



# Wealth of children from single-parent families: Low levels and high inequality in Germany

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## Abstract

Families' economic wealth is a resource that can provide children with crucial advantages early in their lives. Prior research identified substantial variation of wealth levels between different family types with children from single-parent families being most disadvantaged. The causes of this disadvantage, how much the disadvantage varies between children and how the non-resident parents' wealth may potentially reduce the disadvantage remain unclear. To address these research gaps, we use data from the German Socio-Economic Panel (2002–17) to examine the level of and inequality in wealth for children from single-parent families using recentered influence function regression and decomposition analysis. We replicate earlier findings of a large wealth disadvantage for children in single-parent families. We find that the wealth disadvantage can be mainly explained with compositional differences in household income and employment characteristics. Beyond level differences, inequality between children from single-parent families is higher than for other family types and this inequality can only partly be explained by observed demographic and socio-economic characteristics. When considering the wealth of non-resident parents, the wealth disadvantage of children in single-parent families is reduced but remains substantial. JEL-codes: D31, D1, J1

## Keywords

wealth, family, children, inequality, separation

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## Introduction

Household wealth is a resource that can give children crucial advantages early in life. First, wealth can be invested directly in children's education or living environments. Second, wealth provides a safety net: it can allow children to make risky but potentially rewarding educational and occupational choices or protect parents from negative income shocks due to unemployment (see Rodems and Pfeffer, this issue). Third, wealth may be directly transferred from parents to children to give them a head start in childhood or advantages later in life. The benefits of wealth clearly go beyond those provided by income. Shapiro (2005: 2–3) argues that wealth can be understood as 'transformative assets [...] [that] lift a family economically and socially beyond where their own achievements, jobs and earnings would place them'.

High wealth inequalities between children are a sign of concentrated dis-/advantage that may affect children far into adulthood. It is therefore crucial to understand whether children have access to wealth and how much wealth is available to them. Prior research identified substantial disadvantages in wealth among children from single-parent families, which may considerably reduce their life chances (for example, Bernardi et al., 2019). This further aggravates economic disadvantage experienced by children in single-parent families who are also shown to have substantially higher income poverty rates (for example, Goebel et al., 2015; Härkönen, 2018; see Kuypers and Marx, this issue, for the joint consideration of wealth and income poverty).

Yet, important gaps in prior research limit our understanding of the wealth disadvantage of dependent children in single-parent families. First, the demographic and socio-economic factors contributing to wealth disadvantages remain underexplored. In particular, it remains unclear how compositional differences – such as differences in parents' ages or differences in family types – contribute to the disadvantages experienced by children in single-parent families. Second, because previous research focused only on mean-level differences between family types, we do not know whether the wealth disadvantages are the same for all children from single-parent families. If there are large inequalities within

this group, measuring only the main tendencies will provide an incomplete description of children's situations and may also mask the processes leading to disadvantages. Studying the distribution of wealth among single-parent families also offers insights into the equality of opportunity for children in this group, who are an important target of social policy in many developed welfare states. Third, previous research has ignored the non-resident parent when studying single-parent families. After a separation, the non-resident parent may still accumulate some wealth for the child. Ignoring this parent's wealth may lead to an overestimation of the disadvantage experienced by children from single-parent families. Additionally, considering the non-resident parent's wealth helps to further illuminate the sources of disadvantage.

To address these research gaps, we tackle three research questions:

1. What demographic and socio-economic factors contribute to the wealth disadvantage of single-parent families compared to two-parent families?
2. How unequal is the wealth distribution among single-parent families?
3. How much wealth do single-parent families have after parental separation when taking the non-resident parent's wealth into account?

To answer these questions, we focus on dependent children aged 0 to 16 years living in Germany, a country with a high share of single-parent families.

Our conceptual and empirical advances are crucial for two reasons. First, our analyses contribute to a better understanding of the processes leading to wealth disadvantages in single-parent families, which may include the selection of socially disadvantaged groups into separation and wealth depletion after separation due to the costs of setting up a second household. Although our research design is descriptive and not causal, the results provide preliminary evidence of these processes. Second, our results help in designing effective and appropriate policy responses targeted to the groups in need: if the wealth disadvantage of single-parent families turns out to be due to compositional differences, general policies directed at socially disadvantaged groups

will help. If it is due to specific processes such as wealth depletion at separation, more targeted policies for families experiencing separation are necessary.

## Background

In 2017, around 16 percent of all families with dependent children in Germany were single-parent households (also see [Supplementary Figure C.1](#) in Online [Supplementary Appendix C](#)). This is above the average in the EU-28 countries. Single-parent families are formed in four different ways, each of which may have distinct consequences for wealth: (1) the mother was not partnered before birth (accounting for 12 percent of all single-parent families), (2) the mother separated from her partner before birth (2%), (3) the parents separated after birth (81%) and (4) one parent died before or after birth (5%) ([Ott et al., 2011](#)). In those families in which the parents were together when the child was born, the large majority of children in West Germany were born to married parents, while more than half of all children in East Germany were born to unmarried parents ([Klämer, 2015](#)).

### *A model of wealth accumulation and disadvantage in single-parent families*

Wealth accumulation occurs through three main processes: (1) savings from income, (2) receipt of financial transfers (for example, inter vivos transfers and inheritances) and (3) capital appreciation on investments. The wealth disadvantage of single-parent families may arise from a number of limitations or constraints on these accumulation processes: (1) selection into single-parent families, (2) wealth depletion after parental separation or death, (3) division of wealth between partners at separation and (4) limited wealth accumulation after parental separation or death. All of these constraints are directly influenced by social policy and can only be fully understood when considering the social policy context.

First, the wealth disadvantage of children from single-parent families may not be a direct causal consequence of parental separation or death. Rather,

observed differences between single-parent families and two-parent families may at least partly be due to selection of less financially well-off parents into separation or death. Such selection may occur, for instance, if younger parents who accumulated less wealth than older parents are more likely to separate.

Second, single-parent families may experience wealth depletion after separation or the death of a parent due to the direct and indirect costs of the occurrence. At separation, resources may be drained by the costs of setting up a second household or by unfavourable terms for the sale of shared property. Separation and divorce may also entail substantial legal costs (for example, [Boertien and Lersch, 2021](#)). The death of a parent may be preceded by high medical expenses and may be followed by considerable funeral and burial costs.

Third, when wealth is divided after separation, the main care provider for children is sometimes left with less wealth at their disposal. This is particularly the case in unmarried couples. In Germany, children usually remain with their mothers after separation or divorce, although legal custody is almost always shared ([Geisler et al., 2018](#)). In light of previous research on the within-couple gender wealth gap in Germany ([Grabka et al., 2015](#)), the loss of wealth to children in single-parent families may be particularly severe.

Here, it is important to note that the wealth of the non-resident parent may remain available to the child, a point that has been ignored in previous research. Non-resident parents may have a personal interest in continuing to care for their children, and they also have legal obligations (provision of ongoing financial support as well as future inheritances) to maintain the wellbeing of their children. They may, for instance, make investments in education or leisure activities that directly benefit their children. In addition, because children of parents with shared custody are likely to spend some of their time with the non-resident parent, they may benefit from that parent's home ownership. Therefore, we argue that it is important to consider both the resident and the non-resident parent's wealth to gain a fuller and more holistic perspective on the economic wellbeing of children in single-parent families.

Including the non-resident parent's wealth may markedly reduce the disadvantage measured for children. However, we argue that while household wealth in a single-parent family can be seen as a lower bound of the resources available to children, the joint wealth of the resident and non-resident parent together can be seen as an upper bound that may not be reached in many families because the non-resident parent's wealth is not fully available to the child.

Fourth, after separation or the death of a parent, wealth accumulation may be reduced. Although single mothers typically have higher labour force participation and higher working hours than partnered women in Germany, their net household income is considerably lower and their poverty rates higher than those of couple households (for example, [Goebel et al., 2015](#)). Wealth accumulation may also be reduced by the loss of tax advantages for married couples after divorce, depending on the institutional context. Policy programmes targeted at single-parent families may improve the financial situation of such families.

### *Previous empirical evidence on wealth in single-parent families*

Previous research found that families with dependent children generally have less wealth than other households ([Gibson-Davis and Percheski, 2018](#)). In line with the outlined arguments, for Germany in 2012, single-parent families were the household type with lowest per capita wealth levels, with mean wealth of €35,038 for single-parent families with one child and €20,800 for single-parent families with two or more children. In comparison, couples with one child had €62,579 on average (€50,586 for couples with two children) ([Grabka and Westermeier, 2014](#)). Wealth disadvantages for single-parent families are also found in a number of other countries, where the magnitude of disadvantage for single-parent families compared to two-parent families varies between 27% in Italy and 93% in Canada ([Sierminska, 2018](#)). In the long term, several studies have found adult children who experienced parental absence during childhood to have less wealth (for example, [Bernardi et al., 2019](#)).

While the overall wealth disadvantage for single-parent families measured with mean group

differences is well established in the literature, crucial research gaps remain. First, the demographic and socio-economic factors contributing to the wealth disadvantage for children in single-parent families remain underexplored. Second, we know little about within-group inequality among children from single-parent families. For the United States, wealth inequality among families with dependent children is found to be higher than among other households ([Gibson-Davis and Percheski, 2018](#)). To our knowledge, however, no study to date has investigated wealth inequality within the group of single-parent families. Third, previous research has ignored the non-resident parent when studying single-parent families. Together, these gaps also limit our understanding of the mechanisms leading to lower wealth among single-parent families in specific social policy contexts.

### *The social policy context in Germany*

There are significant differences in eligibility for public benefits between single-parent and (married) couple households across countries, which affect the constraints on wealth accumulation faced by single-parent families. In addition to eligibility rules for public transfers, there are also other policy instruments (for example, taxes and alimony law) that influence the financial situation of families. In the following, we use the case of Germany to illustrate these differences. It should be noted that in comparison to other OECD countries, Germany is one of the countries where single-parent families are most disadvantaged by family and tax policies when comparing their net incomes to those of couple households ([Bradshaw et al., 2018](#)). We describe the rules that were in place for the period 1986–2017, in accordance with the birth years of the children in our sample.

With regard to income tax law, married couples benefit from the joint assessment of income, which can significantly lower the tax burden compared to separate assessment, the approach used for single-parent families and unmarried parents. To partly compensate for this disadvantage, in 2017, a special tax allowance (*Entlastungsbetrag*) was introduced for single-parent families to the amount of €1,908 per

calendar year for the first child and an additional €240 for all other children.<sup>1</sup>

Direct monetary transfers, such as the child benefit and the child supplement for low-income families introduced in 2005, do not differentiate according to the type of household.

Since 2007, parents of newborns are entitled to a parental allowance that amounts to 65 percent of the last annual net labour income before birth and can increase up to 100 percent for low earners. Single-parent families do not obtain higher allowances than couples with comparable incomes, but the duration of benefit receipt is, at 14 months, two months longer than for couple households if the other parent cannot take parental leave for whatever reason.

Wealth accumulation in the case of house purchases is promoted by a first home buyer allowance (*Eigenheimzulage*) of up to roughly €20,000, which was in effect between 1995 and 2005 in Germany. In the case of a single parent, this allowance was granted only once in a lifetime, while in couple households, this allowance could be claimed by each partner separately. This may have enabled couple households to accumulate wealth faster.

Additional needs allowances (*Mehrbedarfe*) for extra expenses that are not covered by the basic social assistance or the unemployment benefits for the long-term unemployed are granted to single-parent families based on the age and number of children. The rationale for such allowances is to compensate for the lack of economies of scale in single-parent families. For single-parent families with a child below the age of 7 years, this additional allowance is €147.27 per month, equalling 36 percent of the standard rate for a single adult in 2017.

Legal regulations governing the relationship between divorced spouses (or between the spouse and the state, for instance, when a spouse is unable to provide support) are another policy instrument. Single parents have the right to claim child support (maintenance) from the non-resident parent. The maintenance claim is calculated based on the income of the divorced spouses. The spouse earning more must pay three-sevenths of the difference in income to the dependents. However, one has to

differentiate between the maintenance obligation for spouses and children. The obligation to provide for a spouse exists during the marriage, separation and usually for the first three years<sup>2</sup> of their child's life. The obligation to provide for children holds until the child has completed compulsory education followed by university or vocational training. Private wealth has to be liquidated only if current income does not suffice. Parents are obligated to provide this form of support for their children regardless of whether they were married or not. If a former spouse is not willing or not able to pay, the other parent can apply to the public authorities for advance maintenance payments.

For children in single-parent families in which one parent has died, provision for dependents is granted to at least partly compensate for the loss of income of the deceased parent. The basic requirement for a widow's or widower's pension is that the couple was married. The pension amounts to 55% of the pension entitlement of the deceased spouse. An orphan pension is 10% of the pension entitlement of the deceased parent. If the couple was not married, only orphan pensions are paid.

To summarize, due primarily to the joint taxation of married couples in Germany and the economies of scale when couples cohabit, there is a systematic income advantage for married couples compared to single-parent families. Although there are different policy instruments that are designed to alleviate this disadvantage, they do not fully compensate for the income of the missing partner. As a result, the distribution of wealth between the different family types is highly unequal.

## Data and method

We use data from the Socio-Economic Panel (SOEP; DOI: 10.5684/soep.v35) covering the period 2002–2017 (Goebel et al., 2019). The SOEP is a panel survey interviewing a representative sample of the German population on an annual basis. Information on wealth was collected every five years between 2002 and 2017. We use these waves as repeated cross-sections without modelling the longitudinal

dimension of the data. Data are logically edited and multiply imputed by the SOEP survey team.

Our units of analysis are children. Our sample is restricted to individual children up to 16 years of age living in private households (born between 1986 and 2017)<sup>3</sup> We assign household-level information on wealth, family status and other family characteristics described below, which are collected from the parents of each child. We exclude households with three generations living together because we cannot assign household wealth to children in these households. We adjust standard errors for clustering of children within households.

Our outcome of interest is per capita *net wealth* including all assets (real estate, financial assets, life insurance, private pension plans and business assets) minus debts (mortgages and loans). All wealth variables are in euros in 2015 prices. We winsorize at the 0.1 and 99.9 percentile.

Because our units of analysis are children, we assign a value for the wealth of the parents within the household to the children, as underage children's wealth is not surveyed in the SOEP. To assign wealth to children, we have to make fundamental assumptions about the within-household distribution of wealth and about economies of scale. Both are contested issues in the research on wealth (Killewald et al., 2017). For the present study, we assume that household wealth is equally shared by all household members, which is the implicit assumption in the vast majority of studies on wealth. In the current study, we use the per capita approach, which assumes no economies of scale (for a discussion, see Online Supplementary Appendix A). Household wealth is divided by the number of household members (including parents and children). Our main conclusions are robust to alternative equivalent scales (see Supplementary Table A.1 in Online Supplementary Appendix A).

We argue that it is crucial for a holistic perspective on children's economic wellbeing to consider the wealth of the parent who does not reside with the child in families where the parents are separated or divorced in order to establish an upper boundary for the resources that may be available to children. Measures of non-resident parents' wealth are not typically collected in household surveys. Therefore,

we construct measures of *extended net wealth*, which combine wealth of resident and non-resident parents. We create four alternative measures due to small sample size for our preferred measure:

1. *Current extended net wealth*: This is the total net wealth of the household where the child lives and the total net wealth of the non-resident parent, adjusted by household members in both households. This is our preferred measure because it directly captures both parents' wealth. We obtain the information about non-resident parents from families that were observed in the data before the separation of the parents. In these cases, the SOEP follows both parents after separation, and the observations of both parents can be linked to their children even if they live in separate households. This kind of linkage is possible only for a small subset of our sample of children in single-parent families ( $N = 420$  when pooling all years), because either the parents were not observed before separation, or the absent parent dropped out of the panel after separation.
2. *All extended net wealth ever observed in the data*: To increase sample size, we relax the restriction that the current wealth needs to be observed. Instead, as our measure of extended wealth, we average all observed wealth measurement points for biological fathers and mothers separately and use the sum of the average wealth divided by the children's current household size plus one ( $N = 503$ ).<sup>4</sup>
3. *Extrapolated extended net wealth*: We assume that the observed wealth in the child's household corresponds to 37 percent of the joint wealth of both parents because in almost all cases, the non-resident parent is the father. As shown by Grabka et al. (2015), women own 37 percent of wealth in German couples on average. If, for example, we observe the resident parent to have €10,000, the extrapolated extended net wealth would be €27,027. We adjust by the children's current household size plus one ( $N = 4,629$ ).
4. *Imputed extended net wealth*: Building on the observed information on all observed mothers' and fathers' wealth, we build a multiple imputation model to fill in the

missing wealth observations of non-resident parents to create a joint measure of both parents' wealth.<sup>5</sup> We adjust by the sum of both parents' (imputed) current household size ( $N = 4,629$ ).

The degree to which a child can potentially benefit from the available wealth, however, depends heavily on whether the non-resident parent has, in the meantime, started a new family with additional children. As we have only a small subset of cases at hand in which wealth information is available for both partners, we refrain from considering this aspect in our calculations.

We group children into four types of families:

1. single-parent families after separation or divorce (including mothers who never cohabitated with the child's father);<sup>6</sup>
2. single-parent families after the death of the other parent;
3. blended two-parent families (that is, at least one non-biological child of one parent in household); and
4. two cohabiting biological parents.

Our focus is on single-parent families. We have only a few observations of children in single-parent families after the death of the other parent, and it is therefore necessary to pool all observation points for this group in the analysis. For reference, we also include blended two-parent families and families with two biological parents married or cohabiting. [Supplementary Appendix Table C.1](#) in the online appendix shows the relative frequency of children living in these types of families in Germany.

For multivariable regression and decomposition analysis, the following variables are added: *parental education, age, migration background, East Germany, household income, experience in full-time employment, experience of unemployment, civil servant, self-employed, number of parents' siblings* (Lersch, 2019), *ever inherited* and *period* (also see Online Appendix).

For the empirical analysis, we first describe the level of wealth of children in single-parent families compared to other family types. We use recentered influence function (RIF) regression (Firpo et al., 2009) to estimate

unconditional median regressions of net wealth (Rios-Avila, 2020). We use decomposition analysis (Kitagawa, 1955) based on RIF to separate differences in characteristics (composition effect) from differences in coefficients (wealth structure effect) between children from single-parent families compared to children from biological two-parent families to explain the wealth gap between the two family types.

Second, we report inequality using the Gini coefficient. Similar to our approach for the median, we use RIF regression and decomposition analysis to examine differences in the Gini between children from single-parent families and biological two-parent families. To provide a more comprehensive description of inequality, and because the Gini is not bounded between 0 and 1 when considering negative values (Berrebi and Silber, 1985), we additionally report the coefficient of variation (CV) in supplementary results. We also report two measures of wealth poverty. First, wealth poverty relative to wealth is defined as at or below 60 percent of median per capita net wealth (for a similar approach additionally including income, see Kuypers and Marx, this issue). Second, wealth poverty relative to income is defined as per capita net wealth below three times the monthly income poverty line (60 percent of median income; see similarly the two-dimensional approach in Kuypers and Marx, this issue) in line with a permanent income framework in which assets are transformed into income streams for consumption (see Rodems and Pfeffer, this issue).

Third, in response to our last research question, we consider extended wealth to more comprehensively describe the situation of children in single-parent families. Here, we describe the level of and inequality in wealth for children with extended wealth in single-parent families after parental separation rather than only considering wealth of the resident parent. We report results from the four alternative measures of extended net wealth introduced above.

## Results

### Levels of children's wealth

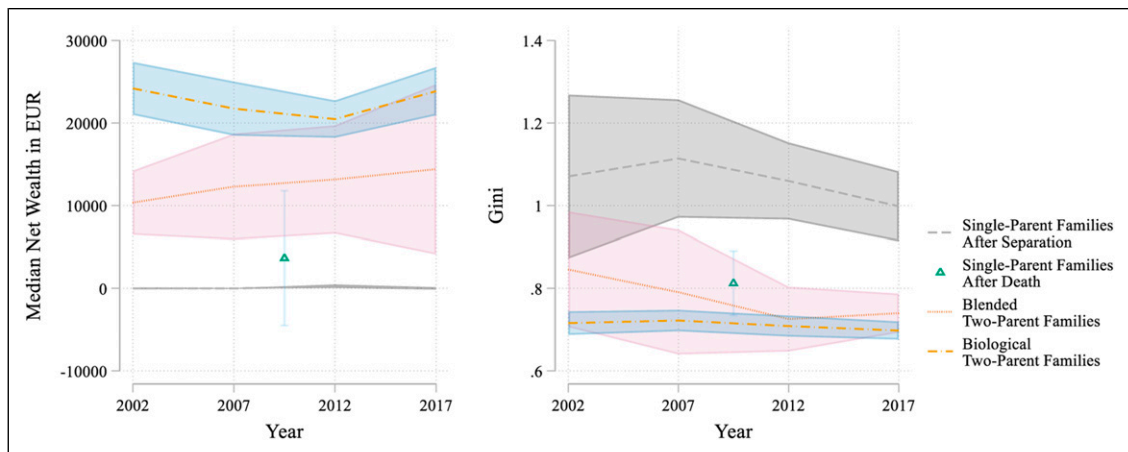
Figure 1 (left panel) shows large differences in the level of net wealth between children from different types of families between 2002 and 2017. We find

little change over time – in line with relatively stable wealth inequalities in Germany more generally (Grabka and Halbmeier, 2019). Children in single-parent families after separation have virtually no wealth at the median (and above the median up to about the 70th percentile) (see [Supplementary Figure C.2](#) in [Online Supplementary Appendix C](#)) across all years. This is in contrast to children from families with two biological parents: these children have between €20,000 and €25,000 at the median. Children in single-parent families after the death of the other parent are less disadvantaged than children in single-parent families after separation or divorce but have considerably less wealth than children from families with two biological parents, with a median of about €3,656 when pooling all years. Children in blended two-parent families also have considerably less wealth than children in families with two biological parents, where the median increases from about €10,341 in 2002 to €14,404 in 2017, so that the difference between children from blended two-parent families and from biological two-parent families decreases over time up to 2012 and then remains constant up to 2017. It is important to note that these inequalities also persist in many families when excluding home ownership as the main wealth component (see [Supplementary Figure C.7](#) in [Online Supplementary Appendix C](#)). Thus,

we can replicate earlier findings on the wealth disadvantage of children in single-parent families. In addition, children in single-parent families after separation or divorce are more disadvantaged than children from single-parent families after the death of the other parent, although differences are statistically non-significant. This is preliminary evidence that processes such as selection into single-parents and wealth depletion may be more detrimental for children after parental separation compared to parental death. In the following, we pool all years given the remarkable stability in disadvantage over time.

### *Decomposing wealth differences at the median*

Which factors contribute to the wealth disadvantage of children in single-parent families after separation or divorce compared to biological two-parent families at the median? To answer this question, we use RIF regression with decomposition techniques and focus on demographic and socio-economic factors, pooling all years ([Table 1](#)). To illustrate the interpretation, we consider the estimates for demographics, which include age, migration background, East Germany and the number of parents' siblings. If children in single-parent families had the



**Figure 1.** Trends in wealth and wealth inequality for children by family type. Data SOEP v35 2002, 2007, 2012 and 2017 (imputed, weighted). Note: Because of small sample size, all years pooled for children from single-parent families after the death of the other parent



same characteristics as children in biological two-parent families, they would have about €763 more wealth at the median, which is statistically insignificant at common test levels. Thus, compositional differences in demographic characteristics cannot explain the wealth gap. The estimate of €120,040 for the unexplained part captures different returns on demographic characteristics for both groups but also includes any unobserved characteristics.

Household income and employment characteristics explain most of the observed disadvantage in wealth of about €21,831 for children in single-parent families. For instance, if children from single-parent families had the household income of biological two-parent families, their expected median net wealth would be €11,954 higher. If resident parents of children in single-parent families had the same employment characteristics as biological two-parent families, their wealth would be about €8,948 higher at the median. Compositional differences in education and inheritances are also statistically significant and important in explaining the wealth gap. Overall, if children from single-parent families had the same characteristics as children from two-parent families, their median net wealth could be expected to be €25,350 higher and, thus, very similar to children from two-parent families.

On the one hand, these results suggest that single-parent families have disadvantageous characteristics for wealth accumulation in line with our argument about negative selection into single-parent families: compared to two-parent families, they have lower levels of education, disadvantageous employment characteristics and lower incomes. Income is the key determinant for wealth accumulation. These results are in line with previous research from an international perspective, which has reported a moderate negative educational gradient for being in single-parent families in Germany. Previous research also shows that income poverty among single-parent families in Germany is particularly high among those with lower levels of education (Härkönen, 2018), which would suggest different penalties for single-parent households across educational groups. Such differences in penalties are not supported in our data for wealth because the estimated structural effects

**Table 1.** Decomposition of the difference in median net wealth.

	b/se
Overall	
Biological two-parent families	22630.00*** (673.00)
Single-parent families after separation	798.38*** (37.92)
Difference	21831.61*** (666.95)
Explained	25350.59*** (1377.06)
Unexplained	−3518.97* (1325.97)
Explained	
Demographics	763.27 (623.08)
Education	1980.73*** (323.71)
Income	11954.13*** (790.07)
Employment	8948.53*** (1244.17)
Inheritance	1568.56*** (200.18)
Unexplained	
Demographics	120040.15*** (11314.14)
Education	858.67 (525.20)
Income	270865.06*** (16953.53)
Employment	−569.48 (1454.88)
Inheritance	1204.50*** (179.93)
N Observations	26,066

Data: SOEP v35 (2002, 2007, 2012, 2017) multiply imputed, weighted

Note: Decomposition with RIF regression; demographics includes age, migration background, East Germany and number of siblings of parents; employment includes experience in full-time employment, experience in unemployment, civil servant and self-employed; control for survey year included.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

of education do not differ significantly between family types in our model (not shown). It is important to note that we cannot rule out reverse causality of being in a single-parent family on

income or employment (it is less likely on education). A large body of literature documents the obstacles single parents face in the German labour market (for example, Hübgen, 2020). Such disadvantages in income and employment are likely to feed into lower wealth accumulation, in accordance with the limited wealth accumulation after separation outlined above. We would argue that selection and causation are not mutually exclusive in this case, but that both contribute to the observed wealth disadvantage of children in single-parent families. Remaining gaps could be due to wealth depletion at separation and the division of wealth between the spouses.

### *Inequality in children's wealth*

So far, we have considered median wealth and level differences between children from different types of families, but this perspective ignores wealth inequality within these types of families and may mask considerable inequality of opportunity within this group. Therefore, we now turn to inequality between children in single-parent families which may be caused by heterogeneity in the constraints on wealth accumulation faced by these families.

Figure 1 (right panel) shows the Gini over time for children by family types. A first striking finding is the high wealth inequality within the group of children from single-parent families. The Gini for children from single-parent families exceeds 1.0 in all years except 2017, which is because, with negative wealth values, the Gini is no longer bounded between 0 and 1.<sup>7</sup> For children in single-

parent families after the death of the other parent, the Gini is 0.81 when pooling all years. The Gini coefficients for blended two-parent families are between 0.72 and 0.95. The lowest inequality can be observed for children from biological two-parent families.<sup>8</sup> Thus, children from single-parent families after separation have lower wealth levels at the median than children from other family types. At the same time, the wealth within this group is more unequally distributed, which means that the median alone provides a limited picture of the wealth situation of these children.<sup>9</sup>

The stark inequality within the group of children of single-parent families can be further illustrated by considering measures of wealth poverty (Table 2) (see Supplementary Table C.3 in the Online Appendix for year-specific rates). We find that children in single-parent families after separation experience staggeringly high levels of poverty, with 70 to 81 percent of children falling below the respective poverty line. For children from all other family types (including single-parent families after the death of the other parent), poverty rates are considerably lower. A large share of those children falling below the poverty line are children without any positive net wealth, as illustrated by the third column in Table 2.

### *Decomposing inequality in wealth*

Again, we use decomposition techniques to gain a better understanding of the underlying processes that lead to higher wealth inequality among children from

**Table 2.** Wealth poverty by family type (all years pooled).

	Net wealth poverty relative to wealth	Net wealth poverty relative to income	Zero or negative wealth
	(share)	(share)	(share)
One parent after separation	0.81	0.70	0.52
One parent after death	0.60	0.45	0.41
Blended two parents	0.47	0.31	0.22
Biological two parents	0.40	0.27	0.18

Note: Net Wealth Poverty Relative to Wealth: 60 of median per capita net wealth or below; Net Wealth Poverty Relative to Income: Net wealth below 3 months income poverty line; Data: SOEP v35 (2002, 2007, 2012 and 2017) multiply imputed, unweighted

single-parent families after parental separation compared to biological two-parent families (Table 3). Compared to the decomposition of median differences, less of the difference in the Gini coefficient (1.06 vs 0.71) can be explained with observed compositional differences. Compositional differences in employment make up about half of this explained difference. If the families of children with one parent had similar employment characteristics to biological two-parent families, the Gini for children from single-parent families would be about 0.07 points smaller. Compositional differences in education account for 0.03 points. Compositional differences in inheritances explain about 0.01 points difference in the Gini index. Demographic differences such as age account for 0.02 points difference. Income plays no substantial role in explaining differences in wealth inequality. One possible explanation is that the Gini index is income-scale independent – it remains the same if all incomes in a group A are x-fold higher than the incomes in group B. More than half of the difference in the Gini is due to different returns on the characteristics included in the model.<sup>10</sup> The remainder is attributable to non-observed or non-included characteristics.

### *Extended wealth including non-resident parents*

We now turn to our last research question and investigate whether we underestimate the wealth available to children from single-parent families by not considering the non-resident parent. Table 4 shows the median and Gini for our measures of extended net wealth. Even when including the non-resident parent's wealth, the median wealth of children in single-parent families after parental separation remains low and close to zero. Only in our extended wealth measure drawing on all observed wealth of both parents is median wealth positive, about €3,359. Inequality in median wealth also remains very high and considerably higher than for children from biological two-parent families. For instance, when considering the extended wealth measure drawing on current observed wealth of both parents, the Gini is 0.93. The results clearly

**Table 3.** Decomposition of difference in Gini for net wealth.

	b/se
Overall	
Biological two-parent families	0.71*** (0.01)
Single-parent families after separation	1.06*** (0.03)
Difference	−0.34*** (0.03)
Explained	−0.14*** (0.02)
Unexplained	−0.20*** (0.04)
Explained	
Demographics	−0.02** (0.01)
Education	−0.03*** (0.00)
Income	−0.01 (0.02)
Employment	−0.07*** (0.01)
Inheritance	−0.01*** (0.00)
Unexplained	
Demographics	−1.73** (0.60)
Education	−0.01 (0.02)
Income	3.22*** (0.83)
Employment	0.07 (0.07)
Inheritance	0.03* (0.01)
N Observations	26,066

Data: SOEP v35 (2002, 2007, 2012 and 2017) multiply imputed, weighted

Note: Decomposition with RIF regression; demographics includes age, migration background, East Germany and number of siblings of parents; employment includes experience in full-time employment, experience in unemployment, civil servant and self-employed; control for survey year included.

\*p<.05, \*\* p<.01, \*\*\* p<.001.

indicate that even if the non-resident parents' wealth is included in the wealth aggregate, children from single-parent families remain

**Table 4.** Distribution of wealth in single-parent families after parental separation including the non-resident parent.

	p50	LB	UB	Gini	LB	UB
Current	804.28	-1233.26	2841.83	0.93	0.84	1.01
Ever observed	3359.38	1060.74	5658.01	0.86	0.81	0.91
Extrapolated	0.00	-62.06	62.06	1.06	1.00	1.12
Imputed	0.00	-1365.52	1365.52	1.04	0.82	1.26

Data: SOEP v35, weighted

Note: All years pooled.

disadvantaged compared to children in two-parent families (see [Supplementary Appendix Figure C.6](#) in the Online Appendix for more details on the distribution of wealth when adding absent parents' wealth).

## Conclusion

Families' economic wealth is a resource that can provide children with crucial advantages. We found that children in single-parent families after separation have considerably less wealth than those in two-parent families (including blended families), in line with previous research. Children from single-parent families after the death of one parent are less disadvantaged. Going beyond previous research, we found that most of the wealth disadvantage of children in single-parent families can be explained by compositional differences in income and employment characteristics. Our findings suggest that selection into single-parent families and reduced wealth accumulation after separation due to limited participation in employment contribute to the wealth disadvantage of single-parent families after separation, and that this disadvantage persists to some degree even in blended families. While our mainly descriptive results do not allow us to distinguish between these two explanations, we argue that both are likely relevant in explaining wealth disadvantage. Overall, this interpretation points to a double disadvantage faced by children in single-parent households: they have less household income, and this low household income may lead to less wealth accumulation, which limits their financial security in the long term (for example, [Bernardi et al., 2019](#)).

Furthermore, we found higher inequality within the group of children from single-parent families compared to two-parent families, and this larger inequality cannot be fully explained by observed compositional differences in demographic and socio-economic characteristics. This inequality is also visible in staggeringly high wealth poverty rates for children in single-parent families. This finding highlights that a focus on median disadvantage alone is too simplistic to describe the experience of children in single-parent families, where many children fare worse, but some also fare better than the median disadvantage would suggest. The finding calls for future research to unravel the factors contributing to the inequality within the group of children from single-parent families. One avenue to explore is intergenerational support and transfers from the grandparents' generation in the case of separation ([Leopold and Schneider, 2011](#)), which was beyond the scope of the current study. Finally, this finding suggests that social policy generally targeted at single-parent families is unlikely to fully eliminate the wealth disadvantage experienced by children in these families.

Finally, the material wellbeing of a child in a single-parent household does not depend on the wealth of this household alone. These children may also benefit from the wealth of the other parent. Besides legal claims, the non-resident parent may provide the child with financial resources, either directly through child maintenance, or indirectly through other non-monetary support. This type of wealth outside the single-parent household has been ignored in prior literature. When we additionally considered the wealth of non-resident parents, we found that the wealth disadvantage of children in

single-parent families is only slightly reduced. This suggests that the division of wealth at separation is of limited relevance in explaining the wealth disadvantage in single-parent families. Wealth depletion at separation may further contribute to the relatively low wealth that non-resident parents add to the extended wealth of children in single-parent families.

In this study, we analysed the wealth stock of children, assuming that household assets are distributed equally among all members and thus also among the children. The within-household rule for sharing wealth is unobserved and not necessarily the same across households; it also undoubtedly differs from the amount of parental wealth to which children are legally entitled. Studying the factual *de jure* claims certainly is an interesting direction for future research. A further limitation of our analyses consists in the low case numbers for single-parent families and, in particular, for those with a deceased partner, which affects the explanatory power. Differentiating between types of families with larger case numbers would make it possible to more easily distinguish between different explanations for the wealth disadvantage in single-parent families.

Despite these limitations, we showed the unequal wealth levels of children in different types of families in Germany. Following the findings by [Sieminska \(2018\)](#) for seven selected countries (not including Germany) within and outside the EU, one can argue that the findings presented here for Germany are not an exception, but that the wealth disadvantages of children from single-parent families generalize to other countries. However, the social policy context will play an important role in the extent of disadvantage faced by children in single-parent families. Even though there are minor welfare policies targeted at single-parent families, Germany is one of the countries in which single-parent families are actually disadvantaged by family and tax policies when comparing their net incomes to those of couple households ([Bradshaw et al., 2018](#)). This is especially the case for low-earning single-parent families. As a result, German single-parent families have a three times higher risk of being poor compared to two-parent families ([Goebel et al., 2015](#)). This would suggest that the policy context in Germany may be more detrimental to the wealth accumulation in single-parent households compared to other

countries, but more comparative research is needed to support such conjectures.

How could policy respond to the wealth disadvantage of single-parent families? First, our findings suggest that policies which facilitate gainful labour market integration of single-parent families, such as accessible and flexible childcare, are likely to also improve their wealth. Furthermore, in the German context, income tax disadvantages for single parents should be reduced and here the extension of the special tax allowance to €4,008 from 2020 onwards can only be a first step. Second, our results suggest that policies involving the non-resident parents through legal obligations for comprehensive maintenance are necessary but may be insufficient to reduce the wealth disadvantage in single-parent families because the resources of the non-resident parent are unlikely to fully compensate for the disadvantage faced by children in single-parent families. Third, beyond policies targeted at single-parent families, it should be emphasised that family policies which benefit all families' wealth accumulation are also likely to improve the situation of single-parent families ([Maldonado and Nieuwenhuis, 2018](#)). In this direction, for instance, public rent-to-own programmes may facilitate wealth accumulation for medium- and low-income families more generally ([Gründling and Grabka, 2019](#)). For families with medium incomes but insufficient equity, special subordinated loans with public lenders may help families to overcome the hurdle of high down-payments for entering home ownership ([Michelsen, 2017](#)). In contrast, subsidies such as the expiring *Baukindergeld* (building allowance for families with children) in Germany, which are only granted after financing has been secured, are unlikely to support entry into home ownership for low-income households. More ambitiously, a universal inheritance programme providing children with a lump sum at adulthood may substantially reduce the lifetime disadvantage for children from single-parent families ([Atkinson, 2015: 155ff](#); [Morelli et al., this issue](#)).

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## Supplementary material

Supplementary material for this article is available online.

## Notes

1. Before 2003, tax relief was also granted, but up to 1995, the relief was equal to the sum of the personal exemptions of all taxpayers.
2. Before 2007, for a period of eight years.
3. We drop the SOEP refugee samples M3–M5 because they do not include wealth measures.
4. We use the term biological father/mother in a broad sense including adoptive parents and those parents who used reproductive technologies.
5. We use multiple imputation using chained equations.
6. Although we have panel data at hand, we do not disentangle these two groups as we do not have a full partnership history for all of the single-parent households. The processes generating wealth disadvantage after separation mostly also apply to those mothers without partners at birth.
7. See [Supplementary Appendix Figure C.4](#) in [Online Supplementary Appendix C](#) for inequality trends excluding negative and 0 net wealth.
8. Overall, the conclusions are similar when considering the CV instead ([Supplementary Appendix Figure C.5](#) in [Online Supplementary Appendix C](#)).
9. In [Online Supplementary Appendix C](#), we show the Lorenz curves for the wealth distributions by family types in [Figure C.2](#) and the 25th, 75th and 90th percentiles in [Supplementary Appendix Figure C.3](#).
10. Results are different when decomposing the coefficient of variation (CV) (see [Supplementary Appendix Table C.2](#) in [Online Supplementary Appendix C](#)). For this measure of inequality, the observed demographic and socio-economic characteristics have less explanatory power, and only about one fourth of the difference in the CV can be explained by compositional differences. Again, employment contributes the largest effect, but is statistically non-significant. Compositional differences in demographics and education can explain a substantial part of the difference in the CV between children from single-parent families after separation and children from two-parent families.

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