

Why Do Lone Mothers Fare Worse than Lone Fathers?

Lone Parenthood and Welfare Benefit Receipt in Germany

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Abstract: This article uses data from the German microcensuses of 2007 and 2012 to examine gender differences in welfare reliance among lone parents. Binary logistic regression was employed as the method of analysis. We show that the risk of welfare benefit receipt is lower among lone fathers than lone mothers. We also find that these gender differences can be partially explained by the socio-economic characteristics of lone fathers; compared to lone mothers, lone fathers are, on average, better educated and more likely to be living with older children. Gender differences decreased over time among parents who have never married, but remained constant among divorced parents. We present a discussion of our findings in light of recent policy reforms, in particular the reform of the German Maintenance Law of 2008, which curbed the ability of a divorced parent to collect support from an ex-spouse.

Keywords: Employment · Lone parents · Single parents · Social assistance · Welfare

1 Introduction

In recent years, divorce and separation rates have increased or stalled at high levels. As a result of this trend, the share of lone parents has increased in most European countries. A lone parent is defined as a mother or a father who co-resides with her or his minor child or children, but does not have a partner who lives in the same household unit. Although lone fathers are included in this definition, public policy has focused primarily on lone mothers, who constitute the overwhelming majority of lone parents, and who are at an elevated risk of poverty and welfare dependence (*Chzhen/Bradshaw 2012; Härkönen 2017; Lewis 1997; Maldonado/Nieuwenhuis 2015*). While significant scholarly and public attention has been devoted to lone motherhood, relatively few studies have looked at the economic well-being of lone fathers.

Most of the knowledge we have about lone fatherhood comes from broad overview studies on lone parenthood, most of which include only short subsections on the prevalence and characteristics of lone fathers. For most countries, it has been reported that the prevalence of lone fatherhood has increased substantially in recent decades (*Bures 2009; Coles 2015*). It has also been repeatedly shown that compared to lone mothers, lone fathers have higher incomes and are at a lower risk of poverty and welfare dependence (*Chzhen/Bradshaw 2012; Kramer et al. 2016; Maldonado/Nieuwenhuis 2015*). The differences in the poverty risks faced by lone fathers and lone mothers have largely been attributed to socio-economic differences. Compared to lone mothers, lone fathers are, on average, better educated, more likely to be in a well-paid occupation, and more likely to be living with children who are older and fewer in number. Cross-national studies have shown that Germany is among the countries where lone parents face a very elevated risk of poverty (*Chzhen/Bradshaw 2012: 497*). In line with findings for other countries, it has also been shown that in Germany, lone fathers differ in their socio-demography from lone mothers (*Statistisches Bundesamt 2018*) and that they are at lower risk of poverty and of receiving welfare benefits than lone mothers (*Andreß 2001; Hammer 2002; Matzner 2007; Schneider et al. 2001*). However, these studies did not answer the question of whether these patterns have changed over time, or of whether these changes can be attributed to social policy reforms that have altered the economic well-being of lone parents in Germany.

This article seeks to close parts of this research gap by analysing large-scale survey data from the German microcensus that compare behaviour in the years 2007 and 2012. We describe the socio-economic correlates of lone fatherhood and how they compare to the characteristics of lone mothers. In particular, we explore the economic foundations of lone parenthood by investigating the extent to which lone parents receive social welfare, and how this level has changed between 2007 and 2012. We have picked these two points in time because 2007 is the first year in which the microcensus contained unambiguous measures of welfare reliance. The year 2012 was selected as the most recent year for which a Scientific Use File of the microcensus was available when this study was conducted. The advantage of focusing on the more recent time period is that our analysis covers the period after the implementation of major labour market reforms (the “Hartz reforms”). As these reforms made significant changes to welfare eligibility, an investigation of this issue that covered a longer period of time would have been difficult to conduct. Another advantage of focusing on 2007 and 2012 is that these years represent points in time immediately before and after the implementation of the reform of the spousal maintenance law in 2008. Although we are unable to perform a thorough evaluation of this policy change, we can provide some descriptive insights into the welfare benefit receipt of divorced women with children, who represent the group most affected by this legal change.

A note on terminology: In line with the conventional definition, we define a *lone parent* as a woman or a man who lives with his or her minor children in the same household, but does not have a partner who also lives in the household. A lone parent may be single (never-married), divorced, or widowed. Other household mem-

bers (siblings, parents, etc.) are disregarded in the definition of lone parenthood. Thus, a lone parent may live with her or his own parents in the same household unit. However, unmarried parents in cohabiting unions are not considered lone parents and are not part of this investigation.

2 Theoretical considerations

2.1 Perspectives on lone parenthood

It is conventional wisdom of social policy research that the modern welfare state has evolved around securing the risks faced by the married male breadwinner family (*Esping-Andersen* 1999; *Lewis* 1992). The assumption underlying the conservative welfare regime is the continuous full-time employment of the male breadwinner who is insured against the risks associated with unemployment, sickness, disability, and old age. Non-working women obtain derived rights through marriage in the public retirement and health care system. The risk to the family of the death of the male breadwinner is reduced through the availability of survivor pensions. The economic consequences of divorce are cushioned by means of spousal maintenance, albeit to varying degrees in different countries and time periods. The people who fall through the cracks of this regime tend to be single women with children. Their care duties mean that they are unable to participate fully in the labour market, but they also lack derived rights to benefits through a legal bond with a male breadwinner. As a result, women in this regime are at a high risk of poverty and welfare dependence. Scholars of comparative welfare state research have thus argued that the public policy treatment of single mothers is a “bellwether” for the treatment of women in general, as such policies determine whether women are able to form autonomous households, or whether the lack of a married partner forces women into poverty and welfare dependence (*Christopher* 2002; *Duncan/Edwards* 1997; *Orloff* 1993; *Zagel* 2018).

A second and contrary view of lone parenthood has focused on how social policies incentivise the employment of lone mothers (*Blundell et al.* 2016; *Ermisch/Wright* 1991; *Jenkins* 1992). According to this perspective, the social transfer system discourages lone mothers from entering the labour market. Because social benefits are means-tested, and lone mothers do not have a partner whose income is assessed in the calculation of benefits, they are especially likely to be eligible for transfer payments. Concerns about the excessive use of social welfare by lone mothers have been expressed in the US and the UK in particular, as in these countries the employment rates of lone mothers tend to be substantially lower than those of partnered mothers (*Zagel* 2014). In line with this view, the implementation of welfare reforms such as the Working Tax Credit in the UK and the Earned Income Tax Credit in the US were motivated by the belief that changes in the incentive structures would boost the employment rates of lone mothers and reduce their reliance on social welfare (*Eissa et al.* 2008; *Rake* 2001; *Skevik* 2006).

Researchers who have examined the poverty risks and the welfare reliance of lone parents have often included in their investigations not only parents who have never married but also divorced parents (e.g., *Jenkins 1992; Chzhen/Bradshaw 2012*). Some studies have focused on divorcees (e.g., *Andreß/Bröckel 2007; Uunk 2004*), while others have drawn attention to the poverty risks of never-married parents (e.g., *McLanahan 2009*). The overwhelming majority of these studies have examined mothers. In our study, we include both lone mothers and lone fathers. Moreover, we pay special attention to the differences between unmarried, widowed and divorced parents. It seems important to distinguish lone parents by their marital status, because of the distinct treatment of the different groups under German legislation. Under a conservative welfare state regime, social policies tend to provide a buffer against some of the adverse consequences of widowhood and divorce. For example, Germany was the first country in Europe to install a system of “pension splitting” in 1977. In this system, pension entitlements that are accrued during marriage are split equally between the partners after divorce. Furthermore, the “weaker party” is eligible to ex-spousal maintenance. Recent policy reforms have, however, aligned the treatment of never-married and divorced parents. These regulations as well as recent changes in labour market policies are set out in the next step.

2.2 Social policies and lone parents’ poverty risk: the German context

German labour market policies underwent radical changes shortly after the turn of the century. Following the enactment of the Hartz IV reform in 2005, the three-tier system of unemployment support – which consisted of social assistance, unemployment benefits, and unemployment assistance – was replaced by a two-tier system (*Hassel/Schiller 2010*). Previously, the long-term unemployed had been eligible to receive income-related unemployment assistance. For this group, the reform merged the social assistance and unemployment assistance benefit programmes to form the unemployment benefit II (*Arbeitslosengeld II* or *ALG II*), which grants only a flat-rate, means-tested benefit. Social assistance (*Sozialhilfe*) still exists, but is mainly reserved for the disabled. The implementation of the reform was also accompanied by intensified use of active labour market programmes designed to integrate the long-term unemployed into the labour market. Although the primary recipients of *ALG II* are the unemployed, people who are in work but are earning very low wages are also entitled to supplement their earnings by claiming this benefit. Unemployed *ALG II* recipients include long-term unemployed people who have run out of their unemployment insurance benefits, people who have accumulated too little recent employment experience to claim unemployment insurance benefits, as well as people who were previously employed only in non-contributory jobs (e.g. Minijobs). In addition, people whose unemployment benefits (*ALG I*) are too low can claim supplementary *ALG II*. Currently, *ALG II* is the main welfare benefit provided by the German government. While individuals can claim a means-tested housing benefit designed to ensure that people have suitable housing, this benefit cannot be claimed in conjunction with *ALG II*. For the purposes of this study, we classify

a person as being a social welfare recipient if he or she is receiving either *ALG II*, a housing benefit, or social assistance.

Germany has commonly been classified as a country with a conservative welfare regime that provides strong incentives for a gendered division of labour within the family. In line with this principle, the German tax system allows married couples to file their taxes jointly. Because the tax schedule is progressive, the “second earner” is taxed heavily under this system, which particularly reduces the work incentives for women with children. However, over the past decade, major reforms of the German welfare system have been enacted that incentivise the labour market participation of mothers. The most significant of these reforms are the expansion of day care for children under age three since 2005 and the redesign of parental leave benefits in 2007 (*Geisler/Kreyenfeld* 2018; *Zoch/Hondralis* 2017). These policy reforms have been widely seen as representing a major shift in the German family system away from conservative principles (*Fleckenstein* 2011). It has also been well documented that since the enactment of these reforms, full-time employment among mothers and the uptake of leave among fathers have risen steadily (*BMFSFJ* 2014; *Statistisches Bundesamt* 2017a). While these policy changes have had a major impact, the full-time employment and earnings levels of mothers and fathers have yet to converge. According to recent data from the German Federal Statistical Office, the gross earnings of employed women are more than 20 percent lower than those of their male counterparts. Thus, Germany’s gender pay gap continues to be one of the highest in Europe (*Boll/Lagemann* 2018). However, there are large regional differences. Differences in employment and earnings between men and women in eastern Germany are considerably smaller than in western Germany (*Statistisches Bundesamt* 2017b).

It has been shown that divorced women – and especially those who have been absent from the labour market for longer periods of time – tend to face particular difficulties in increasing their labour market participation following union dissolution (*Andreß et al.* 2006; *Bröckel/Andreß* 2015). Until recently, German family law followed the principle of status maintenance, whereby spousal maintenance levels were calculated based on the couple’s standard of living prior to divorce. The weaker party in the couple was generally not expected to work full-time, and thus received financial support from the ex-partner until the youngest child reached age 16.¹ In 2008, the German Maintenance Law was reformed, and the length of time divorcees were entitled to receive maintenance on the grounds of having care obligations for children was drastically cut. While it was previously assumed that the caregiving mother (or theoretically also the father) is unable to work full-time until the youngest child reaches age 16, the revised legislation assumes that – given the wider availability of day care – a parent can return to work after the youngest child has reached age three (*Lenze* 2014). Very little is known about the share of women

¹ It may be that ex-spouses agree on reduced ex-spousal maintenance payments, for example in exchange for housing property. However, there is no reliable and representative information available on these agreements.

who were claiming ex-spousal support before and after the reform. It is, however, clear that while the reform created incentives for divorced parents to enter the labour market swiftly after splitting up, it also increased the risk of a divorced woman who failed to receive sufficient ex-spousal support having to rely on social benefits.

Hypotheses

Despite the recent reforms of the German welfare state, there are still considerable differences in the employment patterns of men and women. As women continue to face difficulties in expanding their labour market activities after separation and divorce, we expect to find that they are at a higher risk than lone fathers to receive welfare benefits. These differences between lone mothers and lone fathers in terms of the share receiving welfare benefits may be attributable to differences in their human capital, such as gaps in educational attainment. Compared to lone mothers, lone fathers are more likely to live with children who are older and fewer in number (*Matzner 2007*). We might therefore assume that lone parents' education and other socio-demographic characteristics, as well as the ages and the number of children who live with them, explain some of the differences in welfare recipient levels between lone fathers and lone mothers (*Hypothesis 1*).

In Germany, maternal employment has increased over time and fathers have become more active in the upbringing of their children. Because women are more frequently employed than in previous decades, the possibility of women working after union dissolution or expanding their employment may have increased as well. We might therefore assume that the gap between lone mothers and fathers in the risk of being dependent on welfare benefits narrowed during our observation period (*Hypothesis 2*).

Recent welfare state reforms, in particular the reform of the German Maintenance Law, emphasised the principle of "self-reliance" after divorce. We might therefore conclude that divorced as well as married women had a greater incentive than before to establish themselves in the labour market. The risk of a divorced woman being dependent on social welfare may, thus, have declined over time. As a consequence, gender differences in terms of welfare recipient levels should have diminished more strongly among divorcees than among those persons that never married (*Hypothesis 3a*). However, because the German Maintenance Law of 2008 also included major cuts in post-maintenance payments, some divorced women may have been pushed into the labour market, while others were pushed into welfare receipt. Thus, our alternative hypothesis assumes that gender differences in welfare recipient levels increased more strongly among divorcees than among the unmarried between 2007 and 2012 (*Hypothesis 3b*).

3 Data and methods

We use data from the German microcensus for the years 2007 and 2012 in this analysis. Ideally, we would have investigated welfare benefit patterns since the mid-

1990s, and looked at how various reforms affected the behaviour of lone parents over several decades. However, because the Hartz reforms outlined above redefined unemployment and welfare benefit receipt in Germany, comparing these patterns before and after 2005 would be too cumbersome. In addition, the microcensus data did not allow us to distinguish between the two forms of unemployment benefit (insurance-based for the short-term unemployed and means-tested for the long-term unemployed). Thus, we were able to unambiguously identify respondents who had only been in receipt of social welfare benefits from 2007 onwards. The dataset for 2012 was selected because it is the most recent microcensus dataset for which a Scientific Use File was available when this study was conducted. Furthermore, because the microcensus replaces a quarter of its respondents every year, the sample is fully replaced after four years. As personal identifiers are not included in the data, we selected two years of survey data that are at least four years apart in order to ensure that the respondents do not appear in the data multiple times.

The microcensus is a one percent sample of the population in Germany. It has been conducted in western Germany since 1957 and in eastern Germany since 1991. For our analysis, we use the Scientific Use File of the data, which is a 70 percent sub-sample of the original. Our analytical sample contains women and men aged 18 to 64 who were living in a private family household with at least one child under the age of 18, but in which no partner was present. We defined (a) lone fathers as men who were living in a family unit that included minor child(ren), and (b) lone mothers as women who were living in a family unit that included minor child(ren). The microcensus distinguishes between family units and households. Although the lone parents in our sample were defined as sharing a family unit with minor child(ren) only, they may have been sharing a household with other people as well (e.g. other relatives, such as the lone parents' own parents) as a household can contain more than one family unit. It should also be noted that the microcensus does not collect information on the filial relationships of the respondents to the co-residential children. It is therefore possible that the children in the household were stepchildren, foster children or adopted children.

Our key dependent variable is a binary variable that measures the welfare benefit receipt of the respondent. We define a person as a social welfare recipient if he or she was collecting *ALG II*, social assistance, or housing benefit. The overwhelming share of welfare benefit recipients were collecting *ALG II* (82 percent). If the respondent was not receiving any of these welfare benefits, he or she was coded as "not receiving welfare benefits". It should be noted that people can receive these benefits while in employment if their income is too low to support themselves and their families (see below for a further discussion).

The socio-economic correlates that we take into account are the *age of the youngest child* (0-2, 3-5, 6-9, 10-13, 14-17) and the *number of children* (one, two, three or more children). We also consider whether any of the children had a *second residence* in order to capture parents who were practicing shared parenting. In our sample, two percent of the mothers and eight percent of the fathers reported that at least one of their children was also registered at a different household. The small share of children who were living at two residences reflects the small percentage of

parents in Germany who practice shared parenting (Kindler/Walper 2016). We also consider the household context. In particular, we control for whether the respondent was living with his or her parents, as co-residence with parents may reduce eligibility for means-tested benefits. Only a very small fraction (roughly three percent) of the lone parents in our sample were co-residing with their own parents. In addition, we consider the *marital status* of the respondent, i.e. whether he or she was never married, was divorced (a category that also includes those who were separated, but were not yet legally divorced), or widowed. The respondent's level of education is identified using three categories: no degree (low level of education), vocational degree (medium level of education), and university degree (high level of education). The regression analysis further controls for *age* (18-24, 25-29, 30-34, 35-49, 50-64), and *citizenship* (German/non-German). Given the considerable differences in maternal employment patterns that have been well documented (Drasch 2012; Hanel/Riphahn 2012), we also control for *region* (eastern/western Germany).

In an initial step, we use standard cross tables to describe the socio-economic characteristics of lone parenthood and how these characteristics changed between 2007 and 2012. In a second step, we employ a binary logistic regression model that explores the determinants of welfare receipt among our two comparison groups (lone fathers and lone mothers). In the final part of our analysis, we investigate the question of whether these gender differences disappeared between 2007 and 2012, using interaction models that take into account gender and calendar year. We also examine the question of whether there are differences by marital status, using a three-way interaction model that includes marital status, calendar time, and gender.

4 Results

4.1 Descriptive results

Table 1 presents information on the composition of the sample. It shows that the vast majority of the lone parents studied were mothers, not fathers. In both 2007 and 2012, just 10 percent of the lone parents in our sample were men. Unlike in other countries (Coles 2015), no increase in the share of lone fatherhood in Germany was reported over the period. The results shown in Table 1 reveal that the characteristics of the male and the female lone parents differed considerably. The lone fathers were, on average, about six years older than the lone mothers. The majority of the lone fathers were living with teenage children, while most of the lone mothers had children under the age of 10. The lone fathers were also living with fewer children; about three-quarters of the fathers, but only two-thirds of the lone mothers, were living with only one child. In addition, the lone fathers were found to have higher levels of education than the mothers. About 16 percent of the lone fathers, but only around 11 percent of the lone mothers, reported having a university education in 2012. The analysis also uncovered gender differences by marital status. For example, in 2012, about 42 percent of the lone mothers, but only 23 percent of the lone fathers, were never-married. Relative to the women, the men were more likely to be

Tab. 1: Characteristics of lone parents, column percentages

	Total Mothers & fathers	Lone fathers		Lone mothers			
		Both years	2007	2012	Both years	2007	2012
<i>Sex</i>							
Men	9.8						
Women	90.2						
<i>Calendar year</i>							
2007	49.5	48.8			49.6		
2012	50.5	51.2			50.4		
<i>Region</i>							
Western Germany	78.4	82.4	83.5	81.4	77.9	77.7	78.1
Eastern Germany	21.6	17.6	16.5	18.6	22.1	22.3	21.9
<i>Citizenship</i>							
German	88.9	90.5	91.0	90.0	88.7	89.9	87.5
Non-German	11.1	9.5	9.0	10.0	11.3	10.1	12.5
<i>Age group</i>							
18-24	5.5	1.5	1.8	1.2	5.9	6.1	5.7
25-29	10.0	2.6	2.3	2.9	10.8	10.8	10.8
30-34	14.0	5.4	5.1	5.8	14.9	14.5	15.4
35-49	61.7	66.3	68.8	63.9	61.2	62.7	59.7
50-64	8.9	24.2	22.1	26.3	7.2	6.0	8.5
Mean age	38.8	44.3	44.1	44.5	38.2	37.9	38.6
Sd.	8.3	7.6	7.5	7.7	8.2	7.9	8.4
<i>Education</i>							
No education/low level of education	22.3	15.4	16.3	14.5	23.0	23.3	22.8
Medium level of education	61.7	64.9	62.1	67.7	61.4	61.7	61.1
High level of education	11.3	17.5	18.9	16.2	10.6	10.3	10.9
In education	4.3	1.7	1.9	1.6	4.6	4.2	4.9
N/a	0.5	0.5	0.9	0.1	0.5	0.6	0.4
<i>Marital status</i>							
Never married	37.1	19.1	15.3	22.7	39.1	36.2	41.9
Divorced/married and separated	57.6	69.1	72.6	65.9	56.3	58.9	53.8
Widowed	5.3	11.8	12.1	11.5	4.6	4.9	4.3
<i>Household position</i>							
Household reference person	94.4	95.9	96.5	95.4	94.2	94.7	93.7
Son/daughter (in law) of household reference person	2.8	2.6	2.7	2.5	2.8	3.0	2.6
Other kin of household reference person	0.5	0.6	0.6	0.6	0.5	0.5	0.4
No kinship with household reference person	2.4	0.9	0.3	1.5	2.5	1.8	3.2
<i>Number of children</i>							
One child	67.9	76.2	75.0	77.3	66.9	67.7	66.2
Two children	25.6	20.0	21.1	18.9	26.3	25.9	26.7
Three or more children	6.5	3.9	4.0	3.8	6.8	6.5	7.1

Tab. 1: Continuation

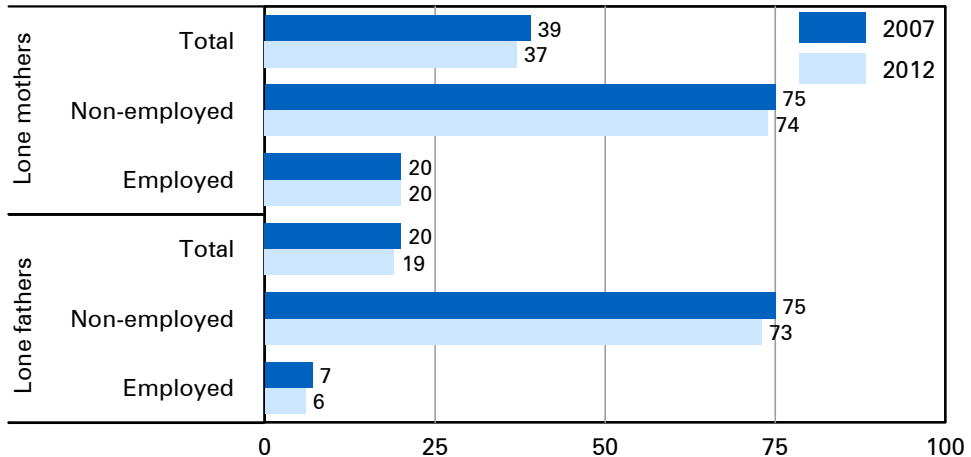
	Total Mothers & fathers	Lone fathers		Lone mothers			
		Both years	2007	2012	Both years	2007	2012
<i>Age of youngest child</i>							
0-2	14.0	3.1	3.2	2.9	15.2	14.8	15.5
3-5	15.8	9.3	8.3	10.2	16.5	16.3	16.6
6-9	21.5	16.5	16.7	16.3	22.0	22.7	21.4
10-13	22.9	29.0	27.6	30.4	22.2	22.1	22.3
14-17	25.9	42.2	44.3	40.2	24.1	24.2	24.1
<i>At least 1 child has other residence</i>							
Yes	2.6	7.6	7.8	7.4	2.0	1.9	2.2
No	97.4	92.4	92.2	92.7	98.0	98.1	97.8
<i>Welfare benefits (unemployment benefit II, social assistance, housing benefit)</i>							
No	63.8	80.6	80.0	81.2	62.0	61.0	62.9
Yes	36.2	19.4	20.0	18.8	38.0	39.0	37.1
<i>Number of cases</i>	<i>18,928</i>	<i>1,859</i>	<i>907</i>	<i>952</i>	<i>17,069</i>	<i>8,469</i>	<i>8,600</i>

Source: Scientific Use File of the German microcensus 2007 and 2012. Data are not weighted.

divorced or to be widowed. Although widowhood has declined over time, 12 percent of the lone fathers and four percent of the lone mothers reported in 2012 that they were widowed. The table also displays information on the respective proportions of the lone mothers and fathers who were receiving welfare benefits. Among the lone fathers, 20 percent in 2007 and 19 percent in 2012 reported that they were collecting welfare benefits. Among the lone mothers, by contrast, 39 percent in 2007 and 37 percent in 2012 indicated that they were receiving welfare benefits. Thus, a slight downward trend in welfare receipt was observed for both groups. Moreover, the descriptive statistics suggest that these gender differences were stable over the period studied, with the risk of welfare receipt consistently being twice as high among the lone mothers compared to the lone fathers.

Of the welfare recipients in our sample, nearly two-thirds (65 percent) were not working. However, under the German system, individuals who are employed may also be eligible to claim social benefits to top up their incomes if their wages are not high enough to enable them to support themselves and their families. Figure 1 shows that levels of welfare receipt were much higher among the employed lone mothers than among the employed lone fathers (see also Table A1 in the appendix). 20 percent of the mothers but only six percent of the working fathers were receiving welfare benefits. This pattern can be attributed in large part to the finding that, compared to the lone fathers, the lone mothers were more likely to be in marginal or part-time employment where wages are lower than in full-time jobs. We do not take into account the employment status in the multivariate regression, as employment cannot be regarded as an exogenous variable to the collection of welfare benefits.

Fig. 1: Probability of receiving welfare benefits by calendar year, employment status, and gender



Note: Respondents on parental leave are classified as non-employed.

Source: Scientific Use File of the German microcensus 2007 and 2012. Data are not weighted.

However, for the interpretation of the subsequent investigations, it is important to bear in mind that even if they were able to enter the labour market, the lone mothers continued to be at a high risk of welfare receipt.

4.2 Regression results

Table 2 shows the results from the logistic regression that estimated the probability of receiving social welfare benefits. The results are reported as average marginal effects (AME). The outcomes for Model 1 – which includes only calendar year, citizenship, region, and gender – confirm the descriptive finding that welfare receipt was lower among the lone fathers than among the lone mothers. The results also revealed that welfare receipt levels were lower in 2012 than in 2007, and that the risk of receiving welfare benefits was substantially higher for foreign nationals than for German nationals. We also find that people in eastern Germany were more likely to receive welfare benefits than those in the west of the country. Separate investigations by region (see Table A2 in the Appendix) reveal that the determinants for collecting welfare were very similar in eastern and western Germany, with the exception of the number and age of children. While the age of the children was a strong predictor of welfare receipt among lone parents in western Germany, this was not the case in the eastern part of the country. However, having three or more children was a stronger predictor of welfare receipt in eastern than in western Germany.

The findings for Model 2 indicated that the likelihood of receiving welfare benefits declined with age, with the lone parents aged 18-24 being at the greatest risk of having to rely on welfare benefits. Model 3 included the respondent’s level of

education. In line with previous research (see also *Chzhen/Bradshaw 2012; Achatz et al. 2013*), a strong negative gradient was found: compared to having a medium level of education, the risk of welfare receipt increased by 29 percent when the respondents had either no education or a low level of education. While the divorced respondents were at a lower risk of receiving welfare benefits compared to the never-married (see Model 4), the effect was not very strong. By contrast, the risk of collecting social benefits was found to be much lower for the widowed respondents than for their divorced or never-married counterparts: the risk of welfare benefit reliance was about 16 percent lower for the widowed respondents than for the never-married respondents. This result can most likely be attributed to the availability of a survivor's pension, which reduces the chances of a widow or widower having to rely on welfare benefits.

The results also showed that co-residence with the parent's own parents – which was more common among younger than among older lone parents – acted as a buffer against some of the adverse effects of early lone parenthood on welfare receipt. If a respondent was living with his or her parents, the probability that he or she was receiving welfare benefits was 25 percent lower than it was for a respondent who was living in an independent household. Whether a lone parent was receiving welfare benefits was greatly influenced by how many children the parent had and how old they were (see also *Chzhen/Bradshaw 2012; Achatz et al. 2013*). The probability of receiving social benefits was 18 percent higher among the lone parents with three or more children than among their counterparts with one child only (see Model 5). The analysis also showed that the likelihood of a lone parent receiving social benefits declined gradually as his or her children grew older. The model includes an indicator of whether the parent's children were also living at a second residence, as this may indicate that the lone parent was in a shared parenting arrangement, thus potentially making it easier for her or him to engage in the labour market. The model results confirm this assumption: the probability of a lone parent being on welfare declined by about eight percent if his or her children were also living at a second residence.

A major finding from the stepwise modelling procedure is that the inclusion of the socio-demographic characteristics of the lone parents reduced the gender differences from 18 (Model 1) to eight percent (Model 5). Thus, lone mothers are at a higher risk of welfare receipt, but lone parents' socio-demographic characteristics – particularly their educational levels and the ages and number of their children – explain some of the differences in the levels of welfare receipt found between lone fathers and lone mothers (see Hypothesis 1). The pseudo R squared suggests that the model fit increases in particular when marital status and education are included in the model.

In the next step of our analysis, we examined the evolution of gender differences between 2007 and 2012. Figure 2 includes the results from an interaction model by calendar year and gender. We assumed that gender differences in welfare receipt would narrow. The improved compatibility of work and family life has resulted in a rise in the employment rates of (partnered) women, which should have also affected the employment prospects of women after union dissolution (see Hypoth-

Tab. 2: Results from binary logistic regression, determinants of welfare benefit receipt (unemployment benefit II, social assistance, housing benefit) (1=yes; 0=no), average marginal effects (AME)

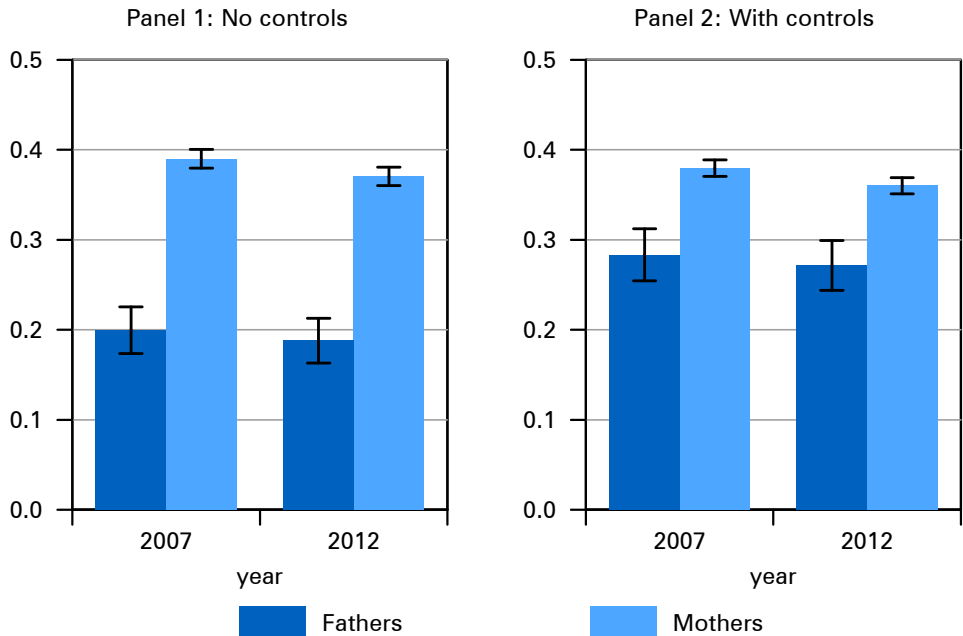
	Model 1 AME Sig.	Model 2 AME Sig.	Model 3 AME Sig.	Model 4 AME Sig.	Model 5 AME Sig.
<i>Sex (ref. women)</i>					
Men	-0.178 ***	-0.132 ***	-0.115 ***	-0.108 ***	-0.084 ***
<i>Calendar year (ref. 2007)</i>					
2012	-0.024 ***	-0.023 **	-0.020 **	-0.024 ***	-0.025 ***
<i>Region (ref. western Germany)</i>					
Eastern Germany	0.147 ***	0.106 ***	0.141 ***	0.133 ***	0.127 ***
<i>Citizenship (ref. German)</i>					
Non-German	0.241 ***	0.226 ***	0.146 ***	0.154 ***	0.142 ***
<i>Age group (ref. 35-49)</i>					
18-24		0.345 ***	0.225 ***	0.190 ***	0.175 ***
25-29		0.267 ***	0.192 ***	0.167 ***	0.122 ***
30-34		0.151 ***	0.115 ***	0.100 ***	0.055 ***
50-64		-0.020 *	-0.012 n.s.	0.005 n.s.	0.052 ***
<i>Education (ref. medium education)</i>					
No education/low level of education			0.289 ***	0.291 ***	0.277 ***
High level of education			-0.184 ***	-0.187 ***	-0.191 ***
In education			0.048 **	0.046 **	0.062 ***
<i>Marital status (ref. never married)</i>					
Divorced/married and separated					-0.052 ***
Widowed					-0.172 ***
<i>Household position (ref. household reference person)</i>					
Son/daughter (in law) of household reference person					-0.254 ***
Other kin of household reference person					-0.122 **
No kinship with household reference person					-0.249 ***

Tab. 2: Continuation

	Model 1 AME Sig.	Model 2 AME Sig.	Model 3 AME Sig.	Model 4 AME Sig.	Model 5 AME Sig.
<i>Number of children (ref. one child)</i>					
Two children					0.068 ***
Three or more children					0.183 ***
<i>Age of youngest child (ref. 0-2)</i>					
3-5					-0.037 **
6-9					-0.064 ***
10-13					-0.107 ***
14-17					-0.137 ***
<i>At least 1 child has second residence (ref. no)</i>					
Yes					-0.078 ***
<i>Model summary</i>					
Log likelihood starting model	-12,388	-12,388	-12,388	-12,388	-12,388
Log likelihood	-11,911	-11,403	-10,589	-10,533	-10,062
Pseudo R ²	0.04	0.08	0.15	0.15	0.19
<i>Number of cases</i>	18,928	18,928	18,928	18,928	18,928

Notes: *** p<0.001; ** p<0.01; * p<0.05. AME: average marginal effects.

Source: Scientific Use File of the German microcensus 2007 and 2012.

Fig. 2: Average predicted probabilities from the interaction model, by calendar year and gender

Note: The results displayed in panel 1 do not contain any covariates apart from gender and calendar year (in interaction). The model in panel 2 includes all covariates that are also included in Model 5 (region, citizenship, age of respondent, household position, marital status, number of children, age of youngest child, second residence of child, education).

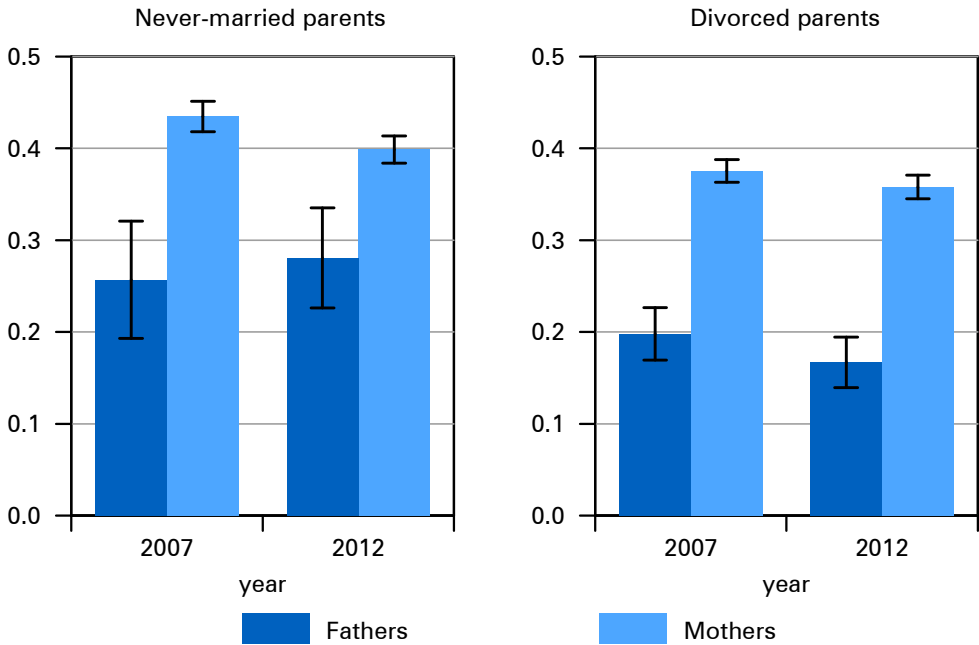
Source: Scientific Use File of the German microcensus 2007 and 2012. Data are not weighted.

esis 2). However, our results do not support this hypothesis. Instead, we observed a slight decline in welfare benefit reliance from 2007 to 2012 for fathers as well as for mothers, with the gender difference remaining fairly stable. After controlling for socio-demographic characteristics, the difference between the genders narrowed (Fig. 2, Panel 2).

In the final part of the investigation, we examined differences by marital status. In 2008, a reform of the German Maintenance Law was enacted, aimed at strengthening the economic independence of divorced women. The notion of “self-reliance” that governed this reform may have pulled married as well as divorced women into the labour market, thereby reducing divorced mothers’ reliance on welfare benefits. However, as the reform also mandated large cuts in ex-spousal maintenance, the divorced women who were unable to enter the labour market may have become increasingly reliant on social benefits. To illustrate these patterns, Figure 3 displays the results of a three-way interaction, by marital status, calendar year and gender. As the sample sizes for widowers and widows were rather small, they were omitted from this part of the analysis. Panel 1 in Figure 3 shows the pattern for the

never-married parents. The figure suggests that the likelihood of the never-married mothers and fathers receiving social welfare benefits showed signs of converging between 2007 and 2012, as welfare receipt levels declined slightly among the never-married mothers, but increased among the never-married fathers. Panel 2 in Figure 3 displays the results for the divorcees. We observed stable and strong gender differences in terms of the probability of receiving welfare, and even witnessed a slight increase in 2012. The divorced mothers were found to be more than twice as likely as the divorced fathers to be receiving welfare benefits. Thus, we must reject the claim that the maintenance reform has enforced women’s self-reliance and diminished the gender gap (see Hypothesis 3a). We find that the differences between the genders among the unmarried narrowed, while they increased slightly in the

Fig. 3: Average predicted probabilities from the interaction model, by calendar year, marital status and gender (with all controls)



Note: The model includes all covariates that are also included in Model 5 (region, citizenship, age of respondent, household position, marital status, number of children, age of youngest child, second residence of child, education).

Source: Scientific Use File of the German microcensus 2007 and 2012. Data are not weighted.

case of the divorcees, which provides mild support for the alternative hypothesis (see Hypothesis 3b).

5 Summary and conclusions

This article has examined gender differences in terms of transfer reliance among lone fathers and mothers in Germany. Our analysis uncovered stark gender differences in the risk of welfare receipt among lone parents. The findings indicate that in 2012, 19 percent of the lone fathers and 37 percent of the lone mothers in our sample relied on transfers. Although the vast majority of the welfare recipients in our study were not in employment, significant proportions of the lone parents who were employed were also claiming welfare benefits. Among the employed lone parents, 20 percent of the mothers and six percent of the fathers were collecting benefits in 2012. These results suggest that being employed did not fully shield the lone mothers from the risk of having to rely on welfare receipt, because many of these lone mothers were either not in full-time employment or did not earn enough money to support a family.

The regression analysis showed that gender differences in welfare receipt can partially be explained by the ages and the number of children living in the household. The finding that the lone fathers were more likely than the lone mothers to be highly educated may also explain some of the differences between these two groups. Another important finding from our investigation was a narrowing of these gender differences between 2007 and 2012. However, the time trend was shown to differ by marital status. While we observed a trend towards convergence among the never-married parents, we also found that the differences between the divorced mothers and fathers remained relatively unchanged. A primary aim of the reform of the German Maintenance Law in 2008 was to strengthen the economic independence of divorcees. Although our results did not show that the risk of welfare receipt increased among the divorced women in our sample, they also failed to provide evidence that the reform made these women less economically dependent on state subsidies.

While previous research for other countries has shown that lone fatherhood is on the rise, the findings of our investigation did not support that notion for Germany. In our sample, men constituted roughly 10 percent of all lone parents, and this figure changed very little over time. One potential explanation as to why other countries have been reporting major changes in the prevalence of lone fatherhood while a similar pattern has not been evident in Germany is that joint parenting is becoming increasingly common in other countries, but not yet in Germany (*Kindler/Walper* 2016). In our analysis, we used an indirect measure of joint parenting, namely whether there was a child in the household who had a second residence. We found that only a small fraction (less than five percent) of the parents reported having such an arrangement. These lone parents were found to be less likely to be receiving welfare, which suggests that shared parenting could increase lone parents' employment and lower the share who received welfare benefits. However, our measure of

shared parenting probably did not capture all of the respondents who were practicing this arrangement, as it relied on the official registration of a second residence with the local authorities. Fathers who practice shared parenting may be classified as lone fathers in other countries, whereas such fathers in Germany may not have entered our investigation because their children were not officially registered with the local municipality as living with their father “part-time”. Unfortunately, we know little about how couples who practice shared parenting in Germany manage the official registration of their children’s residence. There is still relatively little research on shared parenting for the German case in general (see, however, *Kindler/Walper* 2016). Our analysis suggests that this type of research is desperately needed in order to gain a better understanding of living arrangements of lone parents and the possible impact of such arrangements on the economic well-being of children and parents.

There are also limitations as regards the variables that were included in our investigation. We were able to explain some of the gender differences in welfare benefit reliance by controlling for the standard socio-demographic characteristics of the children and the parents. As the lone fathers were more likely than the lone mothers to be living with older children, they were less likely to be facing the challenges associated with caring for small children while maintaining paid employment. However, some of the gender differences we observed remain unexplained. An important dimension that was left out was gender role norms (*Grunow/Evertsson* 2016; *Schneider et al.* 2015). Parental behaviour is governed by societal norms of what constitutes good parenthood (*Coltrane* 2009; *Fenstermaker/West* 2002), and by the fact that fathers are pulled into the labour market because society assigns them the role of family provider. Conversely, it may be assumed that women reduce their labour market participation while prioritising family and care obligations in order to live up to the societal norm of “good motherhood” (*Hays* 1996). These moral obligations guide the division of labour between couples, but they can also extend beyond union dissolution. Thus, the high share of welfare recipients observed among lone mothers should be seen as resulting from the tension between being a good provider for the family and a good caregiver. Lone fathers may prioritise full-time employment and the financial well-being of the household, while lone mothers may be more willing to sacrifice financial well-being for time spent with their children in order to align their behaviour with their aspiration to be a “good mother” (*Duncan/Edwards* 1997). Yet, with the microcensus, which does not include any attitudinal questions, we were unable to examine how the incompatibility of work and family life affects the lives of lone parents, or how gendered attitudes towards parental responsibilities play into this dynamic.

Another important limitation of our study is that the microcensus data we used do not include information on the respondents’ employment and earnings histories. Women – and especially married women – are more likely than men to reduce their level of employment after having a child. These women may face substantial obstacles to increasing their level of employment after separation, and are therefore at a particularly high risk of becoming reliant on welfare benefits. With the data from the microcensus, we were able to provide robust estimates of the shares of welfare re-

ceipt by calendar year, marital status, and gender. However, we were unable to track the same individuals over time, or to examine how the event of divorce and separation triggered benefit claims, and how these patterns differed by gender across policy contexts. Conducting such a methodologically superior longitudinal analysis was, unfortunately, not possible given the limitations of the microcensus data.

Our analysis has also been confined to the investigation of lone fathers and lone mothers. Examining how the transition into a new co-residential union, which terminates the status of lone parenthood, affects the risk of receiving welfare was beyond the scope of our investigation. Furthermore, our analysis compared the risks of welfare receipt among lone mothers and lone fathers, but disregarded other comparison groups. Although we found that lone fathers have been outperforming lone mothers, it must be emphasised that compared to two-parent families, lone parents – regardless of their gender – are more likely to be reliant on welfare.

Finally, our investigation only included the immediate period following the reform of the German Maintenance Law. The courts may possibly have adopted the legislation with a certain time lag as some ambiguities arose over the correct interpretation of the new regulation (*Lenze* 2014). It would therefore be important to continue to monitor the differences in the risk of welfare receipt between divorced and never-married parents once new releases of the Scientific Use File of the microcensus become available.

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References

- Achatz, Juliane et al.* 2013: Alleinerziehende Mütter im Bereich des SGB II. Eine Synopse empirischer Befunde aus der IAB-Forschung. IAB Forschungsbericht 8/2013. Institut für Arbeitsmarkt- und Berufsforschung (IAB): Nürnberg.
- Andreß, Hans-Jürgen* 2001: Die wirtschaftliche Lage Alleinerziehender. In: *Bundesministerin für Familie, Frauen und Jugend* (Ed.): *Alleinerziehen in Deutschland*. Ressourcen und Risiken einer Lebensform. Berlin: 14-30.
- Andreß, Hans-Jürgen et al.* 2006: The economic consequences of partnership dissolution: A Comparative analysis of panel studies from Belgium, Germany, Great Britain, Italy, and Sweden. In: *European Sociological Review* 22,5. 533-560 [doi: 10.1093/esr/jcl012].
- Andreß, Hans-Jürgen; Bröckel, Miriam* 2007: Income and life satisfaction after marital disruption in Germany. In: *Journal of Marriage and Family* 69,2: 500-512 [doi: 10.1111/j.1741-3737.2007.00379.x].

- Bastin, Sonja* 2016: Partnerschaftsverläufe alleinerziehender Mütter in Deutschland: Eine quantitative Untersuchung auf Basis des Beziehungs- und Familienpanels. Wiesbaden: Springer VS [doi: 10.1007/978-3-658-10685-0].
- Blundell, Richard et al.* 2016: Female labor supply, human capital, and welfare reform. In: *Econometrica* 84,5: 1705-1753 [doi: 10.3982/ECTA11576].
- Boll, Christina; Lagemann, Andreas* 2018: Gender pay gap in EU countries based on SES (2014). Luxembourg: European Commission [doi: 10.2838/978935].
- BMFSFJ (Bundesministerium für Familie, Senioren, Frauen und Jugend)* 2014: Dossier Müttererwerbstätigkeit 2012. Berlin: Bundesministerium für Familie, Senioren, Frauen und Jugend.
- Bröckel, Miriam; Andreß, Hans-Jürgen* 2015: The economic consequences of divorce in Germany: What has changed since the turn of the millennium? In: *Comparative Population Studies* 40,3: 277-312 [doi: 10.12765/CPoS-2015-04en].
- Bures, Regina M.* 2009: Living arrangements over the life course: Families in the 21st century. In: *Journal of Family Issues* 30,5: 579-585 [doi: 10.1177/0192513X08331131].
- Christopher, Karen* 2002: Welfare state regimes and mothers' poverty. In: *Social Politics* 9,1: 60-86 [doi: 10.1093/sp/9.1.60].
- Chzhen, Yekaterina; Bradshaw, Jonathan* 2012: Lone parents, poverty and policy in the European Union. In: *Journal of European Social Policy* 22,5: 487-506 [doi: 10.1177/0958928712456578].
- Coles, Roberta L.* 2015: Single-father families: A review of the literature. In: *Journal of Family Theory & Review* 7,2: 144-166 [doi: 10.1111/jftr.12069].
- Coltrane, Scott* 2009: Fatherhood, gender and work-family policies. In: *Gornick, Janet C. et al. (Eds.): Gender equality: Transforming family divisions of labor.* London/New York: Verso: 385-409.
- Drasch, Katrin* 2012: Between familial imprinting and institutional regulation: Family related employment interruptions of women in Germany before and after the German reunification. IAB-Discussion Paper 9/2012. Institut für Arbeitsmarkt- und Berufsforschung (IAB): Nürnberg.
- Duncan, Simon; Edwards, Rosalind* (Eds.) 1997: Single mothers in international context: Mothers or workers? London/New York: Routledge.
- Eissa, Nada; Kleven, Henrik Jacobsen; Kreiner, Claus Thustrup* 2008: Evaluation of four tax reforms in the United States: Labor supply and welfare effects for single mothers. In: *Journal of Public Economics* 92,3-4: 795-816 [doi: 10.1016/j.jpubeco.2007.08.005].
- Ermisch, John F.; Wright, Robert E.* 1991: Welfare benefits and lone parents' employment in Great Britain. In: *The Journal of Human Resources* 26,3: 424-456 [doi: 10.2307/146020].
- Esping-Andersen, Gøsta* 1999: Social foundations of postindustrial economies. Oxford: Oxford University Press.
- Fenstermaker, Sarah; West, Candace* (Eds.) 2002: Doing gender, doing difference. Inequality, power, and institutional change. New York: Routledge [doi: 10.4324/9780203615683].
- Fleckenstein, Timo* 2011: The politics of ideas in welfare state transformations: Christian democracy and the reform of family policy in Germany. In: *Social Politics* 18,4: 543-571 [doi: 10.1093/sp/jxr022].

- Geisler, Esther; Kreyenfeld, Michaela* 2018: Policy reform and fathers' use of parental leave in Germany: The role of education and workplace characteristics. In: *Journal of European Social Policy* 29,2: 273- 291 [doi: 10.1177/0958928718765638].
- Grunow, Daniela; Evertsson, Marie* (Eds.) 2016: *Couples' transitions to parenthood. Analysing gender and work in Europe*. Cheltenham/Northampton: Edward Elgar [doi: 10.4337/9781785366000].
- Hammer, Veronika* 2002: Alleinerziehende im Gender-Diskurs: Unterschiede oder Gemeinsamkeiten bei Müttern und Vätern? In: *Zeitschrift für Familienforschung* 14,2: 194-207.
- Hanel, Barbara; Riphahn, Regina T.* 2012: The employment of mothers – recent developments and their determinants in East and West Germany. *Jahrbücher für Nationalökonomie und Statistik* 232,2: 146-176.
- Härkönen, Juho* 2017: Single-mother poverty: How much do educational differences in single motherhood matter? Stockholm University [http://www.suda.su.se/polopoly_fs/1.324319.14907081921/menu/standard/file/SRRD_2017_02.pdf, 03.07.2019]
- Hassel, Anke; Schiller, Christof* 2010: *Der Fall Hartz IV: Wie es zur Agenda 2010 kam und wie es weitergeht*. Frankfurt/Main: Campus.
- Hays, Sharon* 1996: *The cultural contradictions of motherhood*. Yale University Press.
- Jenkins, Stephen P.* 1992: Lone mothers' employment and full-time work probabilities. In: *The Economic Journal* 102,411: 310-320 [doi: 10.2307/2234516].
- Kindler, Heinz; Walper, Sabine* 2016: Das Wechselmodell im Kontext elterlicher Konflikte. In: *Neue Zeitschrift für Familienrecht* 3: 820-822.
- Kramer, Karen Z. et al.* 2016: Comparison of poverty and income disparity of single mothers and fathers across three decades: 1990-2010. In: *Gender Issues* 33,1: 22-41 [doi: 10.1007/s12147-015-9144-3].
- Lenze, Anne* 2014: *Alleinerziehende unter Druck: Rechtliche Rahmenbedingungen, finanzielle Lage und Reformbedarf*. Gütersloh: Bertelsmann Stiftung.
- Lewis, Jane* 1992: Gender and the development of welfare regimes. In: *Journal of European Social Policy* 2,3: 159-173 [doi: 10.1177/095892879200200301].
- Lewis, Jane* 1997: Lone mothers: The British case. In: *Lewis, Jane* (Ed.): *Lone mothers in European welfare regimes: Shifting policy logics*. London/Philadelphia: Jessica Kingsley Publishers: 50-75.
- Maldonado, Laurie C.; Nieuwenhuis, Rense* 2015: Family policies and single parent poverty in 18 OECD countries, 1978–2008. In: *Community, Work & Family* 18,4: 395-415 [doi: 10.1080/13668803.2015.1080661].
- Matzner, Michael* 2007: Alleinerziehende Väter – eine schnell wachsende Familienform. In: *Mühling, Tanja; Rost, Harald* (Eds.): *Väter im Blickpunkt: Perspektiven der Familienforschung*. Opladen: Barbara Budrich: 225-242.
- McLanahan, Sara* 2009: Fragile families and the reproduction of poverty. In: *The Annals of the American Academy of Political and Social Science* 621,1: 111-131 [doi: 10.1177/0002716208324862].
- Orloff, Ann Shola* 1993: Gender and the social rights of citizenship: The comparative analysis of gender relations and welfare states. In: *American Sociological Review* 58,3: 303-328 [doi: 10.2307/2095903].
- Rake, Katherine* 2001: Gender and new labour's social policies. In: *Journal of Social Policy* 30,2: 209-231 [doi: 10.1017/S0047279401006250].

- Schneider, Norbert F. et al.* 2001: Alleinerziehen: Vielfalt und Dynamik einer Lebensform. Schriftenreihe des Bundesministeriums für Familie, Senioren, Frauen und Jugend, Band 199. Stuttgart/Berlin/Köln: Kohlhammer.
- Schneider, Norbert F.; Diabaté, Sabine; Ruckdeschel, Kerstin* (Eds.) 2015: Familienleitbilder in Deutschland. Kulturelle Vorstellungen zu Partnerschaft, Elternschaft und Familienleben. Opladen et al.: Barbara Budrich [doi: 10.3224/84740663].
- Skevik, Anne* 2006: Working their way out of poverty? Lone mothers in policies and labour markets. In: *Bradshaw, Jonathan; Hatland, Aksel* (Eds.): Social policy, employment and family change in comparative perspective. Cheltenham/Northampton: Edward Elgar: 221-236.
- Statistisches Bundesamt* 2017a: Elterngeldempfänger nach Geburtszeiträumen: Deutschland, Jahre, Geschlecht, Bezugsdauer des Elterngeldes. Ergebnis 22922-0009. Genesis-Online Database [https://www-genesis.destatis.de/genesis/online, 09.05.2018].
- Statistisches Bundesamt* 2017b: Gender Pay Gap: Unbereinigter Gender Pay Gap nach Gebietsstand [https://www.destatis.de/DE/Themen/Arbeit/Verdienste/Verdienste-Verdienstunterschiede/Tabellen/ugpg-01-gebietsstand.html, 02.06.2019].
- Statistisches Bundesamt* 2018: Alleinerziehende in Deutschland 2017. Wiesbaden: Statistisches Bundesamt.
- Uunk, Wilfred* 2004: The economic consequences of divorce for women in the European Union: The impact of welfare state arrangements. In: *European Journal of Population* 20,3: 251-285 [doi: 10.1007/s10680-004-1694-0].
- Zagel, Hannah* 2014: Are all single mothers the same? Evidence from British and West German women's labour market involvement trajectories. In: *European Sociological Review* 30,1: 49-63 [doi: 10.1093/esr/jct021].
- Zagel, Hannah* 2018: Alleinerziehen im Lebensverlauf. Familiendynamiken und Ungleichheit im Wohlfahrtsstaat. Wiesbaden: Springer VS [doi: 10.1007/978-3-658-20051-0].
- Zoch, Gundula; Hondralis, Irina* 2017: The expansion of low-cost, state-subsidized child-care availability and mothers' return-to-work behaviour in East and West Germany. In: *European Sociological Review* 33,5: 693-707 [doi: 10.1093/esr/jcx068].

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Appendix

Tab. A1: Employment status (column %) and share of welfare benefit recipients (unemployment benefit II, social assistance or housing benefit) by employment status

	2007		2012	
	Employment status	% receiving benefit	Employment status	% receiving benefit
<i>Lone fathers</i>				
Employed	80.6	6.7	81.1	6.2
Non-employed	19.4	75.0	18.9	72.8
Total	100.0	20.0	100.0	18.8
<i>Number of cases</i>	<i>907</i>	<i>181</i>	<i>952</i>	<i>179</i>
<i>Lone mothers</i>				
Employed	65.8	20.4	68.0	19.8
Non-employed	34.2	74.8	32.0	73.73
Total	100.0	39.0	100.0	37.06
<i>Number of cases</i>	<i>8,469</i>	<i>3,303</i>	<i>8,600</i>	<i>3,187</i>

Note: Respondents on parental leave are classified as non-employed.

Source: Scientific Use File of the German microcensus 2007 and 2012. Data are not weighted.

Tab. A2: Results from binary logistic regression, determinants of welfare benefit receipt (unemployment benefit II, social assistance, housing benefit) (1=yes; 0=no), western and eastern Germany, average marginal effects (AME)

	Western Germany		Eastern Germany	
	AME	Sig.	AME	Sig.
<i>Sex (ref. women)</i>				
Men	-0.079	***	-0.114	***
<i>Calendar year (ref. 2007)</i>				
2012	-0.017	*	-0.051	***
<i>Citizenship (ref. German)</i>				
Non-German	0.121	***	0.244	***
<i>Age group (ref. 35-49)</i>				
18-24	0.173	***	0.158	***
25-29	0.105	***	0.166	***
30-34	0.059	***	0.047	*
50-64	0.042	**	0.133	***
<i>Education (ref. medium level of education)</i>				
No education/low level of education	0.235	***	0.248	***
High level of education	-0.180	***	-0.351	***
In education	0.076	***	0.019	
<i>Marital status (ref. never married)</i>				
Divorced/married and separated	-0.056	***	-0.035	*
Widowed	-0.189	***	-0.143	**
<i>Household position (ref. household reference person)</i>				
Son/daughter (in law) of household reference person	-0.332	***	-0.283	***
Other kin of household reference person	-0.178	***	0.233	+
No kinship with household reference person	-0.323	***	-0.272	***
<i>Number of children (ref. one child)</i>				
Two children	0.060	***	0.101	***
Three or more children	0.142	***	0.303	***
<i>Age of youngest child (ref. 0-2)</i>				
3-5	-0.033	**	-0.033	
6-9	-0.071	***	-0.016	
10-13	-0.122	***	-0.058	
14-17	-0.162	***	-0.004	
<i>At least one child has second residence (ref. no)</i>				
Yes	-0.094	**	-0.071	
<i>Model summary</i>				
Log likelihood starting model	-9,451		-2,828	
Log likelihood	-7,562		-2,406	
Pseudo R ²	0.20		0.15	
<i>Number of cases</i>		<i>14,834</i>	<i>4,094</i>	

Notes: *** p<0.001; **p<0.01; * p<0.05; + p<0.1. AME: average marginal effects.

Source: Scientific Use File of the German microcensus 2007 and 2012.

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