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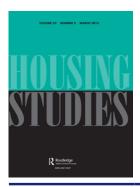
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Parental marital dissolution and the intergenerational transmission of homeownership

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ABSTRACT

Children of homeowners are more likely to enter homeownership than are children whose parents rent. We investigate whether this association is dependent on parental divorce, focusing on parental assistance as a conduit of intergenerational transmission. Event history analyses of data for England and Wales from the British Household Panel Survey (BHPS) show that the intergenerational transmission of homeownership is stronger for children of divorced parents compared with children of married parents. Such an effect may arise from two channels: (1) children of divorced parents are more in need of parental assistance due to socio-economic disadvantages associated with parental divorce; and (2) compared with married parents, divorced homeowning parents (mothers) rely more on housing wealth, rather than financial wealth, for assisting children. Findings support both explanations. Children of divorced parents are furthermore less likely to co-reside. We find limited evidence that when they do, co-residence is less conductive to homeownership compared with children from married parents.

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Intergenerational transmission of homeownership; first-time homeownership; parental divorce; British Household Panel Survey; event history analysis

1. Introduction: context and research question

It is a well-known finding that children of parents living in rental accommodation are less likely to become homeowners themselves, than are children of homeowners (e.g. Henretta, 1984; Smits & Mulder, 2008). Such intergenerational transmission of tenure status is considered to reproduce and even increase inter- and intra-generational inequalities and to hamper social mobility (Coulter, 2016; Kurz & Blossfeld, 2004; Lewis & West, 2016). However, as yet it is unknown whether parental marital dissolution—an increasingly common life event that affects resources of both parents and children—might contribute to a further deepening of such generational inequalities.

Over the past decades, divorce rates have increased. Divorce lowers the economic and housing resources available to divorced parents, and negatively affects the life-course outcomes of their children (e.g. Amato, 2000; Andreß & Hummelsheim, 2009; Kiernan, 1997). At the same time, housing and labour market developments resulting in declining affordability of homeownership have made first-time homebuyers more dependent on family background (e.g. Coulter, 2016; Gulbrandsen & Sandlie, 2015; Smits & Mulder, 2008). In countries like the United Kingdom (UK) and Australia, homeownership rates already declined before the economic crisis, as inflated house prices became increasingly unaffordable to young people (Hulse, 2014; Ronald, 2008). Social housing budget cuts furthermore forced more young people to rent in the more expensive private rental sector, making it more difficult to save for a deposit (McKee, 2012). High youth unemployment and employment insecurity (e.g. temporary contracts, part-time jobs) have also been linked to delayed homeownership entry, in particular in countries where access to homeownership is more dependent on mortgages (Lersch & Dewilde, 2015). Although house prices have readjusted following the financial crisis, stricter borrowing constraints since then may encourage first-time homebuyers to turn to their parents for a deposit or for mortgage guarantees—a social issue which has engendered public debate (e.g. Legal & General, 2016). As both parental divorce rates and the need for parental support upon the transition to homeownership have increased, the question to what extent parental divorce and parental homeownership interact with regard to the entry into homeownership, becomes increasingly relevant.

Four mechanisms underlying the intergenerational transmission of tenure status have been identified (e.g. Helderman & Mulder, 2007; Lersch & Luijkx, 2015; Mulder et al., 2015; Rowlands & Gurney, 2000): (1) direct parental assistance for housing promoted by the economic benefits associated with parental homeownership (e.g. lower housing costs in later life, housing equity (gains)), allowing parents to use accumulated (housing) wealth to enable children's homeownership through gifts, loans or mortgage guarantees; (2) intergenerational transmission of homeownership as a side-product of socio-economic status transmission; (3) geographical proximity between parents and children (indicating both a shared opportunity structure and a stronger likelihood of support exchange); (4) and socialization towards a preference for homeownership. *In this paper, we investigate whether and to* what extent the intergenerational transmission of homeownership is affected by a disruption of the parental marriage. We specifically evaluate whether the conduit of parental assistance depends on parental divorce. To this end, we compare entry into first-time homeownership, with respect to both occurrence (likelihood) and timing, for adult children of still-married and adult children of divorced parents. We evaluate the association between parents' tenure status and children's homeownership entry for both groups. As parental support is not easily observed directly with existing data, we mostly (though not entirely) infer its impact by statistically controlling for the other mechanisms explaining the intergenerational transmission of homeownership. Given the nature of our data (longitudinal household panel data, see Data and Methodology), parental resources and tenure status around the time of homeownership entry of young adults are mainly evaluated by means of mothers' resources and tenure status.

Reduced parental economic and housing resources following divorce are likely to influence both direct parental assistance and the 'indirect' transmission of socio-economic status. Changes in the (quality of the) parent-child relationship upon divorce might influence the geographical distance between parents and their adult children. Furthermore, if parental divorce results in an exit out of homeownership, it may affect the socialization of children regarding homeownership, as they have spent less years of their childhood in homeownership. While taking account of the other mechanisms (which in our analytical strategy assume the status of confounders), we focus on parental assistance—or rather the opportunities for parents to provide help—as this is the only *direct* mechanism driving the intergenerational transmission of homeownership (Spilerman, 2000). Intergenerational transfers are however also dependent on children's needs. Parental divorce is associated with disadvantaged life-course outcomes for their adult children (Amato, 2000; Kiernan, 1997). Parental help is thus intertwined with an 'added' indirect socio-economic status disadvantage arising from parental divorce.

We use data from the British Household Panel Survey (BHPS), 1991–2008. This data-set contains detailed longitudinal information on relevant socio-demographic characteristics of respondents and their parents, with excellent and dynamic measurement of the economic situation of the parents. Whereas previous research tended to use information about the parents referring to respondents' childhood (e.g. at age 10), the BHPS allows for using information on the *current* family, financial and housing status of parents. This is important because, although these variables are affected by the divorce experience, they are also likely to fluctuate over time.

Since 1999 housing policy in the UK has been devolved to the Scottish Parliament, the National Assembly for Wales and the Northern Ireland Assembly. Although tenure structures vary somewhat across England and Wales (the territories analyzed in this paper), both devolved regions have seen a decline in social housing and owner-occupation compensated by an increase in private renting. According to Birrell et al. (2016, p. 237, 238), 'any divergence of approach because of devolution has been accompanied by convergence towards market processes' and because of that, 'differences within each of the territories of the UK are greater than differences between them. Furthermore, social security arrangements and welfare reform—important for access to and affordability of housing—remain largely determined by Westminster. This is why, for the purpose of this paper, respondents from England and Wales are analyzed together. In our models, we control for regional house prices.

2. Parental divorce, parental tenure and children's homeownership

Although empirical evidence is not always consistent, previous studies suggest that parental marital dissolution has negative implications for adult children's socio-economic and demographic life-course outcomes (Amato, 2000; Kiernan, 1997). Parental marital dissolution also featured in some previous studies on intergenerational wealth transfers and access to homeownership, but usually only as a control variable (e.g. Smits & Mulder, 2008). Several studies for the Netherlands have shown that children of parents who divorced before the child turned 18 are less likely to have received financial assistance upon accessing homeownership, or any other type of financial support from their parents (Mulder & Smits, 2013); that women whose parents separated have a lower likelihood of being a homeowner (Blaauboer, 2010); and that the housing values of children of divorced parents are lower (Smits & Michielin, 2010). Unfortunately, these studies have two main drawbacks.

Firstly, studies tended to look at the parental marital status and housing tenure when the respondent was a certain age during childhood (e.g. age 10), rather than at parents' situation during the time of entry into homeownership. This may affect findings in unknown ways. For instance, parents who divorced early in their life course may have recovered in terms of their economic and housing situation when their adult child may enter homeownership (e.g. due to re-partnering), and thus have more resources at their disposal than presumed. 'Later' divorces—taking place after the specified age during childhood at which parents' characteristics are measured—furthermore remain unobserved. The intertwined impact of parental divorce and parental homeownership on entry into homeownership of adult children may therefore be ill-specified, depending on the timing of parental divorce and the subsequent economic and housing trajectories of parents. These methodological issues may, in other words, bias estimates of the association between parents' and adult children's homeownership and its relationship with parental divorce. In this study, we contribute to the literature by focusing on the experience of parental divorce measured over the whole lifespan of the child, and by focusing on the dynamics of the tenure and marital status of the parents, in particular the mother, at the time of entry into homeownership.

Secondly, it remains unclear through which underlying mechanisms the negative association between parental divorce and access to homeownership comes about. So far, this relationship has been tentatively explained in terms of the lower level of material resources available to divorced parents, which in turn hampers wealth transfers favouring their adult children. Divorce generally has adverse social and economic consequences. Compared to women, men are less likely to suffer large income declines upon divorce, although recent research has shown that men also experience negative economic consequences, such as financial strain or lifestyle deprivation (see e.g. the volume edited by Andreß & Hummelsheim, 2009). Upon relationship dissolution both men and women struggle to maintain their 'pre-divorce' position in terms of tenure, affordability, quality and type of housing (Dewilde, 2009). Previous research on the housing consequences of divorce has shown this life event to be related to increased residential mobility and exit out of homeownership of parents, especially mothers, both in the short and middle term (Dewilde, 2008; Feijten & van Ham, 2010) as in the long term (Dewilde & Stier, 2014). Since housing wealth is one of the main sources of wealth for most households, the negative implications of divorce for homeownership would imply that divorced parents may have less housing resources to support their children on entry into homeownership.

Less attention has been paid to the various other mechanisms through which parental marital dissolution is related to homeownership of adult children. Parental divorce not only directly influences access to homeownership by means of potentially reduced parental assistance, but also indirectly. For instance, socio-economic transmission happens through the 'opportunities made available by parents to their children' over the life course (Spilerman, 2000, p. 511). A notable exception is the study by Lersch & Baxter (2015) using Australian panel data, who although looking at the association between parental separation and adult children's wealth (rather than homeownership), studied three possible pathways through which a negative association occurred, namely reductions in: (1) wealth transfers from parents to children (as already mentioned), (2) educational attainment and earnings of children and (3) stable family structures of adult children. The third pathway asserts that growing up in a disrupted family is related to poorer partnership choices and early childbearing, which reduces children's chances of maintaining stable relationships later in life. Unstable relationships hamper wealth accumulation—and thus also saving for a deposit. Out of the three pathways, the latter focusing on partnership and childbearing choices was found to be the most likely one via which adult children's wealth is influenced by parental separation. This negative association was however limited to adult children who experienced parental divorce before age 15. Other studies similarly found that parental marital disruption at a younger age matters more for later-life socio-economic outcomes than when children were older at the time of divorce (e.g. McLanahan & Sandefur, 1994). With regard to demographic outcomes however, Kiernan (1997) reports that for the UK the

age at which parents divorced does not matter much. All in all, we conclude that parental divorce may not only influence parents' resources, but also adult children's needs later in the life course—these greater needs arise from an 'added' indirect socio-economic status disadvantage hampering wealth accumulation, and may necessitate more parental support compared with children from still-married parents.

2.1. The ability to provide and the need for support

In this paper, we analyze whether the association between parental homeownership and the likelihood and timing of first-time entry into homeownership differs between children with parents (still) living together, and children with divorced parents. While our main focus is on direct parental assistance as an important mediator between parental tenure status and children's chances to make the transition into homeownership, we also take account of the more indirect mechanism of socio-economic transmission, as parental divorce is associated with both declined parental housing and economic resources and disadvantaged socio-economic outcomes in children's life courses, affecting children's resources and wealth. As explained in the introduction, parental support is mostly (though not entirely) inferred from a positive association between parents' homeownership and children's entry into homeownership, controlling for confounding influences impacting on this association (socio-economic status transmission, geographical proximity and socialization towards homeownership). This strategy has also been used in previous research (e.g. Kurz, 2004, Mulder et al., 2015).

Notwithstanding its prominence in contemporary debates on inter-generational solidarity and intra-generational equity with regard to housing wealth in the UK, detailed representative figures on parental assistance for housing are hard to come by. Qualitative research from e.g. Heath & Calvert (2013) points at several different forms of support next to 'earmarked' financial gifts or loans for a deposit or the co-signing of mortgage loans, such as: financial and in-kind contributions to offset general living expenses; overdraft and credit-card 'bail outs'; legacies from grandparents; or living in family members' 'buy-to-let' investment properties at reduced cost. Given the expense of private renting, for many young people co-residence in the parental home has furthermore become an important route to accumulate savings for a deposit (also see Lewis & West, 2016). For our hypotheses, we draw on theory and empirical findings that intergenerational support in general depends on two main factors: the ability to provide support, and the need for support (Fingerman et al., 2009; Henretta et al., 2002; Kalmijn, 2010; Kim et al., 2015; Spilerman, 2000). Both aspects are likely to be affected by parental divorce, and may therefore influence the intergenerational transmission of tenure status through the conduit of parental assistance.

Following a divorce, parents are likely to have fewer economic resources, both in terms of financial resources, as in terms of having a home that can be used as an asset. There are several reasons why divorce is related to less homeownership. A separation usually implies that at least one partner leaves the household to take up residence elsewhere. Moving house is generally a costly affair, amongst other things because of transaction costs. In addition, the relative housing costs themselves often increase after a separation as these costs are no longer shared with a partner, something which has been found to affect women in particular (Dewilde, 2009). Increased residential mobility and housing costs, combined with reduced financial resources increase the risk of exiting homeownership (Dewilde, 2008, Feijten & van Ham, 2010) and hampers wealth accumulation. Re-partnering might restore financial resources and make homeownership accessible again. Nevertheless, previous studies have found that having ever experienced a divorce reduces the likelihood of being a homeowner in later life, though much less so for men than for women (Dewilde & Stier, 2014). For some, this stems from a reluctance to re-enter into such a considerable joint investment like a joint home (e.g. Joseph & Rowlingson, 2012). For others, it is simply the result of the economic consequences of divorce.

Furthermore, even if divorced parents own a home, it might be harder for them to use it to support their children in purchasing a house. Whereas the housing costs of renters tend to remain relatively stable over the life course, those of homeowners decrease when they become outright homeowners, enabling them to accumulate savings that can be used as a gift or loan to their children to purchase a home (Grundy, 2005; Mulder & Smits, 1999, 2013). However, the accumulation of such savings on housing costs might be smaller for divorced rather than married parents because of various reasons. First, divorced parents may have benefited less from homeownership because they may have lived in a rental home for some time after the divorce. Second, taking on a larger mortgage by divorced parents is likely to increase the time it takes for them to pay off housing debt, resulting in higher housing costs for a longer period of time (Wind & Dewilde, 2016). Furthermore, divorced homeowners with low equity cannot easily use their house as a collateral for co-signing loans, or cannot release equity from their homes to kick-start their children on the housing market, a 'family strategy' which has become common in the UK (see Lowe et al., 2012, also using BHPS-data).

On the other hand, apart from a (mortgaged) house, divorced homeowning parents are less likely to have other financial assets (savings, investments) that can be used to assist their children. The wealth portfolios of divorced parents are likely to be less diversified than those of married parents. Parents who remained in homeownership (or regained access) are likely to own mostly housing wealth, while parents who rent presumably did not have enough resources to stay in or (re)enter homeownership, and are paying high rents when in the private rented sector. Parents in social housing have lower incomes and less financial wealth by default. In a qualitative study of English highly educated parents and their student or graduated children, Lewis & West (2016) found that almost all parents felt an obligation to support their children financially if they were able to do so. However, there were considerable disparities in parents' abilities to provide support, with especially single mothers having difficulties making regular financial contributions to their children. In fact, from research on income poverty dynamics, we know that for lone mothers, older children's contributions from work to household income form an important route out of poverty (Jenkins, 2000). We thus expect that adult children of divorced parents (in particular when co-residing with a lone mother) are less likely to benefit from and, instead, more likely to contribute to parents' household resources.

In addition, whereas divorced parents are thus expected to be less able to provide (financial) support to their children, at the same time the need for such support is likely to be higher amongst children of divorced parents. McLanahan & Sandefur (1994) have shown that even when controlling for the socio-economic status of parents, children of divorced parents tend to do less well in school and on the labour market (Amato, 2010; Lersch & Baxter, 2015; McLanahan et al., 2013). They are also more inclined to form partnerships and become parents at younger ages, and thus leave home earlier (Kiernan, 1997). This is likely to result in lower resources and accumulated wealth, and thus more need for parental support in order to purchase a house. Previous research on intergenerational solidarity has found that in general more support is provided to those children who are more in need of support (Cox & Rank, 1992; Hochguertel & Ohlsson, 2009; McGarry & Schoeni, 1995). If the children of divorced parents have higher support needs, they can thus be expected to receive more parental support, as long as their parents are capable of providing such support. The underlying assumption here is that within-family differences can be generalized to different family types. In a comparative study for 10 European countries on homeownership entries between 1965 and 2009, Mulder et al. (2015) furthermore find that the intergenerational transmission of homeownership is stronger in contexts (country-period combinations) where homeownership is less affordable, but less strong in more affluent contexts. The higher the level of economic affluence, the greater the likelihood of a transition to homeownership, but the smaller the impact of parental homeownership. In times and situations of need however, parents are more strongly inclined to help their children, whatever resources they dispose of.

We conclude from the above that divorced parents are less likely to be able to provide direct parental assistance to their children for purchasing a home, which should be reflected in a weaker association between parents' and children's homeownership. However, this association may also be strengthened as homeowning divorced parents (in particular mothers) with housing wealth are more likely to own *only* housing wealth and less likely to own significant financial wealth. An association between parents' and children's homeownership may therefore be more likely to arise from direct parental support linked to parents' homeownership (e.g. through home equity borrowing), as there is simply less opportunity for socio-economic status transmission—the latter is arguably the main conduit underlying a 'tenure-effect' amongst children with non-divorced parents, as direct parental support for this group of children mostly originates from financial (non-housing) wealth of their parents. Divorced parents (in particular mothers) in the rental sector presumably have less financial resources compared with married parents in the rental sector. Parental divorce furthermore increases children's support needs through the socio-economic disadvantages associated with (early) parental divorce, and may hence lead to more direct parental assistance, again leading to a stronger association between parents' and children's homeownership. Whether the association between parents' and children's homeownership differs between children of married and divorced parents depends on the relative balance between the ability to provide and the need for support, and is therefore an empirical question. From the theoretical insights outlined above, we however derive the following hypotheses:

There is a positive association between parents' homeownership and the likelihood and timing of entry into first-time homeownership of their adult children. (Hypothesis 1)

This positive association is stronger for children from divorced compared to children from married parents. (Hypothesis 2)

Mothers' housing wealth as a means of parental support is more conductive to homeownership entry for children of divorced parents, compared with children of married parents.

Co-residence with mother as a means of parental support is less conductive to homeownership entry for children of divorced parents, compared with children of married parents. (Hypothesis 4)

2.2. Disentangling the effect of parental homeownership

In this final section, we elaborate on the other mechanisms explaining the association between parents' and adult children's homeownership, and on potential differences between children from married and children from divorced parents. We need to take account of these other mechanisms given that our analytical approach is built on the idea that any remaining effect of parental homeownership on the likelihood and timing of first-time entry into homeownership proxies 'direct' parental assistance. Intergenerational transmission of homeownership as a side-product of socio-economic status transmission refers to the idea that parents with a higher socio-economic status also own more (non-housing) financial resources—and hence have more opportunities for parental support, while at the same time they are more likely to own their own house. In the previous section, we elaborated on the idea that—given their lack of non-housing wealth—divorced homeowning parents (in particular mothers) are more likely to rely on their housing wealth in order to assist adult children's entry into homeownership, compared with married homeowning parents. This implies the following hypothesis with regard to the multivariate relationships between parental tenure, parental resources and adult children's homeownership:

The positive association between parents' homeownership and the likelihood and timing of entry into first-time homeownership of their adult children is partly explained by parental (non-housing) financial resources, e.g. investment income; such confounding is however less likely for children of divorced parents compared with children of married parents. (Hypothesis

Geographical proximity between parents and their children forms the third mechanism. There are two sides to this mechanism. First, local housing markets tend to differ in tenure structures as well as with regard to affordability and availability of (certain types of) housing. Urban areas, for example, usually have more rental homes and less owner-occupied homes than rural areas (Mulder & Wagner, 1998). Since (elderly) parents and their adult children tend to live close to one another (Glaser & Tomassini, 2000; Michielin & Mulder, 2007), they are therefore likely to operate on the same local housing market, resulting in similar housing tenures. Besides the specific local housing market parents and children operate on, support exchange is simply facilitated by geographical proximity: the closer a person lives to a family member, the more likely it is that they will exchange support. In this sense, direct parental assistance for homeownership may be partly conditional on geographical proximity. If as expected, divorce has implications on the provision of and need for support of divorced parents and their children, these relationships are also likely to be associated with the geographical proximity between parents and children. If children of divorced parents are in need of more support, they can be expected to live closer to their parents in order to receive support. Geographical proximity between parents and children may also arise from parents'—more particularly single mothers'—need for material and emotional support. This might in turn increase the chances of parents and children to operate on the same housing market, resulting in a stronger association between parental tenure status and that of their adult children. Although previous research clearly shows that divorced fathers live further away from their adult children (Shapiro, 2003; Stjernström & Strömgren, 2012), such effects are not found for divorced mothers. Furthermore, while some divorced mothers may have better relationships with their children or live closer by (compared with still-married parents and their children), other divorced mothers might have worse relationships with their

children or live further away. Put differently, although there may well be higher variance, we do not expect much difference with regard to 'average' parent-child relationships or geographical proximity for children of divorced and still-married mothers.

The association between parental tenure status and first-time homeownership can be partly explained by geographical proximity; such confounding (through local housing markets) or mediation (through support exchange) is similar for children of divorced and children of married parents. (Hypothesis 6)

Socialization forms the fourth and final mechanism, yet one for which there is only limited empirical evidence. Rowlands & Gurney (2000) interviewed English children aged 15–17 and found that already at this age information transmitted by parents, peers and the media on homeownership had resulted in children viewing this tenure as 'part of a normal life' (page 126) and a symbol of success, whereas council housing was perceived as a symbol of failure. Especially, children who grow up in an owner-occupied home are thought to develop a preference for homeownership themselves. Controlling for other sources of parental tenure effects, Lersch & Luijkx (2015) indeed found that socialization in homeownership—measured as the length of time spent in parental homeownership—increased the likelihood of becoming a homeowner. Children of divorced parents can be expected to spend less of their childhood in owner-occupied houses. As a result, the socialization into homeownership might be less strong for them. Data limitations however do not allow us to test this, and in any case the effect of socialization is hard to separate from the socio-economic transmission of homeownership, as in most contexts (particularly in the UK) homeownership tends to be economically beneficial, and these benefits accrue over time (i.e. with each year spent in homeownership). Lux et al. (2016) (for the Czech Republic) and Druta & Ronald (2017) (for the UK) furthermore showed that intergenerational transfers are often conditional on homeownership entry of adult children, the latter being considered a form of 'responsible' consumption. Socialization towards homeownership is hence also entangled with direct parental assistance.

3. Data and methodology

3.1. Data

We used data from the British Household Panel Survey (BHPS), waves 1–18 (Taylor et al., 2010). The panel started in 1991 with a representative sample of 10,300 individuals from 5500 households, who were followed until 2008. All adult members in the sampled households were included in the panel study and interviewed individually, including children from the moment they turn 16. In 2009, the BHPS was replaced by the UK Household Longitudinal Study (UKHLS), which incorporated the BHPS sample. We did not include the UKHLS since the members of the BHPS sample were not interviewed in its first wave in 2009, creating an undesirable gap in the person-year data-set.

For this study, a subsample of respondents was drawn from the total sample. First, we selected people aged 17-25 years old in the first wave who were still living with their parents. This age group was chosen in order to minimize the risk that the respondent may have owned a home before the data collection started (see Ermisch & Halpin, 2004 for a similar strategy). Selecting respondents residing in their parental homes ensured that the parents were also BHPS sample members. In addition, people turning 17 years old in waves 2-18 were added to the sample. Only respondents living in England and Wales were included. A person-year data-set was created in which each row represents a single year in the life of the respondent. Respondents are included in the data-set up to the moment they purchase a house,1 or until the last wave in which they participated in the survey if they did not purchase a house during the observation window. Since several independent variables are constructed as lagged variables, we started following respondents from their second person-year, generally from the age of 18. After removing respondents with survey non-response in certain waves or missing values on key variables, our analysis sample consists of 7555 person-years for 1337 individuals, with ages ranging from 18 to 42.

3.2. Operationalization of variables

3.2.1. Entry into homeownership

Our dependent variable 'first-time homeownership' is defined as a binary variable indicating whether in a certain person-year a respondent moved to an owner-occupied home (either mortgaged or owned outright), without their parents or other adult family members (such as grand- or stepparents). The dependent variable thus takes the value of 1 in the first person-year in which a respondent lives independently in an owner-occupied home, and a value of 0 in the other person-years, in which respondents live with their parents or other adult family members other than their own partner, or independently but in a rented accommodation.

3.2.2. Characteristics adult child

Apart from gender, all adult child and parental characteristics are measured as time-varying indicators. Parental separation was determined by combining information on the marital history of the respondent's biological parent(s) asked in the second wave, with the legal marital status as reported by the parent(s) in each following survey wave. Divorce was defined as having either 'separated' or 'divorced' as the legal marital status. These separation indicators were retrieved for each parent separately, and then combined into a single binary variable indicating whether in a certain year, one or both parents have ever experienced a divorce or separation. Biological parents who were still together but had experienced a separation in the past before the birth of the respondent, were grouped with the married rather than with divorced parents. Hence, parental divorce indicates divorce of respondents' parents. The rationale behind this decision was that these parents had been together for at least 18 years, and the possible impacts of a divorce from another partner before the birth of the respondent were unlikely to be of influence on the situation of the respondent.

Educational attainment is often seen as an indicator of earnings capacity, an important characteristic when applying for a mortgage. Three binary variables were created using the Comparative Analysis of Social Mobility in Industrial Nations (CASMIN)² coding scheme: elementary (1a-c); intermediate (2a-c); and higher education (3a-b) (Brauns et al., 2003). This variable is updated yearly in order to include the most recent qualifications of each respondent. For respondents who are still in education this variable shows their highest achieved educational level to date. In addition, we created a separate dummy variable that indicates whether a person is in full-time education or not. Our measure of respondent's individual annual gross labour income is corrected for inflation using the consumer price index (CPI) for the different survey years (2005 = 100). Because of its skewness, the natural logarithm was used after adding a value of 1 to the income of every respondent to prevent missing values for people with no individual income. Both education and annual labour income are included in the models as lagged variables since we expect education and income of the respondent measured in the year preceding the purchase of a house to contribute more strongly to the decision to purchase a house, than when measured in the year of purchase.

Geographical proximity of the respondent to his or her mother indicates the distance between their respective residential locations and thus the likelihood of them operating on the same housing market, as well as their propensity to exchange support. An important issue here is how local housing markets are defined. Data limitations often imply that Local Authority Districts (Coulter, 2016) are used as proxies for local housing market areas. Several studies on defining and delineating housing submarkets however have shown that actual local housing markets do not necessarily adhere to such administrative boundaries (Brown & Hincks, 2008; Coombes et al., 2006; Watkins, 2001). In addition to spatial aspects, both structural characteristics of dwellings (e.g. size and type: detached, semi-detached, apartment) as well as characteristics of buyers (e.g. low- or high-income groups) define the local housing market (Watkins, 2001). Since parents and their children are likely to differ in terms of the type of dwelling they are looking for (e.g. family vs. starter home), as well as in their personal characteristics (most notably their income levels), even if they live in the same Local Authority District (LAD), they might still be operating on different housing submarkets. Bearing in mind these limitations, in this paper we operationalized geographical proximity in terms of Local Authority Districts and compare the LAD in which the respondent resides to the LAD in which the mother of the respondent resided in the previous year. Results are however robust with respect to alternative operationalizations.³ This was then combined with the co-residence variable to take into account whether respondents lived in the same LAD as their mother in the previous year because they were living in the same household. As a result, the final variable included in the multivariate models consists of the following four categories: (1) Lived with mother in previous year and in same LAD this year; (2) Lived with mother in previous year but in different LAD this year; (3) Did not live with mother in previous year but in same LAD this year and (4) Did not live with mother in previous year but in different LAD this year.

Gender, household composition and employment status have been combined into six different categories: (1) single female, not employed; (2) single female, employed; (3) single male, not employed; (4) single male, employed; (5) couple, one or no partners employed; (6) couple, both employed. The number of children younger than 16 in the household in a certain year includes both natural children, as well as adopted or stepchildren. It consists of three separate categories: no children (0), one child (1) and two or more children (2). The age of the respondent is included as a continuous variable. To control for differences between regional housing markets, real average regional house prices of all types of dwellings were included in the analyses for the 10 different larger ONS regions⁴ respondents resided in.

3.2.3. Parental characteristics

We have information on parents' characteristics only if the parents are (or have been) members of respondents' households since the start of data collection (and are thus panel members). When the parents are divorced, we do not always have much information for the parent who left the household, either because the parent was already out of scope when the data collection started, or because the parent dropped out of the panel following the divorce. Since this often concerns the father of the respondent, we can only properly estimate the effects of maternal tenure and resources on homeownership entry rates of children from married and divorced parents. While our focus on maternal resources may be considered as a drawback of using the BHPS data, we believe that our focus on current housing and resources of the mother represents an improvement compared to previous studies.

Four indicators of direct parental assistance were tested: 5 mothers' tenure status, mothers' housing wealth, mothers' housing wealth equity extraction and co-residence with mother. Tenure status of the mother is measured by means of a binary variable indicating whether she lives in a rented home (0) or in an owner-occupied home, either mortgaged or owned outright (1). Since less than 3 per cent of mothers live in a privately rented dwelling, we made no distinction between social and private renting. Housing wealth of the mother was calculated by subtracting the mortgage from the value of the home as estimated by the mother of the respondent herself. Where possible, missing values on either the mortgage or housing value were copied from the surrounding years. For cases which had no valid responses on these variables at all, a 'missing' housing wealth category was created. The final deflated housing wealth variable (2015 = 100) consists of the following five categories: (1) £0 or less; (2) Between £1 and £49,999; (3) Between £50,000 and £99,999; (4) £100,000 or more; and (5) Missing housing wealth. Mothers who rent are included in the first category. Since the question on mortgages in the BHPS reflects mortgages on all owned properties combined, a dummy variable indicating whether the mother of the respondent owned any other properties besides her main residence was created and included in all models containing housing wealth. Lagged variables for tenure status and housing wealth of the mother were used. We furthermore constructed an indicator of 'housing wealth extraction' (by taking out an extra mortgage or loan secured against the home) by the child's mother (for reasons 'other' than those explicitly specified in the questionnaire, which mainly pertain to mother's own home maintenance and extension, or for a car or consumer goods) and around the time of the child's homeownership transition. Co-residence was measured through a variable indicating whether a person was living at home with his or her mother in the previous year (vs. renting his/her own dwelling).

Our measure of gross annual household income of the mother is equivalized using the Modified OECD-scale, and similar to the labour income of the respondent has been corrected for inflation using the consumer price index (CPI) for the different survey years (2005 = 100). In its original form, this variable includes all types of labour and non-labour household income. To get an indication of the wealth of the mother's household and thus her ability to provide financial support to her children, investment income was separated from total household income by deducting it from the total household income, and included in the analyses as a separate variable. Investment income consists of any estimated income from investments, savings, as well as any rents received from boarders and lodgers or property owned. In cases where the respondent still lived in the parental home, his or her income was deducted from the annual household income of the mother. Similarly, investment income of the respondent was deducted from the household investment income of the mother in case he or she was still a member of the maternal household. The natural logarithm was taken of both the household and investment income, and in the analyses the values for the previous year were included. To deal with 0-values, a value of 1 was added to all incomes.

Several variables have been included in the models to control for certain characteristics of the mother. Since new partners can potentially help their step children and/or increase economies of scale, in the models for divorced mothers we control for whether she is living with a new partner or not. Furthermore, as housing wealth tends to increase with time we also control for the age of the mother, and for divorced mothers for the time since divorce. The latter consists of four categories: (1) divorced for 0–4 years; (2) divorced for 5–9 years; (3) divorced for 10-14 years; and (4) divorced for 15 or more years. Older mothers and mothers for whom more time has passed since divorce are expected to have more housing wealth and thus be more likely to be able to help their children purchase a house.

Table 1 provides an overview of the variables that were used in the analyses. The statistics are based on the data-set with 7555 person-years from 1337 respondents. The table distinguishes between respondents with married and respondents with divorced parents, and also presents the characteristics of respondents who purchased their first house. In line with expectations, children of divorced parents are less likely to have been living with their mothers in the previous year (73.4 per cent) than children whose parents are still married (82.72 per cent; p < 0.00). We further observe that parental divorce seems to be associated with different socio-demographic characteristics of adult children, in the sense that support needs of children from divorced parents could be higher—an assumption which also underlies our empirical expectations. Children of divorced parents are less likely to be a student (p < 0.06), they have lower educational levels (p < 0.00), and are more likely to be a parent themselves (p < 0.00). Although the annual labour income of respondents with divorced parents is somewhat lower than the income of respondents with parents who are still together, this difference is not statistically significant. Looking at respondents who have purchased a house, the opposite relation is found as now the respondents with divorced parents have the higher incomes (which may indicate that they form a more selective group compared to their counterparts with married parents), although again this difference is not statistically significant. Households in which both partners are in paid employment clearly are the most likely to own a house. This association appears to be stronger for children whose parents are still married than for those whose parents are divorced. Single male employed respondents whose parents are divorced are twice more likely to own a house than those whose parents are still together (p < 0.09). Regarding the characteristics of the mother of the respondent, it is especially striking to see how, even though only two-thirds (67.5 per cent) of the divorced mothers live in an owner-occupied home (compared to 84.5 per cent of non-divorced mothers), almost 82 per cent of the respondents with divorced parents who have purchased a home have a mother who is a homeowner (compared to 88 per cent of respondents with married parents). Those with divorced mothers living in rental accommodation therefore seem to be most disadvantaged when it comes to purchasing a home of their own. Taken together, the latter findings point at a stronger association between mothers' tenure and children's entry into homeownership for children of divorced parents. When looking at mothers' housing wealth rather than mothers' tenure, we see that (obviously) divorced mothers are far more likely to have no or negative housing wealth. Married mothers are far more likely to own larger amounts of housing wealth (£50,000 or more). Finally, we also find that divorced mothers are more likely to extract housing equity 'for other reasons' around the time their child purchases a home than are married mothers (8.0 per cent vs. 3.7 per cent, p < 0.06)—a difference which is even more pronounced when viewed in the light of our findings that divorced mothers are less likely to be in homeownership/have any housing wealth.

 Table 1. Descriptive statistics of independent variables.

		Total				Parent	Parents married			Parent	Parents divorced	
		All	First-time owner	wner	All	_	First-time owner	vner	All	_	First-time owner	wner
	% (mean)	n person years	%	и	%	и	%	и	%	и	%	И
All	100.00	7555	6.50	491	76.15	5753	6.57	378	23.85	1802	6.27	113
Characteristics respondent												
Lives with mother (lag)												
Yes	80.50	6082	ı	ı	82.72	4759	ı	ı	73.42	1323	ı	ı
No	19.50	1473	ı	ı	17.28	994	ı	1	26.58	479	ı	ı
Age	22.39	1	24.62	ı	22.48	ı	24.70	ı	22.12	ı	24.32	1
Partnership and employment situation	situation											
Single female not empl	14.81	1119	1.02	2	14.97	861	0.79	3	14.32	258	1.77	2
Single female empl	23.60	1783	11.00	54	23.33	1342	10.58	40	24.47	441	12.39	14
Single male not empl	14.00	1058	2.24	11	13.70	788	1.85	7	14.98	270	3.54	4
Single male empl	31.49	2379	12.02	29	32.23	1854	9.79	37	29.13	525	19.47	22
Couple both empl	10.79	815	61.91	304	10.59	609	64.55	244	11.43	206	53.10	09
Couple one or none empl	5.31	401	11.81	28	5.20	299	12.44	47	2.66	102	9.72	11
Student												
Yes	17.67	1335	2.24	11	18.15	1044	2.38	6	16.15	291	1.77	2
No	82.33	6220	97.76	480	81.85	4709	97.62	369	83.85	1511	98.23	111
Number of children												
0	99.68	6774	83.50	410	90.32	5196	83.60	316	87.57	1578	83.19	84
1	96.9	527	13.03	64	6.34	365	12.96	49	8.99	162	13.27	15
2 or more	3.36	254	3.46	17	3.34	192	3.44	13	3.44	62	3.54	4
Lives in different LAD from mother	other											
Yes	12.89	974	40.12	197	12.64	727	40.74	154	13.71	247	38.05	43
No	87.11	6581	59.88	294	87.36	5026	59.26	224	86.29	1555	61.95	70
Education (lag)												
Basic	18.99	1435	11.81	28	17.35	866	10.85	41	24.25	437	15.04	17
Intermediate	65.43	4943	55.60	273	66.43	3822	54.76	207	62.21	1121	58.41	99
High	15.58	1177	32.59	160	16.22	933	34.39	130	13.54	244	26.55	30
Annual income (In lag)	09'9	ı	8.62	ı	6.61	I	8.55	ı	6.55	ı	8.86	I
Regional house prices	168,910	ı	156,707	ı	167,038	ı	152,740	ı	174,885	ı	169,976	ı
Duration	4.64	I	6.12	1	4.72	1	6.13	ı	4.39	ı	90.9	ı

(Continued)

 Table 1. (Continued).

		Total				Parents	Parents married			Parents	Parents divorced	
		All	First-time owner	wner	All		First-time owner	ner	All		First-time owner	vner
	% (mean)	n person years	%	и	%	и	%	и	%	и	%	и
Characteristics mother												
Tenure status (lag)												
Renter	19.54	1476	13.24	65	15.49	891	11.90	45	32.46	585	17.70	20
Owner	80.46	6209	92.98	426	84.51	4862	88.10	333	67.54	1217	82.30	93
Mother has partner												
Yes	81.87	6185	84.11	413	94.65	5445	94.71	358	41.07	740	48.67	55
No	18.13	1370	15.89	78	5.35	308	5.29	20	58.93	1062	51.33	28
Education (lag)												
Basic	45.02	3401	43.79	215	45.72	2630	46.30	175	42.79	771	35.40	40
Intermediate	29.77	2249	28.31	139	29.74	1711	27.25	103	29.86	538	31.86	36
High	25.22	1905	27.90	137	24.54	1412	26.46	100	27.36	493	32.74	37
Household Inc. mother (In	9:26	I	09.6	ı	09.6	ı	9.62	I	9.42	ı	9.53	
lag) Investment Inc. mother (In	3.46	ı	4.21	ı	3 83	ı	4 46	ı	777	ı	3 37	I
lag)	;		- !		9		2		77:7		ì	I
Housing wealth mother (lag)												
£0 or less	20.28	1532	14.26	70	16.03	922	12.70	48	33.85	610	19.47	22
Between £1 and £49,999	18.03	1362	20.37	100	17.10	984	18.25	69	20.98	378	27.43	31
Between £50,000 and	24.63	1861	25.46	125	26.44	1521	25.93	86	18.87	340	23.89	27
£100,000 or more	33.43	2526	34.62	170	36.64	2108	37.83	143	23.20	418	23.89	27
Missing housing wealth	3.63	274	5.30	56	3.79	218	5.29	20	3.11	26	5.31	9
Housing equity extraction												
Yes	4.78	361	4.68	23	4.19	241	3.70	14	99.9	120	7.96	6
No	95.22	7194	95.32	468	95.81	5512	96.30	364	93.34	1682	92.04	104
Mother owns other property												
Yes	91.25	6894	88.39	434	90.98	5234	89.95	340	92.12	1660	83.19	94
No	8.75	199	11.61	27	9.05	519	10.02	38	7.88	142	16.81	19
Age mother	49.10	ı	51.17	ı	49.39	ı	51.38	ı	48.12	ı	50.48	I
Years since divorce												
))	(Continued)

 Table 1. (Continued).

		Total				Paren	Parents married			Parents	Parents divorced	
		All	First-time owner	ner	AI		First-time owner	ner	All		First-time owner	ner
	% (mean)	% (mean) n person years	%	и	%	и	%	и	%	и	%	и
0-4	ı	1	ı	ı	ı	ı	I	ı	24.31	438	23.89	27
5-9	ı	1	ı	ı	I	I	ı	I	20.70	373	23.01	56
10–14	I	ı	ı	ı	ı	ı	ı	ı	25.36	457	20.35	23
15 or more	ı	ı	ı	ı	I	ı	ı	I	29.63	534	32.74	37

3.3. Method of analysis

Discrete-time event history analysis was used to analyze the first transition into homeownership (Allison, 1984; Yamaguchi, 1991). Using person-year data, logistic regression models were run for three different groups of respondents: children of married parents, children of divorced parents and both groups combined. Given the ambiguous interpretation of logistic regression coefficients and odds ratios across nested models based on the same sample, we report average marginal effects (AMEs) for our micro-level models.⁶ AMEs are less affected by varying levels of unobserved heterogeneity across models, and reflect the average change in P(y = 1) given a change in the level of the respective variable, holding all other variables constant at their sample values (e.g. Mood, 2010). To establish whether observed differences in the outcomes for children of married and divorced parents were statistically significant, interaction terms of the independent variables with the parental divorce variable were added one by one to the analyses of the total group, and the significance of the effects of these interaction terms is reported in the tables. To control for duration dependence, two additional variables were included in the models: duration, a variable which increases with every following person-year, and duration squared. Likelihood ratio tests were performed in such a way that each new model was compared to the previous model (e.g. model 2 compared to model 1) to determine whether the goodness of fit of the more complex models was better than that of the simpler models.

4. Results

4.1. Descriptive findings

To get a first impression of how the tenure and marital status of the mother of the respondent is related to the likelihood of the respondent purchasing a house, Figure 1 plots the differences in the survival function, or rather the duration until a respondent purchases a house for the first time. Four groups are compared, based on a cross-classification of parental marital status and parental homeownership. Interestingly, respondents whose parents are divorced are both the most and the least likely to purchase a home. The tenure status of their

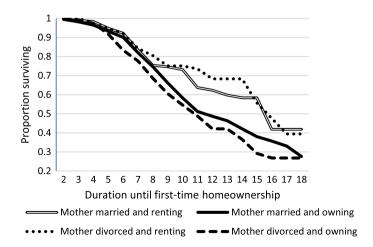


Figure 1. Lifetable of duration to first-time homeownership by marital and tenure status of the mother.

mothers is a decisive factor in this regard, with those whose mothers live in rental accommodation being much less likely to purchase an owned house. This again indicates that the intergenerational transmission of homeownership, i.e. the association between parents' and children's homeownership, is stronger for people whose parents are no longer together.

The question then becomes why this should be the case? If it is harder for divorced mothers to support their children with purchasing a house of their own, we would have expected the children of married parents living in owner-occupied homes to be the most likely to purchase a home themselves. Figure 1 therefore seems more supportive of the notion that the need for parental assistance might be higher for children of divorced parents because they may have fewer resources themselves. From Table 1, it can indeed be concluded that children of divorced parents have lower educational levels than those with married parents (p < 0.001). Their respective income levels, however, are not statistically significantly different from one another. Educational level is however a better predictor of future income progression and permanent income. Children of divorced parents may also have relatively high incomes at the time of the interview, because they are less often students, and have been in the labour force longer. Finally, children of divorced parents are less likely to co-reside with their mother prior to entering homeownership, and hence less able to profit from this form of parental assistance, e.g. to save up for a deposit.

4.2. Multivariate findings

Multivariate analyses were performed in order to examine whether there are differences in the intergenerational transmission of homeownership between children of married and children of divorced parents. As explained in the theoretical section, our main focus is on direct parental assistance as an important mediator between parental tenure status and children's likelihood to make the transition into homeownership. According to this mechanism, direct parental assistance is promoted by the economic benefits associated with homeownership (e.g. lower housing costs in later life, housing equity release), allowing parents to use accumulated (housing) wealth to enable children's homeownership. These benefits are however compromised when parental divorce occurs. We furthermore take account of the more indirect mechanism of socio-economic transmission, as parental divorce is additionally associated with both declined parental resources and disadvantaged socio-economic outcomes in children's life courses, affecting children's need for support, e.g. a deposit. Finally, we also control for potential differences in geographical proximity as a possible confounder/mediator of our main association of interest.

Model 1 in Table 2 indicates that the tenure status of the mother is significantly related to the likelihood and timing of a respondent becoming a first-time homeowner, providing preliminary support for Hypothesis 1. When the mother owns a home, her adult child is also more likely to enter homeownership. This is true for both children of married and children of divorced parents. When controlling for other characteristics of the respondent however (Model 2, Tables 2 and 2A), such as age, gender, partnership and employment status, and the number of children, the differences between respondents with married parents and those with divorced parents become more pronounced. In fact, the effect of mothers' tenure status is no longer significant for children of married parents. In line with Hypothesis 2, we thus find that the positive association between mothers' and children's homeownership is stronger for children from divorced compared to children from married parents (p < 0.001).

Table 2. Logistic regression of first-time entry into homeownership and tenure status mother, control variables, average marginal effects.

	Tot	al	Parents m	narried	Parents of	divorced
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Parents divorced	0.004	0.006				
Tenure status moth- er: owner (lag)	0.026***	0.022***	0.019*	0.011	0.041***	0.041***
Mother has partner Lives with mother (lag)		0.032***		0.038***		0.015 0.015
Age		0.004**		0.005**		0.001
Partnership and emplo	oyment situation	(ref = couple, bot	h partners employ	ed)		
Single female not empl		-0.099***		-0.110***		-0.079***
Single female empl		-0.140***		-0.146***		-0.115***
Single male not empl		-0.101***		-0.111***		-0.079***
Single male empl		-0.185***		-0.204***		-0.127***
Couple one or none empl		-0.027***		-0.027***		-0.033*
Student Number of children (ref = no children)		-0.020		-0.007		-0.040*
1		-0.027***		-0.026***		-0.023(*)
2 or more		-0.041***		-0.043***		-0.034(*)
Age mother respondent		-0.000		-0.000		0.001
Years since divorce (re	f = 0-4)					
5–9 10–14 15 or more						-0.001 -0.023(*) -0.021
Regional house price		-0.000***		-0.000***		-0.000
Duration Duration squared N Number of events	0.030*** -0.002*** 7555 491	0.012*** -0.001***	0.028*** -0.001*** 5753 378	0.009** -0.001**	0.037*** -0.002*** 1802 113	0.024*** -0.002***
Pseudo R ² Log likelihood Log likelihood ratio test, X ²	0.049 -1727.68	0.325 -1226.64 1002.08***	0.041 -1336.27	0.362 -889.52 893.50***	0.079 -388.84	0.251 -316.47 144.75***

^{***}p < 0.001; **p < 0.01; *p < 0.05; (*)p < 0.10.

Arguments for this hypothesis related to the higher support need of children from divorced parents due to socio-economic disadvantages associated with parental divorce, but also to the idea that divorced homeowning parents (in particular mothers) rely more on housing wealth, rather than non-housing (financial) wealth, in order to assist adult children. Put differently, for children of married parents, the association between parents' tenure and children's homeownership mainly seems to come about through the transmission of socio-economic status more generally: wealthier parents have higher housing and non-housing wealth, and the latter 'explains' potential transfers for homeownership. We also argued that for divorced mothers in the rental sector, 'overall' options to help adult children are presumably very limited. When looking at mothers' housing wealth in Table 2A rather than mothers' tenure, we indeed find support for these arguments. While for children of married parents, there is hardly an association between mothers' housing wealth and the likelihood

Table 2A. Logistic regression of first-time entry into homeownership and housing wealth mother, control variables, average marginal effects.

	Tota	al	Parents m	narried	Parents	divorced
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Parents divorced	0.002	0.007				
Housing wealth mother (la	g, ref = 0 or less)					
Between £1 and £49,999	0.038**	0.022*	0.029(*)	0.008	0.046*	0.050*
Between £50,000 and £99,999	0.027*	0.011	0.016	-0.004	0.058*	0.052*
£100,000 or more	0.018(*)	0.030**	0.012	0.019(*)	0.034	0.047*
Missing housing wealth	0.112**	0.051*	0.086*	0.017	0.178*	0.192**
Mother owns other property	0.024*	0.023*	0.010	0.014	0.070*	0.054*
Mother has partner						0.010
Lives with mother (lag)		0.033***		0.038***		0.018
Age		0.004**		0.005**		0.001
Partnership and employme	ent situation (ref =	couple, both p	artners employed	d)		
Single female not empl		-0.100***		-0.111***		-0.080***
Single female empl		-0.139***		-0.145***		-0.116***
Single male not empl		-0.101***		-0.111***		-0.081***
Single male empl		-0.184***		-0.202***		-0.130***
Couple one or none		-0.027***		-0.027***		-0.034**
empl						
Student		-0.019		-0.006		-0.035
Number of children (ref $=$ r	no children)					
1		-0.026***		-0.025**		-0.021
2 or more		-0.040***		-0.042***		-0.030
Age mother respondent		-0.000		-0.000		0.001
Years since divorce (ref = 0	-4)					
5–9						-0.003
10–14						-0.024(*)
15 or more						-0.020
Regional house price		-0.000***		-0.000***		-0.000
Duration	0.031***	0.013***	0.029***	0.009**	0.039***	0.027***
Duration squared	-0.002***	-0.001***	-0.002***	-0.001***	-0.002***	-0.002***
N	7555		5753		1802	
Number of events	491		378		113	
Pseudo R ²	0.053	0.329	0.045	0.366	0.096	0.266
Log likelihood	-1719.41 ·	-1218.71	-1331.94	-884.02	-381.82	-309.81
Log likelihood ratio test, χ^2		1001.39***		895.85***		144.03***

^{***}p < 0.001; **p < 0.01; *p < 0.05; (*)p < 0.10.

and timing of becoming a first-time homeowner, the same association for the children of divorced parents is clearly in line with Hypothesis 3: For children of divorced parents, compared with children of married parents, mothers' housing wealth—however small—as a conduit of parental support is more conductive to homeownership entry (compared to having no or negative housing wealth). For children of married parents, we furthermore find a strong effect of co-residence (Model 2 Table 2). Living with their parents appears to enable them to save money to purchase their own homes. In line with Hypothesis 4, we find no such positive effect of co-residence on the chance to become a homeowner for children of divorced mothers. In other words, for the latter group of children, co-residence does not function as a conduit of parental assistance enabling children to become homeowners.

Model 2 further shows that with increasing age, the chances of becoming a homeowner increase. Couple households in which both partners are in paid employment are also more likely to purchase a house compared to other household configurations. Having children on the other hand decreases the chances of becoming a homeowner. We note however that respondents are relatively young and not many of them are parents yet; those who are may thus form a selective group. Mothers' age, and for divorced mothers the time since divorce, are both not related to the likelihood and timing of entry into homeownership of their adult children. High regional house prices only reduce the chances of becoming a homeowner for children of married parents. Results for our duration controls are in line with 'normal' expectations: at shorter durations, when respondents have become 'at risk', the odds of entering homeownership increase. These odds however turn negative at longer durations (about 11 years).

Before examining how the level of resources of both parents and children affects the association between parental tenure status and first-time homeownership, we first check to what extent differences in geographical proximity (indicating both a shared opportunity structure/housing market and a stronger likelihood of support exchange) between parents and children, respectively, confound or mediate this relationship. Comparing Models 2 and 3 shows that the association between mother's tenure status (Table 3) and housing wealth (Table A1 in Appendix) on the one hand, and children's homeownership on the other hand, remains largely unaffected by including geographical proximity (measured in various ways) in our models, although the AMEs are somewhat reduced in size (but remaining non-significant for children of married parents and significant at the 0.01 level for children of divorced parents). Hypothesis 6 can therefore be discarded: geographical proximity matters to some extent for children of divorced parents, but does not substantively affect our results. We further find that for both groups of children, compared to co-residing with the mother in the previous year and now living in the same Local Authority District (LAD), co-residence in the previous year and now living in a different LAD is associated with a higher chance of entering homeownership. This result is presumably an artefact of our coding scheme, as children who did not move out and hence co-reside with the mother in the current year are included in the reference category, next to those who moved out but remained in the same LAD. These effects should therefore not be substantively interpreted.

As the impact of mother's tenure status for children of married parents was already non-significant in Table 2 (controlling for children's socio-demographic characteristics), we focus our discussion of Table 4 on the children of divorced parents. Comparing the AMEs for the tenure status of the mother in Model 3 (Table 3) with those in Model 4 (Table 4) shows that controlling for children's resources (education and income), the tenure effect remains strong and significant for children of divorced parents. However, including indicators for the (non-housing) financial resources of the mother's household in Model 5 (Table 4) results in a stronger reduction in the average marginal effect regarding the association between mother's tenure status and the likelihood and timing of entering homeownership of adult children. Apparently, divorced mothers who own their homes also tend to have some other assets that increase the chances of their adult children having more resources and assets, and becoming owner-occupiers themselves. Nevertheless, even after controlling for the levels of economic resources of both the mother and the respondent, the tenure status of the mother remains associated to first-time homeownership for children of divorced parents. These results are in line with Hypothesis 5 (and also Hypothesis 3), in the sense

Table 3. Logistic regression of first-time entry into homeownership and tenure status mother, control variables and geographical proximity, average marginal effects.

	Total	al	Parents married	arried	Parents divorced	orced
	Model 2	Model 3	Model 2	Model 3	Model 2	Model 3
Parents divorced Tenure status mother: owner (lag) Mothor has parented.	0.006	0.007	0.011	0.007	0.041***	0.034**
Mouter has partied Lives with mother (lag) Age	0.032***	0.004**	0.038***	0.005**	0.015 0.001	0.001
Partnership and employment situation (ref = couple, both partners employed)	/ed)					
Single female not empl	***00.00	***0110	-0.110***	****0.00	-0.079***	-0.074***
Single reniale empl Single male not empl	-0.160	-0.110	-0.140	***960.0—	-0.079***	-0.038
Single male empl	-0.185***	-0.154*** -0.024**	-0.204*** -0.027***	-0.170***	-0.127***	-0.112***
Student	-0.020	-0.029*	-0.007	-0.020	-0.040*	-0.042*
Number of children (ref = no children)						
-	-0.027***	-0.023**	-0.026***	-0.021**	-0.023(*)	-0.026*
2 or more	-0.041***	-0.033***	-0.043***	-0.033**	-0.034(*)	-0.033(*)
Age mother respondent	-0.000	-0.000	-0.000	-0.000	0.001	0.001
Years since divorce (ref = $0-4$)						
5-9					-0.001	-0.010
15 or more					-0.025(*)	-0.024(*)
Regional house price	***0000-	***000'0-	***000.0—	***0000-	-0.000	-0.023
Duration	0.012***	0.010***	**600.0	*2000	0.024***	0.023***
Duration squared	-0.001***	-0.001***	-0.001**	*000.0—	-0.002***	-0.001***
Co-residence and geographical proximity combined (ref $=$ same house and LAD as mother)	LAD as mother)					
Lived in same house as mother and now in different LAD Lived in different house than mother and now in same LAD		0.120***		0.103***		0.160***
Lived in different house than mother and now in different LAD		-0.004		-0.011		-0.012
~	7555		5753		1802	
Number of events	491		378		113	
Pseudo R ²	0.325	0.352	0.362	0.386	0.251	0.283
Log likelihood	-1226.64	-1176.76	-889.52	-856.48	-316.47	-302.86
Log likelihood ratio test, X^2		99.77***				27.22***
070/2(*):000/2*:000/2**:000/2****						

***p < 0.001; **p < 0.01; *p < 0.05; (*)p < 0.10.

(Continued)

Table 4. Logistic regression of first-time entry into homeownership and tenure status mother, resources respondent and mother of respondent, average marginal

	Total		Parents married	arried	Parents divorced	rced
	Model 4	Model 5	Model 4	Model 5	Model 4	Model 5
Parents divorced Tenure status mother: owner (lag) Mother has partner	0.009	0.013* 0.006	0.002	-0.006	0.032**	0.028*
Age	*8000	0.003*	0.004*	0.004*	-0.001	-0.001
Partnership and employment situation (ref = $couple$, both partners employed)	loyed)					
Single female not empl	***080-	-0.080***	***680.0—	***680.0-	-0.065***	-0.066***
Single female empl	-0.113***	-0.114***	-0.119***	-0.120***	***860.0-	-0.100***
Single male not empl	-0.077***	-0.077***	-0.086***	-0.086***	-0.060***	-0.060***
Single indicate emple Couple one or none empl	-0.016*	-0.016*	-0.016*	-0.016*	-0.028*	-0.027*
Student	-0.029*	-0.030**	-0.020	-0.021	-0.039*	-0.039*
Number of children (ref = no children)						
_	-0.017*	-0.016*	-0.016*	-0.013(*)	-0.017	-0.020
2 or more	-0.023*	-0.020(*)	-0.025*	-0.020(*)	-0.016	-0.015
Age mother respondent	-0.000	-0.000	-0.000	-0.000	0.001	0.000
Years since divorce (ref = $0-4$)						
5-9					-0.009	-0.007
10–14					-0.019	-0.017
15 or more					-0.016	-0.014
Regional house price	***0000-	***0000-	***000.0-	***0000-	*0000-	-0.000(*)
Duration Duration consend	0.008**	0.008**	0.005(*)	0.004	0.020**	0.021**
Co-residence and geographical proximity combined (ref = same house and LAD as mother)	ind LAD as mother)					
Lived in same house as mother and now in different LAD	0.119***	0.115***	0.106***	0.102***	0.143***	0.131***
Lived in different house than mother and now in same LAD lived in different house than mother and now in different IAD	-0.017** -0.003	-0.018**	-0.023** -0.009	-0.023** -0.011	0.000	-0.001
Education (lag; ref = basic education)						
Intermediate	0.023**	0.022**	0.019*	0.018*	0.025(*)	0.024(*)
High	0.046	0.043	0.036**	0.034**	0.051(*)	0.048(*)
Annual income (In lag)	0.005	0.005	0.004**	***************************************	0.010***	**0.000
Housenoid Inc. motner (In Iag)		0.000		0.003		-0.009

	T	Total	Parents married	narried	Parents divorced	vorced
	Model 4	Model 5	Model 4	Model 5	Model 4	Model 5
Investment Inc. mother (In lag)		0.003**		0.003*		**900.0
N	7555		5753		1802	
Number of events	491		378		113	
Pseudo R ²	0.365	0.369	0.394	0.397	0.310	0.320
Log likelihood	-1153.12	-1147.30	-845.27	-841.60	-291.27	-287.22
Log likelihood ratio test, X ²	47.28***	11.64**	22.42***	7.34*	23.17***	8.12*
$^{***}p < 0.001; ^{**}p < 0.01; ^{*}p < 0.05; (^{*})p < 0.10.$						

that mother's housing resources matter more for children of divorced parents, even after controlling for mothers' non-housing wealth. For children of married parents, Hypothesis 5 can be discarded since mother's tenure status was already insignificant for them. When replacing mother's tenure with mother's housing wealth (Table A2 in the Appendix), we arrive at very similar conclusions: for children of divorced parents, mother's wealth remains positively associated with children's homeownership, though the effect for the higher category of housing wealth turns insignificant when controlling for mother's (investment) income. Divorced mothers with higher housing wealth hence also have higher non-housing wealth that can be transferred to adult children, and substitutes for assistance derived from homeownership per se.

In Table 5, further models testing a number of interaction effects are presented. Mother's tenure status and housing wealth are indeed significantly more strongly related to the chances of purchasing a house for children of divorced parents than for children with married parents (Models 6 and 7). Despite the effect of co-residence being much larger for children with married parents, the interaction effect of co-residence with parental divorce is not statistically significant. This is probably due to the fact that the absolute number of respondents with divorced parents is much smaller than the number with married parents, and that they are proportionally also less likely to co-reside. To formally test whether the non-housing resources of the respondents and their parents are more strongly related to first-time homeownership for children of divorced parents, further interaction terms were added separately. The results in Table 5 indicate that for children of divorced parents annual labour income of the respondent him or herself (Model 8) is more strongly positively related to the likelihood of becoming a first-time homeowner. Finally, the interaction term for mother's investment income indicates that the additional financial resources of the mother increase the chances of purchasing a house more strongly for children of divorced parents (Model 9).

5. Conclusion and discussion

Children of homeowners are more likely to become homeowners themselves, than are children whose parents live in rental accommodation. The aim of this paper was to examine whether and to what extent the intergenerational transmission of tenure status is affected by parental marital dissolution in England and Wales, with a focus on parental assistance. Parental assistance—as a 'direct' mechanism of intergenerational transmission—is promoted by the economic benefits associated with homeownership (e.g. lower housing costs in later life, housing equity release), allowing parents to use accumulated (housing) wealth to enable children's homeownership—through gifts, loans or mortgage guarantees. These benefits are however compromised by parental divorce, as this life event is associated with lower accumulated housing wealth or an exit from homeownership altogether. We furthermore took account of the more indirect mechanism of socio-economic transmission, as parental divorce is additionally associated with both declined parental economic resources, and disadvantaged demographic and socio-economic outcomes in children's life courses, affecting children's need for support to enter homeownership, e.g. for a deposit. Finally, we also controlled for potential differences in geographical proximity as a possible confounder/ mediator of our main association of interest.

Table 5. Logistic regression of first-time entry into homeownership, interactions, average marginal

	Model 6	Model 7	Model 8	Model 9
Parents divorced	-0.016	-0.019(*)	-0.031	-0.000
Tenure status mother: owner (lag) X divorced	-0.009 0.044*		0.006	0.006
Housing wealth mother (lag, ref = 0 or less)				
Between £1 and £49,999		-0.003		
X divorced		0.036		
Between £50,000 and £99,999		-0.019*		
X divorced		0.062*		
£100,000 or more		-0.010*		
X divorced		0.051*		
Missing housing wealth X divorced		-0.001		
		0.100(*) 0.018*		
Mother owns other property Age	0.003(*)	0.003(*)	0.003*	0.003*
Partnership and employment situation (ref = couple,	. ,		0.003	0.003
Single female not empl	-0.081***	-0.081***	-0.081***	-0.081***
Single female empl	-0.081**** -0.114***	-0.114***	-0.114***	-0.061**** -0.114***
Single male not empl	-0.114 -0.077***	-0.114 -0.078***	-0.114 -0.077***	-0.114 -0.077***
Single male empl	-0.150***	-0.151***	-0.150***	-0.150***
Couple one or none empl	-0.018**	-0.019**	-0.016*	-0.017*
Student	-0.029*	-0.028*	-0.030**	-0.029*
Number of children (ref = no children)				
1	-0.014*	-0.013(*)	-0.015*	-0.017*
2 or more	-0.018(*)	-0.019(*)	-0.020(*)	-0.021*
Age mother respondent	-0.000	-0.000	-0.000	-0.000
Regional house price	-0.000***	-0.000***	-0.000***	-0.000***
Duration	0.008**	0.009**	0.008**	0.008**
Duration squared	-0.001**	-0.001**	-0.000**	-0.001**
Co-residence and geographical proximity combined (ref = same house	and LAD as moth	ner)	
Lived in same house as mother and now in different LAD	0.114***	0.111***	0.115***	0.114***
Lived in different house than mother and now in same LAD	-0.017**	-0.018**	-0.018**	-0.018**
Lived in different house than mother and now in different LAD	-0.006	-0.006	-0.006	-0.006
Education (lag; ref = basic education)				
Intermediate	0.022**	0.023**	0.022**	0.022**
High	0.043***	0.042***	0.043***	0.043***
Annual income (In lag)	0.005***	0.005***	0.004**	0.005***
X divorced			0.005(*)	
Household Inc. mother (In lag)	0.001	0.001	0.000	0.000
Investment Inc. mother (In lag) X divorced	0.003***	0.003**	0.003**	0.002* 0.004(*)
N	7555			
Number of events	491			
Pseudo R ²	0.371	0.374	0.370	0.370
Log likelihood	-1143.67	-1136.80	-1145.08	-1145.43
Log likelihood ratio test, χ ²	7.25**	11.07*	4.44*	3.75(*)

^{***}p < 0.001; **p < 0.01; *p < 0.05; (*)p < 0.10.

Event history analyses of life-course data for England and Wales from the British Household Panel Survey (BHPS) show that the intergenerational transmission of homeownership is stronger for children of divorced parents compared with children of married parents. Such an effect may arise from two channels: (1) children of divorced parents are more in need of direct parental assistance due to the socio-economic disadvantage associated with parental divorce; and (2) compared with married parents, divorced homeowning parents (in particular mothers) rely more on housing wealth, rather than non-housing (financial) wealth, in order to assist children. Empirical support for both explanations was found.

With regard to the first explanation, we for instance found that children of divorced parents have lower educational levels and are more likely to be a parent themselves. They are also less likely to co-reside with their mother prior to entering homeownership, and are hence less able to profit from this form of parental assistance, e.g. to save up for a deposit. Furthermore, we found limited evidence showing that co-residence as a means of parental support is less conductive to homeownership for children of divorced parents compared to children of married parents, presumably because they partly support their mothers, rather than the other way around. The second explanation, pertaining to differences in housing and financial resources of divorced versus married parents (in particular mothers), is—likewise—entangled with indirect socio-economic status transmission. In particular, we argued that homeowning divorced parents (mothers) with housing wealth are more likely to own only housing wealth and less likely to own significant financial wealth. For divorced mothers in the rental sector, 'overall' options to help adult children are presumably very limited. These arguments are supported by our results. While for children of married parents, after controlling for respondent's socio-demographic characteristics, there is no association between mothers' tenure and housing wealth on the one hand and the likelihood and timing of becoming a first-time homeowner on the other hand, we find positive and significant associations for the children of divorced parents—although these are to some extent confounded by mothers' non-housing (financial) wealth. Finally, our results hold when controlling for the (potential) confounding/mediating influence of geographical proximity.

Both 'direct' parental assistance related to parental homeownership and the 'indirect' transmission of socio-economic status appear to be relevant mechanisms in the transmission of tenure status between generations, for children of divorced parents. In our analytical strategy, parental support is mostly (though not entirely) inferred from a positive association between parents' homeownership and children's entry into homeownership, controlling for confounding influences impacting on this association. This strategy has also been used in previous research. Although this mechanism is entangled with the other conduits of intergenerational transmission, we can however not exclude that socialization to homeownership plays an 'independent' role in explaining our main results. If following a divorce, parents move out of homeownership and into the rental sector, their children are less likely to grow up in an owner-occupied home and, as a result, might not develop very strong preferences for homeownership. On the other hand, if they see that their parents manage to get back on the housing ladder despite their divorce experience, their children might be extra motivated to become a homeowner themselves. Their children might reason that if, for example, a single mother with children can manage to buy a home, so should they. In this sense, home-owning divorced parents might provide strong role models for their adult children. McLanahan & Sandefur (1994) argue that one of the reasons why children of divorced parents are more likely to become parents at a young age is that having witnessed how their own mothers managed to provide for their family on a low income, makes them believe that raising a child is less expensive than it seems to other people. In a similar vein, children of a divorced mother who owns her own home, might think that the presence of children in the household or having just a single income, factors that normally lower the chances of entering homeownership (Mulder, 2006), should not necessarily prevent one from purchasing a home.

Although the BHPS data had many benefits, the most important of which was the possibility to use current information on the financial and housing status of parents, it also has several limitations. As already mentioned, it does not provide satisfying indicators for the socialization into homeownership. And although it contains a wealth of information on maternal characteristics, similar information on the father is not available in case the parents divorced prior to data collection. This may limit the generalization of our results. Furthermore, if people purchase a house with their partner, the parental resources of the partner are also likely to be of great importance. This information however is not available in the BHPS.

Future studies can advance the current research by examining the importance of the quality of the relationship between parents and children and how it is affected by parental divorce. Mulder & Smits (2013) argue that the implications of parental divorce for the intergenerational transmission of homeownership are dependent on the extent to which the relationship between parents and children is affected by the divorce. Previous research has shown that especially the quality of the relation between fathers and their children suffers from a divorce (Cooney, 1994; Cooney & Uhlenberg, 1990; Shapiro & Lambert, 1999). Since men tend to experience less severe financial consequences from a divorce, maintaining a good relationship with the father might facilitate adult children in purchasing a house. In addition, the possibly differing role of co-residence in facilitating the purchase of a home for children of married and divorced parents also warrants further research. Often seen as a housing situation in which young people can save up for a deposit, our results show that this might depend on the marital history of the parents.

Apart from looking at the causes of differences in the intergenerational transmission of tenure status, it can also be worthwhile to look at its possible consequences. Intergenerational wealth transfers are generally seen to reproduce and even exacerbate existing social inequalities in household living standards and wealth levels (Kurz & Blossfeld, 2004). Insofar as parental marital dissolution is related to intergenerational wealth transmission, it might therefore also have an indirect impact on inequality levels. Whether parental divorce increases or decreases inequality will depend on how the various mechanisms play out in practice. If, for instance, children of divorced parents receive fewer or lower intergenerational wealth transfers, then it may take them more time to purchase a home of their own, and thus can be expected to generate less housing wealth and financial security. In this study, we however find support for a more nuanced set of mechanisms. While children of renting mothers obviously fare worst, socio-economic disadvantages of children of divorced parents may be somewhat mitigated by the fact that they potentially receive more direct assistance from their parents compared to children of married parents. It is however unclear whether this can compensate for the fact that divorced parents are less able to transmit general opportunities and resources over the life courses of their children. In terms of policy-making, the results reported in this paper seem to indicate that children of divorced parents whose mothers live in rental accommodation are in most need of attention. Not only are they much less likely to become a homeowner compared to the other groups, it also takes them much longer to do so. As a result, they are also less likely to generate any wealth themselves, thereby further contributing to the intergenerational transmission of disadvantage. Finally, we point at the possibility that children from married and divorced parents sort into locations with different house prices (e.g. see Coulter (2016) for the suggestion that young people from more disadvantaged background would employ such a strategy), but so far no study has really addressed this issue in-depth.

Notes

- 1. A small subgroup of respondents moved in with an already-owning partner. Excluding these respondents however did not affect our main conclusions (results available upon request). This may be so because these respondents will become co-owners in time and thus still receive parental transfers upon moving into 'homeownership' (e.g. for home improvement or renovation), or simply because of measurement error (the difference in ownership may arise if the person responsible for the household questionnaire fails to mention his/her partner as co-owner—survey methodology research (e.g. on income measurement) has repeatedly shown that 'responsible' persons report more accurately on their personal assets compared with other household members' assets).
- 2. 1a Inadequately completed general education; 1b General elementary education; 1c Basic vocational training above and beyond compulsory schooling; 2a Intermediate vocational qualification, or secondary programmes in which general intermediate schooling is combined with vocational training; 2b Intermediate general education. Academic or general tracks at the secondary intermediate level; 2c Vocational maturity: Full maturity certificates including vocationally specific schooling or training; 2c General maturity: Full maturity certificates; 3a Lower tertiary education: Lower-level tertiary degrees, generally of shorter duration and with a vocational orientation; 3b Higher tertiary education: The completion of a traditional, academically oriented university education (taken from Brauns *et al.*, 2003).
- 3. Two alternative operationalizations were tested: one comparing the larger regions in which the respondent and his or her mother resided and one comparing the travel-to-work areas in which they resided. There are 17 different regions: Inner London; Outer London; Rest of the South East; South West; East Anglia; East Midlands; West Midlands Conurbation; Rest of West Midlands; Greater Manchester; Merseyside; Rest of North West; South Yorkshire; West Yorkshire; Rest of Yorkshire and Humberside; Tyne and Wear; Rest of North England; and Wales. The main results with regard to the effect of parental tenure proved to be robust to different operationalizations of geographical proximity. Results are available from the authors upon request.
- 4. North East; North West (including Merseyside); Yorkshire and the Humber; East Midlands; West Midlands; East; London; South East; South West and Wales. House price data were taken from the Office of National Statistics website: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/305691/Table_511_-_ONS.xls.
- 5. We also proxied the number of siblings by means of the number of children the mother has ever given birth to, but inclusion of this variable did not change our main results and conclusions (results available upon request).
- 6. Tables with odds ratios are available upon request; substantive results are identical.
- 7. The higher bivariate association between mothers' housing equity extraction and children's entry into homeownership for children of divorced mothers compared to children of married mothers is no longer apparent when comparing both groups of children in a multivariate setting, so we did not include this variable in our further models. It is likely that the potential for housing wealth extraction is closely correlated with the level of housing wealth, so both variables essentially measure the same.

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Appendix

Table A1. Logistic regression of first-time entry into homeownership and housing wealth mother, control variables and geographical proximity, average marginal effects.

	Total		Parents married	narried	Parents divorced	vorced
	Model 2	Model 3	Model 2	Model 3	Model 2	Model 3
Parents divorced	0.007	0.007				
Housing wealth mother (lag, ref = 0 or less)						
Between £1 and £49,999	0.022*	0.019*	0.008	0.006	*00.0	0.045*
Between £50,000 and £99,999	0.011	900.0	-0.004	-0.007	0.052*	0.040(*)
£100,000 or more	0.030**	0.021*	0.019(*)	0.012	0.047*	0.037(*)
Missing housing wealth	0.051*	0.042*	0.017	0.014	0.192**	0.153*
Mother owns other property	0.023*	0.023*	0.014	0.016	0.054*	0.045*
Mother has partner					0.010	900'0
Lives with mother (lag)	0.033		0.038***		0.018	
Age	0.004**	0.004**	0.005**	0.005**	0.001	0.001
Partnership and employment situation (ref = couple, both partners employed	yed)					
Single female not empl	-0.100	***060.0-	-0.110***	***860.0—	***080"-	-0.075***
Single female empl	-0.139***	-0.118***	-0.145***	-0.124***	-0.116***	-0.101***
Single male not empl	-0.101***	***680.0-	-0.111	-0.097***	-0.081***	-0.074***
Single male empl	-0.184***	-0.155***	-0.202***	-0.170***	-0.130***	-0.117***
Couple one or none empl	-0.027***	-0.024**	-0.028	-0.023**	-0.034**	-0.036**
Student	-0.019	-0.029*	900'0-	-0.020	-0.035	-0.037(*)
Number of children (ref = no children)						
_	-0.026***	-0.022**	-0.025**	-0.019*	-0.021	-0.025(*)
2 or more	-0.040***	-0.032***	-0.042***	-0.033**	-0.030	-0.028
Age mother respondent	-0.000	-0.000	-0.000	-0.000	0.001	0.001
Years since divorce (ref = $0-4$)						
5-9					-0.003	-0.010
10–14					-0.024(*)	-0.024(*)
15 or more					-0.020	-0.021
Regional house price	***000.0-	***000.0-	***000.0-	***000'0-	-0.000	-0.000
Duration	0.013***	0.012***	**600.0	**800.0	0.027***	0.027***
Duration squared	-0.001***	-0.001	-0.001	-0.001**	-0.002***	-0.002***
Co-residence and geographical proximity combined (ref = same house and LAD as mother)	d LAD as mother)					
Lived in same house as mother and now in different LAD		0.117***		0.100		0.150***
Lived in different house than mother and now in same LAD		-0.024***		-0.030***		-0.004
Lived in different nouse than mother and now in different LAD		-0.004		-0.0-		0.0.0-

(Continued)

Table A1. Logistic regression of first-time entry into homeownership and housing wealth mother, control variables and geographical proximity, average marginal effects. (Continued).

	7	Total	Parents	Parents married	Parents	Parents divorced
	Model 2	Model 3	Model 2	Model 3	Model 2	Model 3
N	7555		5753		1802	
Number of events	491		378		113	
Pseudo R ²	0.329	0.356	0.366	0.389	0.266	0.296
Log likelihood	-1218.71	-1169.45	-884.02	-851.64	-309.81	-297.35
Log likelihood ratio test, X^2		98.53***		64.76***		24.92***

*** p < 0.001; *** p < 0.01; ** p < 0.05; (*) p < 0.10.

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 Table A2. Logistic regression of first-time entry into homeownership and housing wealth mother, resources respondent and mother of respondent, average marginal effects.

	Total		Parents married	arried	Parents divorced	vorced
	Model 4	Model 5	Model 4	Model 5	Model 4	Model 5
Parents divorced	600.0	0.012(*)				
Housing wealth mother (lag, ref = 0 or less)						
Between £1 and £49,999	0.013	0.011	0.001	-0.003	0.041*	*650.0
Between £50,000 and £99,999	0.002	-0.003	-0.011	-0.018*	0.043*	0.040(*)
£100,000 or more	0.014(*)	9000	9000	-0.004	0.034(*)	0.025
Missing housing wealth	0.027	0.022	0.003	-0.003	0.132*	0.117*
Mother owns other property	0.022*	0.018*	0.015	0.012	0.042*	0.035(*)
Mother has partner Ane	*6000	0.003(*)	**000	***************************************	0.009	0.002
Partnership and employment situation (ref = couple, both partners employed	_					
Single female not empl	-0.081***	-0.081***	-0.090***	***060.0-	***990.0-	-0.067***
Single female empl	-0.113***	-0.114***	-0.119***	-0.120***	-0.100***	-0.101***
Single male not empl	-0.077***	-0.077***	-0.086***	-0.086***	-0.062***	-0.062***
Single male empl	-0.149***	-0.150***	-0.162***	-0.163***	-0.118***	-0.119***
Couple one or none empl	-0.017*	-0.017*	-0.016*	-0.017*	-0.029*	-0.029*
Student	-0.029*	-0.029*	-0.020	-0.021	-0.035	-0.035(*)
Number of children (ref = no children)						
	-0.016*	-0.015*	-0.015(*)	-0.012	-0.015	-0.017
2 or more	-0.023*	-0.020(*)	-0.025*	-0.021(*)	-0.011	-0.009
Age mother respondent	-0.000	-0.000	-0.000	-0.000	0.000	0.000
Years since divorce (ref = $0-4$)						
5-9					-0.009	-0.006
10–14					-0.019	-0.017
15 or more					-0.015	-0.012
Regional house price	***000'0-	***000'0-	***000.0—	***000.0-	-0.000	-0.000
Duration	**600.0	**600.0	0.006(*)	0.005(*)	0.023**	0.024***
Duration squared	-0.001***	-0.001**	*000.0-	*000.0-	-0.001**	-0.001**
Co-residence and geographical proximity combined (ref $=$ same house and LAD as mother)	AD as mother)					
Lived in same house as mother and now in different LAD	0.117***	0.114***	0.103***	0.100***	0.133***	0.124**
Lived in different house than mother and now in same LAD	-0.019**	-0.019**	-0.024**	-0.024***	-0.002	-0.002
Lived in different house than mother and now in different LAD	-0.003	-0.005	-0.008	-0.011	0.005	0.001

(Continued)

Table A2. Logistic regression of first-time entry into homeownership and housing wealth mother, resources respondent and mother of respondent, average marginal effects. (Continued).

	Total	tal	Parents married	narried	Parents divorced	livorced
	Model 4	Model 5	Model 4	Model 5	Model 4	Model 5
Education (lag; ref = basic education)						
Intermediate	0.023**	0.022**	0.019*	0.018*	0.026(*)	0.026(*)
High	0.045	0.042***	0.034**	0.032**	0.051(*)	0.049(*)
Annual income (In lag)	0.005	0.005***	0.004**	0.004**	**010	**600.0
Household Inc. mother (In lag)		0.000		0.003		-0.008
Investment Inc. mother (In lag)		0.003**		0.003*		0.005**
N	7555		5753		1802	
Number of events	491		378		113	
Pseudo R ²	0.369	0.371	0.397	0.400	0.321	0.330
Log likelihood	-1147.32	-1142.33	-841.11	-837.80	-286.62	-283.07
Log likelihood ratio test, X²	44.25***	**86.6	21.06***	6.61*	21.46***	7.10*

*** p < 0.001; *** p < 0.01; ** p < 0.05; (*) p < 0.10.