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## **Intergenerational Transmission of Homeownership: The Roles of Gifts and Continuities in Housing Market Characteristics**

Amanda Helderman and Clara Mulder

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Summary. Parental homeownership influences the younger generation's housing tenure through parental gifts and similarities in housing market circumstances (for example, urban-rural differences), among other mechanisms. This paper contributes to the distinguishing of these mechanisms and their relative importance, using the Netherlands Kinship Panel Study data and logistic regression analysis of housing tenure. Both gift-giving and continuities in housing market characteristics appear to be important mechanisms underlying the intergenerational transmission of homeownership. After controlling for these mechanisms and other individual and parental characteristics, a strong effect of parents' housing tenure on children's housing tenure remains, which may be partly attributed to mechanisms such as socialisation.

#### Introduction

The housing tenure (owning versus renting) of different generations of the same family often shows a high degree of similarity (Henretta, 1984, 1987; Mulder and Smits, 1999). Mulder and Smits (1999) denoted this similarity of housing tenure between generations as the intergenerational transmission of homeownership. Owner-occupied homes in the Netherlands are generally larger, of better quality (Mulder and Wagner, 1998) and situated in more salubrious neighbourhoods than rental homes are (Megbolugbe and Linneman, 1993). They also provide better opportunities for building up capital assets (Saunders, 1990). Intergenerational transmission of homeownership is therefore an important way of reproducing social inequality over the generations.

The part parents play in their children's attaining homeownership can take different forms. An important form consists of financial contributions, either specifically earmarked towards housing or not, which are more easily affordable to homeowning parents. Nowadays, parental gifts may be particularly important for the younger generation's housing tenure in the Netherlands. The reasons are twofold. First, the population of new homeowners is younger (Feijten and Mulder, 2002; Mulder and Wagner, 1998; Helderman et al., 2004). Secondly, the prices of owner-occupied homes doubled in the last two decades of the 20th century (Boelhouwer, 2000) and are continuing to rise. Buying a home is a particularly large expenditure in the early adult life-cycle stage, when

Amanda Helderman—E-mail: Amanda@amandahelderman.com. Clara Mulder is in the Faculty of Social and Behavioural Sciences, University of Amsterdam, Nieuwe Prinsengracht 130, 1018 VZ Amsterdam, The Netherlands. Fax: +31 20 525 4051. E-mail: C.H.Mulder@uva.nl. This research was supported by the Netherlands Organisation for Scientific Research (NWO), Aspasia grant no. 015.000.013 and VICI grant no. 453-04-001. The Netherlands Kinship Panel Study is funded by grant 480-10-009 from the Major Investments Fund of NWO and by the Netherlands Interdisciplinary Demographic Institute (NIDI), Utrecht University, the University of Amsterdam and Tilburg University. consumption needs generally rise more quickly than income. The decreasing age of the population of new homeowners in the Netherlands combined with the high prices of owner-occupied homes might lead homeowners to depend on their parents' resources to a greater extent. This increasing importance of parental support may exacerbate the current patterns of inequality (Henretta, 1984; Jenkins and Maynard, 1983; Semyonov and Lewin-Epstein, 2000).

The intergenerational transmission of homeownership through gift-giving represents a deliberate action by the parents. However, the intergenerational transmission of homeownership may also reflect coincidence: parental homeownership is important for their offspring's housing tenure not only through gift-giving, but may also be linked to their children's housing tenure by similarities in housing market conditions. People often live in close proximity of their parents' residential location, either by choice or because residential relocations mostly take place over short distances while people with children of middle age and older hardly move. If people live in the vicinity of their parents, they have to deal with the same housing market conditions in which either the rental or the owner-occupied sector prevails (Henretta, 1987; Mulder and Smits, 1999). Particularly within the most urban and most rural environments in the Netherlands, there is limited variation in housing tenure within a short distance.

Whether intergenerational transmission of homeownership takes place through giftgiving or through similarities in housing market conditions makes a great difference for transmission in the future. If gifts are more important, an increase in transmission might be expected and inequalities in the housing market might be exacerbated. If similarities in housing market conditions are more important, transmission may decrease: through time and with educational expansion, children have become less likely to live close to their parents (compare Mulder and Kalmijn, 2004).

In previous research, several attempts have been made to unravel the various mechanisms underlying the intergenerational transmission of homeownership (for example, Henretta, 1984, 1987; Kurz, 2004). These attempts were only partially successful, however, because there were insufficient direct measurements of the different mechanisms of intergenerational transmission of housing tenure available in the datasets. Previous work has not addressed the relationship between the attainment of homeownership and the proximity to home-owning parents, indicating that they operate in the same housing market. The study reported in this paper, therefore, aims to unravel two mechanisms underlying the intergenerational transmission of homeownership: gift-giving and similarities in housing market characteristics. In doing so, we aim to contribute to a better understanding of why different generations of the same family are similar with regard to housing tenure. The first wave of the Netherlands Kinship Panel Study is used. Compared with surveys used in previous research, this survey has only limited opportunities for retrospective longitudinal analysis. A great advantage of the data, however, is that they provide detailed information regarding housing tenure, parental gift-giving and the residential locations of respondents and their parents. The method used is logistic regression analysis of whether or not someone owns a home.

# Explaining the Intergenerational Transmission of Homeownership

Many of the social and economic characteristics of one generation are similar to those of the next. This similarity does not come about by chance, but because characteristics are passed from one generation to the next. This phenomenon is referred to as intergenerational transmission. Examples of characteristics that are transmitted are socioeconomic status (Blau and Duncan, 1967) and level of education (de Graaf and Ganzeboom, 1993). For the transmission of housing tenure, a transmission mechanism with the active involvement of parents is gift-giving. However, location choice relative to parents'

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location is also important for the attainment of homeownership. This mechanism does not require the active involvement of parents and so it harbours an element of chance. Housing market characteristics and similarities between generations deserve special attention because they determine the opportunity structure in which housing tenure is attained. It is also important to acknowledge that the transmission of housing tenure might be a side effect of the transmission of socioeconomic status and it might also be partially caused by socialisation towards homeownership.

### Gift-giving

Gift-giving towards housing is a direct way for people to transmit homeownership to their children and is known to influence the transition to homeownership significantly (Davies Withers and Katz Reid, 2004). Gifts take the form of money transfers that are sometimes specifically earmarked as gifts towards buying a home. By giving a large sum of money to their adult children, parents may influence the timing of purchase, the quality of the home and the mortgage duration (Engelhardt and Mayer, 1998; Guiso and Jappelli, 1999).

Parents who are homeowners themselves can afford to give gifts towards their children's homeownership more easily than parents who are renters (Jenkins and Maynard, 1983; Mulder and Smits, 1999). Homeowning parents of young adults have often accumulated equity in the form of homeownership, while their housing costs are low because either they already own their home outright or they are getting close to paying off their mortgage (Haffner, 2004). Equity from their homeownership and low housing costs provide parents with sufficient resources to be able to give gifts to their children. In the Netherlands nowadays, more parents of young adults are homeowners. In 1981, 43 per cent of 49-65-year-olds owned their homes, while by 2002 this figure had grown to 60 per cent (Statistics Netherlands, 1981-2002). On average, homeowners aged 49-65 have the most capital in housing; the lowest shares of their home values are mortgaged and they have the most equity (Table 1).

The causal direction of the relationship between receiving a gift and the ownership of a home may not be straightforward. That is, the timing, and possibly even the occurrence, of parental gifts may be influenced by the interest expressed by the younger generation in purchasing a home or by the occurrence of an actual offer of a home on the market. If it were just the timing of the gift that was influenced in this way and not the occurrence, the processes of gift-giving and the transition to homeownership would show the following association. The assumption would be that a certain number of parents have put aside a sum of money to give to their children. They intend to give that sum at some point in time, but sooner if this child becomes a homeowner. At young ages, those

 Table 1. Average values of owner-occupied homes and share of value tied up in mortgages by age in the Netherlands

| Age | Percentage<br>of<br>homeownership | Average<br>value<br>of home<br>(euros) | Percentage<br>outright<br>owners<br>(without<br>mortgage) | Average<br>outstanding<br>mortgage<br>(euros) | Equity (difference<br>between home<br>value and<br>outstanding<br>mortgage) (euros) | Percentage of<br>value of<br>homes<br>mortgaged |
|-----|-----------------------------------|--|---|---|---|---|
|     | 31.7                              | 181 842                                | 1.5   | 133 968                                       | 47 874  | 73.7  |
|     | 61.3                              | 248 177                                | 3.0   | 126 059                                       | 122 118   | 50.8  |
|     | 59.9                              | 275 901                                | 14.3  | 94 224  | 181 677   | 34.2  |

Source: Statistics Netherlands, Housing Demand Survey 2002.

children who have already become homeowners would already have received their gift, whereas those who were still renting would still be waiting for their gift. With increasing age, an increasing share of the children would either already have become homeowners and have received their gift on that occasion, or have received the gift without having become homeowners. One would therefore expect gift-giving to be particularly associated with homeownership at younger ages. Separate analyses for different agegroups can be used to investigate whether this is the case. It is not possible, however, to investigate whether some parents deliberately withhold gifts from children who do not wish or intend to become homeowners.

### Intergenerational Continuities in Housing Market Characteristics

The housing tenure that can be attained depends considerably on the opportunity structure of the local housing market. In the Netherlands, children frequently live at short distances from their parents (Mulder and Kalmiin, 2004; see Results section for further details). The proximity of people's homes to their parents' residences implies that parents and their offspring are often operating in the same housing market (Henretta, 1987; Kurz, 2004; Mulder and Smits, 1999) and so they have to deal with the same housing market circumstances. It is therefore possible the relationship between that parents' and children's housing tenure is explained by characteristics of the local housing market.

If there are not many owner-occupied homes in the local housing stock, the probability of owning a home can be expected to be smaller than if there are. Furthermore, the probability of owning a home is expected to be smaller if the prices of owner-occupied homes in the local housing market are high, because a higher income or more capital is required to purchase a home in such an area. Rents differ less between regions in the Netherlands, because of rent control. The differentiation in shares of owner-occupied homes in the local housing stock and in house prices is shown in Figures 1 and 2.

Rural areas are dominated by owneroccupied housing, whereas urban areas have more rental housing (Clark and Dieleman, 1996). House prices are higher in urban areas and the suburban and rural areas near cities (see also Figure 2; the mid-western part of the Netherlands is the most urban). The degree of urbanisation is also associated with the turnover rate: the percentage of homes that changes occupiers within a certain period (Dieleman, 2001). The turnover rate is a lot higher for rental than for owneroccupied homes, which implies that, in urban areas, there are not only more rental homes, but they also become available at a higher rate. Not surprisingly, therefore, a negative association between the degree of urbanisation and the likelihood of becoming a homeowner has been found (Deurloo et al., 1990; Feijten, 2005; Mulder and Wagner, 1998).

Almost by definition, it will not be possible to account perfectly for local housing market characteristics and therefore for similarities between generations in these characteristics. Remaining similarities are expected to be captured by the distance to parents: it is to be expected that the closer people live to their parents, the more similar their housing tenure will be. More specifically: if people live closer to homeowning parents, the probability that they are also homeowners is greater. And similarly, if people live closer to renting parents, the probability of their renting is greater. When the residential locations of family generations are at a considerable distance, however, additional distance may not make much difference.

#### Other Factors Explaining the Intergenerational Transmission of Homeownership

The intergenerational transmission of homeownership may partly be a side effect of the transmission of other parental characteristics. Socioeconomic status and the ability to accumulate capital tend to be transferred from one generation to the next, perhaps

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Figure 1. Share of owner-occupied homes in housing market areas in the Netherlands. *Source*: Statistics Netherlands (2002).

making it easier for the younger generation to purchase a home. The socioeconomic status of parents, parents' self-employment and their level of education should therefore be taken into account. Children are supposed to base their expectations concerning living standards on their parents' home situation (Henretta, 1984; Semyonov and Lewin-Epstein, 2000) and homeownership is part of this. Socialisation



Figure 2. Mean prices of owner-occupied homes in housing market areas in the Netherlands. *Source*: Statistics Netherlands (2002).

in the parental home might therefore make homeownership a natural goal for the children of homeowners. It is argued that people strive to reach at least the socioeconomic status of their parents (Easterlin, 1980; Henretta, 1984). If parents own the family home, their child is also likely to own a home someday (Boehm and Schlotmann, 1999, 2001; Iasnaia and Magun, 1999; Mulder and Smits, 1999). This replication may be regarded as a passive socialisation process, operating through an expectation level based on the parents' achievements. Another part of socialisation towards homeownership may be active socialisation, in which case the parents may praise homeownership as a life-goal and even show their children how to obtain a mortgage. The complex nature of socialisation explains why socialisation towards homeownership is so hard to measure. Socialisation towards homeownership has not been measured in previous studies, even though many authors (Henretta, 1984; Mulder and Smits, 1999; Kurz, 2004) refer to socialisation towards homeownership and recognise its likely influence in intergenerational transmission in homeownership. In our data, we do not have satisfactory indicators of socialisation towards homeownership either.

### Individual Factors Influencing Homeownership

To be able to study the mechanisms of intergenerational transmission of homeownership more accurately, individual factors determining housing tenure need to be accounted for. The respondent's age is an indicator for the stage in the life-course. Young people are still shaping their occupational and household careers and generally have shorter employment histories, which makes obtaining a mortgage and thus becoming a homeowner harder. And, the older people are, the more time they have had to attain homeownership. However, younger generations have better chances of being a homeowner because owner-occupied homes have grown spectacularly in number since the Second World War. The effect of age might thus be non-linear.

Gender is also of importance. Women are less likely to be homeowners than men are (Boehm and Schlottmann, 1999). Income expectations are somewhat lower for women than for men, possibly leading to greater difficulty in obtaining a mortgage.

Household income is important for being a homeowner because of the high out-of-pocket expenses in the first few years. Mortgage repayments are initially higher than a monthly rent, although they usually remain at the same level while rents increase. Additionally, a substantial downpayment is often necessary to obtain a mortgage. Because of the long-term nature of the financial commitment, the decision to strive for homeownership is often based on future expectations of income. These are partly based on the level of education. Therefore, regardless of income, respondents with a higher level of education are expected to be more likely to have attained homeownership.

Generally, people do not enter into homeownership before they have formed a stable household (Clark and Dieleman, 1996; Mulder and Wagner, 1998; Feijten, 2005). People with children are more likely to have settled down than people without children, especially one-person households. People with children might be more open to the long-term commitment that homeownership general, represents. In owner-occupied homes are often larger and so more suitable for families than rental homes are. Oneperson households are also less likely to be homeowners because they cannot benefit by pooling resources as couples can (Mulder and Smits, 1999).

#### Data and Methods

The data used in this study are from the main sample of the first wave of the Netherlands Kinship Panel Study (Dykstra et al., 2005; see also www.nkps.nl; N = 8, 155; response rate 42.2 per cent). The migrant sample (an oversampling of migrants) and the substitute sample (consisting of respondents who refused a face-to-face interview but filled out a shorter written questionnaire) were excluded because of incomplete information. Because only the first wave of the panel study is available, the data are in fact cross-sectional. The dataset is representative of individuals in the Netherlands between the ages of 18 and 79 living in private households: that is to say, not in an institution. The purpose of this survey is to gain insight into the complex nature of contemporary family relationships. The data used were collected from the main respondent (anchor) through computer-assisted personal interviews. The measurement of the variables was most detailed at the individual level, but some household characteristics were also available.

A disadvantage of the data is the limited availability of retrospective information. For example, it is not known whether parental gifts were given before or after the respondent became a homeowner. Furthermore, information about only one set of the parents of couples is available. The advantage of the spatial information of residential locations of several generations within the same family and the information on gift-giving between generations, however, provides these data with an unprecedented advantage.

The selection of the data is limited to those respondents (N = 4917) who have moved out of their parental home, are not enrolled in education as their main activity and have at least one parent still alive. This selection is necessary to ascertain that the respondent, not the parents, attained the housing tenure in question and to enable a precise measurement of the distance between the parents' and children's residences. Theoretically, the selection of those living away from the parents might be problematic if leaving the parental home was related closely to first-time homeownership and, therefore, to the younger generation's ability to buy a home. This is, however, not the case in the Netherlands. In 2001, the mean age for leaving the parental home for women was rather young: around 21 years old and for men around 23 years old (Statistics Netherlands, 2004). Only a small minority of those leaving the parental home move to an owner-occupied home immediately (Mulder, 2003). The limitation to those with living parents did not seem to influence the results: in models without distance to parents, including or excluding respondents whose parents were no longer alive led to similar results.

Housing tenure—the dependent variable categorises respondents according to whether they are tenants or homeowners (renting: 33 per cent; owning: 67 per cent). The age of the respondent was measured in years. The level of education was categorised in three levels: up to primary level, secondary level (high school and/or lower vocational training) and tertiary level (higher vocational training or university).

Household income was the net annual income of the respondent plus, if present, that of the partner measured in thousands of euros. No selection for income was made because excluding outliers from the analyses (incomes over 150 000 euros) did not render different results. Household composition was classified in four categories: one-person households, couples without children, couples with children and one-parent families.

The socioeconomic status of parents was measured using the International Socioeconomic Index (ISEI; Ganzeboom *et al.*, 1992) at the time when the respondent was 15 years old. For both the socioeconomic status and the level of education of the respondent's parents, the higher score of the two parents was used where the data for both parents were available. The same procedure was followed for the parents' self-employment: if either of the respondent's parents was self-employed at the time the respondent was 15, the parents were considered to be self-employed.

The parents' homeownership was measured retrospectively for the year in which the respondent was 15 years of age. In this way, the possibility is ruled out of including cases where the parents had moved into homeownership after their children had done so, or where children helped their parents move into homeownership rather than the other way around.

Gifts are defined both as gifts earmarked for the purchase of a home (derived from the question 'Did your parents ever give you money to buy a home?') and as monetary gifts of at least  $\in$ 5 000.00 not earmarked for the purchase of a home (derived from the question 'Did your parents ever give you a sum of at least 5000 euros or 10 000 guilders in one go?'; bequests were not measured). Gifts are measured as having taken place at some time up to the moment of interview.

The distance to the parents' residence was measured, in kilometres, at the time of interview. This moment of measurement is not the same as that for the parents' housing tenure (which was measured for the situation when the respondent was 15 years of age). However, because people with children more than 15 years old show little mobility, it is likely that the distance to the parents' current home forms a good approximation of the distance to the home the parents owned when the respondent was 15 years old. In the descriptive analysis, a boundary of 10 kilometres was used to distinguish those living close to their parents from the other respondents. This boundary was based on the empirical observation that about half of the respondents live within 10 kilometres of their parents' residence. Distance is used in the multivariate analysis in a logarithmic transformation, both as a main effect and in interaction with the parents' tenure. The logarithm was used because it could be expected that the impact of living close to parents decreases more rapidly for short distances to parents than for long distances, so there should be more emphasis on the variation in the lower values of distance. All distances from respondents to their parents between 0 and 1 were given the value 1 before the transformation. Furthermore, the mean log-distance was subtracted from the log-distance to make the reference category the mean rather than zero. This step makes interpretation easier because the main effect of parental homeownership now reads as the effect of parental homeownership for the mean distance to parents.

The main effect of distance should be interpreted as the distance effect for renting parents and is thus expected to be positive. The farther away the children live from renting parents, the greater is their likelihood of owning. The parameter for the interaction between distance and the parents' tenure indicates the additional effect of distance for those with home-owning parents compared with those whose parents rent. This parameter is expected to be negative and to more than offset the positive main effect of distance. The farther children live away from owning parents, the smaller their likelihood of owning will be.

The share of owner-occupied homes in the respondent's municipality was measured

using data from Statistics Netherlands. An indicator was constructed for the mean price (in  $\in 10\ 000$ s) of an owner-occupied home in the housing market area, using the 2002 Housing Demand Survey (Statistics Netherlands, 2002). The degree of urbanisation distinguishes five levels of urbanisation based on the density of addresses of municipalities: very strongly urbanised, strongly urbanised, moderately urbanised, hardly urbanised and not urbanised. Descriptive statistics of the dependent and independent variables are given in Table 2.

Five logistic regression models have been estimated. The first model includes the personal characteristics of the respondent (age, gender, level of education, household income and household composition) and the homeownership of the parents. In four consecutive models, variables representing the socioeconomic characteristics of the parents (model 2), gift-giving (model 3), the housing market characteristics (model 4) and the distance to the parents (model 5) are added to evaluate the contribution of each to the explanations of the intergenerational transmission of housing tenure. Model 1 was compared with the null model and each consecutive model was compared with the previous model. This approach makes it possible to unravel the effects of parental housing tenure on the respondent's housing tenure by monitoring the decrease in the effect of parental homeownership, the magnitude of the newly included parameters and the value of Nagelkerke  $R^2$  of each model.

Missing values were deleted listwise. This led to the exclusion of 15.2 per cent of the cases, mainly due to partial non-response on household income and the distance to parents. Alternatively, we also estimated models in which for these variables the missing values were substituted by the average in the sample selection and a dummy was created to account for the average estimation (Cohen and Cohen, 1975; results not shown). The results of these models were not very different from those of the models shown. According to Allison (2002), listwise deletion of cases yields less biased parameter estimates than

|  | Mean  | Standard deviation | Range       |
|--|-------|--------------------|-------------|
| Homeownership  | 0.65  |                    | 0,1         |
| Age  | 40.7  | 9.9                | 18 - 80     |
| Female   | 0.60  |                    | 0,1         |
| Household income (€1000s)  | 2.40  | 2.34               | 0.00-98.61  |
| Level of education <sup>a</sup>  |       |                    |             |
| Primary  | 0.16  |                    | 0,1         |
| Secondary  | 0.45  |                    | 0,1         |
| Tertiary   | 0.39  |                    | 0,1         |
| Household composition  |       |                    |             |
| One-person household   | 0.24  |                    | 0,1         |
| Couple without children  | 0.16  |                    | 0,1         |
| Couple with children   | 0.55  |                    | 0,1         |
| One-parent household   | 0.06  |                    | 0,1         |
| Highest socioeconomic status of both parents <sup>a</sup>                      | 48.5  | 15.8               | 16-88       |
| Level of education of $(d_{1}, d_{2}, d_{3}, d_{4}, d_{5})^{a}$                |       |                    |             |
| parents (the higher if both present) <sup>a</sup>                              | 0.58  |                    | 0,1         |
| Primary  | 0.38  |                    | 0,1         |
| Secondary  | 0.21  |                    | 0,1         |
| Tertiary   | 0.21  |                    | 0,1         |
| Either parent's self-employment <sup>a</sup>                                   | 0.25  |                    | 0,1         |
| Homeownership of parents <sup>b</sup>  | 0.44  |                    | 0,1         |
| Received gift from parents towards<br>homeownership or monetary <sup>b</sup>   | 0.20  |                    | 0,1         |
| Distance to parents' residence   | 28.1  | 41.6               | 0 - 279     |
| Share owner-occupied homes in the municipality <sup>c</sup>                    | 54.1  | 14.8               | 18.3-83.3   |
| Mean price owner-occupied homes<br>housing market area (€10 000s) <sup>c</sup> | 25.29 | 3.46               | 16.10-38.94 |
| Degree of urbanisation in the municipality                                     |       |                    |             |
| Very strongly urbanised area   | 0.20  |                    | 0,1         |
| Strongly urbanised area  | 0.29  |                    | 0,1         |
| Moderately urbanised area  | 0.20  |                    | 0,1         |
| Hardly urbanised area  | 0.20  |                    | 0,1         |
| Not urbanised area   | 0.11  |                    | 0,1         |

**Table 2.** Summary statistics of dependent and independent variables (N = 4052)

<sup>a</sup>Measured retrospectively for situation at age 15 respondent. *Source*: Netherlands Kinship Panel Study, 2004.

<sup>b</sup>Measured as having occurred ever, up to moment of interview. *Source*: Statistics Netherlands (2002).

<sup>c</sup>Statistics Netherlands (2002).

the method suggested by Cohen and Cohen (1975).

Parents may decide to give towards homeownership sooner if their children express their interest in purchasing a home. In that case, one would expect to find a stronger association between parental gift-giving and housing tenure at younger than at older ages (see second section). To investigate to what extent this occurs, separate logistic regression models of housing tenure were run for different age categories (not shown). As it turned out, the importance of parental gift-giving was only slightly smaller for respondents more than 40 years of age than for younger respondents.

### **Descriptive Results**

Over 40 per cent of the respondents grew up in a home their parents owned. Of the respondents who grew up in an owner-occupied home, 63 per cent also lived in an owneroccupied home at the time of interview. Of the respondents who grew up in a rental home, only 26 per cent had ever attained homeownership.

Of all the respondents, 8.8 per cent had received gifts earmarked for home purchase and about 15.6 per cent received non-specific gifts of at least €5000.00. Altogether, 22.3 per cent of respondents had received either a gift specifically for home purchase or a nonspecific gift of at least €5000.00. This latter percentage is similar to the share in the US: there, a 21 per cent occurrence of parental gifts was found (Mayer and Engelhardt, 1996). In Table 3 the percentages of parental gifts received are shown by the respondent's housing tenure. It is notable that most people, and even most homeowners, have not received a parental gift towards housing or otherwise. The relationship between gifts towards homeownership and the housing tenure of the respondent is significant (p = 0.00), as is the relationship between intergenerational gifts towards housing plus money transfers over  $\in$  5000.00 (p = 0.00) and housing tenure.

Half the respondents live within 10 kilometres of their parents' residence. The average distance between respondents and their parents is 28 kilometres, varying between zero and 279 kilometres. A respondent who lives within 10 kilometres of the parental home and whose parents live in an owneroccupied home has a 79.1 per cent probability of living in an owner-occupied home as well. If the distance exceeds 10 kilometres, the probability of the respondent living in an owner-occupied home drops to 67.5 per cent. If the respondent lives within 10 kilometres of parents who rent their home, the probability of the respondent being an owner-occupier is 60.2 per cent. When the respondent lives more than 10 kilometres from renting parents, the probability of living in an owner-occupied home rises to 67 per cent. Distance to parents indeed seems to matter for housing tenure.

### **Multivariate Results**

The first logistic regression model includes the personal characteristics of the respondent (age, gender, level of education, household income and household composition) and the housing tenure of the parents when the respondent was 15 years of age (Table 4).

The older people are, the more likely they are to live in an owner-occupied home. At an older age, this association between age and homeownership is only slightly less strong (see small negative parameter for age squared). The effect of gender indicates that women have a smaller probability than men of becoming owner-occupiers. Results from a model including an interaction between gender and household composition (not

|  | Does not             | own home       | Owns home         |                |  |  |  |
|--|----------------------|----------------|-------------------|----------------|--|--|--|
| Intergenerational gifts  | Column<br>percentage | Row percentage | Column percentage | Row percentage |  |  |  |
| No gift  | 89.3                 | 34.8           | 76.1              | 65.2           |  |  |  |
| Gift towards homeownership   | 1.5                  | 11.5           | 5.4               | 88.5           |  |  |  |
| Monetary gift of at least €5000.00   | 8.0                  | 22.9           | 12.2              | 77.1           |  |  |  |
| Both gift towards homeownership<br>and monetary gift of at<br>least €5000.00 | 1.2                  | 8.0            | 6.2               | 92.0           |  |  |  |

**Table 3.** Occurrence of intergenerational gift-giving by housing tenure of the respondent (N = 4555)

Source: Netherlands Kinship Panel Study, 2004.

|   | Model 1                                  |            |   |                                       | Model 2           |   | ]                       | Model 3           |   |                          | Model 4           |                         | Model 5                  |                   |                         |
|---|--|------------|---|---------------------------------------|-------------------|---|-------------------------|-------------------|---|--------------------------|-------------------|-------------------------|--------------------------|-------------------|-------------------------|
|   | leman, A                                 | icance     | Standard<br>error                           | В                                     | Signif-<br>icance | Standard<br>error                           | В                       | Signif-<br>icance | Standard<br>error                           | В                        | Signif-<br>icance | Standard<br>error       | В                        | Signif-<br>icance | Standard<br>error       |
| Age of respondent<br>Age squared  | 0 <u>편</u> 33<br>-0 <u>평</u> 33          | ***        | $\begin{array}{c} 0.028\\ 0.000\end{array}$ | $0.130 \\ -0.001$                     | ***<br>***        | $\begin{array}{c} 0.028\\ 0.000\end{array}$ | $0.122 \\ -0.001$       | ***<br>***        | $\begin{array}{c} 0.028\\ 0.000\end{array}$ | $0.126 \\ -0.001$        | ***<br>***        | 0.029<br>0.000          | $0.126 \\ -0.001$        | ***<br>***        | 0.029<br>0.000          |
| Gender of respondent $(ref = male)$   | -0 <del>9</del> 918<br>Manloage<br>02019 | ***        | 0.080                                       | -0.319                                | ***               | 0.081                                       | -0.315                  | ***               | 0.081                                       | -0.292                   | ***               | 0.083                   | -0.288                   | ***               | 0.083                   |
| Household income<br>of respondent (€ 1000s)   | 0ක්19                                    | ***        | 0.035                                       | 0.218                                 | ***               | 0.035                                       | 0.207                   | ***               | 0.035                                       | 0.230                    | ***               | 0.036                   | 0.229                    | ***               | 0.036                   |
| Level of education (ref = print<br>Secondary<br>Tertiary  | mary)<br>0.662<br>0.930                  |            | 0.109<br>0.121                              | 0.682<br>1.006                        | ***               | 0.112<br>0.128                              | 0.664<br>0.965          | ***               | 0.113<br>0.130                              | 0.695<br>1.116           | ***               | 0.114<br>0.133          | 0.678<br>1.105           | ***               | 0.115<br>0.136          |
| Household composition of re.<br>Couple without children<br>Couple with children<br>One-parent household | spondent<br>0.846<br>1.985<br>0.017      | ***        | ne-person h<br>0.122<br>0.100<br>0.166      | nousehold,<br>0.855<br>1.979<br>0.031 | )<br>***<br>***   | 0.123<br>0.101<br>0.166                     | 0.880<br>2.025<br>0.074 | ***               | 0.125<br>0.103<br>0.168                     | 0.768<br>1.786<br>-0.053 | ***               | 0.127<br>0.106<br>0.173 | 0.767<br>1.789<br>-0.045 | ***               | 0.127<br>0.107<br>0.173 |
| Homeownership of<br>parents when<br>respondent aged 15  | 0.648                                    | ***        | 0.081                                       | 0.638                                 | ***               | 0.084                                       | 0.543                   | ***               | 0.086                                       | 0.419                    | ***               | 0.088                   | 0.325                    | ***               | 0.094                   |
| Higher socioeconomic status of both parents   |  |            |   | -0.001                                |                   | 0.003                                       | -0.002                  |                   | 0.003                                       | 0.001                    |                   | 0.003                   | 0.001                    |                   | 0.003                   |
| Level of education of parents<br>Secondary<br>Tertiary  | the high                                 | her if bol | th present)                                 | 0.030 - 0.251                         | **                | 0.105<br>0.121                              | 0.023<br>-0.299         | **                | 0.106<br>0.122                              | $0.026 \\ -0.205$        |                   | 0.107<br>0.126          | 0.016<br>-0.200          |                   | 0.108<br>0.126          |
| Either parent's self-<br>employment   |  |            |   | 0.200                                 | **                | 0.094                                       | 0.139                   |                   | 0.095                                       | 0.129                    |                   | 0.097                   | 0.133                    |                   | 0.098                   |
| Received gift   |  |            |   |                                       |                   |   | 0.907                   | ***               | 0.113                                       | 0.925                    | ***               | 0.115                   | 0.933                    | ***               | 0.116                   |

**Table 4.** Logistic regression analysis of respondents' housing tenure (N = 4052)

At: 15:53 26 July 2007

|   | July 2007                  |                  |           |          |                   |         |          |                   |         |                |                 |                |                |                 |                |
|---|----------------------------|------------------|-----------|----------|-------------------|---------|----------|-------------------|---------|----------------|-----------------|----------------|----------------|-----------------|----------------|
| Degree of urbanisation (rej<br>Strongly urbanised area  |                            | ngly ur          | banised)  |          |                   |         |          |                   |         | -0.009         |                 | 0.135          | -0.022         |                 | 0.135          |
| Moderately urbanised area   | At: 15:5                   |                  |           |          |                   |         |          |                   |         | -0.039         |                 | 0.173          | -0.050         |                 | 0.174          |
| Hardly urbanised area<br>Not urbanised area   | Amanda] At: 15:53          |                  |           |          |                   |         |          |                   |         | 0.052<br>0.249 |                 | 0.203<br>0.240 | 0.040<br>0.234 |                 | 0.204<br>0.241 |
| Percentage of owner-<br>occupied homes in the<br>municipality   |                            |                  |           |          |                   |         |          |                   |         | 0.029          | ***             | 0.005          | 0.028          | ***             | 0.005          |
| Mean price of owner-<br>occupied homes in<br>housing market area<br>(€10 000s)                                      | Downloaded By: [Helderman, |                  |           |          |                   |         |          |                   |         | -0.028         | **              | 0.012          | -0.028         | **              | 0.012          |
| Log distance to parents'  | olnwa                      |                  |           |          |                   |         |          |                   |         |                |                 |                | 0.199          | **              | 0.085          |
| residence minus mean<br>Homeownership of parents<br>at age 15 * log distance to<br>parents' residence minus<br>mean | ,                          |                  |           |          |                   |         |          |                   |         |                |                 |                | -0.341         | ***             | 0.113          |
| Constant  | -5.022                     | ***              | 0.590     | -4.921   | ***               | 0.600   | -4.724   | ***               | 0.603   | -5.705         | ***             | 0.695          | -5.547         | ***             | 0.699          |
| Initial –2 log likelihood<br>Model –2 log likelihood  | 6256<br>4147               |                  |           | 4135     |                   |         | 4065     |                   |         | 3936           |                 |                | 3927           |                 |                |
| Improvement <sup>a</sup><br>Nagelkerke <i>R</i> <sup>2</sup>  | 1084 (df                   | = 10; p<br>0.324 | 0 = 0.00) | 12 (df = | = 4; p =<br>0.327 | = 0.00) | 70 (df = | = 1; p =<br>0.345 | = 0.00) | 129 (df        | = 6; p<br>0.377 | = 0.00)        | 9 (df =        | 2; p =<br>0.380 | = 0.00)        |

<sup>a</sup>Model 1 is compared with null model, models 2 to 5 are compared with previous model. \* = p < 0.10; \*\* = p < 0.05; \*\*\* = p < 0.01.

Sources: Netherlands Kinship Panel Study, 2004; Statistics Netherlands (2002).

shown) suggest that this is specifically true for one-person households and one-parent households. People with higher incomes have greater probabilities of becoming homeowners, as we expected. Also, the higher the level of education, the greater is the probability of living in an owner-occupied home. Couples, either with or without children, have a better chance of living in an owneroccupied home than one-person households do. Couples with children have by far the largest probability of living in an owner-occupied home. One-parent households are not significantly different from one-person households. The expected positive effect of parental homeownership is found.

In model 2, the socioeconomic characteristics of the parents are added. None of the parents' socioeconomic characteristics has a significant, independently identified effect, except the parents' level of education. Separate models including only one of the parents' socioeconomic characteristics rendered similar results, even if the respondent's household income was left out of the analysis. The effect of tertiary education of the parents is negative, suggesting that if the parents are highly educated, there is a smaller probability of their children living in an owner-occupied home. This finding cannot be explained easily. Compared with model 1, the  $-2 \log$  likelihood measure drops by 12 (df = 4, p = 0.00), while the parameter of parents' housing tenure and Nagelkerke  $R^2$  hardly changes. The intergenerational transmission of socioeconomic status does not appear to offer an explanation for the intergenerational transmission of housing tenure.

In model 3, the indicator for gift-giving is added. The effect on homeownership of having received gifts is quite strong and significant. The -2 log likelihood measure is reduced by 70 (df = 1, p = 0.00). The parameter for parents' housing tenure changes from 0.638 to 0.543, indicating that the effect of parental homeownership found in models 1 and 2 was partly caused by gifts from the parents. The Nagelkerke  $R^2$  measure rises slightly from 0.327 to 0.345.

Model 4 includes the characteristics of the housing market in which the respondent operates-namely, the share of owneroccupied homes in the municipality in which the respondent lives, the mean price of owner-occupied homes in the housing market area and the degree of urbanisation in the municipality in which the respondent lives. The share of owner-occupied homes in the housing stock of the local housing market area has the expected positive effect. The mean price of owner-occupied homes in the housing market area has a negative effect, indicating that it is more difficult to attain homeownership when purchasing a home is more expensive. The effects of the degree of urbanisation indicate that the probability of living in an owner-occupied home does not change significantly with the degree of urbanisation. This result does not conform with earlier findings (Deurloo et al., 1990; Feijten, 2005; Mulder and Wagner, 1998). The degree of urbanisation does, however, show a significant effect before controlling for the share of owner-occupied homes and the mean price of owner-occupied homes (not shown). This result might indicate that a degree-of-urbanisation effect may not be important for housing tenure in its own right, but might in fact reflect the composition of the housing stock and/or the price of owneroccupied housing. The -2 log likelihood decreases by 129 (df = 6, p = 0.00) with the introduction of housing market characteristics, suggesting that these characteristics are quite important in explaining homeownership. The parameter of parents' homeownership drops from 0.543 to 0.419; this suggests that the intergenerational transmission of homeownership is partly explained by similarity in housing market characteristics. Nagelkerke  $R^2$  increases from 0.345 to 0.377.

In model 5, the intergenerational similarity of housing markets not captured by our indicators of housing market characteristics is accounted for by adding both the actual logarithm of the distance between residences as a continuous variable and the interaction effect between the logarithm of the distance and the housing tenure of the respondent's parents.

The effect of distance itself shows the impact of the distance to renting parents. As expected, the farther away people live from their renting parents, the greater is the probability of their owning a home. The effect of the interaction is negative and more than offsets the main effect. This finding indicates that the farther away a person lives from homeowning parents, the smaller is the probability of living in an owner-occupied home. So, the hypothesis regarding children having greater probability of reaching the same housing tenure as their parents if they live nearby, and vice versa, is supported. By including the indicators for distance-toparents in the model the  $-2 \log$  likelihood is brought down by 9 (df = 2, p = 0.00). The parameter for parents' housing tenure drops from 0.419 to 0.325, suggesting that proximity to parents in relation to their housing tenure is quite important. Nagelkerke  $R^2$  rises from 0.377 to 0.380. This finding suggests that similarity in housing market characteristics is not captured completely by the housing market indicators in the model. Furthermore, it cannot be ruled out that part of the proximity effect is caused by a greater influence on tenure decisions of parents living nearby than of parents living further away.

#### Discussion

The aim of the study reported in this paper was to unravel the different mechanisms that operate in the intergenerational transmission of homeownership and show their relative importance. The mechanisms that were investigated were gift-giving and the continuity of housing market characteristics over successive generations.

It was found that gift-giving formed an important explanation of intergenerational transmission of homeownership. Intergenerational similarities in housing market characteristics, however, are at least as important. This finding is of importance because the role (in terms of the similarity) of housing market characteristics in intergenerational transmission of housing tenure offers a further explanation of the similarity of successive generations' housing tenure. The importance of housing market characteristics and distance to parents also sheds light on the deliberate versus the coincidental character of the mechanisms of intergenerational transmission of homeownership. Living near parents and thus dealing with the same local housing market characteristics does not involve a deliberate strategy to reach a certain housing tenure, but it does play a significant part in the intergenerational transmission of homeownership.

After controlling for parental and personal characteristics, gift-giving, distance to the parents' home and (the similarities of) housing market characteristics, there is still quite a strong effect of parents' housing tenure. This remaining effect might partly be attributed to imprecise measurements of the mechanisms. For example, parents' financial support might take the form of parents co-signing an offspring's mortgage, which is not measured in the data. Alternatively, other mechanisms than gifts or housing market circumstances may play a part. It is likely that one of these is socialisation towards homeownership. Measuring this socialisation process adequately would be a major contribution towards unravelling the process of intergenerational transmission of homeownership.

The dataset used for this study was chosen because the precise residential locations of the respondents and their parents were available next to measurements of parental housing tenure and gift-giving. It must be noted, however, that the cross-sectional rather than longitudinal character of the data-only the first wave of the Netherlands Kinship Panel Study is available to date-is a weakness. Another shortcoming of the data is that information about only one set of parents of one of the adult members of the household is present. Even though the residential locations of the in-laws of the respondent are available in the dataset, gift-giving and housing tenure are not.

An interesting finding is that the degree of urbanisation, which has repeatedly been found to be associated with homeownership in previous studies (Deurloo *et al.*, 1990; Feijten, 2005; Mulder and Wagner, 1998), does not show a significant effect for housing tenure after controlling for the tenure composition of the local housing stock and the prices of owner-occupied homes, while it does show a significant effect before controlling for those characteristics. This finding seems to imply that the degree of urbanisation represents the composition of the typical housing stock in urban versus less urban environments.

It is not easy to predict to what extent the findings are specific to the Netherlands. On the one hand, children might live closer to their parents in the Netherlands than in other countries, owing to the limited size of the country. Proximity to parents may therefore play a greater role in the intergenerational transmission of housing tenure. On the other hand, the variety in housing tenure and price levels between housing market areas is also limited, so the residential locations of both parents and the younger generation might be less relevant to housing tenure in the Netherlands than in other countries.

The relative importance of financial support from parents might increase if younger people moved into homeownership and housing prices rose. Because parents increasingly own their homes and homeownership equity provides them with a greater capacity to give to their children than renters, homeownership for the younger generation becomes more affordable with support from parents. This greater capacity of the better-off to purchase homes may drive up the prices of owneroccupied houses, making homeownership even less attainable for people with renting parents. This effect would help to reproduce inequality in the housing market in the future, because people who are not in a position to receive gifts from their parents would in that case be disadvantaged. At the same time, the importance of intergenerational similarity in housing market characteristics may become less important if people live further away from their parents in the course of time. Some indications that this might be the case were found by Mulder and Kalmijn (2004).

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