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### Intentions to move, residential preferences and mobility behaviour: a longitudinal perspective

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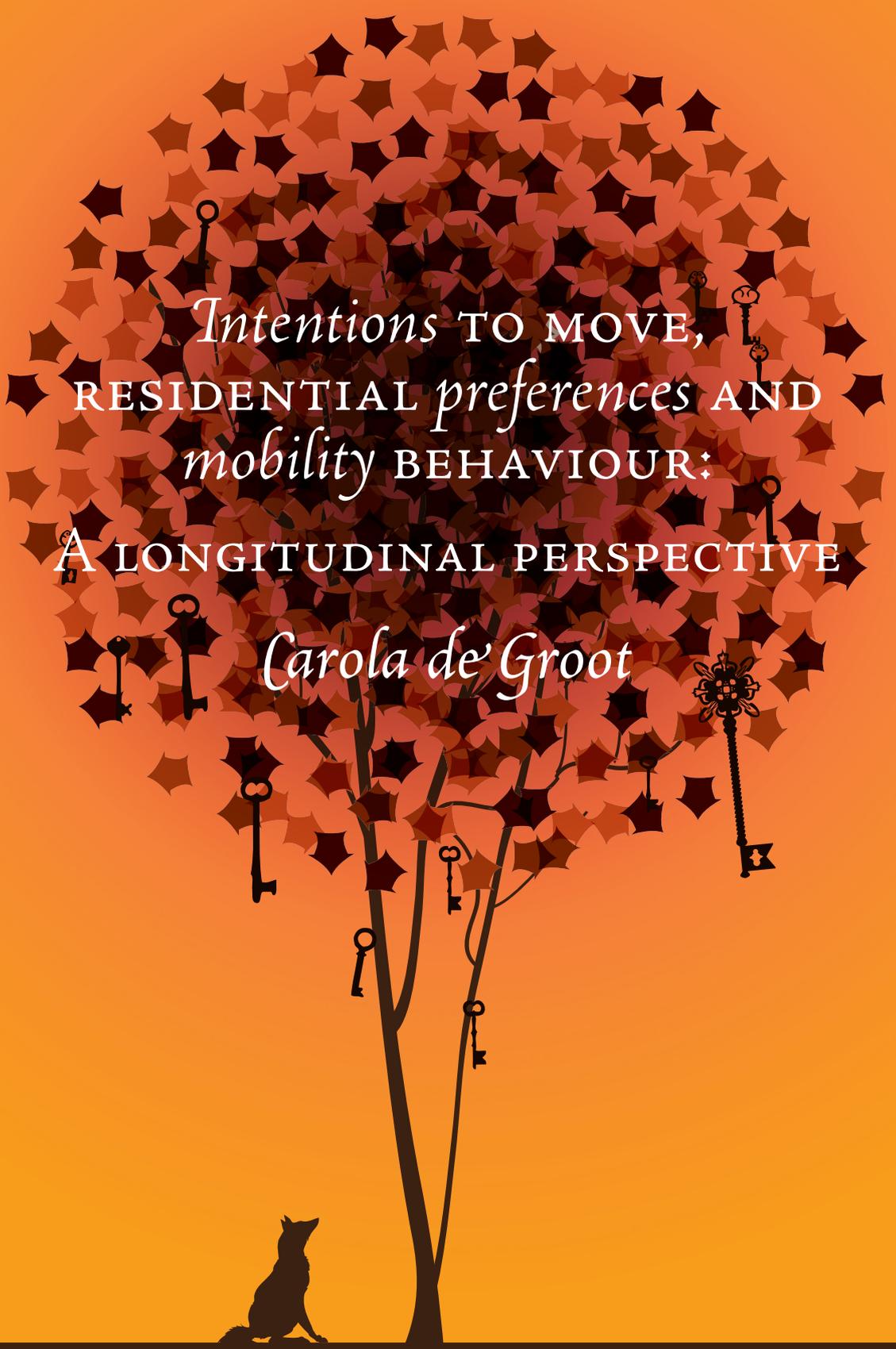
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This book is about the discrepancy between individuals' stated intentions to move and their actual mobility behaviour. Do people move when they say they are willing to do so? And if so, to what extent do they realise or adjust their initial residential preferences? Does the spatial context matter to the extent to which mobility intentions and residential preferences are realised? How important are anticipated and unanticipated life course changes to the mobility behaviour of intended movers? And do unanticipated life events trigger people to move unexpectedly?

Through five complementary studies, this book seeks to uncover the mechanisms contributing to behavioural inconsistencies in the individual mobility decision-making processes. Using an innovative longitudinal data set in which housing survey data from a large-scale sample for the Netherlands are enriched with longitudinal register data, it is shown that many people do not behave according to their prior stated attitude towards moving. Most intended movers do not change residence within two years and some people move despite having no initial intention to do so. Anticipated and unanticipated life course changes may provide an additional or unexpected stimulus to change residence. The results also demonstrate the relevance of the context in which residential choices are made. A high housing market pressure is accompanied by a lower rate of success in two ways: both intentions to move and residential preferences are less frequently realised.



*Intentions TO MOVE,*  
RESIDENTIAL preferences AND  
*mobility* BEHAVIOUR:  
A LONGITUDINAL PERSPECTIVE

*Carola de Groot*



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# Preface

During my PhD research, I turned out to be an excellent example of how behavioural inconsistencies may arise in one's individual mobility decision process, from the formation of an intention to move to the actual decision to move or not. In the first years of my research, the realisation of my intention to move was hampered by a variety of factors, such as my hesitation to put my scarce time toward finding a new home. However, in the course of time, the deterioration of the neighbourhood in which I was living, in combination with the long commuting time to my work, pushed me past the threshold level, and I began searching for a home. In a relatively short time, I moved from a social rental home to an owner-occupied home. Not long thereafter, an unfortunate, unanticipated life event triggered me to move unexpectedly, in accordance with the residential mobility theory, to a rental home.

While these events are based on a single case,  $n = 1$ , for this research, I had the opportunity to examine thousands of unique cases to investigate the individual mobility decision process in detail. Obviously, I did not do this all by myself. I had the luxury of having two excellent supervisors standing by my side: Claartje Mulder and Dorien Manting. Working on this dissertation sometimes felt like building an impossible skyscraper, not as an architect sitting neatly behind a drawing board but as a construction worker working at frighteningly high levels. The two of you prevented me from falling and guided me smoothly throughout this process. You have encouraged not only my critical thinking but also my curiosity and joy in doing research. I am grateful for your constructive guidance and support, both inside and outside the boundaries of this research.

This research would not have been possible without the tremendous help from Marjolijn Das of Statistics Netherlands. Marjolijn, every time I stumbled upon a data problem, you were the one who explored the unexplored to find a creative solution, always successfully. Thank you so much for everything. Furthermore, I want to express my gratitude to my dear colleagues of the PBL Netherlands Environmental Assessment Agency who all have kept my spirits high during this intense period of dealing with data and words! I am particularly grateful to Femke Daalhuizen, Frank van Dam, Sanne Boschman, and Otto Raspe who have

been more closely involved with my research – each in their own way. I also want to thank my colleagues and officemates at the University of Amsterdam, particularly those who joined the “Leerzitje”, for their enthusiastic support and insightful comments on several drafts of my papers.

Finally, I want to thank those whom are dear to me: my parents Rob and Ria, my lovable sister Mariska, Roy and Ilora, Monique and Ramesh, Cindy and Ohad, Marta, Linda, Joyce, Nico and Ineke, Blanca and Miguel, Ana and Rulo, Erik-Jan, and Kenneth. I am thankful for your presence in my life; you all have made the work-life balance as healthy and joyous as possible. Carlos, my last words are for you. I am very grateful that our paths crossed during a summer course Mathematics at the University of Essex, an event that later gave an unanticipated joyous turn to my life and that made “ $1 + 1 = 2$ ”! Thank you so much for your encouragement, your great sense of humour, and for giving a sparkling glow to my life.

Carola de Groot  
The Hague, August 2011

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# 1 Introduction

*A fox of Gascon, though some say of Norman descent,  
When starved till faint gazed up at a trellis to which  
grapes were tied –  
Matured till they glowed with a purplish tint  
As though there were gems inside.  
Now grapes were what our adventurer on strained  
haunches chanced to crave,*

*But because he could not reach the vine  
He said, "These grapes are sour; I'll leave them for some  
knave."  
Better, I think, than an embittered whine.*

[La Fontaine's "The Fox and the Grapes"  
translated by Moore, 1954]

## 1.1 Background

Individuals' residential mobility behaviour and housing choices shape the demographic and socioeconomic composition of residential locations (cf. Cadwallader, 1992). Because different groups of individuals make different residential choices, individuals contribute to processes at the aggregate level, such as the segregation of low-income households and gentrification. A major issue of debate is whether such processes are attributable to differences in residential preferences or to restrictions and constraints on moving, whereby some individuals are able to move freely while others must settle for a home or residential location that does not match their residential preferences. Therefore, it is important to understand how the stage in the life course careers and the contextual circumstances facilitate the realisation of mobility intentions and residential preferences, and the circumstances in which intended movers remain in their current home or move to a home or residential location other than those they initially preferred.

The residential mobility behaviour of individuals is often analysed as a discrete event in which the actual mobility outcome is considered to reflect residential preferences (Timmermans et al., 1994). However, if residential mobility is viewed as a process that starts with the formation of a positive attitude towards moving that may or may not result in a change of residence, then it is insufficient to focus solely on the mobility outcome. As Goldstein (1976) put it, "Can you imagine, too, undertaking a comprehensive study of fertility without giving any attention to those couples who have decided to remain childless or those couples who have decided to halt their fertility?" (p. 427). By focussing solely on the mobility outcome, one ignores the many people who may be willing to move but are unable to do so (Feijten & Van Ham, 2009) and that people's residential choices may differ from their initial preferences due to hampering factors, suggesting a risk of confusing preferences with restrictions and constraints (Cadwallader, 1992).

Longitudinal studies investigating the individual mobility decision-making process reveal a gap between attitudes towards moving and actual mobility behaviour. A positive attitude towards moving (a desire, thought, intention, or expectation) often fails to result in a change of residence, and some people move despite having no initial desire or intention to do so (for example, see Duncan & Newman, 1976; Landale & Guest, 1985; Lu, 1999; Rossi, 1955; Speare, 1974). In other words, there are literal behavioural inconsistencies between the initial attitude and the final outcome that are both dealing with the same specific behaviour (Fishbein & Ajzen, 2010; see also Gardner et al., 1985).

Previous research has focussed on what makes people change residences following a positive attitude towards moving. The question of what makes people move “unexpectedly” has received less attention. Several researchers have tested the validity of Speare’s assertion (1974) that background characteristics (indicated by the stage in the various life course careers) have little effect on actual mobility because their effect is mediated by residential satisfaction, which triggers the desire or intention to move (e.g., Bach & Smith, 1977; Landale & Guest, 1985; Lu, 1998; Newman & Duncan, 1979). Most research has shown that sociodemographic, socioeconomic, and housing circumstances directly affect the relationship between positive attitudes towards moving and mobility behaviour. For instance, renters, whites, and young adults are more likely to realise positive attitudes towards moving than homeowners, blacks, and older adults are (for example, see Duncan & Newman, 1976; Kan, 1999; Lu, 1999). Kearns and Parkes (2003) found that, after controlling for mobility intentions, people living in inner city estates and deprived areas in London were significantly less likely to move than those living in other areas of England.

With its strong focus on current life course statuses, previous research tends to neglect the fact that household, occupational, and housing changes may also affect the extent to which positive attitudes towards moving are realised. Anticipated changes, such as union formation, are often only linked to the formation of positive attitudes towards moving (for example, see Kley, 2010); they are seen as triggers for moving. However, anticipated changes may also directly influence the extent to which positive attitudes towards moving are realised because some anticipated changes or triggers for moving are more urgent than others (Goetgeluk, 1997). Conversely, unanticipated household and labour changes are often mentioned as reasons why people do not behave according to their initial attitude towards moving (Hooimeijer & Oskamp, 1996; Speare, 1974). However, empirical evidence about how unanticipated changes affect the initial attitude towards moving is scarce.

Likewise, little is known about the role of residential preferences in the realisation of a positive attitude towards moving. Residential preferences indicate intended movers’ preferences regarding the home and search location. These preferences and the willingness to adjust these residential preferences are crucial for the opportunities that intended movers have to change residence. If intended movers face difficulties in moving to a home that matches their residential preferences, they may make a diverging residential choice: they may either stay in their current home or move to a home or residential location other than those they initially preferred. Surprisingly, this last substitution mechanism has rarely been investigated by housing researchers.

The aim of this study is to shed light on behavioural inconsistencies within the individual mobility decision-making process through a longitudinal investigation of actual residential behaviour (a term covering both mobility behaviour and housing choice) conditional on mobility intentions and residential preferences. This study's main research question is as follows: *How do anticipated and unanticipated changes in the life course and residential preferences affect the discrepancy between stated mobility intentions and actual mobility behaviour, and what makes intended movers realise or substitute their initial residential preferences?*

## **1.2 The residential mobility decision-making process**

Since Rossi's seminal study, *Why Families Move* (1955), many researchers have investigated the residential mobility behaviour of individuals from a behavioural orientated approach. This approach distinguishes several stages in the mobility decision-making process, including the formation of a positive attitude towards moving, the search and evaluation of the housing alternatives, and, finally, the decision to move or to stay (Brown & Moore, 1971; Cadwallader, 1992; De Jong, 1999; Hooimeijer & Oskamp, 1996). Research has particularly focussed on the extent to which positive attitudes toward moving are realised (for example, see Kan, 1999; Landale & Guest, 1985; Lu, 1998; Rossi, 1955; Speare, 1974). This focus is understandable because the intention-behaviour gap is fundamental to understanding the mobility decision-making process underlying potential moves (De Jong, 1999).

### *Triggers for moving, intentions to move, and residential preferences*

The mobility decision-making process begins with a trigger setting off a positive attitude towards moving. A positive attitude can be triggered by stimuli such as dissatisfaction with the current home or residential location and the wish to change this dissatisfactory situation (Rossi, 1955; Speare, 1974), and life events in the household, educational, or occupational career such as union dissolution and job change (Mulder & Hooimeijer, 1999). The triggers for moving indicate the goals that people try to achieve with the change of residence; changing residence is never a goal in itself (Mulder, 1993). For instance, people may intend to move to reduce their commuting time to work or to begin cohabiting. Note that triggers for involuntary moving, such as impending housing demolition, are beyond the scope of this thesis.

A positive attitude towards moving may refer to a desire, thought, intention, plan, or expectation towards moving. There are important conceptual

differences between these various positive attitudes in their degree of conviction, commitment, and certainty to perform the behaviour. An intention to move indicates that one is willing to change residence (De Jong, 1999) and is therefore associated with a higher degree of conviction and commitment than a desire or thought (see also Lee et al., 1994). Expectations also reflect a perceived “certainty”, namely, whether individuals think that the behaviour is likely to happen in the future (Sheeran, 2002). Neither intentions nor expectations necessarily entail a desire; they can be motivated by obligation or necessity instead (Davis, 1984; McHugh, 1984).

The various positive attitudes towards moving also differ in the extent to which they are accounted for perceived or anticipated factors of which individuals believe that they may hamper the change of residence, such as insufficient income, at the individual level, and a tight housing market, at the contextual level. A desire is often seen as an unconstrained attitude, that is, an attitude that is not adjusted for anticipated hampering factors (Crowder, 2001; Desbarats, 1983; Lu, 1998). Conversely, in line with Ajzen’s theory of planned behaviour (1991), intentions and expectations are thought to incorporate an individual’s perception of restrictions and constraints that might hamper the change of residence (Ajzen, 1991; see also Gollwitzer, 1993; Lu, 1998). Note that this thesis focuses on intentions to move voluntarily, which solely indicates the willingness to change residence.

If individuals expect hindrances in the form of insufficient financial resources or a tight housing market (and assuming that people try to avoid striving for something that is unlikely to happen), a latent favourable attitude towards moving may not crystallise into a manifest intention or expectation (Gardner et al., 1985; Gollwitzer, 1993). In the social psychology literature, this phenomenon is known as “adaptive preference formation”. To reduce cognitive dissonance (uncomfortable feelings caused by preferring something that is difficult to attain) people may adjust their preferences or attitudes in advance (Elster, 1983). Thus, people who have an intention to move presumably believe that it might be possible to overcome the perceived difficulties that they may encounter if they were to move (Gardner et al., 1985).

Financial resources and the perceived circumstances of the regional housing market may also affect the formation of residential preferences, such as the preference for homeownership (Forrest et al., 1990; McLaverty & Yip, 1993) or a certain residential location (Feijten et al., 2008). Individuals are expected to include an immeasurable amount of information (subjective and objective) about housing market circumstances in the formation of their residential preferences (Hooimeijer & Oskamp, 2000). As with latent favourable attitudes towards

moving, a latent residential preference may not crystallise into a manifest preference if people believe that anticipated hampering factors cannot be overcome.

#### *Actual mobility behaviour and housing choice*

It is assumed that people only (intend to) change residence when the benefits of moving surpass the costs (for example, see De Jong, 1999; Mulder & Hooimeijer, 1999). Yet, moving is not free from restrictions and constraints. People may face difficulties in finding a home suiting their residential preferences and budget. Instead of realising their positive attitude towards moving, they may decide to stay in their current home (Brown & Moore, 1970) or to move to a home or location different from their initial residential preference. The latter is referred to as substitution: the acceptance of a new home that may fit some, but not all, of one's initial residential preferences (Goetgeluk, 1997).

The extent to which people realise their positive attitude towards moving depends on whether they have a desire, intention, or expectation to move. Intentions and, especially, expectations possess greater predictive validity than desires and thoughts because they are associated with a higher degree of conviction and commitment to perform the behaviour (cf. Lee et al., 2004). Indeed, several studies have shown that expectations and plans to move are more closely related to actual mobility behaviour than desires and considerations to move (Coulter et al., 2010; Kley, 2010; Rossi, 1955).

Although perceived hampering factors are presumably already incorporated into the intention to move, hampering factors may affect the extent to which intentions to move are realised. First, the actual hampering factors may be more severe than anticipated. This especially holds for contextual circumstances that are beyond a person's control, such as the regional housing market situation. Second, people presumably imperfectly adjust their attitudes towards moving. Even if people believe that it is difficult to change residence due to anticipated hampering factors, they may still be willing to move, which might indicate the adaption of "wishful thinking" (Elster, 1983). Note that the impact of hampering factors, such as insufficient financial resources, on actual mobility behaviour presumably depends on the positive attitude under study. Because intentions are seen as constrained attitudes, hampering factors may have weaker effects on the realisation of mobility intentions than on the realisation of mobility desires.

An important question here is whether anticipated triggers for moving also affect the extent to which intentions to move are realised. Anticipated triggers, such as dissatisfaction and life course events, are often only considered relevant to the formation of positive attitudes towards moving (for example, see Mulder &

Hooimeijer, 1999; Speare, 1974). Although Kley (2010) argues that anticipated life course events do not directly influence the last stage of the mobility process, there is reason to believe that this assumption does not hold. The trigger for moving indicates the consequences of not realising the intended move and thus the necessity of realising it (compare Gollwitzer, 1993). Intended moves triggered by changes in the life course are associated with a high degree of necessity because not moving may require postponing the life course change (Goetgeluk, 1997; Oskamp, 1997). Compared to household and employment reasons for moving, housing reasons for moving are considered less urgent because not moving or delaying the move only extends the suboptimal housing situation (Goetgeluk, 1997). Thus, triggers for moving are relevant to the level of commitment to executing the intended action (Gollwitzer, 1993), that is, how much of an effort people are willing to exert to perform the behaviour (Ajzen, 1991). Generally, the stronger the intention to engage in behaviour, the more likely it is that the intended behaviour will be performed (Ajzen, 1991).

Several authors argue that the extent to which people behave according to their initial attitude towards moving is influenced by unanticipated changes in the life course (for example, see Hooimeijer & Oskamp, 1996; Speare, 1974). Unanticipated changes only differ from anticipated changes in their unexpectedness; they were not taken into account in the mental “calculus” and hence they may affect the intention–behaviour relation (Gardner et al., 1985; see also Anderson et al., 1986). For those without an initial intention to move, unanticipated life events may cause an unexpected trigger for moving and a subsequent move within a short time. Conversely, among those already intending to move, unanticipated life events may lead to the postponement or cancellation of the intended move. With the notable exception of Kan’s (1999) study, large-scale research on the role of unanticipated changes in the discrepancy between stated attitudes towards moving and actual mobility behaviour is scarce.

Finally, individuals’ residential preferences – regarding the type of dwelling and (type of) residential location – are relevant to their housing market opportunities to change residence. For instance, preferences concerning geographical location may play a role because of large regional differences in housing market opportunities (Clark & Dieleman, 1996). People who prefer a home in the densely populated Randstad region, which is characterised by a relatively tight housing market, presumably have fewer housing opportunities than people who prefer a home in the national periphery. If people are unable to find a home that suits their residential preferences, they may decide to stay in their current home or move to a home or a location other than those they initially

preferred. Whether this is the case likely depends on the rigidity of the residential preference, which, in turn, is related to personal characteristics such as the stage in the various life course careers (Goetgeluk, 1997; Goetgeluk & Hooimeijer, 1991). Surprisingly, previous research has paid little attention to the role of residential preferences in the discrepancy between positive attitudes towards moving and mobility behaviour, let alone to the realisation or adjustments of residential preferences.

### **1.3 Research approach and thesis outline**

For the purpose of this thesis, a longitudinal data set was created in which survey data from the large-scale cross-sectional Housing Demand Surveys (HDS) 1998 and 2002 and their successor, the Housing Research Netherlands (HRN) 2006 survey were enriched with individual register data from the longitudinal Social Statistical Database (SSD) of Statistics Netherlands (Bakker, 2002; Houbiers, 2004). While the housing surveys provide information on the respondents' intention to move within two years and their residential preferences, information from the SSD is used to derive the same respondents' actual moves, housing choices, and life course events in the two years after the survey.

This thesis consists of five complementary studies that are described in the following five chapters. The studies each address a different research question and objective, and together they provide the basis to answer the main research question. Each study is written as an individual research paper and can be read separately from the rest. All the studies have been published in or submitted to an international peer-reviewed scientific journal, with the exception of the study described in Chapter 2, which has been published as a chapter of a book.

Chapter 2 investigates how longitudinal and cross-sectional approaches may lead to different conclusions regarding the discrepancy between mobility intentions and mobility behaviour. The aim of the chapter is to show the value of the longitudinal approach to gain insight into individual mobility decision-making processes. A longitudinal research method is applied to answer the following research question using a binomial logistic regression model: *To what extent do reasons for moving, housing dissatisfaction, and housing preferences hamper or stimulate the actual mobility behaviour of those intending to move to another dwelling?*

Chapter 3 concentrates on the impact of anticipated or preferred changes in the household and housing career that may act as triggers for moving, such as union formation and the desire to move out of homeownership, on the

realisation of intentions to move. Special attention is given to the strength of the intention to move. Binomial logistic regression models are used to answer the following research question: *To what extent do anticipated triggers for moving, the strength of the intention to move, resources and restrictions, and the preferred search location play a role in the realisation of an intention to move?*

Chapter 4 investigates how unanticipated changes in the household and occupational career contribute to the discrepancy between initial intentions to move or to stay and actual mobility behaviour. Binomial logistic regression analyses of person-years are employed to investigate how unanticipated life events may lead people to change or adjust their initial attitude towards moving. The chapter aims to demonstrate that unanticipated life events may cause an unexpected need to move among people who initially did not intend to change residence and that they may increase the urgency of previously reported intentions to move or may lead to the postponement or cancellation of intentions to move.

In Chapters 5 and 6, the focus shifts from the realisation of mobility intentions to the realisation and adjustments of residential preferences. Chapter 5 examines the formation of the preference to move into homeownership and the actual residential behaviour of aspiring homeowners. The chapter aims to identify the extent to which factors hamper or stimulate the transition to homeownership at various stages. Special attention is given to the role of regional housing market circumstances. This chapter addresses the following research question: *To what extent do individual characteristics and contextual circumstances influence the formation and realisation of preferences to move into homeownership and in which of these two stages do the various determinants have the largest impact?* Binomial and multinomial logistic regression analyses are employed to answer the research question.

Chapter 6 attempts to illuminate one of the most pressing topics in the rural mobility literature: do rural residents face difficulties in finding a home within their locality, and are they forced to move elsewhere due to the influx of more wealthy newcomers? Using a multilevel multinomial logistic regression model, this chapter addresses the following research question: *Do intended local movers realise their rural location preference (i.e., their preference to move to a rural area within their current municipality) less often than intended non-local movers, and to what extent do income and the local housing market pressure influence the realisation or substitution of rural location preferences?* The chapter also examines whether rural residents are more inclined to express a preference to leave their municipality if the local housing market pressure is high.

The study concludes with Chapter 7. In this chapter, the complementary research findings of the previous chapters are combined to answer the main research question: *How do anticipated and unanticipated changes in the life course and residential preferences affect the discrepancy between stated mobility intentions and actual mobility behaviour, and what makes intended movers realise or substitute their initial residential preferences?* This chapter also discusses the value and limitations of the chosen longitudinal research approach.

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## 2 The realisation of intentions to move: longitudinal and cross-sectional analyses of stated intentions and actual behaviour

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*ABSTRACT This study addresses the discrepancy between stated intentions to move and actual mobility behaviour. Two methodologies can be distinguished in previous research concerning the linkage between stated intentions and actual behaviour: the cross-sectional approach and the longitudinal approach. Using a data set in which survey data from the Housing Demand Survey 2002 are enriched with longitudinal register data from the Social Statistical Database, it is argued that a longitudinal research method is preferred to gain insight into the relationship between stated intentions to move and actual mobility behaviour. Furthermore, it is shown that the extent to which people behave in accordance to their stated intentions to move is mainly affected by the urgency of the intention to move. The underlying triggers for moving and tenure preferences also play a role; particularly those who prefer to move out of homeownership have a high probability of realising their intention to move. Surprisingly, the realisation of stated intentions to move is hardly affected by socioeconomic characteristics such as income.*

## 2.1 Introduction

Research concerning residential mobility and migration is often based either on information on stated attitudes towards moving or on actual mobility behaviour. Attitudes towards moving, such as desires and intentions, are, together with housing preferences (hypothetical housing choices), the subject of the stated preference approach (for an overview, see, for example, Kim et al., 2005). The study of actual mobility (and actual housing choice) belongs to the revealed preference approach (Dieleman, 1996). This approach is based on observable market behaviour under the assumption that actual behaviour is a reflection of preferences (Timmermans et al., 1994).

It is difficult to describe the decision process underlying potential moves by concentrating on either stated attitudes towards moving or actual mobility behaviour. Studies using stated preference data are unable to show to what extent a positive attitude to move will result in actual behaviour. At the same time, by focussing only on the mobility outcome, those who have a favourable attitude towards moving but do not relocate because of a lack of housing market opportunities are ignored (Feijten & Van Ham, 2009). Furthermore, studies using revealed preference data lack the potential to unravel the extent to which moves are the result of the interplay between positive attitudes towards moving, housing preferences (and the willingness to substitute housing preferences), individual resources and restrictions, and housing market opportunities (Goetgeluk & Hooimeijer, 2002; Timmermans et al., 1994).

To gain insight into the process between stated intentions to move and actual moves, information is needed on intentions as well as actual behaviour. This information is available in cross-sectional surveys and in longitudinal surveys. However, only longitudinal surveys combine information about stated intentions and actual moves for the same individuals by following intended movers in time with respect to their actual mobility behaviour. The longitudinal research method is, therefore, an ideal methodology for gaining detailed insight into the extent to which people behave according to their stated intentions to move and into the circumstances that hamper or stimulate actual mobility behaviour conditional on stated intentions to move.

Longitudinal research concerning the question of how positive attitudes towards moving result in actual mobility behaviour is often based on small-scale panel surveys (Landale & Guest, 1985; Rossi, 1955; Speare, 1974) because the type of longitudinal data needed to answer this question is difficult to collect. Generally, it is difficult to track the same respondents, especially if the study is conducted over a long period of time. This is particularly problematic in mobility research because movers are more difficult to trace than non-movers.

However, in the Netherlands, it has recently become possible to combine housing survey data with longitudinal register data at the level of individuals. The resulting large-scale longitudinal data set gives information on both intentions to move and actual mobility behaviour for the same individuals. In contrast to most other longitudinal studies based on panel surveys, all respondents can be followed over time; there are no problems with tracking them. Moreover, the research sample is larger than the samples used in most previous studies, which makes it possible to perform more in-depth analyses with greater statistical power.

Using this newly created longitudinal data set, this study aims to investigate how the longitudinal and cross-sectional approach may lead to different conclusions with respect to the discrepancy between mobility intentions and mobility behaviour. Furthermore, while applying the longitudinal research method, the following research question is addressed: *To what extent do reasons for moving, housing dissatisfaction, and housing preferences hamper or stimulate the actual mobility behaviour of those intending to move to another dwelling (the so-called intended filterers)?* The analyses presented in this chapter are partly based on the study by De Groot and colleagues (2008). The intention to move is derived from the Housing Demand Survey (HDS) 2002; the subsequent mobility behaviour of the HDS respondents is derived from the longitudinal Social Statistical Database (SSD) of Statistics Netherlands.

## **2.2 Theory and background**

### **2.2.1 From stated intentions to actual behaviour: Theory**

The theory concerning residential mobility and migration starts from the assumption that there must be a trigger for a positive attitude towards moving. The first trigger source for moving is the existence of a certain state in a current dwelling or location and the wish to change that state. It is often assumed that the state in the previous dwelling should be dissatisfactory or stressful to make people wish or intend to move (Mulder, 1996). The second category of triggers for moving relates to facilitating the occurrence of life events in the household, educational, or occupational career, such as leaving the parental home, union dissolution, and job change. In contrast to the first category, these triggers for moving are not necessarily related to residential stress or dissatisfaction (Mulder, 1996; Rossi, 1955).

The trigger for moving indicates the importance of achieving the intended behaviour for the subject (Gollwitzer, 1993) and, therefore, partly determines the urgency level of the intention to move. The urgency level of an intention to move

indicates the level of commitment to execute the intended action (Gollwitzer, 1993), such as how hard people are willing to try or how much of an effort they plan to exert to perform the behaviour (Ajzen, 1991). People who intend to move because the current housing situation does not match the preferred housing situation (housing reasons) usually do not have an urgent reason to move. Delaying the move only causes an extension of the suboptimal housing situation (Goetgeluk, 1997). In contrast, triggers for moving related to life events such as job change, union formation, and, especially, union dissolution are more urgent reasons for moving because these events can hardly take place without at least one move (Goetgeluk, 1997; Oskamp, 1997).

The individual's intention to perform a certain behaviour is the central factor in the theory of planned behaviour (Ajzen, 1991). This theory has been widely used for the prediction of a wide range of behavioural outcomes conditional on intentions (for an overview, see Sheeran, 2002) and has been designed to predict the execution of behaviour that is not under volitional control. That is, it predicts behaviour (for example, mobility behaviour) that not only depends on a person's own motivational factors but also on factors that are beyond a person's control (Ajzen, 1991; Madden et al., 1992). For example, whether people are able to realise their intention to move depends on housing opportunities and constraints at the macro level (compare Hooimeijer & Oskamp, 1996; Mulder & Hooimeijer, 1999). The theory of planned behaviour also predicts that people take perceived hampering factors into account in the formation of a behavioural intention (Ajzen, 1991; Gollwitzer, 1993). Intentions to move are likely constrained attitudes; if people expect hindrances in the form of a lack of resources or opportunities, then an initial favourable attitude towards moving may not crystallise into an intention to move (Gardner et al., 1985).

First, the realisation of intentions to move is subject to resources and restrictions. Financial resources are necessary to realise an intention to move (Kleinmans, 2005; Mulder & Hooimeijer, 1999). The most important financial resource is income. The more income one has, the more dwellings that are within the financial reach of the intended mover (Mulder & Hooimeijer, 1999; Murie, 1974). Financial resources are also needed to cover the cost of the move itself. At the same time, restrictions stemming from the housing and household careers may hamper the realisation of an intention to move. Homeowners may have more difficulties realising an intention to move than renters because more time and effort are required to sell a home than to cancel a tenancy. Furthermore, it can be more difficult to realise an intention to move for couples and families than for singles because the former have to take into account the daily activity

spaces and preferences of other household members (Mulder, 1993; Mulder & Hooimeijer, 1999).

Second, intentions may not result in behaviour if the intention is not strong enough. As a rule, the stronger the intention to engage in a behaviour, the more likely that the behaviour will be performed (Ajzen, 1991). As mentioned previously, the urgency of the intention to move is closely connected to the trigger for moving. People whose intention is primarily prompted by housing reasons (which are considered less urgent reasons for moving) are therefore expected to be less likely to realise their intention to move than those whose intention is triggered by household or labour market reasons.

The realisation of intentions to move likely depends on housing preferences, such as the preference for a rented or an owner-occupied home. While opportunities in the owner-occupied sector are mainly determined by the availability and affordability of owner-occupied homes (in relation to a person's own financial means and the willingness of the banks to provide mortgage loans), access to the social rental sector is largely dependent on waiting lists and eligibility criteria (such as age and household size). Thus, people who prefer a rental home (which is likely to be a preference for a social rental home because most rental homes in the Netherlands belong to the social housing sector) may have more difficulties realising their intention to move than those who prefer to move to an owner-occupied home. Tenure preferences may also have an impact on the realisation of intentions to move in combination with current housing tenure. Homeowners who prefer moving to a rental home are expected to move more frequently than others because they are considered to have an urgent need to do so (Feijten, 2005). For the other combinations of current and preferred tenure, it is not straightforward which combination will lead to more difficulties in finding a new home. On the one hand, homeowners who prefer to move to another owner-occupied home might move less frequently than renters who prefer to move into the owner-occupied sector because homeowners also have to put effort into selling their homes (Helderman et al., 2004). On the other hand, it is also possible that renters have more difficulties realising their intention to move if they prefer to enter homeownership because of a lack of personal equity.

Preferences concerning the geographical location are also expected to be relevant because of the regional differences in housing market opportunities (Clark & Dieleman, 1996). Opportunities on the regional housing market are determined by the arrival rate of housing vacancies (Hooimeijer & Oskamp, 1996) and are constrained by price and by the allocation rules set by institutions (Hooimeijer & Linde, 1988). Compared with the Randstad (the more urbanised western region of the Netherlands), the peripheral regions are characterised by

low pressure on the housing market and, therefore, more opportunities to realise an intention to move.

Moreover, the discrepancy between intentions and behaviour depends on the stability of intentions between the time of measurement of the intentions and the performance of the behaviour (Fishbein & Ajzen, 1975). The intention to move may be adjusted, dropped or postponed due to constraints and facilitators that have been previously ignored by the individual (Lu, 1998). For example, if the search for a new home is sufficiently frustrating, a household may decide to stay in the old dwelling (Brown & Moore, 1970). The intention to move may also change due to the occurrence of unanticipated life events. During the search for a new dwelling, people may experience unanticipated events such as becoming unemployed or widowed. Unanticipated life events may prevent some people's moves but may lead others to move rather unexpectedly, even though they might indicate in surveys that they do not intend to move (Hooimeijer & Oskamp, 1996). The longer the time interval, the more likely the occurrence of unanticipated events that may change the initial intention to move or to stay in the current home (compare Ajzen & Madden, 1986).

### ***2.2.2 From stated intentions to actual behaviour: Results of previous research***

In previous research, two approaches can be distinguished concerning the relation between stated intentions to move and actual mobility behaviour: the cross-sectional approach and the internationally more common longitudinal approach.

#### *Cross-sectional studies*

Until recently, no large-scale longitudinal data set was available for the Netherlands that followed people with an intention to move over time with respect to their actual mobility behaviour. To determine the extent to which intentions to move result in actual behaviour, Goetgeluk and colleagues (1991; 1992) developed a cross-sectional ("quasi-longitudinal") research method using information from the large-scale cross-sectional Housing Demand Surveys (HDS). To estimate the extent to which people are likely to realise their intention to move, a comparison was made between the number of people who had moved in the year preceding the interview and the number of people who were actively searching for a home in the period before the interview (see Table 2.1). Both groups, then, were actively searching for a home in the year before the interview, but only one of them had succeeded in finding a home.

**Table 2.1** Method of cross-sectional analysis

Initial status ( $t_{i-1}$ )	Actual mobility behaviour ( $t_{i-1} - t_i$ )	Current status ( $t_i$ )
Actively searching potential mover	Moved	Recent mover
Actively searching potential mover	Not moved	Actively searching potential mover

*Source:* based on Goetgeluk et al. (1992)

In the last two decennia, several studies, all in the Netherlands, have adopted the methodology developed by Goetgeluk and colleagues. However, in some studies, the selection criteria underlying the cross-sectional methodology were applied less strictly than Goetgeluk and colleagues had recommended: the selection of respondents intending to move comprised not only those actively searching for a home, but also a wider selection of intended movers (for example, see Haffner et al., 2008; Van Groenigen & Van der Veer, 2006; VROM, 2007a).

The study of Goetgeluk and colleagues estimated that of the 4,222 respondents who were searching for a home in the year before the interview in 1990, approximately 58 per cent moved to another home, while the remaining respondents were still searching for a home (Goetgeluk et al., 1992). Using data from the HDS 1994, Hooimeijer and Poulus (1995) estimated that in the year preceding the interview, approximately 416,000 people changed residence. In the same period, approximately 461,000 people had searched for a home without success. Of the 877,000 respondents, then, who actively searched for a home in the year preceding the interview, only 416,000 had found a new home. This results in an estimated rate of success of 47 per cent in finding a home within one year ( $416,000 / 877,000$ ). Van Groenigen and Van der Veer's (2006) cross-sectional analysis for Amsterdam shows that in 2005, 71,000 households stated that they definitely intended to find a home in Amsterdam within two years, whilst approximately 39,100 households had recently moved (in the eighteen months before the interview). By relating these numbers to each other, Van Groenigen and Van der Veer (2006) found a success rate of 55 per cent. The study of Haffner and colleagues (2008) for the Netherlands as a whole shows a somewhat lower success rate of 47 per cent for those searching for a home in 2004 and 2005. A national cross-sectional analysis by the former Ministry of Housing, Spatial Planning and the Environment (VROM) estimated that in 2006, approximately 1.9 million people declared an intention to move within two years, whereas in the last two years, only 1.1 million people had moved (VROM, 2007a). The success rate of 58 per cent suggests that a considerable proportion of intended movers will probably not realise their intention. People below the age of 25 face a particularly low rate of success: the number of people searching for a

home far exceeds the number of people who have recently moved (VROM, 2007b). Furthermore, a comparison between the number of people who have recently moved (1.1 million) and the number of people with an urgent intention to move (1.1 million) suggests that most people with an urgent intention to move will find a home within one year (VROM, 2007c).

### *Longitudinal studies*

Longitudinal studies, often based on panel data in which the same people are interviewed at two or more points in time, also show a discrepancy between positive attitudes towards moving and actual mobility behaviour. Using panel data for Philadelphia, Rossi (1955) found that of those who expected to move, approximately 80 per cent did so within the following year. Two decades later, Speare (1974) concluded that approximately 37 per cent of those in Rhode Island with a wish to move actually did so. Landale and Guest (1985) showed that of the residents of the Seattle metropolitan area who were thinking about moving, almost 40 per cent moved within one year. Konter and Van den Booren (1986) used a panel survey for the province of Noord-Holland in the Netherlands and found that approximately 28 per cent of those with a desire to move changed residence within one year. A small-scale panel survey for the Netherlands by Van Kempen and colleagues (1990) showed that approximately 15 per cent of those living in the city of Utrecht and desiring to move changed residence within one year. Based on a small-scale panel survey for Utrecht and Arnhem (relatively large cities within the Netherlands), Goetgeluk (1997) found that of those actively searching for a home, approximately 50 per cent realised their intention to move within one year. Lu (1998) used the national American Housing Survey (AHS) and showed that 44 per cent of those preferring to move did so within two years. Based on the Panel Study of Income Dynamics (PSID), a representative survey of U.S. residents and their families, Kan (1999) showed that almost half of the households expecting to move did so within the following two years. More recently, a large-scale longitudinal study by GfK (2009) showed that approximately 42 per cent of those with an intention to move in the cross-sectional Housing Research Netherlands survey 2006 changed residence within two years.

All of the above-mentioned longitudinal studies show a discrepancy between positive attitudes towards moving and actual mobility behaviour, but the size of the discrepancy differs considerably between the studies. These differences are probably caused in part by the diversity in the positive attitude concepts used in the studies. For example, Speare (1974) measured mobility “wishes”, while Kan (1999) used mobility “expectations”. Generally, it is

assumed that expectations are a better predictor of mobility behaviour than desires or wishes to move (Crowder, 2001; Lu, 1998; Rossi, 1955; Sheeran, 2002). Mobility expectations reflect what is perceived as likely over a specified time period, whereas desires, wishes, and thoughts represent, to a greater extent, unconstrained attitudes (Crowder, 2001).

Longitudinal studies have also found evidence that some people move although they previously had not intended or expected to do so (Lu, 1999; Rossi, 1955). Kan (1999) and De Groot and colleagues (2011a) showed that unanticipated life events are important triggers of such previously unintended or unexpected moves. Unanticipated life events may cause an urgent reason for moving and a subsequent move within a short period of time (compare Speare, 1974).

In contrast to cross-sectional studies, longitudinal studies also provide insight into the extent to which individual characteristics and external circumstances hamper or stimulate actual mobility behaviour conditional on a positive attitude towards moving. A study in the Netherlands based on a follow-up survey among 4,000 respondents of the HDS 1985/1986 indicated a strong linkage between age and the extent to which people realise their intention to move (Everaers & Lamain, 1989). Other studies have shown that whites are more likely to realise their expectation to move than blacks (Crowder, 2001; Kan, 1999). The impact of income on the realisation of stated intentions to move is not straightforward. Some studies have shown a positive effect of income on the probability of moving for those intending or expecting to move (Everaers & Lamain, 1989; Lu, 1998; Moore, 1986), although Everaers and Lamain found that this only applies to people younger than 45, while other studies hardly found an income effect (Goetgeluk, 1997; Kan, 1999). Furthermore, living in a rented or a crowded home increases the probability of moving for those intending or expecting to move (Duncan & Newman, 1976; Lu, 1998; Moore, 1986). Finally, some studies have shown that the probability of moving among those intending to move differs between regions (Kearns & Parkes, 2003; Lu, 1998).

## **2.3 Data and methods**

### **2.3.1 Longitudinal data**

To gain insight into the process between stated intentions and actual mobility behaviour, longitudinal data about the stated intentions and actual mobility behaviour of the same individuals are needed. Most longitudinal studies in which the realisation of positive attitudes towards moving is analysed are based on panel data (Kan, 1999; Landale & Guest, 1985; Rossi, 1955; Speare, 1974). Data

on mobility behaviour are obtained in a follow-up survey among the same respondents. Panel surveys often face difficulties in tracking the same respondents over time because of respondent dropout caused by moves, deaths, or refusals to continue (Behr et al., 2005; Ruspini, 1999). In contrast to the above-mentioned studies, the longitudinal studies of Lu (1998, 1999) and Kearns and Parkes (2003) are based on surveys that follow housing units over time rather than the households that occupy them: the American Housing Survey (AHS) and the English House Condition Survey (EHCS). Changes in the occupants of any housing unit between successive surveys are interpreted as actual moves of the initial occupant of the housing unit. Unfortunately, changes can also occur if the initial occupant dies in the period between the successive surveys, but this information is not always available, as is the case in the data set of Kearns and Parkes (2003).

Recently, it became possible in the Netherlands to enrich survey data from the Housing Demand Surveys (HDS) and its successor, the Housing Research Netherlands survey (HRN), with longitudinal register data of the Social Statistical Database (SSD) of Statistics Netherlands (Bakker, 2002; Houbiers, 2004) at the individual level. The two data sources can be linked by a unique personal identification number that is included in both data sources, resulting in a longitudinal data set that is similar to a linked panel. In linked panels, data items that are not collected primarily for panel purposes (such as census or register data) are linked together using unique personal identifiers (Ruspini, 1999). The advantages of linked panels are obvious; linking data items by using a personal identifier is not only the least intrusive method of collecting longitudinal data (Buck et al. 1994) but also, in contrast to regular panel surveys, presents no problems with tracking the respondents over time.

For this study, survey data of the HDS 2002 are used. Since 1964, this large-scale, cross-sectional survey has been held repeatedly in the Netherlands to provide insight into the housing situation of individuals and households. The interviews of the HDS 2002 were held in the period between January 2002 and March 2003 among a large, person-based sample representing the Netherlands population aged 18 and over who were not living in institutions. The survey contains detailed information about sociodemographic and socioeconomic characteristics, the current housing situation, and the intention to move. An intention to move is indicated by positive answers (i.e., “Possibly yes, maybe”, “I would like to, but I cannot find anything”, or “Most certainly yes”) to the survey question “Do you want to move within the next two years?” For intended movers, the survey also contains information about the speed with which they intend to move (e.g., within half a year or within one year’s time) and preferences

concerning the future home and residential location. Retrospective information about the mobility behaviour of individuals in the two years before the interview is also included.

For the purpose of this research, the HDS 2002 was enriched with individual longitudinal register data from the SSD. The core of the SSD consists of linked registers containing administrative demographic and socioeconomic data for the entire population of the Netherlands from 1999 and onwards. The SSD provides information about characteristics and events such as household composition, employment situation, and mobility behaviour; it shows whether people have moved and in which year and month. Information about moves originates from the municipal population registers (in Dutch, Gemeentelijke Basis Administratie, abbreviated GBA). A disadvantage of using register data to determine the mobility behaviour of individuals is that people do not always (immediately) reregister after they have moved to another address. This limitation probably results in somewhat biased estimates. The magnitude of this problem is unknown, but it is probably largest for students and other mobile groups.

#### *Selection of respondents*

The HDS 2002 contains information on 74,788 respondents. For the analyses in which the HDS respondents were followed over time, a small number of HDS respondents who died in the two years after the time of interview were excluded. After this selection, the research sample included 73,714 respondents. The research sample includes 18,143 respondents with an intention to move, 53,803 respondents without an intention to move (persons who answered “Most certainly not” or “I do not know” to the mobility intention question), and 1,768 respondents expecting an involuntary move (for example because of impeding housing demolition) or who had already found a new home.

In the analyses, a distinction is made between starters and filterers, which are two different groups on the housing market. Starters are people who intend to move to their first independent dwelling; they want to leave the parental home or want to move out of their dormitory to establish their own household. Filterers are people who intend to move from one independent housing situation to another. In the research sample, 4,543 respondents were classified as “intended starters” (25 per cent) and 11,730 respondents as “intended filterers” (65 per cent). For the multivariate analysis with respect to the realisation of intentions to move, the research sample was restricted to the intended filterers. The remaining 1,870 respondents included people who intended to leave the housing market

(because they intended to move abroad or into a nursing home) and people who intended to move into a dormitory.

### **2.3.2 Variables**

With the exception of the dependent variable, all variables are derived from the HDS and refer to the moment of the HDS 2002 interview. The descriptive statistics and definitions of the dependent and independent variables used in the multivariate analysis are presented in Table 2.2. The table also contains the percentage of movers in the distinct categories of the independent variables.

The dependent variable reflects whether people moved in the two years after the interview was held and was coded into two categories: moved (1) and did not move (0). The mobility behaviour of HDS respondents is thus determined for a period of two years after the moment of interview, which implies that those interviewed in January 2002 were followed until January 2004, whereas those interviewed in March 2003 were followed until March 2005. A move (which covers migration within the Netherlands as well as emigration) was measured as the first relocation after the interview; further relocations were ignored.

Respondents with an urgent intention to move are intended movers who had indicated that they intended to move within a year, who were actively searching for a new home (and had undertaken at least one search activity; the reason they had not yet moved could not be attributed to low search activity) and who had declared that they would react immediately if they found a desired home. Intended movers who did not meet these requirements were considered to have a less urgent intention to move.

The reason for moving refers to the main motive for moving and was coded into four categories. The first category covers demographic reasons such as marriage or cohabitation, union dissolution (either married or unmarried), and ageing and health. The other categories refer to reasons related to the home or the neighbourhood characteristics (housing reasons), reasons related to education or work, and to other (highly diverse) reasons for moving.

Household income was coded in quartiles; the quartiles were based on the household income of all respondents in the survey sample. Income refers to household income and not personal income because mobility behaviour is likely based on the total income in the household (it should be noted, however, that approximately 15 per cent of the intended filterers expected a change in their household situation, which presumably affects current household income).

**Table 2.2** Descriptive statistics of dependent and independent variables in the multivariate analysis for filterers ( $N = 11,730$ )

	Frequency	%	Of whom moved (%)
<i>Mobility behaviour (dependent variable)</i>			
did not move within two-year period	8019	(68.4)	
moved within two-year period	3711	(31.6)	
<i>Characteristics of intention to move and housing preferences</i>			
<i>Urgency of intention to move</i>			
less urgent intention	9281	(79.1)	25.7
urgent intention	2449	(20.9)	54.3
<i>Reason for moving</i>			
demographic event	1713	(14.6)	33.7
housing	6129	(52.3)	31.2
work or education	859	(7.3)	33.1
other reason	3029	(25.8)	31.0
<i>Preferred tenure</i>			
wish to rent	5165	(44.0)	30.3
wish to own	6565	(56.0)	32.7
<i>Preferred type of housing</i>			
wish for apartment	3231	(27.5)	30.8
wish for single family home	8499	(72.5)	32.0
<i>Preferred search location</i>			
Randstad	5485	(46.8)	30.8
intermediate zone	3393	(28.9)	31.7
national periphery	2852	(24.3)	33.1
<i>Resources and restrictions</i>			
<i>Income</i>			
low	2646	(22.6)	30.0
middle-low	3272	(27.9)	29.8
middle-high	2914	(24.8)	32.7
high	2898	(24.7)	34.1
<i>Level of education</i>			
up to lower secondary	4414	(37.6)	28.2
higher secondary or medium vocational	3741	(31.9)	33.0
higher vocational or university	3575	(30.5)	34.5
<i>Employment status</i>			
employed	7897	(67.3)	33.3
not employed	3833	(32.7)	28.3
<i>Expected household composition</i>			
single	2975	(25.4)	29.2
couple without children	4207	(35.9)	35.7
family with children	4548	(38.8)	29.5
<i>Current tenure</i>			
renter	6972	(59.4)	32.4
owner	4758	(40.6)	30.5

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*Other individual and housing characteristics*

Migrant status			
native Dutch	9210	(78.5)	32.2
non-Western background	1470	(12.5)	28.8
Western background	1050	(9.0)	30.2
Age			
< 25	980	(8.4)	43.7
25–34	3959	(33.8)	38.5
35–44	2843	(24.2)	27.4
45–54	1728	(14.7)	23.6
55–64	1133	(9.7)	21.8
≥ 65	1087	(9.3)	30.0
Perceived health			
healthy	9607	(81.9)	32.8
reasonably healthy	1135	(9.7)	25.2
less healthy	988	(8.4)	27.3
Type of home			
apartment	5341	(45.5)	35.6
single family home	6389	(54.5)	28.3
Crowding			
crowded	2425	(20.7)	34.4
not crowded	3286	(28.0)	32.8
spacious	6019	(51.3)	29.9
Satisfaction with home			
satisfied	8224	(70.1)	30.6
neither satisfied nor dissatisfied	1924	(16.4)	31.4
dissatisfied	1582	(13.5)	37.4
Satisfaction with neighbourhood			
satisfied	7706	(65.7)	31.9
neither satisfied nor dissatisfied	1715	(14.6)	29.6
dissatisfied	2309	(19.7)	32.4

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Level of education was based on the highest achieved educational level and was categorised into three levels: up to lower secondary, higher secondary or medium vocational, and higher vocational or university. Those whose educational level was unknown ( $n = 99$ ) were assigned to the category “up to lower secondary”.

The expected household composition was classified using prospective information about the expected household situation after the intended move. It was coded into three categories: singles (one-person households and persons sharing an address with another person without a clear relationship), couples without children, and families with children (couples with children and one-parent families).

The migrant status of a respondent was based on the standard definition of Statistics Netherlands (see Aalders, 2001) and was categorised into native

Dutch, non-Western migrant, and Western migrant.

The preferred location was divided into three search regions within the Netherlands: the Randstad (core region), the surrounding intermediate zone, and the periphery of the Netherlands. The classification into three search regions was based on the method used by Van Oort (2003). For the classification, a gravity equation of the population size in all municipalities at the beginning of 2002 was used (496 in total). This gravity equation reflects approximate population density. Based on the gravity value of the municipality, all 496 municipalities were assigned to a region (for more information about the classification, see De Groot et al., 2011b).

The perceived health situation was measured using information about the respondents' opinion of their own health situation and was coded into three categories: healthy (which covers the categories "Good" and "Very good"), reasonably healthy, and less healthy (which covers the categories "Sometimes good, sometimes bad" and "Bad").

Crowding was calculated by dividing the number of rooms by the number of persons in the household. It was categorised in three levels: neutral (between one and two rooms per person in the household), crowded (one room or less per person in the household), and spacious (two or more rooms per person in the household). The classification of crowding (less than one room per person) is in line with the commonly used standard (Myers et al., 1996; see also Gray, 2001).

The degree of satisfaction with the home and the neighbourhood were both coded into three categories: satisfied (which refers to "Satisfied" and "Very satisfied"), neither satisfied nor dissatisfied, and dissatisfied (which refers to "Dissatisfied" and "Very dissatisfied").

### **2.3.3 Method**

The analyses in this study were partly based on the analyses of De Groot and colleagues (2008) and consisted of two parts. First, a descriptive analysis was performed to investigate the relationship between stated intentions to move and actual mobility behaviour while applying a longitudinal and cross-sectional approach. Furthermore, a comparison was made between the longitudinal approach and the cross-sectional approach. To correct for selective non-response, the HDS sampling weights were used in the descriptive analyses. Selective non-response may lead to biased results concerning the discrepancy between stated intentions and actual mobility behaviour, especially if the non-response group is large. For example, if natives are overrepresented in the survey and the realisation of stated intentions to move is selective with respect to ethnicity, the extent to which intentions to move result in actual mobility

behaviour might be over- or underestimated. Because the respondent was tracked over time and not the complete household, the sampling weights of persons were used. These weights are based on age, gender, marital status, country of origin, and household characteristics (Meeuwissen et al., 2003).

Second, a multivariate analysis was performed to gain insight into the characteristics and circumstances that hamper or stimulate the actual mobility behaviour of those intending to move. This analysis was restricted to those intending to move to another dwelling (that is, intended filterers). A logistic regression model was used because of the dichotomous character of the dependent variable. Logistic regression applies the maximum likelihood estimation after transforming the dependent variable into a logit (the natural log of the odds of the event occurring or not). The logistic regression model for  $k$  independent, or explanatory, variables ( $X$ ) is formally specified as follows (Allison, 1999):

$$\log \left[ \frac{p_i}{1-p_i} \right] = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 (X_1 X_2) + \dots + \beta_k X_k$$

In this model,  $\alpha$  is the intercept (or the constant term), and  $\beta_1, \dots, \beta_k$  are the logistic regression coefficients. The equation given above also includes an interaction term ( $X_1 X_2$ ). This term may be added to the model to examine whether the effect of  $X_1$  on the dependent variable varies with values of  $X_2$  (for more information about interaction terms, see Jaccard, 2001).

Table 2.3 presents logistic regression coefficients  $\beta_i$  and the exponent (antilogarithm) of the regression coefficients, the so-called odds ratios. The odds ratio for continuous independent variables represents the factor by which the odds of the event change for a one-unit change in the independent variable. For categorical independent variables, the odds ratio estimates how much more likely (or unlikely) it is for the outcome to be present among those belonging to one particular category than among those belonging to the reference category of the independent variable. To illustrate, the odds ratio of the urgency of the intention to move (presented in Table 2.3) estimates that a move is 3.7 times more likely to occur among those with an urgent intention to move than among those with a less urgent intention to move.

The logistic regression model was estimated without using sampling weights because these weights are roughly a function of independent variables included in the logistic regression model (and therefore, the selective non-response is directly controlled for). In such cases, unweighted regression estimates are preferred because they are unbiased, consistent, and have smaller standard errors than weighted regression estimates (Winship & Radbill, 1994).

## **2.4 Stated intentions to move and actual mobility behaviour: Results**

### **2.4.1 Descriptive results**

#### *Longitudinal analysis*

In 2002, 23 per cent of all HDS respondents stated an intention to move within the next two years. After two years, approximately one-third (31 per cent) had realised this intention to move. It is often assumed that intended starters (people intending to move to their first independent dwelling) especially have difficulties in finding a home (see, for example, Kruythoff, 1994; REA, 2006). Nevertheless, if stated intentions are compared with actual mobility behaviour, it becomes clear that intended starters move more frequently than intended filterers (people who intend to move from one independent housing situation to another). Of the starters in 2002, almost 44 per cent realised their intention to move within two years, compared with 31 per cent of the filterers in 2002. At the same time, a small proportion – approximately 6 per cent – of those who did not intend to move in 2002 moved within two years. These movers not only developed an intention to move after the interview but also succeeded in realising this intention in a relatively short period of time.

The longitudinal analysis shows a substantial gap between stated mobility intentions and actual mobility behaviour; most people with an intention to move have not realised this intention within two years and may instead have postponed or given up their initial intention to move. The results are in line with other longitudinal studies, which generally show a relatively large discrepancy between positive attitudes (e.g., desires, wishes, and intentions) towards moving and actual mobility behaviour. However, the results also show that intended movers relocate considerably more frequently than those with no intention to move. Despite the large gap between stated intentions and actual behaviour, intentions to move are important – although not perfect – predictors of actual mobility behaviour.

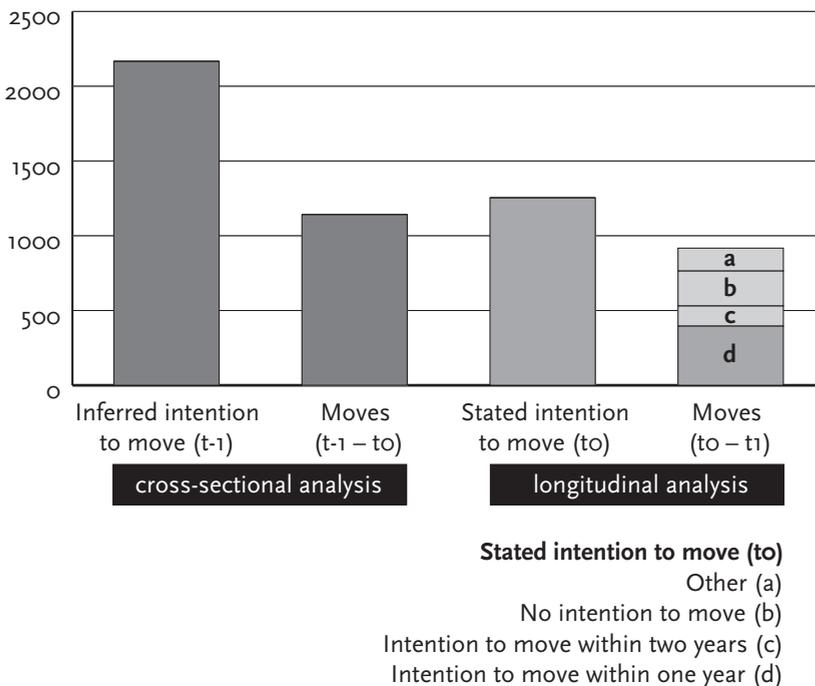
#### *Longitudinal versus cross-sectional approaches*

As with longitudinal studies, cross-sectional studies show a discrepancy between stated intentions to move and actual mobility behaviour (see Section 2.2.2). However, a comparison between the two approaches shows that the cross-sectional approach results in a different picture than the longitudinal approach (see Figure 2.1).

For the cross-sectional comparison, it is calculated that approximately 1.1 million people moved in the year preceding the time of interview, whilst approximately 1 million people were searching for a new residence for at least six months prior to the time of interview. Thus, of the total of approximately 2.1

million people who were supposedly searching for a home in the year preceding the interview (the people with an “inferred” intention to move in Figure 2.1), approximately 1.1 million changed residence. This results in an estimated rate of success of 53 per cent. However, the longitudinal analysis shows that of those who stated an intention to move within one year (third column in Figure 2.1), only 32 per cent moved within this period (note that the period differs from the period in the analysis presented in the previous section to make a proper comparison between the cross-sectional and longitudinal method).

The cross-sectional analysis seems to result in a smaller discrepancy between stated intentions and actual behaviour than the longitudinal analysis. This can be explained by the fact that the total number of actual moves in the year before the year of interview far exceeds the total number of moves made by people with a stated intention to move within one year. The longitudinal analysis makes clear that this is most likely related to the fact that a substantial part of the actual movers in a certain period had no intention to move at the start of the



**Figure 2.1** The discrepancy between intentions and mobility behaviour for a one-year period: cross-sectional versus longitudinal approach (x 1,000), weighted data  
*Note:* The category “other” refers to the movers who expected an involuntary move (for example because of housing demolition or renovation), or who had not moved yet but had already found a new home at the moment of interview

period. The discrepancy between stated intentions to move and actual mobility behaviour is thus much larger on the level of individuals than on the aggregate level.

It seems that estimations of success rates derived from confrontations between aggregated data about stated intentions and aggregated data about actual moves are not without problems. On the one hand, the success rate might be overestimated because the actual moves include “sudden” moves of people who initially had no intention of changing residence. On the other hand, the success rate might also be underestimated because some people with an intention to move might not be in a hurry and, therefore, may not even have started searching for a new home. The actual probability of moving among those with an intention to move can thus only be determined using longitudinal data in which people with an intention to move are followed over time with respect to their actual mobility behaviour.

The cross-sectional approach not only results in a smaller discrepancy between stated intentions and actual behaviour, but it may also lead to other conclusions. A cross-sectional analysis by VROM (2007b) shows that the rate of success is especially low among people aged below 25: the number of people intending to move exceeds by far the number of people who have recently moved (see also Section 2.2.2). In contrast, most longitudinal studies show that people in this age group realise their positive attitude towards moving more often than those in older age groups (for example, see Duncan & Newman, 1976; Lu, 1999). Furthermore, a cross-sectional analysis in which the number of people with an urgent intention to move is compared with the number of people who have recently moved suggests that most people will find a home within one year (VROM, 2007c). In contrast, the longitudinal study of De Groot and colleagues (2008) shows that even people with an urgent intention to move often do not realise this intention within the stated period.

#### ***2.4.2 Multivariate results of the longitudinal analysis***

The logistic regression model shows the extent to which the relatively low realisation of intentions to move among filterers can be ascribed to the urgency of the intention to move, housing preferences, and resources and restrictions (see Table 2.3).

##### *The influence of characteristics of the intention to move and housing preferences*

One explanation for why so many intended filterers do not realise their intention to move can be attributed to the urgency of the intention to move. First, most filterers (79 per cent) have a less urgent intention to move, and those without an

urgent intention to move are less likely to realise their intention to move than those with an urgent intention to move. Second, most filterers intend to move for housing reasons (De Groot et al., 2008), and those intending to move because of housing have a lower probability of realising their intention than those who want to move because of demographic events.

The extent to which filterers realise their intention to move also depends on tenure preferences, but only in combination with the current tenure. Although the Nagelkerke  $R^2$  hardly changes after including the interaction term, the likelihood ratio test showed that the interaction effect contributes significantly to the multivariate model ( $Chi^2 = 10$ ;  $df = 1$ ;  $p = .001$ ) and should therefore be included. The main effect of having a preference for an owner-occupied home, as reported in Table 2.3, should be interpreted as the effect for current renters (because the interaction variable relates tenure preferences and current tenure, and “renter” is the reference category in the current tenure variable). The main effect shows that current renters with a preference to move to an owner-occupied home are 1.2 times more likely (see Table 2.3;  $e^{0.176}$ ) to move within two years than renters who intend to move within the rental sector (from rental to rental). The total effect of the main effects and interaction effect is illustrated in Figure 2.2. Homeowners with a preference to move to a rental home are estimated to be 1.4 times more likely to move within two years than renters who prefer to move to another rental home.<sup>1</sup> Renters who prefer to move within the rental sector of the housing market have the lowest probability of moving. This might be an indication of barriers in the social rental sector. Figure 2.2 also shows that homeowners with a preference for moving to a rental home are more likely to move within two years than homeowners who prefer to move to another owner-occupied home. This can be explained by the fact that homeowners usually do not move out of owner-occupied dwellings unless there is an urgent need to do so. Finally, among those preferring to move to an owner-occupied home, renters are as likely as homeowners to realise their intention to move within two years. At first sight, this seems to contradict the general thought that it is relatively difficult to move to an owner-occupied home for those who do not yet own a home. However, one should bear in mind that the model offers only an explanation for the extent to which people realise their intention to move and not for the extent to which people succeeded in moving to an owner-occupied home.

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<sup>1</sup> The total effect is the summation of the main effects and the interaction effect. For example, the total effect for homeowners (1) with a preference to move to a rental home (0):  $0.357*1 + 0.176*0 + -0.365*(1*0) = 0.357$ . The corresponding predicted odds ratio is 1.429 ( $e^{0.357}$ ).

**Table 2.3** Logistic regression of moving (ref: not moving) for intended filterers

	B	SE	Exp(B)
<i>Characteristics of intention to move and housing preferences</i>			
Urgent intention (ref: less urgent intention)	1.300***	0.051	3.668
Reason for moving (ref: demographic event)			
housing	-0.256***	0.069	0.774
work or education	-0.118	0.100	0.888
other reason	-0.150**	0.074	0.860
Wish to own (ref: wish to rent)	0.176***	0.065	1.193
Wish to own, homeowner (ref: wish to rent, renter)	-0.365***	0.114	0.694
Wish for single family home (ref: wish for apartment)	-0.034	0.057	0.966
Preferred search location (ref: national periphery)			
Randstad	-0.191***	0.056	0.826
intermediate zone	-0.120**	0.057	0.886
<i>Resources and restrictions</i>			
Income (ref: low)			
middle-low	-0.102	0.065	0.903
middle-high	0.066	0.074	1.069
high	0.103	0.084	1.109
Level of education (ref: up to lower secondary)			
higher secondary or medium vocational	0.030	0.055	1.030
higher vocational or university	0.105*	0.059	1.111
Not employed (ref: employed)	-0.044	0.061	0.957
Homeowner (ref: renter)	0.357***	0.102	1.429
Expected household composition (ref: single)			
couple without children	0.144**	0.066	1.155
family with children	-0.141*	0.079	0.869
<i>Other individual and housing characteristics</i>			
Age (ref: < 25 years)			
25–34	-0.188**	0.079	0.828
35–44	-0.595***	0.086	0.552
45–54	-0.780***	0.095	0.458
55–64	-0.872***	0.110	0.418
≥ 65	-0.539***	0.117	0.583
Migrant status (ref: native Dutch)			
non-Western background	-0.286***	0.073	0.752
Western background	-0.082	0.075	0.922
Perceived health (ref: healthy)			
reasonably healthy	-0.202**	0.080	0.817
less healthy	-0.186**	0.087	0.830
Single family home (ref: apartment)	-0.209***	0.053	0.811
Crowding (ref: neutral)			
crowded	-0.033	0.063	0.968
spacious	-0.212***	0.060	0.809
Satisfaction with home (ref: satisfied)			
neither satisfied nor dissatisfied	0.007	0.061	1.007

dissatisfied	0.182**	0.072	1.200
Satisfaction with neighbourhood (ref: satisfied)			
neither satisfied nor dissatisfied	-0.097	0.062	0.907
dissatisfied	-0.040	0.058	0.961
Constant	-0.174	0.134	0.840
Initial -2 log likelihood			14641
Model -2 log likelihood			13490
Improvement ( $Chi^2$ )		1151***; $df = 34$	
Nagelkerke $R^2$			0.131
$N$			11730

Note: 95% confidence intervals can be calculated as: parameter (B) minus 1.96 \* SE (lower boundary) and parameter plus 1.96 \* SE (upper boundary)

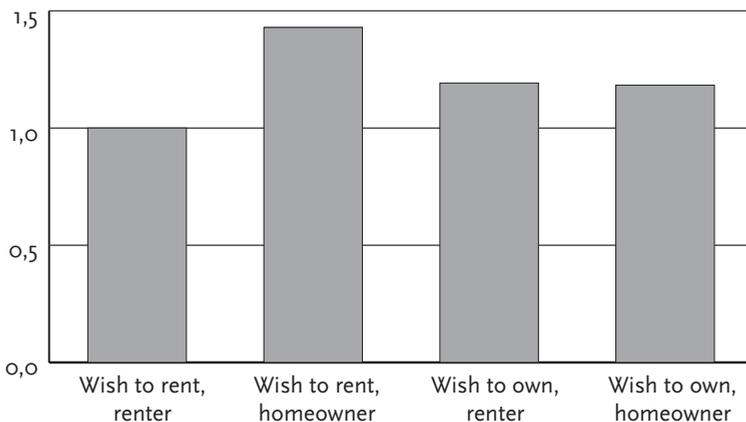
\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Filterers who prefer a single family home do not have a significantly lower probability of realising their intention to move than those preferring an apartment. Although people who prefer a single family home might have fewer opportunities to realise their intention to move because of the relative scarcity of such homes in the Netherlands housing market compared to apartments (VROM, 2003; VROM, 2007a), this is not reflected in the probability of moving.

Furthermore, preferences concerning the search location play a significant role in the extent to which one acquires a new home within two years' time. As expected, filterers who stated a preference for a home in the Randstad – an area where the housing market is under great pressure – are 0.8 times as likely to move as those who intended to search for a home in the national periphery, an area where the pressure on the housing market is lower. Those who preferred to search for a home in the intermediate zone also have a lower probability of moving.

#### *The influence of resources and restrictions*

Somewhat surprisingly, financial resources – income, level of education, and employment situation – have hardly any effect on the mobility behaviour of filterers. Filterers with higher vocational or university education are 1.1 times more likely to move than those with low education, but the effect is only marginally significant. The absence of an income effect may indicate that less wealthy people prefer to move to other (more affordable) types of homes than wealthy people. Another explanation is that the income effect is fully mediated in the formation of mobility intentions. As De Groot and colleagues (2008) have



**Figure 2.2** Relative risk of moving for those preferring a rental home or an owner-occupied home by current tenure (based on the total effect of the main effects and interaction effect of “tenure preferences” and “current tenure” in Table 2.3)

shown, financial resources are taken into account when people state an intention to move to another dwelling. When people believe that they are unable to move because of a lack of financial resources, an initial positive attitude towards moving may not crystallise into a manifest intention to move. Subsequently, financial resources have hardly any impact on the extent to which an intention to move is realised.

The realisation of intentions to move among filterers is hampered by the household situation. As expected, singles have a greater probability of realising an intention to move than families. Conversely, their probability of moving is lower than that of couples. This cannot be attributed to the fact that singles often have lower incomes than couples because income differences were controlled for. It could be that singles tend to search in housing sectors in which the availability and affordability of dwellings is problematic.

Furthermore, the current housing tenure situation plays a role (see previous section). The main effect of current tenure in the model should be interpreted as the effect for those who prefer to move to a rental home (because the interaction variable relates current tenure to tenure preferences, and “preference to rent” is the reference category in the tenure preference variable). The main effect shows that homeowners who intend to move to a rental home are 1.4 times more likely to move within two years than renters who prefer to move within the rental sector. In the previous section, it was calculated that among those who prefer to move to an owner-occupied home, homeowners are about as likely as renters are to realise their intention to move within two years.

Although previous research has frequently shown that homeowners not only desire to move less often (for example, see Rossi, 1955) but that they also move less frequently than renters (for example, see Helderman et al., 2004), this study shows that if homeowners are willing to move, they do not necessarily encounter more obstacles in realising their intention to move than renters.

#### *The influence of other individual and housing characteristics*

In line with other studies, older people and people with a non-Western background have a smaller probability of realising their intention to move than do younger people and native Dutch (for example, see Kan, 1999; Lu, 1998). The probability of realising an intention to move is estimated to decrease with increasing age, up to the age of 65. People who perceive their health to be good have a greater probability of realising an intention to move than those who perceive their health to be poor or reasonably good.

The realisation of stated intentions to move is also affected by housing characteristics. Filterers living in either a spacious home or a single family home are estimated to be less likely to realise their intention to move within two years' time than those living in either a neutral crowding situation or an apartment. Although housing dissatisfaction is often seen as a trigger of positive attitudes (such as an intention) towards moving, it also has a subsequent effect on the extent to which the mobility intention is realised. Dissatisfaction with the current home gives an extra stimulus to realise an intention to move within a short period of time. In contrast, dissatisfaction with the neighbourhood does not have a significant effect on the probability of moving.

## **2.5 Conclusion and discussion**

In this study, the discrepancy between stated intentions to move and actual mobility behaviour was addressed. Using a unique data set in which survey data from a large-scale housing survey of the Netherlands were enriched with longitudinal register data, it was found that the relationship between intentions and behaviour is far from straightforward. Only one-third of those intending to move within the next two years realised this intention within this period. Intended filterers especially did not often behave according to their initial stated intention to move. If intended filterers cannot find a new home that meets their housing preferences, they might be more willing than intended starters to postpone or cancel their intention to move as opposed to accepting a home that does not meet their initial housing preferences. Furthermore, it was shown that in the

same period of time, 6 per cent of those without an intention to move did change residence.

The cross-sectional approach also showed a discrepancy between stated intentions to move and actual moves. However, a comparison between the longitudinal and cross-sectional approaches made clear that this discrepancy was much larger on the individual level than on the aggregate level because at the aggregate level, “unexpected” stays were partly counterbalanced by “unexpected” moves. Cross-sectional analyses are unable to show this underlying variation in the extent to which people behave according to their earlier stated intentions to move, and this can produce incorrect results (compare Davies & Pickles, 1985).

In contrast with cross-sectional studies, longitudinal studies can also provide more insight into the extent to which various determinants influence the mobility behaviour of those with an intention to move. The longitudinal analysis presented in this study revealed that the probability of moving was particularly influenced by the urgency of the intention to move. The discrepancy between intentions and behaviour is also partly attributable to the housing and household situation and to housing preferences. Those who preferred to move out of homeownership had a particularly high probability of realising their intention to move. People who preferred to search for a home in the densely populated Randstad area were less likely to translate intentions into action than those who preferred a home in the national periphery. This finding corresponds with the fact that the shortage of housing is especially problematic in the Randstad and stresses the relevance of contextual factors for the extent to which intentions to move will be realised. Socioeconomic characteristics (indicated by income, education, and employment situation) had hardly any effect on the probability of moving among intended filterers. However, related research has shown that these characteristics do affect the extent to which people intend to move to a different home (De Groot et al., 2008). This suggests that socioeconomic resources mainly have an indirect effect on the realisation of intentions to move, namely through the formation of mobility intentions.

Insight into the discrepancy between stated intentions to move and actual mobility behaviour can be very useful to policy makers because intentions to move are widely considered useful for the prediction of future migration flows (Yang, 2000) and, at least in the Netherlands, for housing demand estimations (Den Otter, 2007; VROM, 2007d). Although at the aggregated level, intentions to move may serve as an indicator for the approximation of the total moves (Van Hoorn, 2009), the use of stated intentions of individuals for housing demand estimations is certainly not without problems. Stated intentions to move or to stay are not perfect predictors of actual mobility behaviour, even more so

because the characteristics of “unexpected” movers do not always correspond with the characteristics of “unexpected” stayers (Everaers & Lamain, 1989).

A drawback of the data used in this study is that it was not possible to show to what extent the discrepancy between stated intentions to move and actual mobility behaviour can be ascribed to the fact that intentions might arise or fade due to unanticipated constraints and facilitators or the occurrence of unanticipated life events. Furthermore, the data did not include specific local housing market circumstances that may play a role in the realisation of mobility intentions. For this reason, future research should include detailed information regarding the local housing market conditions in the area where people intend to search for a home (for example, about the price per square meter or about the average waiting time needed for a social rental home) using a multilevel design.

Despite these limitations, the results presented in this study contribute to our understanding of why people do not behave according to their initial stated intentions to move. This research also makes clear that for insight into the relationship between prior stated intentions to move and actual mobility behaviour, the longitudinal research method is preferable to the cross-sectional research method. Further investigations of the individual characteristics and local housing market circumstances that may hamper or stimulate the realisation of stated intentions to move can be used to improve the effectiveness of housing assistance programs targeting particular population groups and to aid in the design of new programs (see also Lu, 1999).

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### 3 Intentions to move and actual moving behaviour in the Netherlands

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*ABSTRACT This study examines how anticipated triggers for moving and individual, household and regional characteristics hamper or stimulate actual moving behaviour of people who intend to move. It uses a longitudinal data set from the Netherlands, in which survey data from the Housing Demand Survey 2002 are combined with register data from the Social Statistical Database. The study finds that people with a strong intention to move are almost four times as likely to move as people with a less strong intention to move. Homeowners are more likely to realise a strong intention to move than renters who want to move within the rental sector of the housing market. The probability of actually moving is particularly great for those wishing to move from owner-occupied to rented housing and those with more resources, whereas it is small for people whose search location is in the Randstad.*

### 3.1 Introduction

Before a household moves, it has been involved in a more or less lengthy decision process. The mobility decision process starts from a trigger or motive for moving. Households may want to move in response to altered preferences due to (expected) changes in their household situation, and/or changes in their neighbourhood or in the housing market. Subject to resources and restrictions (for example, financial resources such as income), opportunities and constraints within the housing market, some households will fulfil their wish, but others will postpone or even put off the move. All in all, a discrepancy may arise between the intention to move and the actual moving behaviour.

The mobility decision process underlying potential moves is usually studied using information on either moving intentions (stated preference research) or actual moving behaviour (revealed preference research). Research concerning the question how these intentions result in actual moving behaviour is relatively scarce and often based on small-scale samples, probably because this type of data are difficult to collect. Yet, the value of research analysing combined stated and revealed preference data is obvious, because it allows for a much better assessment of the relative roles of triggers for moving on the one hand, and resources, restrictions, and housing opportunities on the other.

Indeed, the studies in which the realisation of intentions to move is analysed provide more insight into the mobility decision process. Most of these studies show how residential satisfaction, mobility intentions (a term used to indicate the various mobility inclination concepts used in previous research: thinking, considering, wishing, willing, planning, or expecting to move) and actual mobility behaviour are interrelated (Kearns & Parkes, 2003; Kley & Mulder, 2010; Landale & Guest, 1985; Lu, 1998; Speare, 1974). While Speare (1974) asserts that background characteristics, for example, housing and household characteristics, add little to the prediction of actual mobility because their effect is mediated by residential satisfaction, several studies have shown that background characteristics do have an independent effect on actual mobility. For example, Lu (1998) shows that tenure, income, and age have significant direct effects on actual moving behaviour, over and above their indirect effects channelled through mobility intentions. According to Fang (2006), the combination of limited economic ability and a lack of choices in the housing market make it hard for people to act upon their strong intention to move. However, despite the fact that there is considerable evidence that background characteristics are important to the realisation of intentions to move, little is known about the role of current characteristics in combination with expectations or preferences about these characteristics after a potential move. This is unfor-

tunate because anticipated triggers for moving may also have an impact on the realisation of intentions to move over and above their impact on the formation of the intention itself.

Furthermore, the study of Kan (1999) reveals that it is not possible to automatically hypothesise that the same determinants that influence mobility in the general population also influence mobility among those with an intention to move. Movers in the general population also include “unexpected” movers. This may colour the findings of studies using only information on actual moves because in some cases, the impact of characteristics on actual mobility behaviour differs between those expecting to move and those expecting to stay. This implies that well-known relationships, such as between homeownership and a small probability of moving, do not necessarily apply to the subsequent moving behaviour of those intending to move.

All above-mentioned studies show a discrepancy between intentions and behaviour. However, the size of the discrepancy differs considerably between the studies. Using panel data for Philadelphia, Rossi (1955) found that of those who expected to move, about 80 per cent did so within the following year. Based on a small panel survey held among residents of the Seattle metropolitan area, Landale and Guest (1985) concluded that of those thinking about moving almost 40 per cent moved within one year, while using the national American Housing Survey, Lu (1998) showed that 44 per cent of those with a desire to move realised their desire within two years. These differences are probably partly caused by differences in the definition and measurement of mobility intentions. In line with the thought that expectations reflect a higher commitment to realise the considered behaviour than desires (see for example, Desbarats, 1983), several studies show that expectations or plans to move are more closely related to actual mobility behaviour than desires or considerations to move (Kley & Mulder, 2010; Rossi, 1955). Furthermore, the variation in the discrepancy might also be caused by the fact that the studies were carried out in different locations and were usually restricted to a few specific towns or regions. This implies that the contextual factors (which are relevant for the extent to which people are able to change residence) substantially differ between the studies. There are a few studies in which the influence of location is analysed using large-scale samples representing the population of one or two countries (Kearns & Parkes, 2003, for England; Lu, 1998, for the United States; Moore, 1986, for the United States and Canada). These studies, and also small-scale studies for the Netherlands (Konter & Van den Booren, 1988; Van Kempen et al., 1990), showed that the degree to which people realise their intention to move varies substantially by town or region. For example, Kearns and Parkes (2003) found that, after controlling for

mobility intentions, those living in London inner city and deprived estates were significantly less likely to move than those living in other areas in England. As far as is known, all these studies refer to the current place of residence and not to the search location. Yet, it is reasonable to assume that the search location is more important to the realisation of intentions to move than the current place of residence.

This paper, addresses the following question: *To what extent do anticipated triggers for moving, the strength of the intention to move, resources and restrictions, and the search location play a role in the realisation of an intention to move?*

To answer this question, the study employs logistic regression models of the actual moving behaviour of those with moving intentions, using a unique longitudinal data set for the Netherlands, which contains information about the moving intentions of people and the subsequent moving behaviour. The information about moving intentions was derived from the Housing Demand Survey (HDS) 2002 and the information about subsequent moving behaviour of HDS respondents was derived from the Spatial and Social Mobility satellite 1999–2005 of the Social Statistical Database (SSD) of Statistics Netherlands.

### **3.2 Theory and background**

The majority of people consider moving to a new home as a stressful event (Raviv et al., 1990). Since moving also takes time, money, and effort, people will only intend to move if there is a clear reason for moving. An important reason why people intend to move is related to (expected) life events within one of the various life course trajectories (Mulder & Hooimeijer, 1999). Life events, such as cohabiting and having children, frequently alter preferences and needs with respect to housing, thereby triggering decisions to move. Furthermore, there is extensive empirical evidence that many people intend to move due to a mismatch between the current and preferred housing situation (see for example, Landale & Guest, 1985; Lu, 1998; Moore, 1986), which results in residential stress (Brown & Moore, 1970; Wolpert, 1965), or in dissatisfaction with the current housing situation (Speare, 1974). Households may also want to move in response to booms and busts in the housing market (Henley, 1998), or other housing market changes such as decreasing interest rates (Clark & Onaka, 1983). It should be noted that some households have to move because of factors that are beyond their control (e.g., eviction or demolition). This paper focuses on the link between intentions to move voluntarily and actual moving behaviour.

The existence of a trigger or motive for moving is not a sufficient condition for a move to take place (Mulder & Hooimeijer, 1999). It is possible that during

the search process a household cannot find a suitable or affordable dwelling. In that case, an alternative for moving is to stay in the current dwelling (Brown & Moore, 1970), possibly combined with making adjustments to the home in order to meet the new requirements (Deane, 1990). The realisation of intentions to move depends on the interaction between the triggers or motives for moving, housing preferences, the individual resources and restrictions on the one hand and the opportunities and constraints in the housing market on the other (Hooimeijer & Oskamp, 1996).

### ***3.2.1 The influence of anticipated triggers for moving and strength of the intention to move***

Whether someone will act upon stated intentions to move depends on the perceived necessity of the intended move, among other things. Those with a greater perceived necessity to change residence are more likely to translate their intention into action than those with a smaller perceived necessity to move. An indicator of the perceived necessity of an intended move (or urgency, in terms of Goetgeluk, 1997) is the underlying trigger for moving. Triggers for moving provide information about the consequences of not realising an intended move. The more far-reaching these consequences are (in the perception of the individual), the greater the perceived necessity of the intended move will be.

People may intend to move because of changes in the household, employment, or educational career. Such moves have been denoted as induced moves (Clark & Onaka, 1983). Not moving may imply having to postpone the life course change. Intended moves that are triggered by changes in the life course are hence associated with a high degree of necessity. This holds especially for intended moves prompted by the wish to form a union or to break up a union, because the wish to cohabit or separate cannot be fulfilled without a move of at least one partner (Goetgeluk, 1997). Therefore, it is likely that singles intending to form a multi-person household and people who expect to become single move more frequently than people who do not expect a change in their household situation. Besides expected changes, the expected household situation may also affect the realisation of intentions to move owing to differences in resources and restrictions between singles and families (see next section).

If people primarily intend to move because of education or work, it is most likely that this intention stems from a (foreseen) long commuting distance between residence and work or education in combination with a desire to reduce that distance (Van Wissen & Bonnerman, 1991). Not moving may imply not being able to accept a certain job or to enrol in education, or having to accept an undesirably long commuting distance instead. Intended moves for educational or

occupational reasons are hence probably associated with a high degree of necessity (Goetgeluk, 1997). Therefore, it is likely that those who intend to move because of work or education move more frequently than those who want to move for other reasons.

Intentions to move may also be prompted by a desire to alter the type and quantity of housing consumption (Clark & Onaka, 1983). An important aspect of the current housing situation is the amount of space relative to the number of household members. Too little space is an important reason for moving (Clark & Onaka, 1983; Rossi, 1955). Not realising an intended move from a crowded home implies the household has to cope with a suboptimal housing situation. Living in a crowded housing situation is likely to lead to a greater necessity of moving. Therefore, it is expected that those living in crowded housing will be more likely to realise an intention to move than those living in less crowded or spacious housing.

Furthermore, moves may be triggered by a preferred change in housing tenure. The wish to move into homeownership is often prompted by housing reasons (Mulder & Hooimeijer, 1999). According to Goetgeluk (1997), moves for such reasons are less necessary. Unlike the wish to move into homeownership, the wish to move out of homeownership is probably associated with a great necessity of moving. This preferred tenure change is often not prompted by housing reasons, but by a decrease in financial resources, for example, after union dissolution, widowhood, or unemployment (Ermisch & Di Salvo, 1996; Feijten, 2005). Therefore, it is likely that those who want to move from owning to renting will realise their intention to move more frequently than others. Furthermore, it is expected that the realisation of intentions to move will be affected by the current and preferred housing tenure in the sense of resources and restrictions (see next section).

Besides anticipated triggers for moving, it is expected that there will be a direct impact of the strength of an intention to move on the extent to which people translate intentions into action. The stronger the intention to engage in behaviour, the more likely should be its performance (Ajzen, 1991), as the strength of the intention to move has an impact not only on the intensity with which a household will search for available vacancies, but also on the probability of acceptance of an offered vacancy (Hooimeijer & Oskamp, 1996). It is therefore expected that people with a strong intention to move will move more frequently than those with a less strong intention to move.

### **3.2.2 *The influence of resources and restrictions***

The more income a person has, the more dwellings are within the financial reach of an intended mover (Mulder & Hooimeijer, 1999; Priemus, 1984). It is expected that affluent people are more likely to realise their intention to move than those with a lower income. Indeed, some studies found that those with higher incomes have a greater probability of translating moving intentions into action (Duncan & Newman, 1976, for people who want to move for work reasons; Moore, 1986). However, other studies hardly found an income effect (Goetgeluk, 1997; Kan, 1999). Possibly, those with higher incomes are not so much less constrained in their choice of housing options, because they often only consider options at the upper end of the market. An alternative explanation is that the income effect is mediated by intentions to move. It has frequently been argued that people take hampering and facilitating factors – such as income – into account when they formulate an intention to move (Desbarats, 1983; Gardner et al., 1985). Assuming that people try to avoid having an intention to do something that is not likely to happen, and that they have a correct perception about the opportunities to change residence given their financial resources, a positive income effect might be absent.

Education is a form of human capital and income potential that can help people make their intentions materialise. A high level of education matters not only to the income at a given moment, but also to career prospects (Mulder & Hooimeijer, 1999). It is therefore expected that highly educated intended movers will realise their intentions more frequently than the less well educated. For the same reasons, the labour market position can also play a role in the realisation of the intention to move. The range of available housing options is smaller for those unemployed; it is, for example, difficult – if not impossible – to get a mortgage. Thus, it is likely that employed individuals with an intention to move will move more frequently than non-employed individuals who intend to move.

Homeownership is known to form a restriction on moving: homeowners move less frequently than renters (Clark & Dieleman, 1996; Helderma et al., 2004). Several explanations have been put forward for this difference between homeowners and renters. Some of these explanations are mainly relevant to the formation of moving intentions: owner-occupied homes are usually of higher quality than homes in the rental sector (Helderma et al., 2004; Speare et al., 1975) and are more frequently regarded as “longstay housing” by their inhabitants (Feijten & Mulder, 2002). Other explanations are particularly relevant to the realisation of intentions: homeowners are confronted with higher transaction costs than renters. These costs include financial and non-financial costs: homeowners have to pay the services of an estate agent and they have to put

effort into selling the home (Helderman et al., 2004). This would imply that homeowners are less likely to realise a moving intention than renters. Indeed, previous research shows that homeowners are less likely to realise an intention to move than renters (Kearns & Parkes, 2003; Lu, 1998). For the tempo at which a person acquires a new home it is also important whether someone wants to move to a rental home or to an owner-occupied home. The transaction costs involved in buying a home can act as a barrier to residential mobility. For the Netherlands, these costs are estimated at 10 per cent of the value of the home (Helderman et al., 2004). These costs may hamper the realisation of intentions to move into homeownership. Furthermore, the availability of opportunities differs between the rental sector and the owner-occupied sector. The affordability of dwellings is a problem in the owner-occupied sector, while the social rental sector (which, in the Netherlands, comprises three-quarters of the rental sector) struggles with long waiting lists (REA, 2006). In addition, people who want to move to a rental dwelling in the social sector have less freedom of choice: they are subject to limitations to the type of homes and locations they are allowed to move into. It is expected that current tenure plays a role in the tempo at which a person acquires a new home in combination with tenure preferences. Although it is difficult to predict which category will encounter the greatest difficulty in finding a new home, it is expected that those who want to move from owning to renting to move more frequently than others because such intended moves are associated with a higher necessity of moving (see previous section).

The household situation is another important source of restrictions (Mulder & Hooimeijer, 1999). On the one hand, the realisation of intentions to move can be more difficult for (intended) singles because of differences in income. In general, singles will have lower incomes than couples and families because they cannot pool their incomes. On the other hand, the choice to relocate may be easier for singles because they do not have to take into account anyone else's daily activity spaces and preferences (Mulder, 1993; Mulder & Hooimeijer, 1999). It is thought that the positive effect of being single is more important than the negative effect; therefore, it is expected that, if differences in income are accounted for, singles have less difficulty to realise an intention to move than households consisting of more than one person.

### ***3.2.3 The influence of local housing market opportunities***

Whether someone is able to realise an intention to move not only depends on his or her own resources, but also on the locally available housing market opportunities. These opportunities are determined by the arrival rate of housing vacancies (Hooimeijer & Oskamp, 1996) and by eligibility criteria and price, for

social housing and private market housing, respectively (Mulder & Hooimeijer, 1999). The availability of housing opportunities differs considerably between regions (Clark & Dieleman, 1996; Dieleman, 2001). Compared with the Randstad (the more urbanised western region that serves as the main economic motor of the Netherlands), the peripheral regions are characterised by relatively low pressure on the housing market. This is reflected by the fact that housing prices are generally lower in the periphery than in the Randstad; the availability and affordability of owner-occupied dwellings is particularly problematic in the Randstad (Renes et al., 2006). Furthermore, the waiting lists for a social rental home are generally longer in the Randstad, especially in large cities such as Amsterdam and Utrecht (REA, 2006). It is likely that intended movers whose search location is in the peripheral region will move more frequently than those who search for a home in the Randstad.

Another characteristic of regional housing markets that might influence the realisation of moving intentions is the degree of urbanisation. Compared with rural areas, the turnover rate of dwellings and the prices of owner-occupied dwellings are higher in urban areas (Helderman & Mulder, 2007). Turnover rates and prices may be expected to have a strong influence on mobility and housing choice (Dieleman, 2001). High turnover rates will increase the number of available housing opportunities, but high housing prices might be an obstacle for moving. Therefore, the expected impact of degree of urbanisation of the search location on the realisation of intentions to move is not straightforward. A summary of the hypotheses is provided in Table 3.1.

**Table 3.1** Summary of hypothesised effects of independent variables on the probability of realising an intention to move

Characteristics	Expected effect
Expectation to form a union	+
Expectation to break up a union	+
Intention to move for work or education	+
Wish to move out of homeownership	+
Crowded home	+
Strong intention to move	+
High income	+
High level of education	+
Not employed	-
A stable multi-person household	-
Desired place of residence is urbanised	+/-
Search location Randstad	-

### **3.2.4 The influence of other individual characteristics**

There are a number of other individual circumstances that are known to play a role in the probability of moving, and should therefore be accounted for. Previous studies for the United States showed that young people are more likely to translate moving intentions into action than older people (Crowder, 2001; Kan, 1999; Lu, 1998). These studies also found evidence of ethnic differences in the extent to which people realise their intentions to move. It is therefore expected that older people and non-Western immigrant groups will realise their intention to move to a lesser degree than younger people and natives. The study also controls for gender.

## **3.3 Data and methods**

### **3.3.1 Data**

The study uses a unique source of data: a combination of the Housing Demand Survey (HDS) 2002 and the longitudinal Spatial and Social Mobility satellite of the Social Statistical Database (SSD) of Statistics Netherlands 1999–2005 (Bakker, 2002). The HDS data are based on a large cross-sectional survey in which information is gathered about the housing situation of people living in the Netherlands. Besides information about the housing situation, the survey also contains sociodemographic and socioeconomic information, and information about mobility intentions and housing preferences. The research population is representative of the Netherlands population aged 18 and older and not living in an institution. The HDS data have been enriched with longitudinal register data of the Spatial and Social Mobility satellite 1999–2005 by using a unique personal identification number. The Satellite contains national migration and emigration data of all persons who have lived in the Netherlands at any time since 1995. The dates of moves have been derived from the population register.

The combination of the survey and the register data made it possible to study the mobility of all persons in the survey (with or without moving intentions) in the years after the survey was held. In contrast to panel surveys, the data set is free of problems related to panel attrition (caused by moves or refusals to remain in the panel); all respondents can be tracked in time. Moreover, in comparison with the data used in most previous studies, this sample is much larger and hence made it possible to perform more in-depth analyses with greater statistical power.

The study excluded children living in the parental home, people living in dormitories or shared accommodation, and a small number of respondents ( $n = 10$ ) of whom the preferred tenure is unknown. Furthermore, it also excluded

people expecting an involuntary move (for example, if the dwelling was going to be demolished) and people who had already found a new home. A small number of HSD respondents died in the two years after the time of interview. These were also excluded, with the exception of those who had already made a move within the period of observation. After these selections, the research sample included 61,580 respondents with non-missing information on the other variables in the analysis. Most analyses only include those respondents who expressed an intention to move in the HDS. This intention was measured by means of the question: “Do you want to move within the next two years?” (In Dutch: “Wilt u binnen twee jaar verhuizen?”). If someone answered “Possibly yes, maybe”, “I would like to, but I cannot find anything” or “Most certainly yes”, this person was considered to have an intention to move. If someone answered “Most certainly not” or “I do not know”, this person was considered not to have an intention to move. In the research sample, 12,832 respondents expressed an intention to move.

### **3.3.2 Variables**

With the exception of the dependent variable, all variables were derived from the HDS and refer to the time of the HDS interview. The descriptive statistics and definitions of the dependent and independent variables are presented in Table 3.2. Table 3.2 also contains the percentages movers in the distinct categories of the independent variables among those intending to move and among those with a strong moving intention.

The dependent variable is whether someone actually moved in the two years after the interview was held. The study did not distinguish between migration within the Netherlands and emigration. The interviews were held between January 2002 and March 2003. This implies that those interviewed in January 2002 were followed up to January 2004, whereas those interviewed in March 2003 were followed up to March 2005.

The strength of the intention to move was derived from the same question that was used to determine intentions to move (see previous section). People who answered “Most certainly yes” on this question are considered to have a strong intention to move; those who answered “Possibly yes, maybe” or “I would like to, but I cannot find something”, are considered to have a less strong intention to move. This classification was partly based on empirical analyses, which showed that the moving behaviour of the last answer category showed more similarity with the second than with the first answer category.

**Table 3.2** Descriptive statistics of dependent and independent variables and percentage moved for all intended movers ( $N = 12,832$ ) and for those with a strong intention to move ( $N = 4,940$ )

	People with an intention to move		People with a strong intention to move	
	% of whom moved		% of whom moved	
<i>Moving behaviour (dependent variable)</i>				
did not move	68.0		50.2	
moved	32.0		49.8	
<i>Triggers for moving and strength of intention</i>				
Strength of intention to move				
less strong	61.5		20.9	
strong	38.5		49.8	
Current and expected household situation				
stable single	23.0	28.7	22.5	45.6
stable multi person	62.5	32.5	62.3	51.3
single–multi person	5.6	37.1	6.4	50.8
multi person–single	2.4	34.7	2.8	48.2
multi person–multi person	6.5	34.1	6.0	49.3
Crowding				
crowded	27.6	35.0	27.1	47.9
not crowded	20.4	33.1	25.5	51.4
spacious	52.0	30.3	47.3	49.9
Current and preferred tenure				
renter, wish to rent	39.5	30.8	46.3	43.6
renter, wish to buy	20.4	36.9	22.8	50.3
owner, wish to rent	6.4	34.3	5.9	58.8
owner, wish to buy	33.8	30.1	25.0	58.8
Work/education related trigger to move				
no	91.0	31.8	91.2	49.2
yes	9.0	34.2	8.8	56.0
<i>Resources and restrictions</i>				
Level of education				
up to lower secondary	37.4	28.9	37.5	44.9
higher secondary or medium vocational	31.7	33.6	30.5	51.8
higher vocational	20.7	33.6	20.4	54.0
university	9.4	36.0	10.5	55.1
unknown	0.8	28.0	1.0	34.0
Employment status				
employed	66.0	33.5	65.6	52.0
not employed	34.0	29.1	34.4	45.7
Income				
lowest quartile	19.3	30.7	21.2	42.7
middle-low quartile	27.7	31.0	29.4	47.6
middle-high quartile	26.9	31.8	25.0	49.4
highest quartile	26.2	34.4	24.5	59.0

<i>Housing market opportunities</i>				
Degree of urbanisation desired place of residence				
not urbanised	11.8	32.6	10.0	55.4
hardly urbanised	16.4	34.8	15.8	53.5
moderately urbanised	22.2	33.3	25.4	49.2
strongly urbanised	21.6	31.9	24.6	47.4
very strongly urbanised	7.7	33.1	6.8	53.6
foreign country	2.4	29.6	2.8	44.5
unknown	17.9	27.6	14.6	46.4
Search location				
Randstad	45.6	31.3	48.8	47.3
intermediate zone	28.4	32.2	26.8	50.6
national periphery	23.6	33.6	21.6	55.1
foreign country	2.4	29.6	2.8	44.5
<i>Individual characteristics</i>				
Gender				
female	53.0	32.3	53.4	49.6
male	47.0	31.8	46.6	50.1
Ethnic background				
native	78.6	32.6	74.6	53.0
Western background	9.1	30.6	8.9	45.5
non-Western background	12.4	29.3	16.4	37.7
Continuous variables	Mean	SD	Mean	SD
Age	41.4	15.3	39.5	15.2
Age <sup>2</sup>	1946.2	1492.9	1788.9	1473.4

The triggers for moving can be identified by studying the impact of life events on mobility or by analysing stated motives for moving (Mulder, 1996). In this study, triggers for moving related to the household and housing careers were derived using information about expected household changes and preferred tenure changes. Triggers related to the educational and occupational careers were derived from a question about the main motive for moving. People who want to move because of work ( $n = 1031$ ), education ( $n = 69$ ), or both work and education ( $n = 51$ ) have a positive score on the variable indicating that the trigger for moving was related to work or education.

Crowding was measured by dividing the number of rooms by the number of persons in the household. It was categorised in three levels: neutral (one to two rooms per person), crowded (one room or less per person), and spacious (two or more rooms per person).

Household income was categorised in quartiles; the quartiles were based on the household income of all respondents in the survey. The study used household income rather than personal income because mobility behaviour is

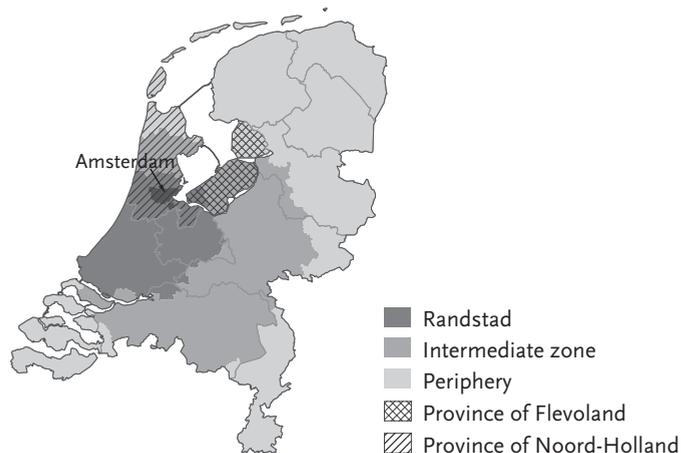
likely to be based on the total income in the household in most cases (85 per cent do not expect a change in their household situation).

The degree of urbanisation of the desired place of residence in the Netherlands was measured using the standard definition of address density, provided by Statistics Netherlands. Five categories were distinguished: not urbanised (fewer than 500 addresses per square km), hardly urbanised (500 to 1000 addresses per square km), moderately urbanised (1000 to 1500 addresses per square km), strongly urbanised (1500 to 2500 addresses per square km), and very strongly urbanised (2500 or more addresses per square km). Two additional categories were added to the variable indicating the degree of urbanisation: foreign country (for those who intend to move abroad) and unknown (for those with missing information on the desired place of residence).

The search location was divided into foreign country, and three search regions within the Netherlands: the Randstad (core region), the surrounding intermediate zone, and the periphery of the Netherlands (see Figure 3.1). The classification into three search regions was based on the method used by Van Oort (2003). For the classification, a gravity equation of population size in all municipalities was used (496 in total) at the beginning of 2002. This gravity equation approximately reflects population density. Based on the gravity value of the municipality, all 496 municipalities were assigned to a region. In order to create uninterrupted zones, 11 municipalities of which the classification differed from the classification of the surrounding municipalities were assigned to the surrounding region. For those ( $n = 2296$ ) who did not mention a desired place of residence within the Netherlands, information about the desired province was used. Because 10 provinces (out of the total of 12 provinces) are approximately situated within one single search region, desires for these provinces were assigned directly to a region. The two other provinces (Noord-Holland and Flevoland) are spread over all three search regions. Those who expressed a desire for one of these provinces ( $n = 353$ ) were assigned to the search region in which the current place of residence was located. The current place of residence represents the most plausible search region, because most people move short distances (Clark & Dieleman, 1996).

### **3.3.3 Method**

The analysis consists of two parts. First, there is a descriptive analysis of the extent to which people express an intention to move. Furthermore, there is a description of the relationship between whether people intend to move and actual moving behaviour in a two-year period.



**Figure 3.1** Macro-zoning of search regions in the Netherlands into Randstad, intermediate zone, and national periphery, 2002

The second part investigates the moving behaviour of those who expressed an intention to move using logistic regression models. One analysis is performed for those who expressed an intention to move (irrespective of the strength of the intention to move) and one for those who expressed a strong intention to move. If no differences are found between all intended movers and people with a strong intention to move, results are described only for all those with an intention to move.

### 3.4 Moving intentions and actual mobility: Results

#### 3.4.1 Descriptive results

Approximately 21 per cent of all respondents expressed an intention to move within two years. With increasing age, the intention to move diminishes (Table 3.3). Almost half of those who are younger than 25 intend to move compared with 13 per cent of the middle-aged category (55–64 years old). The intention to move also differs with ethnic background. More than one-third of the non-Western immigrants express an intention to move compared with 20 per cent of the native-born. Compared with couples and families, singles and single-parent families more frequently express an intention to move. The intention to move also differs with such socioeconomic variables as income and education. Highly educated people more frequently express an intention to move than less educated people. Conversely, compared with those with lower incomes, those with higher incomes less frequently express an intention to move. This does not

**Table 3.3** Percentage intending to move according to major background characteristics (N = 61,580)

	% Intending to move		% Intending to move
Age		Tenure	
18–24	47	renter	29
25–34	33	homeowner	15
35–44	21	Income	
45–54	16	lowest quartile	23
55–64	13	middle-low quartile	23
65–74	13	middle-high quartile	20
≥ 75	11	highest quartile	19
Household situation		Level of education	
single	23	up to lower secondary	18
couple without children	20	higher secondary or medium vocational	22
couple with children	18	higher vocational	23
single parent family	28	university	27
other	37	unknown	31
Ethnic background			
native	19		
Western background	24		
non-Western background	36		

**Table 3.4** Percentage moving of those with and without a (strong) intention to move

	No intention to move		Intention to move		
	All	Less strong	Strong	All	
Did not move	94	79	50	68	
Moved	6	21	50	32	
N (100%)	48,748	7,892	4,940	12,832	

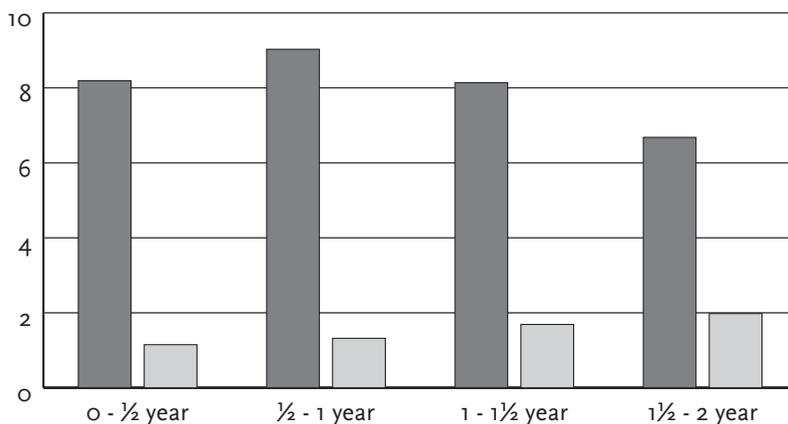
imply that people do not take into account their financial resources while formulating an intention to move; an additional analysis (not shown) revealed that after controlling for current tenure, those with a higher income had a higher likelihood to have an intention to move than those with a lower income. Compared to homeowners, renters more frequently express an intention to move; the percentage of those with an intention to move among renters is almost twice as high as among homeowners.

Of those who expressed an intention to move, almost one third moved within two years (Table 3.4). The moving behaviour is strongly connected with the strength of the intention to move. About 20 per cent of those with a less strong intention to move moved against almost half of those with a strong intention to move. Most of the moves occurred in the first year after the interview

(Figure 3.2). The longer the period after the interview, the smaller the probability that those who intend to move but have not done so yet eventually do so (see also Lu, 1998). Apparently, the majority of individuals (even those with a strong intention to move) are not able to realise their intentions within two years time, change their plans, or postpone their move.

Table 3.4 and Figure 3.2 also provide information about moves among people who did not have an intention to move. The majority of the population (almost 80 per cent) did not intend to relocate. Only a small proportion of them, about 6 per cent, moved within two years. The occurrence of these previously unintended moves may be explained from the fact that some events in the life course, such as separation or job change, can cause an urgent reason for moving and a subsequent move within a short period of time (Speare, 1974). Moves among those without a stated intention to move may also be explained by the unexpected opportunity to move to a better home. Indeed, previous research found evidence of the existence of such unexpected “windfall-moves” (see for example, Rossi, 1955).

Although the majority of the people with an intention to move do not move within two years time, they relocate considerably more frequently than those without an intention to move. The strength of the relationship between stated intentions to move and actual moving behaviour was calculated using Cramer’s V. This statistic indicates a rather strong and significant ( $p < .001$ ) association between stated intentions to move and actual moving behaviour (Cramer’s  $V = 0.329$ ). Therefore, despite the substantial gap between intention



**Figure 3.2** Percentage moved of those with an intention to move (dark grey coloured columns) and without an intention to move (light grey coloured columns) by length of period between interview and first relocation

and actual behaviour, intentions to move are important predictors of subsequent moving behaviour (see also Lu, 1998).

### ***3.4.2 The influence of anticipated triggers for moving and strength of the intention to move***

The first column in Table 3.5 shows the results of a logistic regression model of the probability of moving for all people who intend to move; the second column refers to the probability of moving only for those with a strong intention to move. It should be noted that, although the explanatory models shed more light on the factors that play a role in the process from stated intentions to move to actual moving behaviour, the overall explanatory power of the logistic regression models, indicated by the Nagelkerke  $R^2$ , is modest. It is not unusual to find a low pseudo  $R^2$  in analyses of the realisation of stated intentions to move (see for example, Duncan & Newman, 1976). Apparently, it is quite difficult to predict mobility behaviour on the level of individuals using the available independent variables.

The realisation of an intention to move strongly depends on the strength of the intention. People with a strong intention to move are estimated to be 3.7 times as likely to move as people with a less strong intention to move. The Nagelkerke  $R^2$  measure rises from 0.051 to 0.157 when the strength of the intention to move is added to the model. These findings indicate that the strength of an intention to move is an important predictor of actual moving behaviour.

Singles who expect to form a multi-person household are more likely to move than stable singles. This is in line with the idea that intended moves prompted by a household change are more necessary than intended moves of households that remain the same. Furthermore, pooling of incomes can help those who want to cohabit realise their intention to move more easily whereas stable single households do not have that advantage. In contrast to what was expected, expectations to become single do not significantly influence the realisation of intentions to move. For people with a strong intention to move, the effect of the current and expected household situation is not significant. However, it must be borne in mind that the decision to separate will be followed almost immediately by a subsequent move. This implies a small probability of observing someone in the survey whose intention to move is triggered by a wish to separate.

Although people who want to move because of work or education move somewhat more frequently than others (Table 3.2), the effect of work- and education-related triggers for moving is not statistically significant after control-

ling for the other variables. The absence of a significant effect might possibly be attributed to the fact that only few people have expressed an intention to move for reasons of work or education.

As expected, owners with a preference for a rental dwelling are more likely to realise an intention to move than renters with a preference for another rental dwelling. This can be explained from the fact that homeowners do usually not move out of owner-occupied dwellings unless it is really necessary to do so. Renters who intend to move to an owner-occupied home are not significantly more likely to move than renters who want to move within the rental housing sector. Similarly, living in a crowded home does not have a significant effect on the extent to which people realise their intentions to move within two years (see also Lu, 1998). As soon as there is control for the strength of the intention to move, the negative effect of living in a spacious home becomes insignificant.

### ***3.4.3 The influence of resources and restrictions***

The effect of a high income on realising an intention to move is only marginally significant, but among those with a strong intention to move the probability of moving is significantly greater in the highest income quartile. The fact that previous research did not show an unequivocal relationship between income and the realisation of an intention to move can perhaps be explained from differences in the definition of an intention to move. A high income seems to facilitate particularly the realisation of strong intentions to move.

As expected, a high level of education has a positive and significant influence on the actual mobility of those intending to move. Highly educated people not only more frequently express an intention to move than less well educated people (Table 3.3), but they also have a higher probability of realising this intention (Table 3.5). For those with a strong intention to move, the effect of level of education is only marginally significant. Compared to employed people, people who are not employed have a significantly lower probability of realising an intention to move. However, this effect is not significant for those with a strong intention to move.

Current tenure in combination with tenure preferences plays a significant role in the probability of realising an intention to move within two years time. Homeowners who want to move to a rental home have a higher probability of moving than renters who want to move to another rental home. The influence of current and preferred tenure is especially manifest among people with a strong intention to move. Although previous research (Kearns & Parkes, 2003; Lu, 1998) shows that homeowners are less likely to realise an intention to move than renters, the results here show that this does not hold for those with strong



highest quartile	0.137*	0.083	1.147	0.365***	0.119	1.441
<i>Housing market opportunities</i>						
Degree of urbanisation desired place of residence (ref: not urbanised)						
hardly urbanised	0.013	0.093	1.013	0.160	0.146	1.173
moderately urbanised	0.092	0.088	1.096	0.164	0.137	1.178
strongly urbanised	-0.071	0.087	0.931	0.060	0.131	1.061
very strongly urbanised	-0.053	0.096	0.948	0.120	0.144	1.128
unknown	-0.220**	0.090	0.803	-0.097	0.140	0.907
<i>Search location (ref: national periphery)</i>						
Randstad	-0.150***	0.058	0.860	-0.239***	0.087	0.788
intermediate zone	-0.102*	0.057	0.903	-0.188**	0.087	0.829
foreign country	-0.364**	0.153	0.695	-0.399*	0.212	0.671
<i>Individual characteristics</i>						
Age	-0.111***	0.008	0.895	-0.083***	0.011	0.920
Age <sup>2</sup>	0.001***	0.000	1.001	0.001***	0.000	1.001
Female (ref: male)	0.012	0.042	1.012	0.006	0.061	1.006
<i>Ethnic background (ref: native)</i>						
Western background	-0.070	0.072	0.933	-0.237**	0.104	0.789
non-Western background	-0.281***	0.070	0.755	-0.421***	0.090	0.657
Constant	1.123***	0.210	3.074	1.440***	0.393	4.219
Initial -2 Log Likelihood			16097			6848
Model -2 log Likelihood			14568			6612
Improvement ( <i>Chi</i> <sup>2</sup> )		1529***, <i>df</i> = 32			236***, <i>df</i> = 31	0.062
Nagelkerke <i>R</i> <sup>2</sup>		0.157				0.062
<i>N</i>		12832				4940

\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

intentions to move. Homeowners (irrespective of tenure preferences) are approximately 1.5 times more likely to realise strong intentions to move than renters with a preference for another rental dwelling. This indicates that, among those with a strong intention to move, homeowners encounter fewer obstacles than renters who want to move within the rental sector of the housing market.

The expected household situation also has a significant effect on the realisation of intentions to move. Contrary to what was expected, stable multi-person households are more likely to move than stable single households. This cannot be attributed to income differences, because there was control for those. For people with a strong intention to move, the expected household situation does not have a significant effect.

#### ***3.4.4 The influence of local housing market opportunities***

As expected, the search location matters to the extent to which people realise an intention to move: people whose search location is in the Randstad have a lower probability of moving than those who search for a home in the national periphery. This finding corresponds with the fact that housing shortages are especially problematic in the Randstad, and may reflect barriers to realise an intention to move in areas with high housing demand (Kearns & Parkes, 2003). People whose search location is in the intermediate zone and those wishing to move abroad also have a lower probability of moving. In contrast to the search location, the degree of urbanisation of the desired place of residence does not have a significant influence on the probability of moving.

#### ***3.4.5 The influence of other individual characteristics***

The probability that intended movers actually move decreases with increasing age. However, the effect of age squared is slightly positive, which means that the age-effect is positive at older ages. The probability of realising an intention to move is estimated to decrease until the age of 51 and to increase from that age on.

Whereas intentions to move are particularly prevalent among immigrants (Table 3.3), non-Western immigrants who intend to move actually do so significantly less frequently than the native-born. Among people with a strong intention to move, non-Western as well as Western immigrants have a lower probability of moving than natives. This finding suggests that immigrants and their descendants face more difficulties in realising their intention to move.

The effect of being female on the probability of realising an intention to move is not significant. This was also found before controlling for socioeconomic characteristics.

### **3.5 Conclusion and discussion**

This paper addresses the relation between the intention to move and actual mobility for the period 2002–2005. Using a unique longitudinal data set in which survey data from a large-scale sample for the Netherlands were enriched with register data, this study gained more insight into the extent to which various determinants influence the moving behaviour of those with an intention to move.

The results show clearly that there exists a relationship between intentions to move and the incidence of moving: people with an intention to move relocate considerably more frequently than people without an intention to move. However, this relationship is far from perfect. Only one-third of those intending to move within the next two years actually moved within this period, whereas 6 per cent of those not intending to move did so.

Among those with an intention to move, the probability of moving is particularly influenced by the strength of the intention to move. Furthermore, a new finding compared with previous research is that the realisation of intentions to move is not only affected by current background characteristics, but also by current characteristics in combination with expectations or preferences about these characteristics after a potential move. This finding suggests that the wish to accomplish something in a particular life course trajectory (indicated by the anticipated trigger for moving) is not only relevant to the formation of intentions to move, but also to the extent to which these intentions are realised. Moving intentions that are accompanied by an expected change in the housing or household situation are more likely to be realised. In particular, those who want to move out of homeownership have a higher probability of moving. This finding is in line with the well-established finding that moves out of homeownership are often prompted by life events such as union dissolution, and are associated with a greater perceived necessity of moving.

Although it is often argued that people take their financial resources into account when they formulate an intention to move, income also proved to be important to the realisation of intentions to move. The influence of income was particularly strong among people with a strong intention to move. The results also show that homeowners (irrespective of tenure preferences) are more likely to realise strong intentions to move than renters with a preference for another rental home. It appears that homeowners encounter fewer obstacles than renters

who want to move within the rental sector of the housing market. Furthermore, stable single households are less likely to realise an intention to move than stable couples and families. It is possible that singles tend to search in housing sectors in which the availability and affordability of dwellings is problematic. Moreover, the results confirm that the search location matters to the extent to which people realise their intention to move: people whose search location is in the Randstad – an area that is characterised by housing shortages – are less likely to translate intentions into action than those who prefer a home in the periphery of the Netherlands.

Several variables, most notably current housing tenure, were found to influence the actual mobility of intended movers in a different way than they have been found to influence moving intentions in stated preference research, or the probability of moving in revealed preference research. This indicates that the formation of moving intentions and the realisation of these intentions are indeed different phases in the process of moving that are subject to different determinants: mainly preference-based determinants in the formation of intentions and mainly resources, restrictions and opportunities in the realisation of intentions.

A limitation of the data is that if people did not move within two years, it is not possible to be certain that what was observed were actually non-realizations of intentions to move. Intentions might fade, and the data do not give any clue about whether this happens and if so, at what speed. People may postpone or drop their intention to move because of unfavourable changes in economic or housing market circumstances. The realisation of intentions to move among homeowners may be thwarted by an unanticipated fall in house prices, as individuals tend to be reluctant to sell at a loss (Chan, 2001). People may also postpone or drop their intention to move due to the occurrence of an unforeseen event such as the loss of a job or the decease of a household member. Unforeseen events may prevent some people's moves, but may lead others to move rather unexpectedly, even though they would indicate in surveys that they do not intend to move (Hooimeijer & Oskamp, 1996). Further research is needed to find out to what extent changes in the determinants influence the mobility behaviour of those intending to move. Future extensions of the SSD will allow for the inclusion in the analyses of household changes taking place after the HDS interview. This information will also be highly valuable in the analysis of moves among people without an intention to move.

Despite these limitations, the results here not only provide strong evidence that intentions to move, particularly strong intentions, are good although not perfect predictors of subsequent moving behaviour, but they also provide more insight into the extent to which anticipated triggers, resources and

restrictions, housing market opportunities, and other individual background characteristics influence the moving behaviour of those with an intention to move.

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## 4 Life events and the gap between intention to move and actual mobility

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*ABSTRACT Life events are frequently mentioned as a reason why people do not behave according to their mobility intentions. However, there is little empirical evidence concerning the role of life events in the discrepancy between stated mobility intentions and actual mobility behaviour. The authors clarify the role of life events in this discrepancy using a longitudinal data set from the Netherlands, in which the Housing Demand Survey 2002 is enriched with register data from the Social Statistical Database. Union dissolution, union formation, and childbirth trigger moves among people who had initially intended to stay in the current home. These events also act as an extra stimulus to move for those who already intended to move for reasons other than household or job change. In contrast, the event of losing a job prevents people from realising their intention to move. The results also suggest that the majority of the moves after union dissolution are made by people who did not have an initial intention to move.*

#### 4.1 Introduction

The mobility behaviour of individuals and households has widespread consequences for societies (Cadwallader, 1992). It has a profound influence on the demographic and socioeconomic composition of neighbourhoods and the changes therein, including processes of segregation of low-income households and immigrants or minority ethnic groups. A major issue of debate is whether such processes result from voluntary action – whereby people move or stay when and where they want – or from differentiated constraints on moving – whereby some people move freely and others remain trapped in less desirable housing or neighbourhoods. It is therefore relevant to understand why some people move without having intended to do so and others remain despite having an initial intention to change residence. Insight into the factors that hamper the execution of mobility intentions might set a direction for urban housing policy that is, at least in the Netherlands, directed at achieving a more equal distribution of lower income households over space (Bolt et al., 2008).

Since Rossi's classical work *Why Families Move* (1955), several studies have been published concerning the discrepancy between stated intentions to move (or to stay) and subsequent mobility behaviour. They have all shown that a substantial proportion of those who initially intend to move do not change residence (Kan, 1999; Moore, 1986). Furthermore, several studies show that some people move, although they previously had not intended to do so (Lu, 1998; Rossi, 1955). In the literature, several explanations can be found for why people do not realise their stated intentions to move. People may not realise their mobility intention due to a lack of financial resources or housing opportunities (Mulder & Hooimeijer, 1999), or because their need for moving is not very urgent (Goetgeluk, 1997). A discrepancy between intention and actual behaviour may also arise because people change their initial intention to move (Fishbein & Ajzen, 1975). Initial intentions to move (or to stay) are based on a person's current characteristics (for example, household situation and income), as well as on their expectations about these characteristics. If these expectations are not fulfilled due to unanticipated changes, people may adjust their initial mobility intentions (Anderson et al., 1986). Life events may lead to the postponement or cancellation of an initial intention to move (Speare, 1974), but they may also constitute an unanticipated trigger for moving and a subsequent move among people who had not intended to move before that event took place (Kan, 1999; Rossi, 1955).

Although several studies suggest that life events are a reason why people do not behave according to their initial intention to move or to stay, only a few researchers have investigated the impact of life events in the discrepancy

between stated intentions and actual moving behaviour. Rossi (1955) showed that becoming unemployed or a divorce, triggers people to move unexpectedly. However, this analysis was based on a very small sample and therefore lacks statistical power. Based on Canadian panel data, Moore (1986) found that life events have a disruptive effect on individual mobility plans, although “the results are not as clear as had been expected” (p. 512). Goetgeluk (1997), who used a small panel in the Netherlands, showed that the postponement of initial intentions to move is partly due to unanticipated life events, such as a new job. From data from the large-scale Panel Study of Income Dynamics (PSID) for the United States, Kan (1999) revealed that some life events force a household to change its mobility expectations. Moreover, the impact of life events that are difficult to predict well beforehand (such as job change) on actual mobility behaviour differ between those expecting to move and those expecting to stay. Yet it remains unclear as to whether the life events were indeed unanticipated at the moment of interview.

The aim in this study is to gain more insight into the extent to which life events play a role in the discrepancy between initial intentions to move and actual mobility behaviour. Whereas mobility studies usually focus on the role of life events on moves without considering initial intentions to move or to stay (e.g., Fischer & Malmberg, 2001), we examine the impact of life events in the household and employment which occur after people have indicated whether they intend to move. If the stated intention to move is prompted by these life events (that is, if the events were anticipated), it is somewhat trivial to analyse the impact of the actual occurrence of the events on the extent to which intended movers do indeed move. Among those with an intention to move, we therefore focus on those whose intention has not been triggered by life events in the household or occupational career. In this manner, we attempt to analyse the impact of unanticipated triggers for moving.

We use a longitudinal data set for the Netherlands in which survey data from the 2002 Housing Demand Survey (HDS) about mobility intentions are enriched with information about life events and actual moves extracted from the Social Statistical Database (SSD) 1999–2005 of Statistics Netherlands. The method used was logistic regression analysis of person years.

## 4.2 Background and theory

### 4.2.1 *Intentions to move, and the link with life events and mobility behaviour*

An intention to move indicates that one is willing to change residence (De Jong, 1999). Other concepts with respect to (positive) attitudes towards mobility behaviour are unconstrained attitudes, such as wishes and desires (Lu, 1998), and constrained attitudes, such as expectations (Kan, 1999), where “constrained” refers to the idea that people take into account constraints on migration when they form an expectation to move (see also Crowder, 2001; Sheeran, 2002). A desire to move may not turn into an intention to move if people believe that the constraints cannot be overcome (Gardner et al., 1985). Conversely, intentions do not necessarily entail a desire: they can be motivated by obligation or necessity rather than desire (Davis, 1984; McHugh, 1984). Intentions are also different from expectations, as the concept of expectations also reflects whether individuals think that the behaviour is likely to happen in the future (Sheeran, 2002). We use the term “intention” in this paper, even though our measurement of intentions is rather simple (see Section 4.3).

Anticipated life events are an important reason why people may intend to move. Life events may trigger an intention to move by creating or eliminating a demand for an independent housing unit, or by altering specific housing needs (Clark & Onaka, 1983; Rossi, 1955). In either case, intentions to move or to stay are based on current characteristics and expectations about these characteristics. If these expectations turn out to be incorrect due to unanticipated life events, people may change their initial intention to move or to stay in three ways.

First, unanticipated life events may cause an unexpected need to move among those who had not intended to move before the event took place. Depending on the urgency of moving, life events may trigger a move within a very short period of time. In particular, life events which imply a move are expected to trigger moves among those without an initial intention to move [e.g., union formation and union dissolution, which require at least one move by one of the (ex-)partners].

Second, life events may lead to the postponement or cancellation of the initial intention to move. This holds in particular for events that are expected to have a negative impact on the financial resources that people can spend (or are willing to spend) on a new home.

Third, life events may increase the urgency level of the initial intention to move, resulting in an extra stimulus to move within a short period of time. In particular, unanticipated life events that imply a move are expected to increase the need to move among those who had already intended to move before the event occurred.

#### **4.2.2 The role of specific life events in the intention–behaviour gap**

##### *The formation and break-up of unions*

Breaking up a co-residential union has a large impact on a person's well-being. Consequently, when the decision to break up has been made, at least one of the partners will generally move out as soon as possible. Not surprisingly, the decision to break up and the actual move out of the former joint home often occur in the same month [own calculations from the survey "Divorce in the Netherlands 1998" (Kalmijn et al., 2000)]. In most cases, one partner stays behind in the former joint home (Gram-Hanssen & Bech-Danielsen, 2008) but, in the years following the union dissolution, the remaining partner is also likely to move (Sullivan, 1986). Union dissolution is therefore expected to have a strong positive impact on the probability of moving in the same year as well as in the following year for those without an intention to move, and for those who had already intended to move for reasons other than household change.

The unanticipated event of becoming a widow(er) is also likely to trigger moves among those who had intended to stay because of an excess of space in the current home and preferences to live closer to children or other members of the social network (Feijten, 2005; Hooimeijer et al., 1986). Moreover, becoming a widow(er) has negative financial consequences (Zick & Smith, 1986) which may result in the need to move to a more affordable home. It should be noted, however, that in the Netherlands, this last effect is often counterbalanced by widow(er) pensions, benefits from life insurance (particularly for homeowners), or by a rise in housing benefits (for renters) (see also Feijten, 2005). For the same reasons as for those initially not intending to move, becoming a widow(er) might act as an additional stimulus to move for those who had been intending to change residence. However, there are also reasons why becoming a widow(er) might result in a cancellation of the initial intention to move. First, the need or desire to move might fade due to the unanticipated event. Second, the event is associated with a decline in the financial resources needed for a new home. This decline may conflict with the fact that many intended moves are associated with "upward-moves" which may thus require more financial resources.

The majority of current singles expect to live with a partner in the future, although many do not know when and with whom (Mulder & Wagner, 1998). When people decide to form a co-residential union at least one of the partners has to move in order to establish the new household, although it is not uncommon that both partners move to a new joint home (Steenhof & Harmsen, 2002). Because those who want to form a union have the possibility of pooling their resources, it might be easier for them to find a home than it is for stable singles. Newly emerging plans to form a co-residential union are expected to

trigger moves among people who previously had intended to stay. We also expect union formation to be likely to cause an extra stimulus to move for those who were already intending to move for reasons other than household change.

### *Childbirth*

Most people will have an idea of whether they desire (more) children in the (near) future; however, the timing of a pregnancy is often difficult to plan (Delbanco et al., 1997). Childbirth may change residential preferences: for example, by creating a desire for a larger home or a child-friendly neighbourhood. If the current housing situation does not match the altered preferences, a trigger to move may arise. Thus, childbirth is related to mobility with a simultaneous consideration of the adequacy of the current home (Pickles & Davies, 1991). We hypothesise that people living in a crowded home are particularly likely to move to a new home in response to or in anticipation of childbirth (compare Michielin & Mulder, 2008). This hypothesis pertains equally to those with and those without an initial intention to move.

### *Changes in the labour market situation*

Although a change of employer – an event that is difficult to foresee one year in advance – does not necessarily imply a move, empirical research has shown a clear connection between job changes and mobility behaviour (Clark & Withers, 1999). An unanticipated job change may trigger a move if the change of employer increases the commuting distance between residence and work, resulting in a need to move closer to the new workplace (Van Wissen & Bonnerman, 1991). In the Netherlands this triggering mechanism might be less pronounced than in other countries as geographical distances are generally smaller and, as Van Ham (2005) shows, the probability of job-related migration decreases as the number of jobs within reach of the residence increases. However, job change is still expected to trigger moves among those without an initial intention to move as well as among those already intending to move for reasons other than job change.

For the same reasons as job change, finding employment is expected to trigger a move among those who are unemployed and have no initial intention to change residence. We also expect positive effects for those already intending to move (for nonoccupational reasons). The transition out of unemployment may increase the financial resources that can be spent on housing, and may therefore have a positive impact on the probability of moving. It might take some time, however, before the transition out of unemployment triggers a move because

such transitions are partly transitions to temporary jobs (Bover & Gómez, 2004; De Graaf-Zijl et al., 2005).

Becoming unemployed is often difficult to foresee and, although this event does not necessarily imply a move, previous research has documented a positive relationship between job loss and the incidence of moving (Fischer & Malmberg, 2001). Becoming unemployed is likely to have negative financial consequences (especially noticeable in the long term) and may therefore create difficulty in meeting monthly living expenses, resulting in a need to move among those who did not have an initial intention to move. The event of becoming unemployed may also hamper moves among those initially intending to move due to the negative impact of the event on the financial resources needed for housing.

#### ***4.2.3 The influence of other characteristics***

Resources and restrictions also determine mobility behaviour. Income likely affects the extent to which people are able to move, since it partly determines the number of dwellings within financial reach (Mulder & Hooimeijer, 1999). A high income is likely to facilitate moves among those without and those with an initial mobility intention. A high level of education may also have a positive impact on the range of affordable homes, and thus the probability of moving, as it is an indicator of career prospects (Mulder & Hooimeijer, 1999). We have no reason to expect this effect to be different for those without than those with an intention to move. Homeownership is associated with strong financial ties to the current home (Helderman et al., 2004). It also takes more time and effort to sell a home than to cancel a tenancy. Homeowners are hypothesised to be less likely to move than renters, regardless of whether they have an initial intention to move.

Furthermore, housing market opportunities are expected to affect mobility behaviour. Both people with an initial intention to move and people without an initial intention to move are hypothesised to be less likely to move if they live (or search for a home) in the Randstad than in the national periphery, as the availability and affordability of owner-occupied dwellings is particularly problematic in the Randstad (Renes et al., 2006). Furthermore, the waiting lists for a social rental home are generally longer in the Randstad – especially in large cities such as Amsterdam and Utrecht (REA, 2006). A number of socio-demographic characteristics – age, gender, and migrant status – are known to play a role in the extent to which people move, and are therefore accounted for.

## 4.3 Data and methods

### 4.3.1 Data

For this study we use a data set in which the Housing Demand Survey (HDS) 2002 is enriched with register data of the longitudinal Satellite Spatial and Social Mobility of the Social Statistical Database (SSD) 1999–2005 of Statistics Netherlands (Bakker, 2002). The HDS is a large cross-sectional survey in the Netherlands of the population aged 18 years and over and not living in institutions. The survey provides detailed information about individual and households characteristics, mobility intentions, and the current housing situation. The interviews for the HDS 2002 were conducted between January 2002 and March 2003.

The HDS 2002 data were enriched with SSD data using a unique personal identification number. The SSD contains register data of all persons who have lived in the Netherlands at any time since 1995, and was used to monitor life events and moves of HDS respondents up to two years after the interview. The SSD data are available by month and sometimes by quarter (information related to the partnership status). Therefore, it is only possible to determine whether events occurred approximately within the first or second year after the time of the interview. For example, to derive partnership transitions in the first observation year for those interviewed at the beginning of February 2002, we analysed whether a transition took place in the period between January 2002 and January 2003.

Within the SSD we used data derived from registers on income tax and social security, and from the population register (Dutch acronym GBA). The population register contains some measurement error: people do not always (immediately) reregister after they have moved to another address. The magnitude of this error is unknown, but it is probably largest for young people (Harmsen & Israëls, 2003). Furthermore, there is some uncertainty about the partnership status of persons who share an address with another person without having a family relation with this other person (they are unmarried, they do not have a registered partnership, nor do they share the parenthood of a child). Because it is not registered in the GBA whether people live together as a couple or merely share a home, Statistics Netherlands assigns the partnership status by several allocation rules and stochastic imputation (Harmsen & Israëls, 2003). Although this implies that the partnership status according to the SSD may not correspond to the respondent's real partnership status, a comparison between SSD and HDS 2002 data showed that 95 per cent of those who are classified as a "partner in a cohabiting couple" in the SSD do indeed consider themselves as cohabiting (HDS data).

We selected respondents who lived in an independent dwelling. We excluded respondents expecting an involuntary move (for example, because of housing demolition), those who had already found a new home at the time of the interview, and those who died in the two years following the HDS interview. Furthermore, we excluded respondents with missing information concerning the registered address at any observation moment. Finally, we excluded those wishing to move abroad and those who actually emigrated because the SSD contains no information about people after they have left the Netherlands.

In the analyses we distinguish between respondents with an intention to move and those with no intention to move. The intentions were derived from the respondent's answer to the HDS question "Do you want to move within the next two years?" Respondents who gave a positive answer ("Possibly yes, maybe", "I would like to, but I cannot find anything", or "Most certainly yes") were coded as having an intention to move. This measurement is rather simple, but we believe it comes closer to the intention concept than to the desire or expectation concepts. Among those with an intention to move, we made an additional selection consisting of respondents whose intention to move did not stem from union dissolution, union formation, or job change (as unanticipated life events in particular are hypothesised to affect initial intentions to move). Because childbirth, as well as widowhood, are not included in the list of motives for moving in the HDS, the selection was further restricted to those not expecting a household change after the intended move has taken place. It is uncertain whether this restriction does indeed exclude all people who might intend to move because of childbirth, because not all these will expect a household change immediately after the move has taken place.

Obviously, there might be a time lag between the occurrence of the life events and a move. To be reasonably sure that the move is related to the life event, life events and mobility behaviour were studied within the same observation year. Depending on whether people move in anticipation of (or in response to) a life event, moves may also occur in the year before (or after) the year in which the event took place. In order to analyse such relations, the data were transformed into a person-year format (Yamaguchi, 1991). For those who moved in the second year and for censored respondents (those who did not move within two years after the moment of interview), the maximum of two person years were created. Our research sample includes 61,075 respondents (118,753 person years), among whom there were 48,597 respondents (95,990 person years) without an intention to move and 12,478 respondents (22,763 person years) with an intention to move. This last group contains 9,596

respondents (17,552 person years) who intended to move for reasons other than household or job change.

#### **4.3.2 Variables**

With the exception of the variables indicating moves and life events, all variables were derived from the HDS and refer to the situation at the moment of the HDS interview. Moves and life events were derived from the SSD and refer to transitions occurring in the first or second year after the time of the interview. The descriptive statistics of the dependent and independent variables are presented in Table 4.1.

The dependent variable is whether someone actually moved in a given year. A move was classified as a change in the registered address of the respondent; only first relocations were included.

The partnership-transition variable was coded as: stable single, stable couple, this year union formation, this year union dissolution, last year union dissolution; transition to widowhood, and unknown. To measure partnership transitions, we used information about the marital status and the registered address of the respondent. For those who were living with a partner at one of the observation moments, we also used information about the personal identification number of the partner(s) and about the registered address(es) of the partner(s). The measurement of partnership transitions is somewhat problematic, as the partnership status for those sharing an address with other (nonrelated) people was derived separately for each SSD year (see previous section). Consequently, there is a chance of an incorrect assignment of partnership status (and thus event). To reduce the effect of misclassifications, “union formation” was assigned only if the respondent and the new partner were registered at different addresses at the beginning of the observation year. Similarly, “union dissolution” was assigned only if the respondent and the former partner were registered at different addresses at the end of the year. The category “union dissolution” also includes those living with a different partner at the end of the observation year. Those who were widowed in the year of observation or the year before were assigned to the category “transition to widowhood”. We did not have information about widowhood among cohabiting couples or among those in registered partnerships. Consequently, cohabiting persons who became widowed (likely a small number of respondents) were mistakenly assigned to the category “union dissolution”. The immediate effect of a partnership transition was given priority: if a respondent experienced union dissolution in the first year and union formation in the second year, the category “this year union formation” was assigned to the second year (rather than “last year union dissolution”).

**Table 4.1** Descriptive statistics of dependent and independent variables (based on person-years)

Categorical variables	All person-years		No intention to move		Intention to move		Intention to move (no event anticipated)	
	N	%	N	%	N	%	N	%
<b>Moving behaviour (dependent variable)</b>								
did not move	111419	93.8	92799	96.7	18620	81.8	14468	82.4
moved	7334	6.2	3191	3.3	4143	18.2	3084	17.6
<b>Partnership status</b>								
stable single	37030	31.2	28912	30.1	8118	35.7	5978	34.1
stable family or couple	77107	64.9	64094	66.8	13013	57.2	10560	60.2
this year cohabitation	1677	1.4	968	1.0	709	3.1	348	2.0
this year union dissolution	1492	1.3	968	1.0	524	2.3	370	2.1
last year union dissolution	326	0.3	218	0.2	108	0.5	80	0.5
transition to widowhood	574	0.5	483	0.5	91	0.4	82	0.5
unknown	547	0.5	347	0.4	200	0.9	134	0.8
<b>Transitions in labour market status</b>								
stable employed	51788	43.6	41644	43.4	10144	44.6	7565	43.1
job change	12100	10.2	9057	9.4	3043	13.4	2175	12.4
transition to unemployment	1305	1.1	871	0.9	434	1.9	318	1.8
transition to employment	751	0.6	514	0.5	237	1.0	163	0.9
pensioner	25699	21.6	22800	23.8	2899	12.7	2607	14.9
stable benefit receiver	10379	8.7	7884	8.2	2495	11.0	2095	11.9
stable inactive	7709	6.5	6554	6.8	1155	5.1	919	5.2
other	9022	7.6	6666	6.9	2356	10.4	1710	9.7
<b>Childbirth</b>								
no birth	111338	93.8	90498	94.3	20840	91.6	16442	93.7
birth	7415	6.2	5492	5.7	1923	8.4	1110	6.3
<b>Crowding</b>								
crowded	17197	14.5	12609	13.1	4588	20.2	3717	21.2
neutral	34808	29.3	28481	29.7	6327	27.8	4734	27.0
spacious	66748	56.2	54900	57.2	11848	52.0	9101	51.9
<b>Migrant status</b>								
native Dutch	101094	85.1	83208	86.7	17886	78.6	13695	78.0
Western immigrant	9290	7.8	7290	7.6	2000	8.8	1541	8.8
non-Western immigrant	8369	7.0	5492	5.7	2877	12.6	2316	13.2
<b>Gender</b>								
male	54131	45.6	43470	45.3	10661	46.8	8097	46.1
female	64622	54.4	52520	54.7	12102	53.2	9455	53.9
<b>Current tenure</b>								
homeowner	68248	57.5	59050	61.5	9198	40.4	6889	39.2
renter	50505	42.5	36940	38.5	13565	59.6	10663	60.8

Household income								
lowest quartile	29637	25.0	23336	24.3	6301	27.7	4781	27.2
middle-low quartile	29694	25.0	23469	24.4	6225	27.3	4733	27.0
middle-high quartile	29709	25.0	24563	25.6	5146	22.6	4077	23.2
highest quartile	29713	25.0	24622	25.7	5091	22.4	3961	22.6
Educational level								
up to lower secondary	52693	44.4	44002	45.8	8691	38.2	7159	40.8
higher secondary or medium vocational	34924	29.4	27759	28.9	7165	31.5	5378	30.6
higher vocational	22185	18.7	17519	18.3	4666	20.5	3424	19.5
university	8297	7.0	6243	6.5	2054	9.0	1432	8.2
other	654	0.6	467	0.5	187	0.8	159	0.9
Location								
Randstad	49450	41.6	38754	40.4	10696	47.0	8347	47.6
intermediate zone	37414	31.5	30777	32.1	6637	29.2	5080	28.9
national periphery	31889	26.9	26459	27.6	5430	23.9	4125	23.5
Continuous variables	Mean	<i>SD</i>	Mean	<i>SD</i>	Mean	<i>SD</i>	Mean	<i>SD</i>
Age	48.1	16.1	49.6	15.9	41.6	15.3	43.0	15.6

For childbirth we used information about the birth of the first, second, and third child of the respondent. We constructed a dichotomous variable indicating whether or not the respondent experienced childbirth in the two years following the interview.

Transitions in labour market status were measured using information about the main source of personal income and information about the identification number of the company. Eight categories were distinguished: stable employed, change of employer, transition to unemployment, transition to employment, stable benefit received, pensioner, inactive person, and other. People who were employed both at the beginning and end of the observation year (in these cases, the largest proportion of personal income originates from work as an employee or as a self-employed person) and who did not change employers, were classified as “stable employed”. Those who changed employers in the observation year or the preceding year (defined as a change in the identification number of the place of employment) were classified as “change of employer”. This last category also includes short-lasting transitions to unemployment: those who lost their job but found a new job within the same observation year. “Transition to unemployment” represents a transition from being employed to unemployment (in which the largest proportion of personal income originates from unemployment benefits or social security payments) in the observation year or last year, and vice versa for “transition to employment”. The largest proportion of personal income of “stable benefit receivers” originates from benefits related to unemployment, disability, or social security. The category

“other” consists, among others, of people receiving student grants, and people who became inactive without receiving a benefit, such as women who quitted their jobs after the birth of a child. Changes during the observation year were given priority.

Household income was measured in quartiles, based on the household income of all respondents in our selection. In accordance with the standard definition of Statistics Netherlands, migrant status was based on the country of birth of the individual's parents. Those with both parents born in the Netherlands are considered to be native Dutch. Those who have at least one parent born abroad are considered to be of immigrant origin. Note that this implies that some who immigrated are thus not considered to be of immigrant origin, whereas “immigrants” also include second-generation immigrants. Countries of origin situated in Europe (excluding Turkey), North America, Oceania, Japan, or Indonesia lead to a “Western immigrant” status, whereas countries of origin situated in Africa, South America or Latin America, or in Asia lead to a “non-Western immigrant” status (Aalders, 2001). The geographic location was categorised into the Randstad (the most densely populated region in the Netherlands), the surrounding intermediate zone, and the periphery of the Netherlands [Figure 4.1; for more information about the classification, see De Groot et al. (2011)]. For those with an intention to move, the geographic location represents the search location. Those without an initial intention to move were assigned to the region in which their current place of residence was located. Because most people move only short distances (Clark & Dieleman, 1996), this is also the most likely search location if they do decide to change residence.

### **4.3.3 Method**

We start with a descriptive analysis in which the connection between life events and mobility behaviour was investigated for people without and for people with an initial intention to move. For this second group, we also describe the extent to which union formation and union dissolution were (un)anticipated at the moment of interview.

Next, we perform multivariate analyses of mobility behaviour. We employ logistic regression models of person years; the models estimate the effect of life events and other independent variables on the annual probability of moving, given that one has not yet moved. We estimate separate logistic regression models for all respondents, for those without intentions to move, and for those with intentions to move. Among this third group, an additional logistic regression model is estimated in which people who intended to move for union formation, union dissolution, or job change are excluded. We test whether the

logistic regression coefficients in the models for those without and those with an intention to move are significantly different by running a Chow test [also known as a “seemingly unrelated estimation” (Chow, 1960; Weesie, 1999)]. In the discussion of the results, we focus mainly on the differences between people without an initial intention to move and those whose initial intention to move did not stem from a household or job change.



**Figure 4.1** Macro-zoning of regions in the Netherlands into Randstad, intermediate zone, and national periphery, 2002

## 4.4 Results

### 4.4.1 Descriptive analysis

Of all people with a stated intention to move in 2002, about 33 per cent in fact moved to a different address within two years. As expected, they relocated more often than people without a stated intention to move (6 per cent).

Table 4.2 gives an indication of the extent to which life events in the household and occupational career were accompanied by a move in the same year, or (depending on the hypothesised effect) in the year before or the year after. In particular, the formation and dissolution of unions are strongly connected with mobility behaviour. Among those initially intending to move who entered a co-residential union, about 65 per cent moved in the same year. An additional analysis (not presented) shows that the event of union formation was often unanticipated: of those who started living together, only 35 per cent reported intending to move for union formation. For people not intending to move at the time of the survey, the incidence of moves among those who experi-

**Table 4.2** Frequencies of life events and the accompanying percentage of moves among people with/without an initial intention to move, and the share of moves made by people without an initial intention to move by life event, 2002–2005

	No intention to move		Intention to move		Share of unforeseen moves (%)
	Occurrence of event (N)	% moved	Occurrence of event (N)	% moved	
Changes in the household career					
union formation	968	41	709	65	47
union dissolution	709	63	393	74	61
transition to widowhood	323	4	62	21	52
childbirth	2744	8	944	35	38
Changes in the occupational career					
job change	5539	9	1929	36	42
transition to unemployment	569	10	280	28	43
transition to employment	348	8	164	22	44
N (all respondents)	48597	6	12478	33	43

enced union formation is rather low; a considerable portion of this group might have intended to form a union with the expectation that their partner would move in with them.

Of those with an initial intention to move who experienced union dissolution, about 74 per cent moved in the same year or in the following year. An additional analysis indicates that the break up of the union was often unanticipated at the moment of interview. Of those intending to move and experiencing union dissolution, less than 5 per cent reported union dissolution as the main reason for their intention to move. Among people without an intention to move, union dissolution was accompanied by a move in 63 per cent of cases. An additional analysis shows that union dissolution is an important reason why people move despite an initial intention to stay in the current home: about 14 per cent of those moving without an initial intention to do so experienced a union dissolution. Interestingly, more than 60 per cent of the moves for union dissolution are made by people without an initial intention to move (Table 4.2). Conversely, moves made in connection with other life events can mainly be attributed to people with an initial intention to move.

Life events in the household and labour market careers which do not imply a move were coupled with moves to a lesser extent. Such life events were accompanied by a move to a lesser extent among those initially intending to stay in the current home than among those who intended to change residence.

#### **4.4.2 Multivariate results**

##### *The impact of life events on the probability of moving*

The logistic regression models estimating the probability of moving for people with and without an initial intention to move are presented in Table 4.3. Strikingly, the explanatory model provides a better explanation of the mobility behaviour of those who had initially intended to stay in the current home than it does for those initially intending to move: the overall explanatory power of the model (indicated by the Nagelkerke  $R^2$ ) is considerably lower in the model for this second group.

The logistic regression model for those without an initial intention to move reveals that, in particular, changes in partnership status trigger individuals to move. Union formation increases the probability of moving both for people without an initial intention to move and for people who intended to move for other reasons than household change; the Chow test reveals, however, that the effect is significantly stronger for those without an initial intention to move.

People who experienced union dissolution are estimated to be 16 times (exp 2.790) more likely to move in the year of union dissolution than are stable singles. This outcome is not surprising, as moves are instrumental to these household events. The probability of moving is also significantly higher in the year after the union dissolution. Union dissolution also causes an extra stimulus to move among those who had already intended to move for reasons other than household change. However, the Chow test indicates that the event has a less strong immediate effect on the likelihood of moving for those who had initially intended to move than for those who had not.

Our hypothesis that becoming widowed is likely to trigger moves among those without an initial intention to move is not supported: the sign for becoming a widow(er) is negative and lacks significance. Becoming a widow(er) has a positive (but not significant) effect on the probability of moving for those initially intending to move for other reasons than household change, although a negative effect is found for all people with an intention to move. The impact of becoming widowed on subsequent mobility behaviour is perhaps limited because the income decline might be offset by, for instance, a widow(er) pension.

An interesting finding is that stable couples were less likely to move than are stable singles if they had intended to stay, whereas they were more likely to move if they initially intended to change residence. Although stable couples are less likely to move than are stable singles (see column 1 in Table 4.3), our results suggest that this does not hold for those with an initial intention to move.

**Table 4.3** Logistic regression model of moving, with standard errors shown in parentheses

	All person-years	No intention to move	Intention to move	Intention to move (no event anticipated)
Transition in partnership status (ref: stable single)				
stable couple or family	-0.315*** (0.037)	-0.690*** (0.057)	0.115**,+ (0.051)	0.166***,+ (0.059)
this year union formation	2.571*** (0.058)	2.722*** (0.079)	2.343***,+ (0.087)	2.153***,+ (0.120)
this year union dissolution	2.382*** (0.062)	2.790*** (0.080)	1.835***,+ (0.098)	1.748***,+ (0.118)
last year union dissolution	0.655*** (0.160)	0.773*** (0.229)	0.567** (0.229)	0.199 (0.294)
this year or last year widowhood	0.042 (0.201)	-0.110 (0.276)	-0.017 (0.306)	0.101 (0.310)
unknown	0.703*** (0.128)	0.816*** (0.186)	0.558*** (0.176)	0.316 (0.233)
Transition in labour market status (ref: stable employed)				
job change	0.232*** (0.039)	0.326*** (0.060)	0.112**,+ (0.054)	0.087+ (0.063)
transition to unemployment	0.156 (0.104)	0.385** (0.158)	-0.167+ (0.138)	-0.144+ (0.160)
transition to employment	-0.249* (0.146)	-0.167 (0.221)	-0.340* (0.196)	-0.361 (0.242)
pensioner	-0.060 (0.076)	-0.203* (0.106)	-0.082 (0.118)	-0.051 (0.127)
stable benefit receiver	0.083 (0.053)	0.072 (0.081)	-0.035 (0.072)	-0.056 (0.081)
stable inactive	-0.031 (0.067)	0.153 (0.099)	-0.137+ (0.095)	-0.177*,+ (0.107)
other	0.148*** (0.046)	0.304*** (0.069)	-0.021+ (0.063)	-0.039+ (0.074)
Childbirth (ref: no birth)	0.801*** (0.100)	0.433** (0.206)	0.726*** (0.121)	0.731*** (0.142)
Crowding (ref: crowded)				
neutral	-0.132*** (0.042)	-0.070 (0.066)	-0.050 (0.056)	-0.042 (0.063)
spacious	-0.257*** (0.040)	-0.156** (0.064)	-0.204*** (0.055)	-0.165*** (0.062)
Interaction childbirth * crowding				
childbirth, neutral	-0.580*** (0.122)	-0.265 (0.235)	-0.498*** (0.153)	-0.469** (0.185)
childbirth, spacious	-0.804*** (0.121)	-0.351 (0.229)	-0.711*** (0.155)	-0.651*** (0.192)
Age	-0.146*** (0.005)	-0.153*** (0.007)	-0.111***,+ (0.008)	-0.112***,+ (0.009)
Age <sup>2</sup>	0.001*** (0.000)	0.001*** (0.000)	0.001***,+ (0.000)	0.001***,+ (0.000)

Migrant status (ref: native Dutch)				
Western immigrant	-0.053 (0.049)	-0.070 (0.075)	-0.100 (0.066)	-0.091 (0.076)
non-Western immigrant	0.076 (0.047)	0.309*** (0.071)	-0.221***+ (0.062)	-0.240***+ (0.071)
Female (ref: male)	-0.054** (0.027)	-0.087** (0.040)	0.013 (0.037)	0.040+ (0.043)
Income (ref: lowest quartile)				
middle-low quartile	0.044 (0.039)	0.073 (0.058)	-0.042 (0.054)	-0.025 (0.063)
middle-high quartile	0.218*** (0.044)	0.357*** (0.067)	0.101*+ (0.061)	0.139***+ (0.070)
highest quartile	0.400*** (0.050)	0.578*** (0.074)	0.151***+ (0.069)	0.152*+ (0.079)
Educational level (ref: up to lower secondary)				
higher secondary or medium vocational	0.009 (0.033)	-0.079 (0.049)	0.020 (0.048)	0.034 (0.054)
higher vocational	0.143*** (0.039)	-0.094 (0.060)	0.121***+ (0.054)	0.129***+ (0.062)
university	0.179*** (0.054)	-0.143 (0.087)	0.125***+ (0.072)	0.188***+ (0.084)
unknown	0.073 (0.155)	0.086 (0.231)	0.036 (0.212)	-0.083 (0.243)
Homeowner (ref: renter)	-0.573*** (0.031)	-0.369*** (0.047)	-0.164***+ (0.042)	-0.184***+ (0.049)
Location (ref: national periphery)				
Randstad	-0.101*** (0.033)	-0.107** (0.048)	-0.159*** (0.046)	-0.175*** (0.053)
intermediate zone	-0.124*** (0.035)	-0.158*** (0.052)	-0.116** (0.049)	-0.115** (0.056)
Constant	1.220*** (0.120)	0.667*** (0.179)	0.908*** (0.179)	0.900*** (0.206)
Initial -2 Log Likelihood	27524	13999	10799	8159
Model -2 log Likelihood	23640	11712	9949	7650
Improvement ( $Chi^2$ )	3885***; $df = 33$	2287***; $df = 33$	851***; $df = 33$	509***; $df = 33$
Nagelkerke $R^2$	0.141	0.163	0.079	0.062
$N$ (person-years)	118753	95990	22763	17552

\* =  $p < .10$ , \*\* =  $p < .05$ , \*\*\* =  $p < .01$ ; + = coefficient differs significantly ( $p < .05$ ) between those with and those without an initial intention to move (result of Chow test)

In line with our hypothesis, the combined main effects and interaction effect show that childbirth act as a trigger for moving for households residing in a crowded home. This holds for those who had intended to stay as well as for those who had intended to move for reasons other than a household change. Among those living in a spacious home, those who had a child are about as likely to move as those who did not.

Job change has a positive impact on the probability of moving, particularly for those who had initially intended to stay in the current home. In line with Kan's (1999) findings, among those with no initial intention to move, job changers were significantly more likely to move than were the stable employed. In contrast with Goetgeluk (1997) and Kan (1999), we find a positive (but not significant) effect of job change on the probability of moving for those who had intended to move for other reasons than job change.

As expected, becoming unemployed prompted moves among those without an initial intention to move, while it had a negative (but nonsignificant) effect on the probability of moving for those who had already intended to move for reasons other than job changes. Becoming unemployed had a positive but nonsignificant effect on the probability of moving if we take all people into account (Table 4.3, column 1). Our results indicate, however, that the direction of this effect depends on whether people had an initial intention to move prior to the transition to unemployment: it is negative for those who were intending to move but positive for those who were not intending to move.

In contrast with our expectation, our multivariate results show negative, and often nonsignificant, effects of finding a job among the unemployed on the probability of moving (irrespective of the initial intention to move or to stay). This could be an indication that it may take some time before the transition out of unemployment triggers people to move, as some such transitions may be transitions to temporary jobs.

Furthermore, among those initially not intending to move, pensioners moved significantly less often than did stable employed people, while being a stable benefit receiver or a stable inactive person had a positive (but not significant) effect on the probability of moving. Among those initially intending to move, stable pensioners, benefit receivers, and inactive persons do not move significantly less often than did stable employed.

#### *Influence of other characteristics*

Financial resources play a role in actual mobility behaviour. Having a high income is particularly relevant for those with no initial intention to change residence, as it facilitates "unforeseen" moves. Surprisingly, only among those with an initial intention to move were the highly educated found to be significantly more likely to move than the less educated.

Our results reveal that the probability of moving is higher among renters than among homeowners and that, as hypothesised, the probability of moving is lower in the Randstad and the intermediate zone than in the national periphery.

In addition, compared with native Dutch, people with a non-Western background were less likely to move if they had an initial intention to move but, perversely, they are more likely to move if they initially had no intention to do so. Crowder (2001) found a similar result for blacks in the United States, and suggested that this might indicate that the mobility behaviour of nonwhites is less determined by their own intentions to move and is more subject to external forces.

#### **4.5 Conclusion and discussion**

In this paper we have addressed the impact of life events on the discrepancy between stated intentions to move or to stay in the current home and actual mobility behaviour. We have argued that unanticipated life events occurring after someone had reported whether he or she intended to move or not may change the initial mobility intention in three ways. As expected, union formation, union dissolution, childbirth, job change, and becoming unemployed tended to trigger moves among people who initially had no intention to change residence. An interesting finding is that the majority of the move following union dissolution can be attributed to people who initially had no intention to move. The formation and dissolution of co-residential unions, as well as childbirth, tend to trigger moves among those who already intended to move for reasons other than household or job change. This suggests that some life events increase the urgency level of previously reported intentions to move, resulting in an extra stimulus to move within a short period of time. Our hypothesis that some life events are likely to result in postponement or cancellation of the initial intention to move was not entirely confirmed. No significant effects were found of becoming unemployed or becoming widowed on the probability of moving among those initially intending to move, although the sign of the effect of becoming unemployed was in the expected direction.

It was found that the effect of becoming unemployed on the probability of moving is significantly different for people with and without an initial intention to move: whereas a negative effect was found for those already intending to move, a positive effect was found for those who had intended to stay in the current home. We also found evidence that the extent to which people behave according to their initial intention strongly depends on background characteristics. Stable couples act more in accordance with their stated intentions than do stable singles. A high income facilitates the realisation of intentions to move as well as “unforeseen” moves; so it seems that those with a higher income have more opportunities to move within a short period of time after the formation of an intention to move.

We see this as an indication that the extent to which those with a lower income realise their mobility intention is partly shaped by external factors. Lower income households often rely on the social rental sector, and are thus subjected to allocation rules and waiting lists for rental dwellings. The finding that the less affluent are less likely to realise their intention to move suggests that constraints on their moving behaviour contribute to the persistence of the spatial concentration of lower income households. Furthermore, even after income differences have been accounted for, non-Western immigrants were found to be less likely to realise their intention to move, whereas they were more likely to move than natives when they had no initial intention to change residence. This finding suggests that the mobility behaviour of non-Western immigrants is indeed more dependent on external forces than is that of natives (cf. Crowder, 2001).

Further research is needed in order to understand why non-Western immigrants act less in accordance to their initial mobility intentions than do the native Dutch. Further research is also needed to find out to what extent changes in housing market opportunities and economic circumstances hamper or stimulate the realisation of initial intentions to move, as not only (changes in) individual characteristics, but also changes at the macro level, may result in a discrepancy between stated mobility intentions and actual mobility behaviour.

There are a few limitations to our study that should be addressed. One drawback is that we are not completely certain whether life events were indeed unanticipated at the moment of interview. This especially holds for those without an initial intention to move, because the HDS contains no information about expected household changes for those who did not report an intention to move. Furthermore, we do not have information about the precise date of the events. Consequently, the results may be biased, as a connection between the event and the move might be absent if in fact people moved a few months before the event. Unfortunately, it was not possible to ameliorate this deficiency. Moreover, we did not have information about transitions in the occupational career of partners of the respondents. Unanticipated changes in the labour market career of the partner may, of course, also affect the initial mobility intention stated by the respondent; this is likely to hold particularly for those respondents whose partner is the main breadwinner in the household.

Despite the limitations, this paper contributes to our knowledge of how life events may hamper or stimulate people to change residence conditional on prior stated intentions to move or to stay. Life events do indeed play a role in the discrepancy between mobility intentions and actual mobility behaviour. Moreover, the impact of certain life events (as well as other characteristics) on

subsequent mobility behaviour is not necessarily the same for people who intended to move and for those who did not; they may differ between people who are in various stages of the mobility decision-making process. Our results confirm that it is worthwhile to take initial intentions to move or to stay into account to gain insight into the factors that influence actual mobility behaviour.

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# 5 Longitudinal analysis of the formation and realisation of preferences to move into homeownership in the Netherlands

*This chapter is co-authored by Dorien Manting and Clara H. Mulder and has been submitted to an international peer-reviewed journal*

*ABSTRACT This study investigates how life course characteristics and housing market circumstances affect the formation and realisation of preferences to move into homeownership. Using a data set from the Netherlands in which data from three cross-sectional housing surveys are enriched with longitudinal register data for the period 1998–2008, we follow aspiring homeowners regarding their actual residential behaviour. We find that only 31 per cent of the aspiring homeowners became homeowners within two years, approximately 13 per cent moved to rental homes, and the vast majority did not move at all. Insufficient socioeconomic resources and a high house price-to-rent ratio hamper the realisation of preferences to move into homeownership. However, these hampering factors are at least as important as the extent to which individuals prefer to move into homeownership. This last finding suggests that housing tenure preferences cannot be viewed as “pure” preferences.*

## 5.1 Introduction

A large body of empirical research has examined the choice between renting and owning a home. In particular, the transition to homeownership has received attention from demographers, economists, sociologists, and human geographers. Moving into homeownership is an important event in the life of individuals (Withers, 1998) and has consequences for the housing market and society at large (e.g., Megbolugbe & Linneman, 1993; Mulder & Hooimeijer, 1999).

The transition to homeownership can be divided into two stages: the formation of the preference to move into homeownership and the subsequent potential realisation of this preference. Both stages must be understood in terms of life course characteristics and the regional housing market circumstances that may constrain individual residential behaviour (cf. Dieleman & Everaers, 1994; Lee & Myers, 2003). Individuals adjust their preference to move into homeownership to what they perceive to be possible given their income and the housing market circumstances (Forrest et al., 1990; McLaverty & Yip, 1993). These factors may also affect the realisation of preferences to move into homeownership. This is particularly true for contextual factors, such as housing market circumstances, because the perception of constraints at the macro level is likely to be less accurate than the perception of the barriers stemming from individuals' personal circumstances.

Studying the formation and realisation of the preference to move into homeownership among the same individuals makes it possible to unravel at which stage and to what extent factors may hamper or stimulate the transition to homeownership. Moreover, this study reveals whether certain categories of aspiring homeowners find it more difficult to realise their preference to move into homeownership than others do. Given the importance of homeownership and the fact that in many developed countries, such as the United States and the Netherlands, housing policy is aimed at encouraging homeownership (Aarland & Nordvik, 2009; Megbolugbe & Linneman, 1993), it is important to understand why some aspiring homeowners achieve homeownership and others do not. Until now, however, this issue has remained unexplored because previous research tends to focus on actual tenure outcomes (for example, see Aarland & Nordvik, 2009; Di Salvo & Ermisch, 1997; Helderma et al., 2004; Ioannides & Kan, 1996; Withers, 1998).

This paper addresses the following question: *To what extent do life course characteristics and contextual circumstances influence the formation and realisation of preferences to move into homeownership, and in which of these two stages do the various factors have the largest impact?* Although we study the outcome of the

tenure preference formation process rather than the process *per se*, we use the term “formation” to maintain a clear distinction between the two stages of the transition to homeownership [see Crowder (2001) for a similar approach to the formation of mobility expectations].

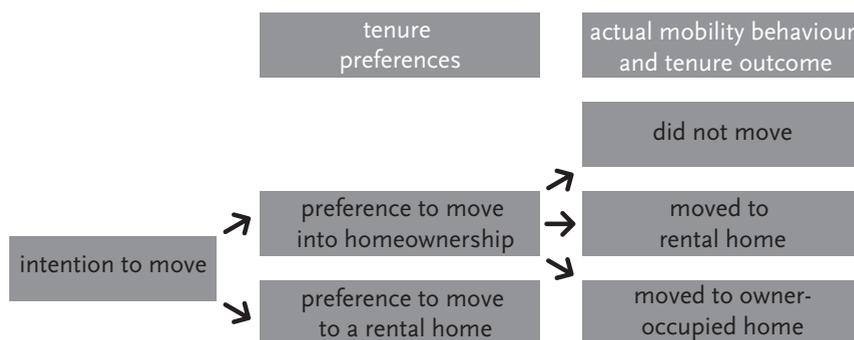
We use a data set in which survey data from the Housing Demand Surveys (HDS) 1998 and 2002 and the Housing Research Netherlands (HRN) 2006 survey are enriched with individual longitudinal register data from the Social Statistical Database (SSD) of Statistics Netherlands (Bakker, 2002). Whereas the surveys provide information about stated mobility intentions and tenure preferences, the register data provide information about actual mobility behaviour and actual tenure choice. We employ a binary logistic regression analysis of the formation of preferences to move into homeownership and a multinomial logistic regression analysis of the actual residential behaviour of aspiring homeowners, in which we distinguish between moving to own, moving to rent, and remaining in the current home. Seemingly unrelated estimation is used to investigate whether any differences in the estimated effects for the formation and realisation of preferences to move into homeownership are statistically significant.

## **5.2 Theoretical framework**

### ***5.2.1 The transition to homeownership in two stages***

In line with the thought that the decision to rent or buy may arise from different factors than those underlying the decision to move (Mulder, 1993; Spader & Guercia, 2008), it is assumed that individuals form a preference for a rental or an owner-occupied home after they have developed an intention to move (Figure 5.1). Preferences for moving into homeownership are frequently associated with housing reasons for moving (Mulder & Hooimeijer, 1999). Financial considerations, in the Netherlands, most notably tax advantages, are also an important reason why individuals may prefer to move into homeownership (Elsinga, 1995).

Although it is sometimes assumed that preferences are unconstrained (Crowder, 2001; Desbarats, 1983) – that is, they are not adjusted for factors that may impose severe restrictions and constraints on the extent to which the preference can be realised –, several studies have suggested that tenure preferences are adjusted, at least to a certain extent, to individual and contextual factors that may hamper moving into homeownership (e.g., Forrest et al., 1990; McLaverty & Yip, 1993). The fewer resources individuals believe they possess and the more hindrances they anticipate, the smaller their perceived control over behaviour (Ajzen, 1991). If individuals have a low perceived behavioural control, a



**Figure 5.1** Analytical framework

positive attitude towards homeownership may not crystallise into a manifest preference to move into homeownership. In the social psychology literature, this phenomenon is known as “adaptive preference formation”. To reduce cognitive dissonance (uncomfortable feelings caused by preferring something that is difficult to attain) individuals may adjust their preferences in advance (Elster, 1983).

After individuals have adjusted their tenure preferences to the perceived restrictions and constraints, these factors may still have an independent effect on the realisation of preferences to move into homeownership. First, it is unlikely that individuals perfectly adjust their tenure preferences in advance. Even if individuals believe that it is difficult to move into homeownership, they may still prefer to move into homeownership, which might indicate the adoption of “wishful thinking” (Elster, 1983). Second, the hampering factors may be more severe than anticipated (Desbarats, 1983). This is particularly true for contextual factors that are beyond a person’s control; the perception of constraints at the macro level is likely less accurate than the perception of the barriers stemming from individuals’ personal circumstances.

If aspiring homeowners have difficulties realising their preference to move into homeownership, they may choose to either remain in their current homes or to move to rental homes (Figure 5.1). The latter is often referred to as substitution: the acceptance of a home that may fit some, but not all, of one’s initial preferences (Goetgeluk, 1997). The choice between the two alternatives is presumably dependent on personal circumstances. Personal circumstances, such as the stage in the various life course careers, determine both the possibility of postponing the intended move and the willingness to adjust the initial tenure preference. Note that moving to a rental home is only one of the many possible

adjustments that aspiring homeowners may make; adjustments regarding the quality of the home or the price segment are also likely to occur.

### ***5.2.2 The role of life course characteristics***

A less favourable socioeconomic position, indicated by a low income, no job, or a low education level, may indicate certain institutional barriers that are difficult to bridge. For instance, being unemployed makes it nearly impossible to obtain a mortgage because this state coincides with a low income and unfavourable income prospects (Blaauboer, 2010). If individuals consider such hampering factors when forming a tenure preference, those in a less favourable socioeconomic position will prefer to move into homeownership less frequently than those in a more favourable socioeconomic position. Individuals in a less favourable socioeconomic position may also be less willing to borrow money to buy a home because of the risks involved in the long-term financial commitment of homeownership (see also Helderma et al., 2004). In the Netherlands, there are two other reasons why individuals with high incomes are especially likely to prefer homeownership. First, individuals with high incomes are precluded from entering large parts of the rental housing sector because this sector is dominated by social housing. Second, the benefits of mortgage interest deductibility on taxable income are largest for individuals with high incomes due to their higher marginal tax rate (Haffner & Boumeester, 2010). Financial resources are also expected to be important in the extent to which aspiring homeowners realise their preference to move into homeownership. Socioeconomic resources make it easier to obtain a mortgage and expand the range of dwellings that are within the financial reach of the aspiring homeowner (Mulder & Hooimeijer, 1999). Therefore, positive associations are hypothesised between income, level of education (an indicator of income potential), full-time employment and the realisation of preferences to move into homeownership.

The transition to homeownership is often undertaken when individuals have reached a certain degree of stability in life (Mulder & Hooimeijer, 1995; Withers, 1998). Both the household situation and age are important indicators of the degree of life course stability. Couples and families and, to a lesser extent, individuals whose intention to move is triggered by union formation are therefore expected to be more likely to prefer to move into homeownership than singles, whose household situation is generally less stable (Richards et al., 1987). Couples are also expected to have less difficulty realising their preference to move into homeownership than singles because mortgage lenders may consider it risky to provide a mortgage based solely on one income.

Whereas instability and a smaller amount of savings mark the first years of adulthood, the life stage of individuals in their late twenties and thirties is associated with a higher degree of stability and more savings (Mulder, 1993; Myers et al., 2005). Therefore, an increased likelihood of preferring to move into homeownership is expected around these years. Around the age of 50, the willingness to move into homeownership may decrease due to the shorter time remaining to make the down payment on a mortgage loan. Furthermore, insufficient savings may prevent young aspiring homeowners from actually moving to an owner-occupied home. If they have difficulty moving to an owner-occupied home, young aspiring homeowners are expected to be more willing to move to rental homes than their older counterparts. Young adults are often still at the beginning of their housing careers, which may make their preference for homeownership less pronounced.

Although owner-occupied homes are especially popular among families with children (Helderma et al., 2004), the transition to homeownership is often undertaken in anticipation of childbirth, thus, before a child is born (Feijten & Mulder, 2002; Mulder & Manting, 1994). After the birth of a child, the costs of rearing children may compete with the costs of homeownership (Courceau & Lelièvre, 1992; Kendig, 1984), which may make families with children less likely to form and realise a preference to move into homeownership.

Furthermore, many studies show that ethnic minority groups, such as African-Americans and Hispanics in the United States and non-Western migrants in the Netherlands, are less likely to become homeowners (for the United States, see Alba & Logan, 1992; Krivo, 1995; for the Netherlands, see Musterd & Van Kempen, 2009; Zorlu & Latten, 2009). Explanations are often sought in socio-economic differences, in cultural differences leading to distinct residential preferences, and in “exclusionary practices”, such as redlining, which may make it more difficult to obtain a mortgage loan in ethnic minority dominated neighbourhoods (Aalbers, 2007; Alba & Logan, 1992; Musterd & Van Kempen, 2009). An innovation of this study is that it allows for the investigation of whether non-Western migrants’ transition to homeownership is mainly hindered in the formation stage or in the realisation stage.

Finally, we account for the strength of the intention to move and the current housing situation (living in the parental home or in an independent rental home) because a strong intention to move and living in the parental home are known to increase the likelihood of realising an intention to move (De Groot, 2011).

### **5.2.3 The role of contextual circumstances**

In the Netherlands, housing market circumstances are shaped by a long-standing tradition of government intervention that affects the accessibility of social rental housing and the monthly housing costs involved with renting or owning a home. Whereas the rental housing sector is dominated by social housing with regulated rents, housing allowances, waiting lists, and allocation rules, the owner-occupied housing sector, which has grown into the largest housing market sector, is marked by tax savings in the form of full deductibility of paid mortgage interest on taxable income (Haffner & Boumeester, 2010; Mulder, 2004; Rouwendal, 2007). The tax savings are equal to the product of the gross interest payments and the marginal tax rate, which is 42 or 52 per cent for most Dutch taxpayers (Rouwendal, 2007). Although market forces determine housing prices (Rouwendal, 2007), the Dutch housing market is not a competitive market on the supply side; the housing supply barely responds to changes in housing prices (Andrews et al., 2011; Haffner & Boumeester, 2010), which may be attributable to the strict regulations governing spatial planning (Renes et al., 2006).

The ratio between the monthly user costs of owning relative to renting is particularly important for the transition to homeownership (Clark et al., 1994; Di Salvo & Ermisch, 1997; Himmelberg et al., 2005). The monthly user costs of owner-occupied housing, which mainly consist of the mortgage interest and down payment on the mortgage loan, indicate the costs that individuals have to bear when they move into homeownership (Renes et al., 2006). Households explicitly weigh the costs of owning against the costs of renting in their purchase decisions (Myers et al., 2005). Low costs of owning and high rent levels tend to create a favourable climate for preferences for homeownership (cf. Forrest et al., 1990). Conversely, when owning is expensive relative to renting, individuals are expected to be less likely to prefer to move into homeownership.

Housing market circumstances are especially important for the extent to which aspiring homeowners actually move into homeownership because it may be difficult to accurately perceive the contextual factors that are beyond an individuals' sphere of influence. If the costs of owning are high compared to the costs of renting, aspiring homeowners are expected to be less likely to move to an owner-occupied home and more likely to move to a rental home. This expectation is strengthened by the fact that high costs of owning relative to renting often accompany high housing prices. This is particularly true in the Netherlands, where the housing rents do not differ strongly over space due to strong rent regulations. Housing prices are an important component of the user costs of owner-occupied housing (Di Salvo & Ermisch, 1997) and are crucial for individuals' ability to move into homeownership (Clark et al., 1994). High

housing prices are known to discourage renters from becoming homeowners (Ermisch & Di Salvo, 1996; Ioannides & Kan, 1996).

The costs of owning compared to the costs of renting vary between regional housing markets, which is mainly attributable to spatial differences in housing prices (hence, the costs of owning). Individuals who prefer to move to a housing market region in which owning is expensive relative to renting are expected to be less likely to form and realise a preference to move into homeownership. Obviously, the assumption that individuals form their tenure preference *after* they have decided upon a preferred region may not always hold. Some individuals may adjust their location preferences to the area (e.g., the suburbs) that they believe offers more opportunities to realise their manifest preference to move into homeownership (see also Mulder, 1993). Although this may lead to a reversed causality between housing tenure preferences and location preferences (and subsequently to a biased house price-to-rent ratio coefficient), we do not consider this a major problem for our analysis. Because of factors such as emotional place attachment and location-specific capital that ties a person or household to a specific place (e.g., DaVanzo, 1981), people tend to move over short distances (Clark & Dieleman, 1996). To illustrate, in the Netherlands, about three-quarters of all moves are intra-municipal (Feijten & Visser, 2005). Preferences for a certain regional housing market are, therefore, presumably particularly influenced by the current residential location rather than by regional differences in housing market opportunities.

Volatility in housing prices may affect the decision to move into homeownership in various ways (see also Andrews et al., 2011). For instance, although housing price appreciations may trigger some individuals to move into homeownership for investment reasons, they may also prevent individuals, particularly renters and those with a low income, from becoming homeowners (Ermisch & Di Salvo, 1996; Follain, 1982; Ioannides & Kan, 1996). In the period under study, the average real housing price rose steeply, from 158,000 euro's in 1998 to 249,000 euro's in 2007. Because the development of the average household income did not keep pace with housing price appreciation, owner-occupied homes became less affordable over time. Whereas the average housing price in 1998 was approximately 5.4 times the average disposable annual household income of 23,900 euro's, this ratio gradually increased to 7.8 in 2006 (see also Haffner & Boumeester, 2010). Considering these developments, it is hypothesised that individuals were less likely to prefer to move into homeownership in 2002 and 2006 than in 1998. Because of a possible data issue, we do not formulate a hypothesis regarding the temporal effect on the realisation of preferences to move into homeownership. Although this issue does

not seem to affect the multivariate results per se, it does make it difficult to relate the changes in realisation to the temporal changes in housing market circumstances (for more information, see Section 5.3.2).

### **5.3 Data and methods**

#### **5.3.1 Data**

We used a pooled longitudinal data set in which survey data from the cross-sectional Housing Demand Surveys (HDS) 1998 and 2002 and its successor, the Housing Research Netherlands (HRN) survey 2006, were enriched with individual register data from the longitudinal Social Statistical Database (SSD) of Statistics Netherlands 1998–2008 (Bakker, 2002).

The housing surveys were conducted among the Netherlands population aged 18 and over who were not living in institutions. The surveys provide detailed information about sociodemographic, socioeconomic, and housing characteristics as well as mobility intentions. An intention to move was indicated by a positive answer (“Possibly yes, maybe”, “I would like to, but I cannot find anything” or “Most certainly yes”) to the survey question, “Do you want to move within the next two years?” For intended movers, the surveys also contained information regarding the preferred tenure and municipality. Based on information about the preferred municipality, we were able to derive the preferred regional housing market for approximately 80 per cent of those with an intention to move. The regional housing markets are based on the spatial level of the 40 COROP regions, which match with the NUTS 3 regions of the European Union classification of territorial units.

The survey data were enriched with individual longitudinal register data from the SSD with a unique personal identification number included in both data sources. The SSD encompasses the entire population of the Netherlands and was used to monitor moves (year-month format) and the accompanying housing tenure choices of the respondents for up to two years following the interview. It should be noted that the longitudinal data set refers to individuals and not households because only respondents were traced over time.

Data about the regional housing market situation in the year the survey was conducted were linked to individual respondents using information about the preferred regional housing market. To calculate the costs of owning relative to renting for each regional housing market, the data set was enriched with regional information on housing prices [Source: “WOX House Price Index”, ABF Valuation (2010)]. The data set was also enriched with regional data on rents in the non-liberalised part of the rental housing sector. Although researchers

sometimes struggle to calculate the costs of owning relative to renting due to the absence of regional data on local authority rents (for example, see Di Salvo & Ermisch, 1997), in the Netherlands, these data are readily available in the annually conducted “Rent Survey” of Statistics Netherlands. This panel survey covers approximately 12,000 rental dwellings, which is considered sufficient to draw conclusions at the COROP level (Statistics Netherlands, 2010). The housing prices and rents were corrected for inflation, with 2006 as the base year.

To analyse the formation of preferences for homeownership, we selected respondents who were not living in an owner-occupied home and who had an intention to move to an independent home at the time of interview ( $n = 28,633$ ). Because we were interested in the role of housing market circumstances in the transition to homeownership, we excluded respondents with missing information on the preferred place of residence ( $n = 6,280$ ). We also excluded respondents who did not state a preference for a particular tenure type ( $n = 2,353$ ) and a small number of HDS 1998 respondents with missing information on migrant status ( $n = 9$ ). After these selections, the research sample for the analysis of the formation of preferences to move into homeownership included 19,991 respondents. For our analyses of the realisation of preferences to move into homeownership, the research sample was further restricted to the respondents preferring to move to an owner-occupied home ( $n = 7,070$ ). We excluded respondents who had moved to homes with missing information about tenure status ( $n = 64$ ). A small number of respondents who had either died or left the country in the two years following the interview were also excluded ( $n = 84$ ). After this selection, our research sample for the analysis of the realisation of preferences to move into homeownership included 6,922 respondents.

### **5.3.2 Variables**

The majority of the variables were derived from the housing surveys, with the exception of the house price-to-rent ratio variable (which was derived from data provided by Statistics Netherlands and ABF Valuation/Kadaster) and the dependent variable indicating the actual residential behaviour of aspiring homeowners (which was derived from the SSD). With the exception of this last variable, all variables refer to the situation at the time of interview. The descriptive statistics of the dependent and independent variables used in the two multivariate analyses are presented in Table 5.1.

The first dependent variable refers to the formation of tenure preferences and indicates whether those intending to move within two years prefer to move to a rental home or an owner-occupied home. The tenure preferences are derived

**Table 5.1** Descriptive statistics of variables in the analyses of the formation (left column) and realisation (right column) of preferences to move into homeownership

Categorical variables	All intended movers		Aspiring homeowners	
	N (100%)	%	N (100%)	%
Preference to move into homeownership (dep var)				
preference to rent	12921	64.6		
preference to own	7070	35.4		
Realisation of preference to move into homeownership (dep var)				
did not move			3877	56.0
moved to rent			912	13.2
moved to own			2133	30.8
Period				
1998–2000	8268	41.4	3638	52.6
2002–2004	6868	34.4	1970	28.5
2006–2008	4855	24.3	1314	19.0
Educational level				
up to lower secondary	8105	40.5	1370	19.8
higher secondary or medium vocational	6992	35.0	2775	40.1
higher vocational or university	4894	24.5	2777	40.1
Labour market participation				
no job	6724	33.6	503	7.3
part-time job	3304	16.5	843	12.2
full-time job	9963	49.8	5576	80.6
Expected partnership situation				
single	8984	44.9	1849	26.7
stable couple	9144	45.7	4187	60.5
single–couple (union formation)	1863	9.3	886	12.8
Presence of children				
no child	14610	73.1	4730	68.3
at least one child	5381	26.9	2192	31.7
Migrant status				
native Dutch	14831	74.2	5647	81.6
Western background	1825	9.1	566	8.2
non-Western background	3335	16.7	709	10.2
Housing situation				
living in parental home or shared accommodation	3261	16.3	853	12.3
renter	16730	83.7	6069	87.7
Strength of intention to move				
less strong	10482	52.4	3568	51.6
strong	9509	47.6	3354	48.5
Continuous variables	Mean	SD	Mean	SD
Age	39.7	16.8	32.4	9.2
Household income (x 1,000)	21.9	14.9	28.7	19.3
House price-to-rent ratio	2.3	0.5	2.2	0.5

from the survey question, “Are you searching for a rental home or an owner-occupied home?” The response categories “I have no preference” and “I do not know” were not differentiated because we excluded those respondents who did not state a preference for a particular tenure type (see previous section). Note that the respondents were asked to consider their incomes when stating their housing preferences (“Please indicate your housing preferences while considering your income”). Therefore, it is likely that the survey question led to an income-constrained tenure preference.

The second dependent variable indicates whether those with a preference to move into homeownership had moved in the two years after the interview was conducted and, if so, if the respondent had moved to a rental or owner-occupied home. We distinguish between did not move, moved to a rental home, and moved to an owner-occupied home. A move was classified as a change in the registered address of the respondent; only first relocations were included. The housing tenure situation of the new registered address was used to determine whether aspiring homeowners had moved to rental or to owner-occupied homes.

To gain insight into the association between the spatial variation in the formation and realisation of preferences to move into homeownership and in the housing market circumstances, a simplified house price-to-rent ratio was calculated for each regional housing market as an approximation of the regional relative costs of owning to renting. Following Renes and Jókövi (2008), this ratio relates the gross mortgage interest that a household would have to pay each month if it were to buy a home to the average monthly rent (see also Himmelberg et al., 2005). The gross mortgage interest was calculated using information about the average housing price and the yearly average mortgage rate (*Source*: “Mortgage statistic” of Statistics Netherlands). The house price-to-rent ratio was derived for each survey year separately. Note that the house price-to-rent ratio is included as an area-level variable and only gives an approximation of the average gross housing expenditures for owning relative to renting. The expenditures do not account for income dependent housing allowances and tax advantages nor for individual preferences regarding the mortgage and other factors that likely affect individuals’ actual monthly user costs of housing.

To investigate the impact of temporal changes in housing market circumstances on the formation of preferences for homeownership, the multivariate model includes a time variable denoting the two-year period following the survey (1998–2000, 2002–2004, or 2006–2008). In the multivariate analysis of the realisation of preferences to move into homeownership, the time variable is merely used as a control variable. A comparison between the actual mobility behaviour of the respondents in the two years following the interview and the

mobility behaviour in the general population for the periods 1998–2000, 2002–2004, and 2006–2008 (*Source*: “Mobility statistics” of Statistics Netherlands) revealed a lower mobility rate among the HDS 1998 respondents than among the general population. Apparently, prospective movers were underrepresented in the 1998 sample. A lower mobility rate leads to a lower realisation rate because it is not possible to realise a preference to move into homeownership without moving. An additional analysis among only aspiring homeowners who moved showed that the proportion who moved to an owner-occupied home was relatively stable in time with a fluctuation approximating 70 per cent. Estimating the multivariate models for each housing survey separately revealed no major differences in the results compared to the results of the multivariate analysis that considered all survey years. Although the possible data problem makes it difficult to relate the changes in the realisation of preferences to move into homeownership to temporal housing market changes, we do not consider this a major problem for the multivariate results.

Income represents the disposable yearly income of the respondent and, if the respondent is involved in a domestic partnership, his or her partner. The income of a small number of respondents ( $n = 282$ ) was marked as “implausible” in the data processing stage; these values have been replaced by the mean household income value. We corrected income for inflation, for which the income in the HDS 1998 was first converted to euro’s. Level of education refers to the highest educational level completed by the respondent or his or her partner, if any. Education was categorised as up to lower secondary or unknown, higher secondary or medium vocational, and higher vocational or university. The employment situation refers to the labour market participation of the respondent or his or her partner, if any, and is categorised as no job, at least one part-time job, and at least one full-time job, which refers to a working week of 36 hours or more.

The partnership variable is based on information about the current partnership status and the expected partnership status after the intended move. Three categories are distinguished: single, stable couple, and single-to-couple (union formation). The category “singles” also includes those who expect a break-up of the union; due to the small number of respondents ( $n = 69$ ), it was impossible to identify the latter category separately. Furthermore, we included three dummy variables: one indicating the presence of children in the expected household after the intended move, one indicating the current housing situation (living in the parental home or shared accommodation versus living in an independent rental home), and one indicating the strength of the intention to move. We distinguish between strong intentions to move (which refers to

individuals who “Most certainly yes” intend to move) and less strong intentions to move. Finally, the migrant status variable is categorised into native Dutch, non-Western migrant, and Western migrant.

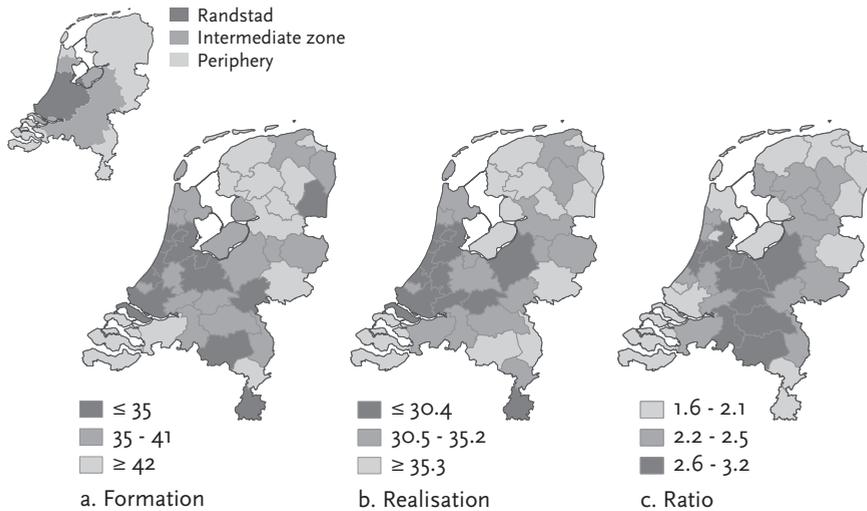
### **5.3.3 Method**

We begin with descriptive analyses to investigate the extent to which individuals form and realise a preference to move into homeownership and the spatial differences therein. Then, we estimate a binomial logistic regression model of the preference to move into homeownership, with the preference to move to a rental home as the reference category. Subsequently, a multinomial logistic regression model of the actual residential behaviour of aspiring homeowners is estimated, in which we distinguish between: did not move (0), moved to a rental home (1), and moved to an owner-occupied home (2). Seemingly unrelated estimation (Suest) is used to investigate whether any differences in the estimated effects of the independent variables on the formation and realisation of preferences to move into homeownership are statistically significant (Chow, 1960; Weesie, 1999). For these cross-model comparisons, we simultaneously estimate the above-mentioned formation model and a realisation model in which only two categories are distinguished: did not realise a move into homeownership (0; comprising “did not move” and “moved to a rental home”) and moved into homeownership (1). Note that both the binomial and multinomial models of the realisation of preferences to move into homeownership showed approximately similar estimates regarding the sign, strength, and significance of the coefficients. Finally, because the observation of housing market circumstances (that is, the regional house price-to-rent ratio) is not independent among individuals preferring to move to the same regional housing market, we corrected the standard errors for the clustering of respondents in regions using the Huber-White estimator to obtain robust standard errors (Fitzmaurice et al., 2004).

## **5.4 Results**

### **5.4.1 Descriptive analyses**

Of the respondents intending to move within two years who had not yet entered homeownership, approximately 35 per cent preferred to move to an owner-occupied home. Of these aspiring homeowners, less than 31 per cent actually moved to an owner-occupied home within two years. Approximately 13 per cent moved to a rental home instead of the initially preferred owner-occupied one, and the remaining majority did not move at all. Of those who did not realise their



**Figure 5.2** The formation and realisation of preferences to move into homeownership in percentages for 1998–2008, and the house price-to-rent ratio for 2007, by regional housing market

preference to move into homeownership within two years time, some may still have a preference to move into homeownership, while others may have discarded or postponed their preference to move into homeownership.

As expected, the extent to which individuals prefer to move into homeownership differs considerably between regional housing markets (see Figure 5.2a). Especially in regions within the Randstad, the most urbanised part of the Netherlands, individuals express a preference to move into homeownership less frequently. For example, whereas 30 per cent or less of the intended movers prefer to move into homeownership in the Randstad regions of Groot-Amsterdam, Leiden, and Het Gooi, 50 per cent of the intended movers in the peripheral regions of Delfzijl and Zeeuws-Vlaanderen prefer to move into homeownership. There are also spatial differences in the extent to which individuals realise their preference to move into homeownership (Figure 5.2b). Individuals whose search locations were in one of the Randstad regions realise their preference to move into homeownership less often than individuals preferring owner-occupied homes in one of the peripheral regions.

Figure 5.2 shows that the regions in which individuals express and realise a preference to move into homeownership less frequently are often regions in which the house price-to-rent ratio is relatively high. Whereas the costs of owning relative to renting are highest in the regions in the northern wing of the Randstad and in the central-south of the Netherlands, they are lowest in the peripheral

regions and in Flevoland, a province in the centre of the country where the suburban growth town Almere is located (Figure 5.2c). Additional analysis revealed that a high house price-to-rent ratio often accompanies a high absolute housing price ( $r = 0.959$ ;  $p < .001$ ).

#### **5.4.2 Multivariate analyses**

Table 5.2 shows the role of life course characteristics and contextual circumstances in the formation and realisation of a preference to move into homeownership. From the overall explanatory power of the models (indicated by the pseudo  $R^2$ ), it becomes clear that life course characteristics and contextual circumstances offer a better explanation of the preference to move into homeownership than of the realisation of this preference.

As hypothesised, individuals tend to adjust their tenure preferences to housing market circumstances. If owning is expensive compared with renting, individuals are significantly less likely to prefer to move into homeownership (Table 5.2). The housing market circumstances likewise affect the extent to which preferences to move into homeownership are realised. Our finding that housing market circumstances are as important to the formation as to the realisation of preferences to move into homeownership (see the insignificance of the Suest test in Table 5.2) may indicate that households have a fairly accurate understanding of their potential to move into homeownership. This finding may relate to the fact that information about housing market opportunities is no longer a limited commodity, as it was in the pre-Internet era (Palm & Danis, 2002). Our findings also suggest that the spatial differences in the formation and realisation of preferences to move into homeownership, as shown in Figure 5.2, partly reflect regionally varying housing market circumstances. Somewhat surprisingly, a high house price-to-rent ratio does not lead to a higher likelihood of moving to a rental home than remaining in the current home. This finding may indicate the rigidity of the preference for homeownership in regions in which owner-occupied housing is relatively expensive.

Although the realisation of preferences to move into homeownership is presumably affected by absolute housing prices (see Section 5.2.3), it is statistically impossible to include the house price-to-rent ratio and the absolute housing price simultaneously in one explanatory model due to collinearity. Likelihood-ratio tests showed that for both multivariate models, the inclusion of the house price-to-rent ratio variable improved the model fit slightly more than the inclusion of the absolute housing price variable.

**Table 5.2** Binomial logistic regression of the preference to move into homeownership and multinomial logistic regression of the realisation of preferences to move into homeownership, with standard errors shown in parentheses

	Preference to move into homeownership <sup>a</sup>		Realisation of preference to move into homeownership <sup>b</sup>			
			Moved to own		Moved to rent	
<i>Contextual circumstances</i>						
House price-to-rent ratio	-0.506***	(0.124)	-0.399***	(0.115)	-0.012	(0.100)
Period (ref: 1998–2000)						
2002–2004	-0.562***	(0.110)	0.377***	(0.105) †	0.192*	(0.108)
2006–2008	-0.516***	(0.087)	0.578***	(0.098) †	0.291**	(0.114)
<i>Individual characteristics</i>						
Age	0.087***	(0.012)	-0.072***	(0.022) †	-0.170***	(0.027)
Age <sup>2</sup>	-0.002***	(0.000)	0.000*	(0.000) †	0.002***	(0.000)
Expected partnership situation (ref: single)						
stable couple	0.407***	(0.073)	0.630***	(0.084)	0.346***	(0.089)
single–couple (union formation)	0.964***	(0.062)	0.495***	(0.092) †	0.191	(0.150)
Presence of child(ren)	-0.197***	(0.050)	-0.165*	(0.097)	0.065	(0.098)
Migrant status (ref: native Dutch)						
Western background	-0.341***	(0.067)	-0.217**	(0.103)	-0.176	(0.144)
non-Western background	-0.659***	(0.084)	-0.677***	(0.108)	-0.064	(0.131)
Household income (x €1,000)	0.049***	(0.003)	0.003**	(0.001) †	-0.014***	(0.004)
Educational level (ref: up to lower secondary)						
higher secondary or medium vocational	0.591***	(0.048)	0.316***	(0.103) †	0.209**	(0.102)
higher vocational or university	1.069***	(0.078)	0.515***	(0.107) †	0.370***	(0.114)
Labour market participation (ref: full-time job)						
no job	-1.281***	(0.062)	-0.279**	(0.136) †	0.383**	(0.138)
part-time job	-0.707***	(0.053)	-0.241**	(0.108) †	0.078	(0.105)
Living in parental home or shared accommodation	-0.642***	(0.058)	0.277***	(0.089) †	0.205	(0.160)
Strong intention to move	-0.259***	(0.039)	1.290***	(0.051) †	1.082***	(0.073)
Intercept	-0.807**	(0.340)	0.450	(0.526)	1.350***	(0.475)
Wald $\chi^2$	6447.04***; $df=17$				3506.30***; $df=34$	
Pseudo $R^2$	0.343				0.095	
N	19991				6922	

<sup>a</sup> Reference category: preference for a rental home; <sup>b</sup> Reference category: did not move  
\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ ; † coefficient “realisation” differs significantly ( $p < .05$ ) from coefficient “formation”

In line with the declining affordability of owner-occupied housing in the period under study, intended movers were significantly less likely to have a preference to move into homeownership in 2002 and 2006 than in 1998. Furthermore, aspiring homeowners were more likely to realise a preference to move into homeownership and to move to a rental home than to remain in the current home in the new millennium than in 1998–2000. As outlined in Section 5.3.2, it is uncertain to what extent these temporal effects are attributable to changes in housing market circumstances.

Individuals tend to adjust their tenure preferences in advance to their own socioeconomic resources. A high income, higher education, and full-time employment increase the likelihood of preferring to move into homeownership. For instance, the odds of preferring to move into homeownership are estimated to be a factor of 1.05 ( $e^{0.049}$ ) higher for every 1000-euro increase in yearly disposable household income. Socioeconomic resources also positively affect the realisation of preferences to move into homeownership. Nonetheless, socioeconomic resources tend to have a more modest impact on the realisation than on the formation of preferences to move into homeownership (see the significant effects of the Suest tests in Table 5.2). This finding might be attributable to the fact that the effect of socioeconomic resources is already considered in tenure preferences. Table 5.2 shows that a high income or a full-time job decreases the likelihood of moving to a rental home among aspiring homeowners. This finding corresponds with the idea that particularly affluent individuals benefit financially from moving into homeownership and do not have access to large parts of the rental housing sector. Somewhat surprisingly, highly educated aspiring homeowners have the highest likelihood of moving to a rental home. Because previous research has shown that highly educated individuals are generally more prone to move (e.g., Fischer & Malmberg, 2001), this finding may indicate that, particularly among the highly educated, the necessity of moving surpasses the necessity of moving into homeownership.

In line with the thought that living in a co-residential union is associated with life course stability, stable couples and singles who expect to form co-residential unions after the intended move are more likely to prefer to move into homeownership than singles are. Expecting union formation has a stronger positive effect on the preferences to move into homeownership than on the realisation of this preference. Although stable couples are more likely to realise their preference to move into homeownership than singles, they also face a greater likelihood of moving into rental homes.

Although we expected that individuals in their late twenties and thirties would be more likely to prefer to move into homeownership, the probability of

preferring to move into homeownership is estimated to slowly increase until the age of 25 and to decrease from that age on. The probability of realising a preference to move also gradually decreases with increasing age. Apparently, the transition to homeownership is typically made in the young adult years; with increasing age, individuals become less likely to make the transition to homeownership. Furthermore, the probability of aspiring homeowners moving to rental homes is estimated to decrease until the age of 50 and to increase from that age on.

In accordance with the thought that the costs of rearing children compete with the costs of moving into homeownership, individuals who expect that their household consists of at least one child after the intended move are less likely to form and realise a preference to move into homeownership than expected childless households are. The hampering effect of the expected presence of children does not significantly differ between the two stages.

Whereas individuals living with their parents or in shared accommodations are estimated to be half as likely as renters to prefer to move into homeownership, they are more likely to realise this preference. This last finding is attributable to the higher mobility rate among aspiring homeowners living in dependent housing, such as the parental home. The comparison between “moved to own” and “moved to rent” for those who actually change residence indicates no significant effect of the housing situation on the likelihood of realising a preference to move into homeownership.

Individuals with a strong intention to move are less likely to prefer to move into homeownership than those with a less strong intention to move. Conversely, strong intentions to move are associated with a higher likelihood of realising a preference to move into homeownership. Individuals with a strong intention to move are also more likely to move to rental homes than those with a less strong intention to move. This finding suggests that the preference to move into homeownership is less rigid among individuals with strong mobility intentions. For these individuals, it might be most important to change residence; whether this move is to the preferred owner-occupied home or not seems to be of secondary importance.

Finally, individuals with non-Western backgrounds are half as likely as native Dutch individuals to form and realise a preference to move into homeownership. Because we controlled for socioeconomic characteristics, these findings are not attributable to the generally less favourable socioeconomic position of non-Western migrants. The less frequent transition to homeownership among non-Western migrants might be attributable to “exclusionary” practices. Alternatively, non-Western migrants’ greater uncertainty about jobs

and income and greater unfamiliarity with the transition to homeownership may hinder their transition to homeownership (Kullberg et al., 2009).

## 5.5 Conclusion

This paper addresses the transition to homeownership in the period of 1998–2008 in the Netherlands. By linking individuals' stated preferences about changing residence and housing tenure to their actual residential behaviour (revealed preferences), this study shows how observable housing market behaviour is the result of stated housing preferences, life course characteristics (as a source of resources and restrictions), and housing market circumstances.

Of the individuals who intended to move within two years and who had not yet entered homeownership, only a minority (35 per cent) preferred to move into homeownership. Of these aspiring homeowners, less than one-third realised their preference to move into homeownership. Approximately 13 per cent moved to rental homes, and the vast majority did not move at all. Singles and non-Western migrants were also less likely to realise their preference to move into homeownership. Furthermore, high costs of owning relative to renting in the preferred housing market region made aspiring homeowners less likely to actually move to owner-occupied homes.

This study demonstrated that both the realisation and the formation of preferences to move into homeownership are shaped by life course characteristics and housing market circumstances. Insufficient socioeconomic resources and a high house price-to-rent ratio hamper the formation of preferences to move into homeownership. Preferences to move into homeownership are thus partly constrained by money (a finding that is undoubtedly related to the fact that respondents were asked to take their incomes into account when stating their housing preferences) and by housing market circumstances. The finding that individuals consider their socioeconomic resources when forming a preference to move into homeownership may contribute to the finding that socioeconomic resources have a more modest impact on the realisation of these preferences.

In the Netherlands, stated housing tenure preferences are used as an indicator for future migration flows or housing demand for policy-making, monitoring, and policy evaluation (Clark & Deurloo, 2006). The finding that housing tenure preferences cannot be viewed as “pure” preferences that indicate what individuals truly desire is not necessarily a disadvantage. In fact, constrained residential preferences may be useful to gain insight into how individuals assess their chances on the housing market and what types of dwellings intended movers would choose if they were to move. As an indicator of

hypothetical housing choices, stated housing preferences do, therefore, not necessarily reflect unrealistic “castles” that are not accounted for certain housing market constraints as is sometimes feared (e.g., Earnhart, 2002; Timmermans, et al., 1994). Nonetheless, researchers should keep in mind that the predictive value of stated preferences to move into homeownership is limited. Many aspiring homeowners do not move at all, and some move to rental homes instead of to their initial preferred owner-occupied homes.

The finding that tenure preferences are constrained by life course characteristics and housing market opportunities presumably contributes to our difficulty in explaining the actual residential behaviour of aspiring homeowners with the same life course characteristics and housing market circumstances. In-depth qualitative research may provide more insight into the factors in addition to the well-established life course characteristics and housing market circumstances that interfere in the step between the formation and realisation of preferences to move into homeownership. It might also be worthwhile for future research to include a house price-to-rent ratio at the individual level instead of a regional approximation as is done in this study. Incorporating factors that likely affect individuals' monthly user costs of housing, such as income dependent tax advantages and mortgage preferences arguably provides more insight into how the costs of owning relative to renting affect the realisation or substitution of preferences to move into homeownership.

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## 6 Once an outsider, always an outsider? The accessibility of the Dutch rural housing market among locals and non-locals

*This chapter is co-authored by Femke Daalhuizen, Frank van Dam, and Clara H. Mulder and has been resubmitted to an international peer-reviewed journal*

*ABSTRACT One of the most pressing questions in the rural gentrification literature is whether rural residents face difficulties in finding a home within their locality due to the influx of more wealthy newcomers. In this paper, we investigate the extent to which intended local movers and intended non-local movers have realised their rural residential preferences in their preferred municipality. We perform multilevel multinomial logistic regression analysis on data from two housing surveys for the Netherlands that are enriched with register data from the longitudinal Social Statistical Database. Our results show that, irrespective of the pressure on the local rural housing market, intended local movers are more likely to find homes within their preferred rural location than are intended non-local movers originating from urban areas or other rural areas. The findings suggest that the rural location preferences of intended non-local movers are more fluid than those of intended local movers and that ties to the residential environment are more important in successfully finding housing in one's preferred rural location than are financial resources.*

## 6.1 Introduction

In recent decades, many Western European and North American rural geographical studies have addressed the popularity of living in rural areas (Jones et al., 2003, for the United States; McGrath, 2001, for Ireland; Stockdale, 2010, for Scotland). Also in the Netherlands, which is one of the most urbanised countries in the world, many urbanites have a preference for rural living (Van Dam et al., 2002). The combined popularity and scarcity of rural housing in parts of Western European countries (Heins, 2003, for the Netherlands; Shucksmith, 1991, for the UK), is reflected by high housing prices. In the Netherlands, rural areas within the urban sphere of influence particularly face a highly pressured housing market (Heins, 2003).

As several rural geographers have observed, it has frequently been claimed that rural residents have problems securing rural housing when the local housing market is under pressure (e.g., Hoggart, 1997; Stockdale et al., 2000). Through their higher income, non-locals have the opportunity to outbid rural residents (for example, see Cloke & Little, 1990; Smith & Phillips, 2001; Stockdale et al., 2000), which may lead to the displacement or out-migration of less affluent rural residents (Cloke & Little, 1990; Hoggart, 1997; McGrath, 2001; Shucksmith, 1991; Smith, 2002). Because of the selectivity of rural migration flows with members of a middle class group replacing less affluent rural residents, rural areas become “colonised” by the middle class (Cloke et al., 1995a; Day, 1989; Phillips, 1993). This process is often referred to as rural gentrification (Phillips, 1993; Phillips, 2004).

Nonetheless, irrespective of whether they are using qualitative or aggregated data on actual moves, studies analysing the mobility processes in rural areas, do not provide conclusive evidence for the general validity of the claim that rural residents have difficulty finding homes within their locality and are forced to move elsewhere (cf. Milbourne, 2007). This lack of evidence may be related to the fact that many studies on rural gentrification are area-specific and thus context-specific (see also Hoggart, 1997; Stockdale et al., 2000). This may make it tricky to generalise findings. As Lewis (1998) argues, by adopting a micro-behavioural perspective and paying attention to mobility intentions and actual mobility behaviour, rural geographical studies would gain a better understanding of why people move into and out of the countryside. Thus far, this type of study has rarely been performed (Lewis, 1998). Investigating rural mobility decisions from a micro-behavioural perspective essentially requires longitudinal data. As Smith (2002) remarks, the use of longitudinal data may improve our understanding of the migration dynamics of gentrification.

In this paper, we investigate whether rural residents indeed face relocation difficulties within their locality by analysing individual rural mobility decisions from a micro-behavioural perspective. Do intended local movers realise their rural location preference (i.e., their preference to move to a rural area within their current municipality) less often than intended non-local movers? Do income and the local housing market pressure matter regarding the extent to which intended local and non-local movers move to locations different from those they initially preferred? We will also pay attention to the question of whether rural residents are more inclined to express a preference to leave their municipality if the local housing market pressure is high.

We use data from two cross-sectional housing surveys for the Netherlands, the Housing Demand Survey (HDS) 2002 and the Housing Research Netherlands (HRN) survey 2006, that are enriched with individual register data from the longitudinal Social Statistical Database (SSD). By following individuals longitudinally, we try to make visible what remains invisible in studies that rely solely on data regarding actual moves. This study employs multilevel multinomial logistic regression of the realisation of rural location preferences.

## **6.2 Theory and background**

Whether it applies to a rural or an urban context, the individual mobility decision-making process includes the formation of a positive attitude towards moving (which may refer to a desire, thought, intention, plan, or expectation towards changing residence), the search and evaluation of housing alternatives, and, finally, the decision to move or to stay. This paper focuses on the realisation of rural location preferences among rural residents and urbanites intending to move. An intention to move indicates that one is willing to change residence (De Jong, 1999) and does not necessarily entail an expectation or desire to change residence (Davis, 1984; McHugh, 1984; Sheeran, 2002). Although our measurement of a positive attitude towards moving is rather simple (see Section 6.3.1), it comes closest to the concept of an intention.

### **6.2.1 Preferences to move to or within rural areas**

Preferences for rural living are often ascribed to the characteristics of rural areas such as peacefulness, space, greenness, and a slower pace of life (Bunce, 1994, for the United States; Halfacree & Boyle, 1998, for the United Kingdom). The positive and idealised image surrounding many aspects of the rural lifestyle, community, and scenery (e.g., Cloke & Little, 1997; Vepsäläinen & Pitkänen, 2010), is certainly not a new phenomenon; the “rural idyll” already emerged in

the eighteenth century, when industrial barons bought up county estates and grand mansions in the Victorian countryside (Bunce, 1994). The rural idyll in particular, offers an explanation for rural preferences among urbanites (Bunce, 1994; Halfacree, 1994; Jones et al., 2003; Van Dam et al., 2002). However, rural residents' preferences can also be related to the rural idyll: rural experience generates attachment to the characteristics of rural areas (Feijten et al., 2008) and thus may affect residential preferences.

In line with the assumption that people take hampering and facilitating factors into account in the formation of intentions to move (for example, see Desbarats, 1983; Gardner et al., 1985), intended movers' location preferences are most likely accounted for perceived local housing market opportunities (compare Feijten et al., 2008). If people believe that it is difficult to realise their latent (rural) residential preferences in a certain municipality due to a high local housing market pressure, then they may not express a preference to move to this municipality. Rural residents living in areas with a highly pressured housing market are, therefore, expected to express a preference for moving elsewhere more often than those living in rural areas with a less pressured housing market. However, such factors as emotional attachment to the locality (Fischer & Malmberg, 2001) and location-specific capital, which indicate the degree to which people are embedded (socially and economically) into their locality (DaVanzo, 1981), may make rural residents less willing to leave their municipality. In such cases, an initial favourable attitude towards moving may not crystallise into an intention to move at all (Gardner et al., 1985).

### ***6.2.2 Realisation of rural location preferences***

If intended movers are unable to realise their rural location preference, two adjustment mechanisms can be expected. First, intended movers may choose to stay in their current homes. Second, intended movers may decide to move to a rural area in a different municipality than initially preferred or they may move to an urban area. The latter is often referred to as substitution: the acceptance of a new home that may fit some, but not all, of one's initial preferences (Goetgeluk, 1997). Which of the two alternatives will be chosen is highly dependent on personal circumstances. Personal circumstances not only determine whether it is possible to postpone the intended move but also the willingness to move to a location that does not comply with one's initial location preferences. Goetgeluk (1997) showed that most people are not willing to move to a location different from that initially preferred because location preferences are often strong. In line with this finding, McHugh (1984) showed for the United States that just 16 per

cent of those with a specific destination in mind relocated to a destination different from that initially preferred.

*Intended local movers versus intended non-local movers*

Studies on rural gentrification frequently claim that rural residents, so-called “locals”, face difficulties realising a preference to move within their rural locality because they are outbid by more affluent non-locals (chosen as the all-embracing term for such descriptions such as “incomers”, “newcomers”, “non-residents”, “returnees”, and “outsiders” found in studies on rural gentrification, e.g., Cloke & Little, 1990; Shucksmith, 1991; Smith, 2002).

Although this assumption is, to say the least, quite persistent, there is no conclusive empirical evidence for its general validity. Based on in-depth interviews, the studies of McGrath (2001, for North West Connemara in Ireland) and Stockdale (2010, for Scotland) indeed suggest that rural residents have difficulties in finding homes within their locality and are forced to move elsewhere. Stockdale and colleagues (2000, for rural Scotland) and Guimond and Simard (2010, for Québec) find some qualitative evidence that rural residents have difficulties securing rural housing. At the same time, however, they did not find direct evidence that non-locals outbid the locals wishing to remain within the area (Stockdale et al., 2000) and that the in-migration of non-locals systematically leads to the displacement of the local population (Guimond & Simard, 2010). Analysing the aggregated data on actual moves, some studies suggest that rural areas have undergone a process of gentrification in the sense that they have become more “middle class” (Cloke & Thrift, 1987, for Southern England; see also Cloke et al., 1998). A study conducted by Van Dam (1996) for the Netherlands demonstrates that poorer groups are moving out while more affluent groups are moving into rural areas. Other studies, however, indicate that rural in-migration flows also include individuals who do not belong to the so-called middle class or service-class (Hoggart, 2007, for rural England and Wales; Phillips, 1993, for Wales; Stockdale, 2010). According to Hoggart (2007), this finding “raises potent question marks against messages that the rural working classes are being forced out of the countryside” (p. 314).

The main reason why locals may have problems competing with non-locals in the rural housing market relates to differences in financial resources (see also next Section). Several studies have indicated that non-local migrants tend to have higher incomes than long-term residents and local movers (Cloke et al., 1995b; Smith & Philips, 2001; Stockdale et al., 2000). People originating from urban areas, in particular, have been shown to be wealthier than their rural counterparts (Hoggart & Henderson, 2005; Jones et al., 2003). If non-locals truly have more

financial resources, they have more opportunities to outbid locals in the local housing market because financial resources widen the range of homes affordable to them (Mulder & Hooimeijer, 1999). If we do not account for these income differences, intended local movers may have greater difficulties in realising their rural location preference than intended non-local movers. This effect is particularly to be expected for those who prefer an owner-occupied home because access to the (regulated) rental housing sector depends not only on income but also on non-price criteria, such as waiting time and allocation rules. Moreover, in some rural areas in the Netherlands, access to the regulated rental sector is characterised by the preferential treatment of locals above non-locals (Haffner & Hoekstra, 2006).

Aside from non-locals' potential difficulties in gaining access to the regulated rental sector, several other non-financial factors may particularly hamper their realisation of rural location preferences. Intended non-local movers may have to put more time and energy into finding a suitable home that meets their preferences than intended local movers because they are less familiar with the local housing market. Not surprisingly, Lewis and Sherwood (1994) found that differences exist in the adopted search procedure in rural areas between local movers and urban migrants.

Furthermore, intended non-local movers may be more willing to move to a rural area in a different municipality than the one initially preferred if they cannot find a suitable home. Because intended non-local movers lack a direct residential tie to the preferred municipality, we propose that they have a less pronounced location preference than intended local movers. Furthermore, emotional attachment to the current locality (Fischer & Malmberg, 2001) and location-specific capital (DaVanzo, 1981) may make intended local movers more likely than intended non-local movers to remain in the current home rather than moving elsewhere if they face difficulties in finding a home in their municipality. Moving away may also be very costly for intended local movers because an individual's ability to conduct his or her daily activities is limited by various space-time constraints (Hägerstrand, 1970). Moving away may, therefore, imply that people need to perform at least some of their daily activities, such as going to school, shopping, and leisure activities, elsewhere and that it may become more difficult to visit family and friends on a regular basis.

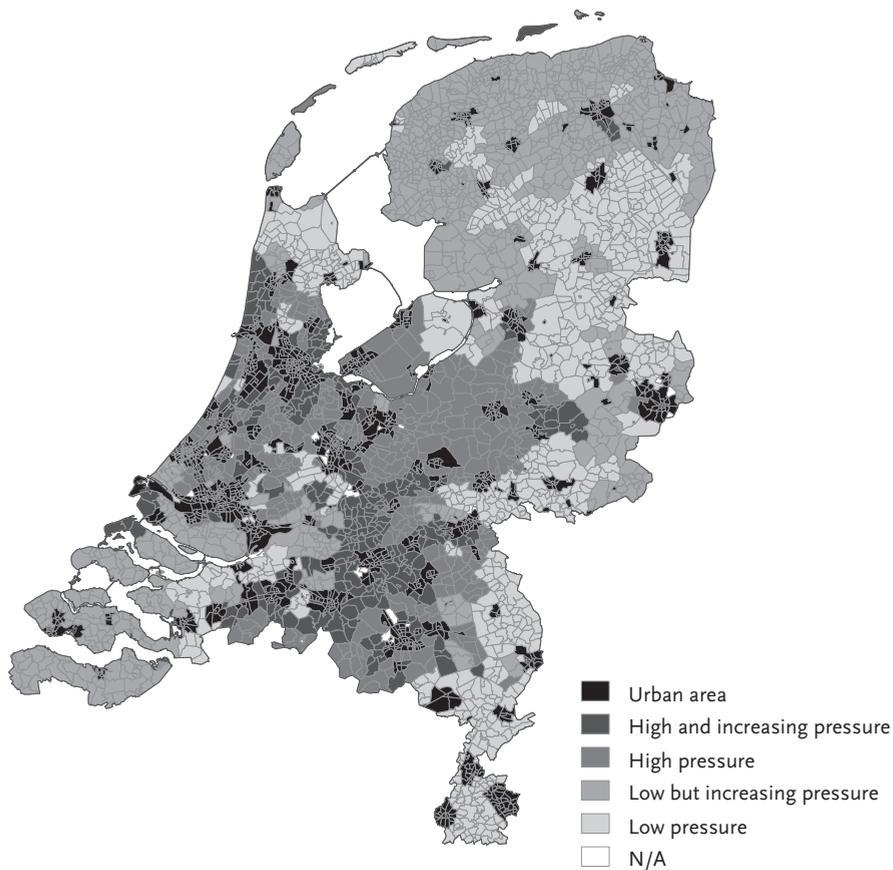
To summarise, if we control for differences in income, we expect that intended local movers are more likely to realise their rural location preferences than intended non-local movers.

### *Influence of local housing market opportunities in rural areas*

Although people are believed to take local housing market opportunities into consideration when forming their location preferences (see also Feijten et al., 2008), the local housing market may still directly affect the extent to which rural preferences are realised in the preferred municipality. Hampering factors may be more severe than anticipated (Desbarats, 1983). Alternatively, the local housing market opportunities (accounted for in the “mental calculus” leading to the formation of location preferences) may have changed since the formation of a preference to move to a rural area in a particular municipality.

It is widely recognised that rural areas differ in their popularity and thus in their local housing market opportunities (for example, see Elbersen, 2001; Jobes, 2000). A high demand for rural homes may result in high tension between supply and demand, which is reflected in high property prices (Visser et al., 2008). In areas where prices are increasing, it becomes more attractive to build new homes (DiPasquale & Wheaton, 1996; Renes et al., 2006). However, in reality, there has been little housing development in rural areas in the Netherlands, particularly in areas with a highly pressured housing market, as restrictive spatial planning policies prevent the construction of housing in these areas (Priemus, 2007; Van Dam et al., 2002). Restrictive spatial policies do not apply only to the Netherlands. In Great Britain (Hoggart & Henderson, 2005), Spain (Elbersen, 2001), Norway, Sweden, and France (Gallent et al., 2002), restrictive spatial regimes also limit the development of rural housing. While spatial restrictive policies are undoubtedly helpful in protecting rural areas from further urbanisation, they also have a hampering effect on the housing opportunities in these areas.

Figure 6.1 gives a crude indication of the tension between supply and demand in rural areas in the Netherlands (for the definition of rural areas, see Section 6.3.2). Rural areas that lie within the urban sphere of influence are characterised by a highly pressured housing market. These rural areas are mainly concentrated near (or in) the Randstad, the most densely populated region that serves as the economic heart of the Netherlands, and in the central-south intermediate zone of the Netherlands. In contrast, peripheral rural areas in the north and east of the Netherlands and in the provinces Zeeland and Limburg are characterised by a less pressured housing market and thus have more housing market opportunities.



**Figure 6.1** Housing market pressure in rural areas in the Netherlands, 1999–2007

The higher the local housing market pressure, the greater difficulty in finding a suitable and affordable home. Therefore, intended movers who prefer to move to a rural area with a highly pressured housing market are hypothesised to be less likely to realise their rural location preference and more likely to move to a different location (either rural or urban) than initially preferred than those preferring to move to a rural area with a lower pressured housing market.

#### *The influence of other individual characteristics*

The extent to which intended local and intended non-local movers are able to realise their rural location preference is purportedly also affected by individual factors. Some individual factors are particularly relevant to the opportunities for finding a home on the local housing market whereas others relate to a willing-

ness to substitute location preferences and the possibility to postpone the intended move.

Intended movers with high income levels have more resources to realise their rural location preferences and are therefore expected to be less likely to move to a different area than initially preferred. The same is hypothesised for the highly educated. As an indicator of career (and thus income) prospects, a high level of education may have a positive impact on the range of homes that are affordable (Mulder & Hooimeijer, 1999).

Some studies suggest that young rural residents, in particular, face difficulties in finding a home in their own municipality (for example, see McGrath, 2001; Shucksmith, 1991). However, in general, younger people are more likely to move than older people if they have an intention to do so (De Groot et al., 2011; Lu, 1998). Because it is not possible to realise a rural location preference without changing home, younger people may be more likely to move to a rural area in their preferred municipality than older people. If it is difficult to find a rural home in their preferred municipality, younger people are also hypothesised to be more likely to move to a location other than their initially preferred one because they are thought to be more flexible and therefore more inclined towards substitution (Goetgeluk & Hooimeijer, 1991). For the same reasons, we also hypothesise that those who are still living in the parental home or in shared accommodation are more likely to move to a different location than initially preferred than current renters and homeowners.

Furthermore, the extent to which rural location preferences are realised likely depends on tenure preferences. Whereas owner-occupied homes are most often sold to the highest bidder, the eligibility for a rental home often depends on allocation criteria, such as position on a waiting list, age, and household size. Those preferring to rent may thus have greater difficulties in realising their rural location preferences than those preferring an owner-occupied home. At the same time, however, it is unlikely that they will move more frequently to a location different from that initially preferred because of the existence of waiting lists and other allocation criteria.

Finally, household situation and strength of intention to move are known to play a role in the extent to which people realise their intention to move, and are therefore accounted for.

## 6.3 Data and analytical strategy

### 6.3.1 Data

We use data from the Housing Demand Survey (HDS) 2002 and its successor the Housing Research Netherlands (HRN) 2006 survey. These large-scale surveys represent the Netherlands population, aged 18 years and over, excluding those living in institutions. The data contain detailed information regarding the sociodemographic and socioeconomic characteristics of respondents, their current housing situation, and the municipality and four-digit postal code areas where respondent resides. The surveys also contain information regarding intentions to move within two years in which an intention to move is indicated by positive answers (i.e., “Possibly yes, maybe”, “I would like to, but I cannot find anything”, or “Most certainly yes”) to the survey question “Do you want to move within the next two years?” For intended movers, the surveys also contain information regarding the preferred municipality and type of residential environment. The preferred type of residential environment is derived from the four-digit postal code area to which intended movers prefer to relocate. In line with the theory that people become attached to the characteristics of the type of residential environment in which they are living, intended movers often express a preference for a type of residential environment that is similar to their current one (depending on the type, the percentage varies from 41 to 64). It should be stressed that the information regarding the exact preferred postal code area is not released to researchers. Approximately 25 per cent of the respondents who stated a preference to move to a particular municipality did not state at all to which specific postal code area they prefer to move. For these respondents, the preferred type of residential environment is indirectly assigned. The assignment is based on answers to questions regarding housing preferences, such as preferences concerning the distance to a city centre and the dominant type of housing in the neighbourhood (ABF Research, 2010). Although this assignment is the best possible indicator of the preferred type of residential environment, we are uncertain whether all of those with an assigned rural preference would state for themselves such a preference if asked directly.

Data concerning housing market transactions in rural areas from 1999 to 2007 were linked to individual respondents using information regarding their current and preferred municipality. These data are provided by Statistics Netherlands and are available at the level of four-digit postal code areas. Because these housing surveys only release information indicating preferred municipalities and do not indicate preferred postal code areas, we aggregated the housing market transactions at the municipal level. Note that between 1999 and 2007, several changes in the municipality zoning occurred due to mergers; all

data regarding housing market transactions are based on the municipal zoning map of 2007.

For the purpose of this research, the housing surveys were enriched with individual longitudinal register data from the Social Statistical Database (SSD) using a unique personal identification number that is included in both data sources (for more information, see Bakker, 2002). The SSD covers the entire population of the Netherlands and contains information about the population's mobility behaviour: it shows whether people have moved, the year and month of such relocation, and the postal code area to which the relocation occurred. The postal code area was used to determine the type of residential environment to which respondents have moved within two years time after the moment of interview (see Section 6.3.2). This newly created longitudinal data set facilitated the study of rural mobility decisions from a micro-behavioural approach without having difficulties in tracking respondents over time. The data set also enabled us to perform in-depth analyses while accounting for differences in area-specific contexts. The latter ability is a major advantage over the many area-specific studies on rural gentrification because it allows generalisation of the micro-behavioural results for the Netherlands as a whole.

The enriched HDS 2002 and HRN 2006 data set contains information on 138,793 respondents. We excluded respondents who were expecting an involuntary move (for example because of impending housing demolition), respondents who had already found a new home, and respondents who, at the time of the interview, had intentions to emigrate. After this selection process, the research sample included 133,349 respondents: 84,864 living in urban areas, and 48,484 living in rural areas. We excluded a small number of rural residents ( $n = 77$ ) because we were unable to define the level of housing market pressure for their residential areas (for more information, see Section 6.3.3) for the analysis of whether rural residents are more inclined to express a preference to move elsewhere if their local housing market pressure is high. To analyse the realisation of rural location preferences, we selected rural residents and non-rural residents who expressed a preference to move to a rural area ( $n = 10,261$ ). A small number of respondents who died or emigrated within the two years following the interview ( $n = 162$ ) and respondents who preferred to move into dependent housing, such as shared accommodation ( $n = 572$ ), were excluded from the data set. We also excluded a small number of intended movers with rural residential preferences who indicated that they preferred to move to municipalities that lack rural areas ( $n = 129$ ). Furthermore, we also excluded respondents with information missing regarding the preferred municipality variable ( $n = 1,824$ ) and those who preferred to move to a municipality for which

we were unable to define the housing market pressure due to a lack of housing market transactions ( $n = 157$ ). Our final research sample includes 7,446 respondents.

### **6.3.2 Identifying rural areas**

Although the Netherlands is a largely urbanised country, it does have areas that are predominantly rural (OECD, 2010). To identify rural areas, we adopted the typology of residential environments developed by ABF (ABF Research, 2010; Van Bremen & Jonkhof, 2003). In the housing surveys, the same typology is used to classify the type of preferred residential environment. The typology differentiates urban areas (centre-urban and outside centre-urban) and modest urban areas (green-urban) from rural areas, wherein the label “rural area” refers to small settlements and villages, and the open countryside. In the Netherlands, 2,728 of the 4,018 postal code areas can be classified as rural. Rural areas are characterised by having a low address density, small population size in the municipality to which the area belongs, and relatively few facilities (ABF Research, 2010; Van Bremen & Jonkhof, 2003).

A drawback to the typology is that areas with a predominantly industrial function (among the most illustrative ones being areas that belong to Schiphol airport and the harbour of Rotterdam) are often classified as “rural” solely due to their low address density. To address this deficiency, we took additional criteria concerning land use into account in our final assessment of whether an area is rural. Rural areas are characterised by the presence of agriculture, forests or nature areas (comprising more than 44.4 per cent of the area) and relatively few business sites (less than 14.7 per cent of the area). These selection criteria are based on a standard deviation from the mean land in use for green and business sites in rural areas as defined by ABF. In the end, 2,516 postal code areas were considered to be rural (see also Figure 6.1). To give an approximation of the size of a rural postal code area, the mean number of square kilometres is 11.96, and the mean population size is 2,527 inhabitants.

### **6.3.3 Variables**

The dependent variable in the multivariate analysis and the contextual variables were derived from the SSD and housing market data of Statistics Netherlands, respectively. All other variables were derived from the HDS and HRN and refer to the time of the interview. The descriptive statistics of the dependent and independent variables are presented in Table 6.1.

**Table 6.1** Descriptive statistics of dependent and independent variables ( $N = 7,446$ )

Categorical variables	N	%
Realisation of rural preferences (dep var)		
did not move	4719	63.4
moved to rural area in preferred municipality	1527	20.5
moved to rural area elsewhere	372	5.0
moved to urban area	828	11.1
Origin intended mover		
local	3756	50.4
non-local from other rural area	1375	18.5
non-local from urban area	2315	31.1
Income		
low	1759	23.6
middle-low	1833	24.6
middle-high	1912	25.7
high	1942	26.1
Plausibility household income		
plausible	7390	99.3
implausible	56	0.8
Educational level		
up to lower secondary	2686	36.1
higher secondary or medium vocational	2986	40.1
higher vocational or university	1774	23.8
Expected household composition		
single	2154	28.9
couple without children	2994	40.2
family with children	2298	30.9
Current housing situation		
starter	1977	26.6
renter	2511	33.7
homeowner	2958	39.7
Preferred tenure		
rental home	2901	39.0
owner-occupied home	4545	61.0
Strength of intention to move		
less strong	4643	62.4
strong	2803	37.6
Survey year		
2002	4119	55.3
2006	3327	44.7
Local housing market pressure		
low	1912	25.7
low but increasing	2464	33.1
high	1822	24.5
high and increasing	1248	16.8

Continuous variables	Mean	SD
Age	38.6	16.1
Age <sup>2</sup>	1745.4	1483.3

The first important variable indicates whether or not rural residents intend to move, and if so, their preferred location. Four categories were distinguished: preference to move to a rural area within the current municipality (intended local movers), preference to move to a rural area in a different municipality, preference to move to an urban area, and no intention to move.

The dependent variable applies to respondents who expressed a preference to move to a rural area. It measures whether they moved in the two years since the interview was held, and if so, whether they realised their rural location preference. The variable consists of four categories: moved to a rural area in the preferred municipality, moved to a rural area in a different municipality than initially preferred, moved to an urban area, and did not move. The last category was chosen as the reference category in the multivariate analysis.

The first main independent variable indicates the level of housing market pressure in rural areas by municipality. The local housing market pressure is indicated by the pressure on the market for owner-occupied dwellings. Using information regarding the average selling price of homes in 2007 and the price increase or decrease (measured in percentages) in the period 1999-2007, four categories were discerned: low pressure, low but increasing pressure, high pressure, and high and increasing pressure. A high pressure indicates that the average selling price is above the national selling price of a rural home; an increasing pressure refers to a price increase that is above the national price increase of rural housing. For 11 municipalities, it was not possible to determine the housing market pressure due to a small number (fewer than 3) of transactions per year in the rural areas of these municipalities.

The second main independent variable indicates the place of origin for those preferring to move to a rural area, and was coded into three categories: intended local mover, intended non-local mover originating from a rural area, and intended non-local mover originating from an urban area. In our research sample, 927 respondents preferred to move from an urban to a rural area within their current municipality. These respondents were classified as intended non-local movers because they were not yet living in a rural residential environment.

Household income was coded in quartiles that were based on the income of all respondents included in the analyses. For 56 respondents, the household income was marked as “implausible” in the surveys; the mean household income value was substituted for these implausible values. The models include a dummy

value to indicate whether substitution had taken place. The level of education refers to the highest educational level achieved and was categorised using three levels: up to lower secondary, higher secondary or medium vocational, and higher vocational or university. The category “up to lower secondary” also includes a small number of respondents with an unknown educational level; owing to the small number of respondents (approximately 20) it was not possible to identify the latter category separately.

The multivariate analyses also include the control variables age and the squared value of age to capture the potential non-linear effects of age. We centred the age variables on the mean so that the intercept is interpretable as the expected value of the outcome variable if the predictor, in this case age, has its mean value of 39. The expected household situation after the intended move has taken place was coded into three categories: single, couple without children, and family with children. The last category includes couples with children and one-parent families. The current housing situation was categorised into three categories: starter (people who are currently living with their parents or in shared accommodation), renter, and homeowner. We also included a dummy variable indicating the preference to buy or rent a home. The variable of the strength of the subject’s intention to move was derived from the same question used to determine the subject’s intentions to move (see Section 6.3.1) and was categorised into two categories: those with a strong intention to move (which refers to people who “Most certainly yes” intend to move) and those with a less strong intention to move. Finally, a dummy variable was included to control for the survey year (2002 or 2006).

#### **6.3.4 Analytical strategy**

We first describe the extent to which rural residents intend to move and, if so, their location preferences. Making a distinction between intended local movers and intended non-local movers, we also investigate income differences between these groups. Furthermore, we investigate the extent to which intended local and non-local movers have realised their preference to move to a rural area in their preferred municipality; i.e., their rural location preference.

In the multivariate analyses, we investigate the realisation of rural location preferences using multilevel multinomial logistic regression models. Multilevel analysis allows a simultaneous examination of the effects of individual level and area level variables on individual level outcomes while accounting for the possible dependency of observations within areas (Diez-Roux, 2000). We estimate regression models in which we assume randomly varying intercepts across municipalities and fixed relationships between the dependent and inde-

pendent variables. Thus, the relationships are assumed not to vary across municipalities. We start with a random intercept-only model that includes no explanatory variables to calculate the intraclass correlation (ICC). The ICC gives information about the proportion of the total variability in the dependent variable that is attributable to the area level. The ICC is equal to  $\sigma^2_{u0} / [\sigma^2_{u0} + \pi^2/3]$ , in which  $\sigma^2_{u0}$  represents the variance of the area level residual errors and  $\pi^2/3$  represents the variance of the individual level residual errors, which is equal to the variance of a standard logistic distribution (for more information, see Grilli & Rampichini, 2007; Hedeker, 2003).

After the random intercept-only model, we estimate four regression models. The first model includes only the place of origin and the year in which the survey is held; thereafter, we add the local housing market pressure (Model 2), the sociodemographic and socioeconomic background characteristics (Model 3), and the current and preferred housing situation, and the strength of the intention to move (Model 4). Although only the last model is presented, we also refer to the results of the previous models when noteworthy changes occurred in the parameters of variables after the inclusion of new variable(s). The multilevel multinomial logistic regression models are estimated with the GLLAMM (Generalized Linear Latent and Mixed Models) program using a multinomial logit link (mlogit) within the software package Stata (Rabe-Hesketh et al., 2004).

## 6.4 Results

### 6.4.1 Descriptive analyses

#### *Preferences to move to and within rural areas*

As presented in Table 6.2, only 19 percent of rural residents intend to move within two years compared to 27 per cent of urbanites. About 32 per cent of those with an intention to move have a preference to move to a rural residential environment. In most cases, they are already living in a rural area (more than 64 per cent of them). Most rural residents with a preference to move to a rural area prefer to do so within their current municipality. As one would expect, urbanites with a rural preference often prefer to leave their municipality.

A closer examination of the location preferences for rural residents intending to move suggests that there is no strong connection between the current local housing market pressure and the extent to which rural residents prefer to move outside their municipal boundaries (see Table 6.3). Both in rural areas with a highly pressured housing market and in rural areas with a lower pressured housing market, approximately 45 per cent of rural residents who intend to move prefer to relocate to a rural area within their municipality. Similarly, in rural areas



with a highly pressured housing market and in rural areas with a lower pressured housing market, approximately 80 per cent of the rural residents have no intention to move at all. Likewise, among less affluent rural residents, no strong connection exists between the local housing market pressure and a preference to relocate outside the municipality. The less affluent rural residents, however, show a strong preference to move to urban areas. The popularity of urban areas among less wealthy rural residents may be traced back to the greater availability of small, affordable homes in cities (Dieleman & Mulder, 2002) or to the career opportunities that cities offer due to the presence of universities and higher vocational schools, and the greater availability of both high- and low-skilled jobs (see also Blaauboer, 2010). Less affluent rural residents relatively often prefer to move to an urban area, particularly in rural areas with a highly pressured housing market. Although it is tempting to relate this finding to the local housing market pressure, rural areas with a highly pressured housing market are often located near urban areas (see also Figure 6.1), a fact that likely affects respondents' location preferences.

#### *Realisation of rural location preferences*

Table 6.4 reveals that rural location preferences are often not realised within two years. Of the 7,907 respondents with a preference to move to a rural location, approximately 63 per cent did not move at all. Of those who changed residence, only 56 per cent moved to a rural area in the preferred municipality; the remaining respondents moved to a rural area in a different municipality or to an urban area.

Income differences account for the primary reason why intended local movers may have more difficulties in realising their rural location preferences than intended non-local movers. In line with previous research, intended local movers have, on average, a lower annual income (€24,863) than intended non-local movers originating from both urban areas (€27,350) and rural areas (€25,628). This finding indicates that intended non-local movers, especially those originating from urban areas, have the capacity to outbid intended local movers on the rural housing market. An analysis of variance (ANOVA) revealed significant differences in income (Brown-Forsythe  $F$  ratio:  $F(2, 7443)=12.66, p < .001$ ). A Games-Howell post-hoc test (used because the population variances and sample sizes were unequal; for more information see Games & Howell, 1976; Jaccard et al., 1984) revealed that intended non-local movers originating from urban areas have significantly higher incomes than both intended local movers and intended non-local movers originating from rural areas.

**Table 6.4** Mobility behaviour and location choice of intended rural movers by several background characteristics, percentages

	Did not move	Moved to:			N (100%)	
		rural area in preferred municipality	rural area elsewhere	urban area	N (100%)	
Origin intended mover						
local	65.4	77.1	8.0	14.9	1298	3756
non-local from other rural area	60.4	52.0	25.4	22.6	544	1375
non-local from urban area	61.8	27.5	14.7	57.9	885	2315
Local housing market pressure						
low	63.5	61.4	13.5	25.1	697	1912
low but increasing	61.2	60.5	13.3	26.3	956	2464
high	64.3	48.0	13.5	38.5	650	1822
high and increasing	66.0	49.3	14.9	35.8	424	1248
Income						
low	59.2	50.8	12.0	37.2	718	1759
middle-low	61.4	61.1	11.7	27.2	707	1833
middle-high	65.8	56.0	14.1	29.9	653	1912
high	66.6	56.1	17.1	26.8	649	1942
Total	63.4	56.0	13.6	30.4	2727	7446

Notably, and despite their less favourable financial situation, our results show that intended local movers more often realised their preference to move to a rural area in their preferred municipality – their current one – than intended non-local movers, especially in comparison to those originating from an urban area (77 per cent versus 28 per cent). Intended non-local movers moved more often to rural areas in a different municipality than initially preferred and to urban areas. An additional analysis (not presented) revealed that this pattern does not differ between areas with a highly pressured housing market and areas with a lower pressured housing market pressure. Thus, although many intended non-local movers have the opportunity to outbid intended local movers, intended local movers have realised their rural location preferences more often.

The local housing market pressure appears to be relevant for the extent to which intended movers have realised their rural residential preferences in their preferred municipality (see Table 6.4). Higher housing market pressure is associated with both a higher incidence of not moving and with moving to an urban area. Therefore, those who preferred to move to a rural area with a highly pressured housing market not only moved less often, but, if they changed residence, they were also less often able to realise their rural location preferences.

Intended movers with a higher income moved less often than those with a low income. If they changed residence, however, they more often realised their rural location preferences. The less affluent movers, in particular, appeared to have difficulties in realising their rural location preferences as they moved more often to an urban area instead of the initially preferred rural area. This finding seems to provide some validation for the concern that individuals with a low income have difficulties securing rural housing and are excluded from living in the countryside.

#### **6.4.2 Multivariate analysis**

Table 6.5 shows the effect of individual characteristics and the local housing market on how intended movers have realised their rural residential preference in their preferred municipality.

The random intercept only model (result not shown in Table 6.5) shows a significant variance at the area level ( $0.0023$ ;  $p < .001$ ) that yields an intra-class correlation coefficient of  $0.0023 / [0.0023 + (\pi^2/3)] = 0.0069$ . This finding implies that less than 1 per cent of the variance in the realisation of rural residential preferences is attributable to the municipality level. The pressure on the local housing market is therefore expected to play only a modest role in the explanation of the extent to which rural location preferences are realised.

The extent to which people realise their rural residential preference in the preferred municipality is clearly affected by the intended mover's location of origin (first column in Table 6.5). Studies on rural gentrification have frequently proposed that rural residents are being outbid and subsequently displaced by more affluent non-locals. However, this study demonstrates that (before and after controlling for potential differences in sociodemographic and socio-economic background characteristics such as household income) intended local movers are more likely to realise their rural location preferences than are intended non-local movers. This finding seems to be in accordance with various other studies, which did not find empirical evidence that non-locals are systematically outbidding or displacing locals who wish to remain within the area (Guimond & Simard, 2010; Stockdale et al., 2000). The second and third columns in Table 6.5 reveal that intended non-local movers are more likely to move to a rural area in a different municipality than they initially preferred and to urban areas than their counterparts, i.e., intended local movers. Whereas urbanites are more likely to move to an urban area, intended non-local movers originating from a rural area are more likely to move to a rural area in a municipality other than that initially preferred. In an additional analysis, we have estimated the model separately for rural areas with a high housing market

pressure and for rural areas with a low housing market pressure (results not shown). Irrespective of the local housing market pressure, intended local movers are estimated to be more likely to realise their rural location preferences than intended non-local movers.

Although the inclusion of the spatial context variable does not add much explanatory power to the model (the pseudo  $R^2$  shows a very modest increase from 0.04 to 0.05), the local housing market pressure significantly affects the extent to which intended movers realise their rural location preferences. As expected, preferring to move to a rural area with a highly pressured housing market decreases the likelihood of realising their rural location preferences. This effect is strongest in rural areas in which the housing prices are high and increasing. Furthermore, people who prefer to move to a rural area characterised by a high or increasing housing market pressure are significantly more likely to move to an urban area than those with a preference to move to a rural area with a low housing market pressure. However, this effect needs to be interpreted with caution because rural areas with highly pressured housing markets are often located in the vicinity of urbanised areas, which may affect the actual location decision (cf. Van Dam et al., 2005; see also Figure 6.1).

As hypothesised, people with higher incomes are more likely to realise their rural location preference than those with a low income (Table 6.5). People with a low income indeed seem to struggle to secure rural housing, as has also been suggested elsewhere (e.g., Hoggart, 1997). Although the descriptive analysis showed that people with a low income moved more often to an urban area than those with a higher income, our multivariate analysis shows that they are not significantly more likely to move to an urban area rather than not moving at all.

Remarkably, level of education only matters to the extent to which people have moved to an urban area (third column Table 6.5). The highly educated are more likely to move to an urban area than the lowest educated. For highly educated people it is presumably more attractive to move to an urban area instead of the initially preferred rural area because in the Netherlands, as elsewhere in the world, the bulk of professional jobs can be found in urbanised areas (Van Ham, 2005). In urban areas, it is therefore easier to exploit the monetary benefits associated with a high education. Highly educated people may also be attracted to urbanised areas because of the location-specific characteristics of cities, such as cultural and recreational amenities, lifestyle options, aesthetic assets, and an open and tolerant atmosphere (e.g., Florida, 2002; Marlet & Van Woerkens, 2005, Van Dam et al., 2005).

**Table 6.5** Multilevel multinomial logistic regression of realising rural location preferences

	Moved to rural area in preferred municipality		Moved to rural area in other municipality		Moved to urban area	
	B	SE	B	SE	B	SE
<i>Individual characteristics</i>						
Origin intended mover (ref: local)						
non-local from other rural area	-0.317***	0.083	1.248***	0.139	0.570***	0.127
non-local from non-rural area	-0.937***	0.084	0.633***	0.141	1.471***	0.097
Income (ref: low)						
middle-low	0.212**	0.093	0.023	0.173	-0.209*	0.117
middle-high	0.199*	0.108	0.176	0.195	-0.043	0.135
high	0.206*	0.123	0.218	0.217	-0.169	0.158
Implausible income	-0.545	0.390	-0.530	0.752	0.288	0.393
Educational level (ref: up to lower secondary)						
higher secondary or medium vocational	0.054	0.077	0.033	0.138	0.142	0.102
higher vocational or university	0.102	0.091	0.176	0.159	0.351***	0.116
Age	-0.089***	0.014	-0.050*	0.029	-0.115***	0.018
Age <sup>2</sup>	0.001***	0.000	0.000	0.000	0.001***	0.000
Expected household composition (ref: single)						
couple without children	0.197**	0.081	0.308**	0.153	0.067	0.103
family with children	0.052	0.102	0.083	0.180	-0.045	0.127
Current housing situation (ref: starter)						
rental home	-0.023	0.105	0.187	0.182	0.161	0.130
owner-occupied home	0.065	0.123	0.343	0.215	0.012	0.161
Preference to rent	-0.034	0.080	0.183	0.143	0.339***	0.101
Strong intention to move	1.351***	0.064	1.020***	0.113	1.278***	0.083
Survey year 2006	-0.048	0.064	0.212*	0.112	0.280***	0.082

<i>Area level characteristics</i>	
Local housing market pressure (ref: low)	
low but increasing	0.017
high	-0.295***
high and increasing	-0.374***
Intercept	-1.589***
Initial log likelihood	0.079
Model log likelihood	0.145
LR $\chi^2$ (60)	0.090
Pseudo $R^2$	0.158
N individuals	0.173
N areas	0.101
	0.140
	-4.263***
	0.267
	-3.720***
	0.194
	0.172
	0.113
	0.415***
	0.115
	0.239*
	0.128
	-7505
	-6622
	1767***
	0.118
	7446
	396

\* =  $p < .10$ , \*\* =  $p < .05$ , \*\*\* =  $p < .01$

Although several studies suggest that young rural residents face difficulties in securing rural housing (for example, see McGrath, 2001; Shucksmith, 1991), this study demonstrates that young people are more likely to realise their rural location preferences than are their older counterparts. The probability of moving to a rural area in the preferred municipality is estimated to decrease until the age of 56 and to increase from that age on. However, younger people are also more likely than older people to move to urban areas and to rural areas in municipalities other than their initially preferred ones rather than not moving. This finding is not necessarily related to a lack of affordable rural housing in the preferred municipality. Young people may also opt to move to elsewhere if the local opportunity structure for jobs and education in the initially preferred municipality is limited (cf. Jones, 2001; McGrath, 2001).

Couples are more likely to realise their rural location preference than singles. Compared to singles, couples are also more likely to move to a rural area in a different municipality rather than staying in the current home. The extent to which rural location preferences are realised does not significantly differ between singles and families with children. Our findings might indicate that the rural housing market affords couples in particular with opportunities to find suitable and affordable rural housing. Future research is needed, however, to determine whether the circumstances of the rural housing market indeed offer an explanation for the different likelihoods of moving to rural housing found for couples, singles, and families.

The relative risk of realising a move to a rural area in the preferred municipality rather than not moving is estimated to be four times higher for those with a strong intention to move than for those with a less strong intention. People with a strong intention to move are, however, also more likely to substitute their rural location preferences: they are more likely to move to an urban area or to a rural area in a municipality other than initially preferred. These findings suggest that for those with a strong intention to move, it is most important to change residence within a short period of time. Whether they also settle in a location that fully complies with their initial location preferences appears to be of secondary importance.

Remarkably starters on the housing market are not more or less likely to realise their rural location preferences than those who are already on the housing market. The likelihood to move to either an urban area or a rural area in a different municipality rather than not moving does not differ between starters, renters, and homeowners.

Finally, intended movers' preference for an owner-occupied home or a rental home does not have a significant effect on the extent to which rural

location preferences are realised. Intended movers who prefer an owner-occupied home are, however, less likely to move to an urban area than those preferring a rental home. This finding corresponds with the fact that rural areas offer more opportunities to buy a home than urban areas. In the Netherlands, the rural housing market, particularly the social rental sector, is characterised by locals having preferential treatment over non-locals. In an additional analysis, we have tested whether our finding that intended local movers are more likely to realise their rural location preference than intended non-local movers especially applies to the rental sector by estimating separate regression models for those preferring to own and those preferring to rent. We find that irrespective of tenure preferences, intended local movers are more likely to realise their rural location preference than intended non-local movers.

## **6.5 Conclusion and discussion**

In this paper, we investigated the realisation of rural location preferences in the Netherlands. We have addressed the question whether intended local movers have more difficulties in realising their preference to move to a rural area in their preferred municipality (i.e., their current municipality) than intended non-local movers. To follow respondents with a rural location preference over time with respect to their actual mobility behaviour and location choice, we created an innovative longitudinal data set that allowed us to account for both individual and area-specific characteristics.

Although many studies on rural gentrification allege that rural areas are becoming more “middle-class” and that rural residents are outbid by non-locals and subsequently forced to move to elsewhere, this study demonstrates that in spite of their lower income, intended local movers are far more likely to realise their rural location preference than are intended non-local movers. In accordance with the findings of Stockdale and colleagues (2000, for rural Scotland) and Guimond and Simard (2010, for rural Québec), our results suggest that, at least in the Netherlands, rural residents do not encounter more problems securing rural housing than non-locals.

It is shown that intended non-local movers more often move to a location other than that initially preferred; that is, urbanites are more likely to move to (or within) an urban area, and non-urbanites to a rural area in a municipality other than initially preferred. Their place of origin is an important determinant to which people realise or adjust their rural location preferences. It may be that the rural location preference of intended non-local movers is more fluid and less pronounced and that this makes them more willing to move to a location

different than that initially preferred. Furthermore, factors such as place attachment and the existence of local ties may cause intended local movers to be more likely to remain in their current home rather than moving elsewhere than intended non-local movers. Although further research is needed to shed more light on the actual reasons, our findings help to clarify why (remote) rural housing projects partly aimed at attracting wealthy urbanites may fail, as has happened with project the Blauwestad in the north-eastern part of the Netherlands (Noordelijke Rekenkamer, 2010). Although many urbanites may express a preference for rural living, the expression of a preference does not imply that people necessarily act upon that preference.

Although individual characteristics are more important for the extent to which rural location preferences are realised than the spatial context, the local housing market pressure does play a role. Intended local movers and intended non-local movers are less likely to realise their rural location preference in rural areas with a highly pressured housing market than in rural areas with a lower pressured housing market. The local housing market pressure is especially relevant to the extent to which intended movers, in particular intended non-local movers, have moved to an urban area instead of to an initially preferred rural one. Because differences in housing market opportunities may lead to variations in the opportunity to secure rural housing in different areas (see also Guimond & Simmard, 2010), researchers should be cautious in generalising the results of area-specific studies. Strikingly, the local housing market pressure is more important to the actual realisation of rural location preferences than to the formation of location preferences among rural residents. Our results suggest that there are no pronounced adjustment mechanisms that are triggered by the local housing market situation in the location preferences among rural residents.

A drawback of our study is that the preferred residential environment type is indirectly assigned for some respondents. Consequently, some of those who were assigned a preference for rural living may not state such a preference themselves if they were asked directly. Further, although we have seen that intended non-local movers are less likely to realise their rural location preferences than intended local movers, it remains unclear to what extent this can be traced back to differences in the constraints people face in realising their preferences, in the strength of the rural location preference, or to factors such as emotional place attachment and local ties. Further research is needed to determine the role of these factors.

Despite these limitations, our longitudinal research provides valuable new insights into rural mobility processes. Firstly, it reveals that patterns found at the aggregated level do not always provide sufficient information to draw conclu-

sions at the individual level at which rural mobility decisions are made. Although studies conducted in the Netherlands have demonstrated that, at the aggregated level, poorer groups are moving out of rural areas while more affluent groups are moving in (Daalhuizen et al., 2011; Van Dam, 1996), our longitudinal analyses reveal that this phenomenon does not necessarily reflect the “displacement” of rural residents. Secondly, this study shows the importance of being cautious in assigning the struggles faced by rural residents in securing rural housing, as found in interviews, to processes such as rural gentrification or to displacement. For instance, if we had conducted a survey or in-depth interviews among rural residents living in a highly pressured rural area, we would have presumably found that rural residents, particularly the less affluent ones, face problems securing rural housing and that they feel forced to move to elsewhere. However, the micro-behavioural approach adopted in this study to investigate rural mobility decisions leads to different conclusions. This approach allowed us to make an objective comparison between the success rates of locals and non-locals, and revealed that rural residents are not systematically excluded from the countryside.

Although this study provides no other indication than that the claim that rural residents are forced from the countryside should be qualified if not confuted (cf. Hoggart, 2007), our findings do not mean that there is no reason for concern. Particularly in rural areas with a highly pressured housing market (most often rural areas within the urban sphere of influence), it is relatively difficult for both intended local and non-local movers to realise rural location preferences. Furthermore, there are indications that the less affluent in particular face greater difficulties in finding affordable and suitable homes in rural areas than do the more affluent. First, less affluent rural residents more often prefer to move to an urban area. Second, less affluent intended movers are less likely to realise their rural location preferences than more affluent intended movers. The adjustment mechanisms in the formation and realisation of rural location preferences among the less wealthy suggest a lack of suitable and affordable homes in rural areas for those with low incomes. As Hoggart (1997) remarks, the problems faced by the less affluent on the rural housing market seem to be merely “centred on the absence of social housing provision, rather than social class changes” (p. 485). Therefore, although there seems to be no reason to boost the preferential treatment of locals over non-locals in the housing allocation system in rural areas, our results do call attention to the difficulties that those with low incomes, both intended local movers and intended non-local movers, face in the realisation of their rural location preferences.

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## 7.1 Introduction

This thesis is about the discrepancy between stated intentions to move and actual mobility behaviour. Numerous studies have demonstrated that people often do not behave according to their prior stated attitude towards moving. Many people with a positive attitude towards moving (e.g., a desire, thought, intention, or expectation) do not change residence, while some of those who initially intend to remain in their current home move nonetheless. In other words, there are literal behavioural inconsistencies between the initial attitude and the actual outcome that are both dealing with the same specific behaviour (Fishbein & Ajzen, 2010; see also Gardner et al., 1985). Behavioural inconsistencies are found not only in intended mobility behaviour but also in other intended behaviours such as voting (Bassili, 1995), healthy eating (Jackson et al., 2005), leisure-time exercise (Godin et al., 1987), charitable giving (Smith & McSweeney, 2007), and academic achievement (Manstead & Van Eekelen, 1998).

The aim of this study was to explore how life course characteristics and changes, residential preferences, and contextual circumstances contribute to the discrepancy between stated mobility intentions and actual mobility behaviour in the Netherlands. An intention to move indicates the willingness to change residence. The main research question was as follows: *How do anticipated and unanticipated changes in the life course and residential preferences affect the discrepancy between stated mobility intentions and actual mobility behaviour, and what makes intended movers realise or substitute their initial residential preferences?*

To answer the main research question, five complementary studies were performed. All studies applied a longitudinal approach in which individuals were followed for two years to determine how their initial attitude towards moving and their residential preferences matched their actual residential behaviour (a term covering both mobility behaviour and actual housing choice). Chapters 2 and 3 addressed the role of anticipated triggers for moving, the strength or urgency of the intention to move, and residential preferences in the realisation of the intention to move. Chapter 4 demonstrated how unanticipated life events might lead to changes or adjustments in the initial attitude towards moving and hence to behavioural inconsistencies. In Chapters 5 and 6, the focus shifted to residential preferences. Chapter 5 examined the formation of preferences to move into homeownership and the actual residential behaviour of aspiring homeowners. Chapter 6 documented the realisation of rural location preferences. In the remainder of the present chapter, the results of the five complementary studies are summarised to answer the main research question. The chapter concludes with a reflection on the research findings and the value of the longitudinal

approach for the investigation of behavioural inconsistencies in the individual mobility decision-making process.

## **7.2 Behavioural inconsistencies in the residential mobility decision-making process**

This thesis has identified a number of inconsistencies between initial mobility intentions and actual mobility behaviour, a finding that is consistent with other longitudinal studies investigating mobility outcomes conditional on initial attitudes towards moving (e.g., Kan, 1999; Lu, 1998; Rossi, 1955). First, the vast majority of those who intended to move within two years (approximately two-thirds) did not move within this period and may have postponed or discarded their initial intention to move. A second behavioural inconsistency arises among people who initially intended to stay in their current home: a small proportion of them moved nonetheless. Some of these movers may have developed an intention to move after the interview and subsequently succeeded in realising this intention, but other unexpected moves might have been triggered by less voluntary reasons for moving, such as forced housing eviction. Third, because so many intended movers stayed in their current homes, many of them did not realise their residential preferences. Some intended movers who did change residence also made a housing choice that did not reflect their initial residential preference. For instance, Chapter 5 showed that of the people who preferred to move into homeownership, approximately 56 per cent did not move, 13 per cent moved to a rental home, and only one-third realised their preference to move into homeownership within two years. Adjustment mechanisms also apply to the realisation of rural location preferences, as demonstrated in Chapter 6. Of the intended movers who preferred rural housing in a specific municipality, less than 37 per cent actually changed residence. Among them, 30 per cent moved to an urban area, 14 per cent moved to a rural area in a different municipality, and approximately 56 per cent moved to a rural area in the preferred municipality.

This thesis has shown that the necessity of moving, indicated by the strength or the urgency of the mobility intention, strongly affects whether intended movers actually change residence. A low necessity to execute the intended move is associated with a lower likelihood of realising an intention to move. Whereas approximately 20 per cent of those with a less strong mobility intention changed residence within two years, almost 50 per cent of those with a strong mobility intention did so (Chapter 3). The necessity of executing the intended move proved to be the single most important determinant of whether intended movers actually changed residence.

This thesis has also shown that intended movers' sociodemographic, socioeconomic, and housing characteristics directly affect the relationship between attitudes towards moving and actual mobility behaviour. Consequently, certain individuals act less in accordance with their initial mobility intentions than others. Chapter 4 revealed that single people and people with a non-Western background were less likely to move if they intended to do so, but they were more likely to move "unexpectedly" than stable couples and native Dutch were. These differences were not attributable to differences in age, financial resources, or residential preferences. Furthermore, Chapter 2 showed that people who intended to move from one independent housing situation to another (intended filterers) moved less frequently than people who intended to move to their first independent home (intended starters). Likewise, older adults were less likely to realise an intention to move than younger adults were. These last two findings may indicate that people become more selective regarding their future home and less willing to adjust their residential preferences after they have progressed in their housing career. They may be more willing to postpone or discard their intention to move than to accept a home that does not meet their initial residential preferences.

### **7.3 Anticipated and unanticipated life course changes**

Decades of research have documented a close relationship between life events in the household and occupational career and residential mobility behaviour (e.g., Clark et al., 1994; Feijten, 2005; Mulder, 1993; Rossi, 1955). Together with residential dissatisfaction, life course events are important triggers for a positive attitude towards moving, which may lead to a change of residence. Chapters 2 and 3 argued that anticipated triggers for moving, such as the formation of a co-residential union or the wish to move to a larger home, may directly influence the last stage of the mobility process. Anticipated triggers for moving indicate the consequences of not realising an intended move. The more far-reaching these consequences are, the more committed intended movers will be to realising the intended move and the more likely it is that intended movers will actually change residence.

Indeed, Chapters 2 and 3 demonstrated that the extent to which people realise their intention to move is related to the desire to accomplish something in a particular life course trajectory by changing residence, either indicated by the main reason for moving (Chapter 2) or by anticipated and preferred changes in the household and housing career (Chapter 3). In line with the idea that union formation and union dissolution are associated with a high perceived necessity

of moving, Chapter 2 showed that people who intended to move for demographic reasons were more likely to change residence than those who intended to move for housing reasons, such as the preference for a garden or a larger house. The failure to realise an intended move triggered by housing reasons extends the suboptimal housing situation, which is unquestionably less severe than the failure to realise an intended move triggered by the anticipated formation or dissolution of a co-residential union. Furthermore, Chapter 3 showed that singles who expected to form a multi-person household after an intended move were more likely to move than stable singles, which supports the idea that intended moves prompted by a household change are more necessary than intended moves of stable households. In line with the thought that homeowners usually do not move out of the owner-occupied housing sector unless there is an urgent need to do so, people who preferred to move out of homeownership had a particularly high probability of realising their intention to move. Finally, Chapter 2 revealed that dissatisfaction with the home provides an extra stimulus for realising an intention to move. In sum, it appears that the realisation of intentions to move is determined not only by the stage in the various life course careers, as has been shown in previous research, but also by anticipated and preferred changes in these careers. Thus, such changes are relevant for the formation of intentions to move and for the extent to which people realise their intention to move.

Whereas Chapter 3 examined whether anticipated changes provide an additional stimulus for realising the intention to move, Chapter 4 argued that unanticipated changes in the household and occupational career might lead to changes or adjustments in the initial attitude towards moving. Unanticipated life events are not considered in the “mental calculus” of the initial intention to move or to stay and may therefore lead to potential behavioural inconsistencies in the individual mobility decision-making process.

Strong evidence is found that unanticipated changes in the household and occupational career may cause an unexpected need to move, which may result in “unexpected” moves. The formation and dissolution of a co-residential union, childbirth, job change, and losing a job all increased the likelihood of moving among those who initially had no intention to change residence. People who did not intend to move before they experienced the dissolution of a union were estimated to be 16 times more likely to move in the year the union dissolves than stable singles were. This outcome is not surprising because moves are instrumental to these household events. It should be noted that no information was available on anticipated household changes for people without an intention to move. The life events may therefore not have been unanticipated at the time of

interview. However, because these events are known to be important triggers for an intention to move and because such an intention was initially lacking, it is likely that these events were unanticipated at the moment of interview.

Furthermore, union dissolution, union formation, and childbirth led to a higher likelihood of moving among those who already intended to move for reasons other than household or job changes, such as housing and education. This suggests that unanticipated life course events may increase the urgency of previously reported intentions to move, resulting in an extra stimulus to move within a short period.

No support was found for the hypothesis that certain unanticipated life events may also result in postponement or cancellation of the intended move. Even though becoming a widow(er) or the loss of a job may negatively affect people's financial resources for a new home, becoming unemployed or a widow(er) had no significant effect on the probability of moving among those who already intended to move. Perhaps this finding can be traced back to the system of private insurances and social security benefits in the Netherlands. Unemployment benefits, widow(er) pensions, benefits from life assurances (particularly for homeowners), and a rise in housing benefits (for renters) may partly offset income decline following widowhood and unemployment, particularly in the short term (see also Feijten, 2005).

#### **7.4 Housing policy context, socioeconomic resources, and residential preferences**

The individual mobility decision-making process cannot be separated from the context in which residential choices are made. The context determines the housing market opportunities for people to move to a home that suits their residential preferences. In the Netherlands, housing market opportunities are shaped by not only the tension between housing demand and housing supply (an issue that will be discussed in greater detail in Section 7.5) but also by a longstanding tradition of government intervention. For individuals, this intervention is noticeable in regulated rents, housing allowances, and allocation rules for social rental housing, which makes up approximately three-quarters of the rental housing sector. In the owner-occupied housing sector, a sector that has grown into the largest housing market sector, the intervention is marked by tax savings in the form of fully deductible paid mortgage interest on taxable income (Haffner & Boumeester, 2010; Mulder, 2004; Rouwendal, 2007). The “pleasures” and “pains” of government intervention are closely interwoven with individuals' socioeconomic situation. For instance, a high household income precludes households from entering large parts of the rental sector. Whereas lower income

households particularly benefit from housing allowances in the social rental sector, higher income households benefit the most from the full deductibility of paid mortgage interest on taxable income due to their higher marginal tax rate (Haffner & Boumeester, 2010; Mulder, 2004; Rouwendal, 2007).

The relevance of the context became clear when investigating the role of housing tenure preferences in the realisation of people's intention to move. Chapters 2 and 3 showed that renters who preferred to move within the rental housing sector had the lowest probability of moving, a finding that presumably reflects the barriers to moving within the social rental housing sector, such as waiting lists and allocation rules. Irrespective of their residential preferences, homeowners were more likely to realise a strong intention to move than renters who preferred to move in the rental sector of the housing market (Chapter 3).

Theoretically, a favourable socioeconomic situation widens the range of dwellings – at least in the owner-occupied housing sector – that are within the financial reach of the intended mover. Does this mean that people with higher income are more likely to realise their intention to move than are people with low income? The findings of these chapters indicate that the answer to this question goes beyond a simple “yes” or “no”. Chapter 4 showed that high income facilitates the realisation of intended moves as well as “unexpected” moves. Chapter 3 demonstrated that people with high income were more likely to realise a strong intention to move than people with low income. These findings suggest that people with higher income have more opportunities to move shortly after forming an intention to move than people with a low income. Lower-income households often rely on the social rental housing sector, which may make their mobility behaviour subject to external factors, such as allocation rules and waiting lists for rental dwellings, more than to personal income.

However, Chapter 2 and, to a lesser extent, Chapter 3 did not show strong evidence that people with high income are more likely to realise an intention to move than are people with low income. In contrast to Chapter 4, in these chapters, the probability of realising an intention was also accounted for the strength of the mobility intention and for residential preferences (hence, for the fact that people with high income may search in different segments of the housing market). The absence of a significant income effect in the first two empirical chapters of this thesis lends support to the thought that while a high income expands the range of financially affordable dwellings, it does not necessarily expand the range of dwellings matching residential preferences. Another explanation for why income barely affected the realisation of intentions to move in Chapters 2 and 3 (which does not explain, however, why income was found to facilitate actual mobility behaviour in Chapter 4) might be that people

tend to consider their socioeconomic resources in the formation of both mobility intentions (De Groot et al., 2008) and residential preferences (an issue that will be pursued below). People who believe that they are unable to move to a home that suits their residential preferences due to insufficient financial resources may not form an intention to move in the first place, a phenomenon that is known as “adaptive preference formation” (Elster, 1983).

Whereas the effect of income on the realisation of intentions to move is not conclusive, socioeconomic resources did affect the extent to which intended movers realise their residential preferences when they change residence. Whereas Chapter 6 revealed that high income facilitates the realisation of rural location preferences, Chapter 5 demonstrated that aspiring homeowners in a more favourable socioeconomic position – indicated by high income and a full-time job – had the highest likelihood of moving into homeownership. Aspiring homeowners in more favourable socioeconomic positions were also less likely to move to a rental home than those with fewer socioeconomic resources. This finding corresponds with the idea that particularly affluent people benefit financially from becoming homeowners and often do not have access to large parts of the rental housing sector. Another finding worth noting is that people tended to adjust their tenure preferences to their socioeconomic resources (Chapter 5). Socioeconomic resources had an even stronger impact on the formation of preferences to move into homeownership than on the realisation of these preferences. This last finding might be attributable to the fact that people had already considered their socioeconomic resources in the formation of their tenure preferences.

### **7.5 Location as a source of opportunities, constraints, and residential ties**

Housing market circumstances determine people’s opportunities to realise an intention to move. High housing market pressure is reflected in high housing prices and long waiting lists for social rental housing and is associated with a greater difficulty in finding a suitable and affordable home. Regions and areas (or neighbourhoods) within municipalities differ in their pressure on the housing market. Thus, different regions and areas offer different opportunities to realise intentions to move and residential preferences. In particular, people in the Randstad, a densely populated region that serves as the economic heart of the Netherlands, are expected to have fewer housing opportunities than those who prefer a home elsewhere because housing market pressure tends to be highest in the Randstad. In the Randstad, housing prices are higher on average, and the waiting lists for social rental housing are generally longer. In the north wing of

the Randstad, owner-occupied housing is expensive compared to renting (Chapter 5), and the rural areas within this part of the Netherlands are characterised by high and increasing housing market pressure (Chapter 6).

Accordingly, Chapters 2 and 3 showed that intended movers who preferred a home in the Randstad were less likely to change residence than those who preferred a home in the national periphery. This thesis demonstrated that high housing market pressure accompanies a lower rate of success in two ways: realising an intention to move and realising residential preferences, as demonstrated in the last two empirical chapters of this thesis.

Chapter 5 showed that if owning is expensive relative to renting in the region where intended movers preferred to move, aspiring homeowners were less likely to realise a preference to move into homeownership. Somewhat surprisingly, a high house price-to-rent ratio was not associated with a higher degree of substitution: it did not lead to a higher likelihood of moving to a rental home. Once intended movers have formed a manifest preference to move into homeownership, they do not seem willing to give up this preference because of housing market circumstances. This might be related to the finding that intended movers have adjusted their tenure preferences to the regional housing market circumstances. If owning is expensive compared to renting, people were significantly less likely to prefer to move into homeownership. Particularly in the regions in which the house price-to-rent ratio is relatively high (in the regions within the Randstad and in the central-south of the Netherlands), people tended to express a preference to move into homeownership less often and they also realised this preference less frequently.

The results of Chapter 6 suggest that high housing market pressure tends to hamper the realisation of rural location preferences. As discussed in Section 7.2, many intended movers who preferred rural housing in a specific municipality stayed in their current home, whereas others moved to a different residential environment or location than they initially preferred. In particular, people who preferred to move to rural areas with highly pressured housing markets, which are often rural areas within the urban sphere of influence, were less likely to realise this preference and were more likely to move to an urban area than were people who preferred to move to a rural area with a less pressured housing market. The findings of the study also suggest that the local housing market pressure is more important to the realisation of rural location preferences than to the formation of location preferences among rural residents. The proportion of rural residents who preferred to move to a rural area within their current municipality did not differ between rural areas with a highly pressured housing market and rural areas with a lower pressured housing market. It could be that

many rural residents are attached to their current locality. This attachment may have a social dimension, such as social ties or familiarity with fellow residents, and a physical dimension, referring to both the built and the natural environment (Scannell & Gifford, 2010). It is precisely this attachment to their residential environment and locality that may make rural residents less likely to prefer to move beyond the boundaries of their current locality, even if the housing market pressure is high.

Attachment to the current residential location and environment type also seems to play a role in the extent to which people realise or substitute their rural location preferences. Rural residents who preferred to move to a rural area within their municipality (the so-called intended local movers) were more likely to realise their rural location preference and were less likely to move to a location different from their initial preference than were intended non-local movers (Chapter 6). Whereas urbanites had a higher likelihood of moving to an urban area, non-urbanites were more likely to move to a rural area in a municipality other than their initial preference. The results indicate the importance of place attachment over financial resources for the extent to which people realise or adjust their rural location preferences. These findings may also suggest that the rural location preferences of intended non-local movers are more fluid than those of intended local movers.

## **7.6 Reflection on the longitudinal research approach**

Throughout this thesis, the longitudinal research approach has proved valuable for gaining a better understanding of the mechanisms underlying the discrepancy between stated mobility preferences and actual mobility behaviour. The longitudinal research approach leads to a more accurate picture of the extent to which people are able to move if they intend to do so than the cross-sectional approach (Chapter 2). In the cross-sectional approach, the number of recent movers is compared with the number of people who are actively searching for a home but have not moved in the same period. Because this type of comparison counterbalances “non-realizations” with “unexpected moves”, cross-sectional approaches lead to a smaller intention–behaviour discrepancy and hence to a less accurate portrayal of the extent to which mobility intentions are realised than the longitudinal approach.

Following individuals’ actual mobility behaviour longitudinally has also shed light on old findings. For instance, non-longitudinal studies generally show that homeowners are less likely to have a positive attitude towards moving than renters and that they move less frequently. Chapters 2 and 3 showed that a

different picture emerges when people are followed over time and when potential differences in residential preference and renters' stronger intention to move are taken into account. Homeowners were more likely to realise their strong intention to move than were renters who preferred to move within the rental housing sector (Chapter 3). In fact, Chapter 2 indicated that renters who preferred to move within the rental housing sector had the lowest probability of moving, which suggests that, in the Netherlands, the barriers to moving are particularly large in the social rental housing sector.

Another example relates to concerns expressed in the rural gentrification literature that rural residents have difficulties finding homes within their locality due to the demand for rural housing by relatively wealthy non-locals, particularly urbanites. Though it might be true that, at the aggregated level, poorer groups are moving out of rural areas while more affluent groups are moving in (Daalhuizen et al., 2011; Van Dam, 1996, both for the Netherlands), this does not imply that rural residents have greater problems securing rural housing than non-locals. Although many intended non-local movers, particularly those originating from urban areas, have the potential to outbid intended local movers, rural residents who preferred to move to a rural area within their municipality were more likely to realise their rural location preference than were intended non-local movers (Chapter 6). The longitudinal approach reveals that behind the mobility patterns at the aggregate level, diffuse residential mobility decisions made at the individual level may hide.

## **7.7 Reflections on working with a linked panel**

The longitudinal analyses presented in this thesis are based on large-scale, cross-sectional housing surveys that are enriched with longitudinal register data. This innovative longitudinal data set has important advantages over the (often small-scale) panel surveys generally used for the investigation of discrepancies between stated attitudes towards moving and actual mobility behaviour. Panel surveys often have difficulties to track respondents, especially if the study is conducted over a long period. This is particularly problematic for investigating behavioural inconsistencies in the residential mobility decision-making process because movers are more difficult to trace than non-movers. The longitudinal data set used for this thesis is free from panel attrition and attrition bias. The combination of survey and register data facilitated the tracking of all respondents over time and the creation of a data set large enough to perform in-depth analyses with great statistical power.

Nonetheless, the use of register data to monitor actual residential behaviour has some drawbacks that should be addressed. First, it was not always easy to obtain the required information in the desired form from the SSD (see also Smits, 2010). In particular, it was time consuming to monitor life events in the household career at the individual level (for more information, see Chapter 4). Second, the register data provides a somewhat limited picture of the “final” stage of the mobility decision process. It provides little to no insight into the search process and the trade-offs between the various residential preferences. If intended movers have not moved within two years, it is impossible to say whether these non-moves are truly “non-realizations”. While some intended movers may still be searching for a new home, others may no longer have an intention to move or may have postponed their intention to move. Intentions may fade, but the data do not provide information about whether or how quickly this happens.

### **7.8 The importance of stated preferences for revealed preferences**

Even though the predictive value of stated intentions to move for actual mobility behaviour proved to be limited, people who intended to move relocated considerably more often than those who intended to stay in their home. Therefore, intentions to move, particularly strong intentions to move, are important predictors of subsequent mobility behaviour. However, when using stated preferences as an indicator for housing preferences and for future migration flows or housing demand, as is sometimes done in housing research (Clark & Deurloo, 2006; Yang, 2000), researchers should bear in mind that such preferences only offer a glimpse into the actual residential choices of individuals (revealed preferences). Stated preferences also provide little insight into moves that occur almost immediately after the decision to change residence, such as moves triggered by the dissolution of a co-residential union. Furthermore, as with actual residential behaviour, stated preferences may reflect not only what people desire to accomplish in their housing career but also the (perceived) constraints and restrictions, that is, what people perceive as possible given their financial means and housing market circumstances. Moreover, stated preferences are fluid and may vary along a continuum. As Rossi (1955) argues, “At any point in time, a survey of households will find some that are at the point of moving, others feeling vaguely that they would like to do so, and still others can be found who are firmly wedded to their present residences.” (p. 66). Some people without a stated intention to move may have a latent desire to change residence that has not yet crystallised into a mobility intention.

As with other studies on the realisation of positive attitudes towards moving (e.g., De Jong et al., 1985; Duncan & Newman, 1976), it was fairly difficult to explain why people did not behave according to their initial intention to move based on life course characteristics and the changes therein, residential preferences, and contextual circumstances. The explanatory power of the multivariate models, indicated by the pseudo  $R^2$ , was often modest. This difficulty might be related to the fact that some of these factors are already considered in the formation of mobility intentions and residential preferences. Perhaps there are other factors that interfere with the outcome of the individual mobility decision-making process. For example, it could be that many people who intend to move may not have passed the critical threshold at which the benefits of moving surpass the costs of moving and at which point they may begin searching for a house. Furthermore, the findings of Chapter 6 hint at the relevance of socio-psychological factors, such as place attachment. Neighbourhood attachment has been found to decrease the likelihood of having a positive attitude towards moving (for instance, see Lee et al., 1994; Permentier et al., 2009). The inclusion of information about place attachment may contribute to this strand of literature by revealing whether place attachment also explains why so many intended movers do not change residence and why some choose different locations than those they initially preferred. Future research must take on the challenging task of further unravelling the interwoven factors – motivational, life course-related, contextual, and socio-psychological – that may lead to behavioural inconsistencies in the individual mobility decision-making process. In-depth qualitative research may provide valuable insights into the dilemmas, considerations, barriers, and socio-psychological factors that cause people to stay in their current homes despite their initial intention to change residences or to make housing choices other than initially preferred.

Despite the unresolved issues regarding behavioural inconsistencies in the mobility decision-making process, this thesis has provided a better understanding of the mechanisms underlying the discrepancy between attitudes towards moving and actual mobility behaviour. It is shown that the mobility behaviour of intended movers depends not only on life course characteristics but also on anticipated and unanticipated changes to these characteristics. Preferences regarding home and residential location, as well as the willingness to accept a home that does not meet the initial residential preferences, affect the likelihood of realising an intention to move. Stated preferences and revealed preferences alone cannot fully explain the complex individual mobility decision-making processes underlying potential moves.

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# Appendices

# Summary

*Intentions TO MOVE, RESIDENTIAL preferences AND mobility BEHAVIOUR:*

A LONGITUDINAL PERSPECTIVE

With their residential mobility behaviour and housing choices, individuals contribute to aggregate-level processes such as the segregation of low-income households. A major issue of debate is whether such processes are attributable to differences in residential preferences or differences in restrictions and constraints on moving, whereby some individuals are able to move freely while others must settle for a home or residential location that does not match their residential preferences. Therefore, it is important to gain more insight into the factors that facilitate the realisation of positive attitudes towards moving and residential preferences, the circumstances in which individuals move to a home or residential location other than their initial preference, and the extent to which actual residential behaviour (a term covering both mobility behaviour and housing choice) is the result of preferences, on the one hand, and restrictions and constraints, on the other.

For decades, researchers have attempted to understand the individual mobility decision-making process, a process that includes the formation of a positive attitude towards moving (e.g., a desire, thought, intention, or expectation), the search and evaluation of housing alternatives and, finally, the decision to move or stay. Without exception, researchers have demonstrated that many individuals do not move despite their initial positive attitudes towards moving and that some individuals move although they initially had no desire or intention to do so. In other words, there are literal behavioural inconsistencies between the initial attitude and the actual outcome that are both dealing with the same specific behaviour. Although previous research has provided more insight into the factors in the realisation of positive attitudes towards moving, some “black holes” remain in the knowledge of behavioural inconsistencies within the individual mobility decision-making process.

One topic that has been overlooked in previous research is the impact of both anticipated and unanticipated changes in the life course careers on the extent to which individuals behave according to their initial attitudes towards moving. Because anticipated changes may act as triggers for moving (with some more urgent reasons for moving than others), anticipated changes may directly affect the extent to which positive attitudes towards moving are realised.

Conversely, unanticipated changes may change the initial attitude towards moving, which in turn may lead to behavioural inconsistencies in the individual mobility decision-making process. A second lacuna relates to the role of residential preferences in the realisation of positive attitudes towards moving. Although preferences regarding the type of home and residential location are relevant to the housing market opportunities for changing residence, previous research has paid little attention to the role of residential preferences in realising positive attitudes towards moving and the extent to which individuals realise or substitute their initial residential preferences.

This thesis aims to explore how life course characteristics and changes, residential preferences, and contextual circumstances contribute to the discrepancy between stated mobility intentions and actual mobility behaviour in the Netherlands, whereby an intention to move indicates the willingness to change residence. This study's main research question is as follows: *How do anticipated and unanticipated changes in the life course and residential preferences affect the discrepancy between stated mobility intentions and actual mobility behaviour, and what makes intended movers realise or substitute their initial residential preferences?*

To answer the main research question, a longitudinal data set was created by enriching the large-scale, cross-sectional Housing Demand Surveys (HDS) 1998 and 2002 and its successor, the Housing Research Netherlands (HRN) 2006 survey, with individual register data from the longitudinal Social Statistical Database (SSD) of Statistics Netherlands. Whereas the housing surveys provide information on the respondents' residential preferences and intentions to move within two years, the SSD can be used to derive the actual moves, housing choices, and life course changes of the same respondents in the two years following the survey. To answer the main research question, five complementary studies are conducted.

### **The realisation of intentions to move: longitudinal and cross-sectional analyses of stated intentions and actual behaviour**

Chapter 2 relates to the first part of the main research question and addresses the impact of anticipated triggers for moving on the realisation of initial intentions to change residence. This chapter argues that anticipated triggers for moving, indicated by the main reason for moving and residential dissatisfaction, are not only relevant for the formation of intentions to move but also for the extent to which these intentions are subsequently realised. The following research question is addressed: *To what extent do reasons for moving, housing dissatisfaction, and housing preferences hamper or stimulate the actual mobility*

*behaviour of those intending to move to another dwelling?* To answer this research question, a logistic regression analysis was employed for intended filterers (individuals intending to move from one independent housing situation to another).

The longitudinal analysis reveals that the vast majority (approximately two-thirds) of those intending to move within two years did not change residence at all. Furthermore, some individuals moved although they initially did not intend to do so. Some of these movers may have developed an intention to move following the interview and subsequently succeeded in realising this intention, but the unexpected moves of others might have been triggered by less voluntary reasons for moving, such as a housing eviction. In absolute terms, these “unexpected movers” make up a sizeable group; a substantial share of actual movers during a certain period had no intention to change residence at the beginning of the period. Because of these “unexpected movers”, the cross-sectional approach, which is an alternative method for investigating the relationship between residential mobility intention and behaviour, generates an overly positive picture of the success rate to realise an intention to move. In the cross-sectional approach, the number of recent movers is compared with the number of individuals who were actively searching for a home in the same period but who did not move. Because “non-realizations” are counterbalanced by “unexpected moves” in the comparison, cross-sectional approaches lead to a smaller intention–behaviour discrepancy and hence, to a less accurate portrayal of the extent to which mobility intentions are realised than the longitudinal approach.

As hypothesised, triggers for moving directly affect the realisation of intentions to move. In line with the thought that anticipated household changes, such as union dissolution and union formation, are associated with a high perceived necessity of moving, intended filterers who intend to move for demographic reasons are more likely to change residence than those intending to move because of housing reasons. Furthermore, dissatisfaction with one’s current home provides an extra stimulus to realise an intention to move within a short period.

Residential preferences regarding the home and location also affect the extent to which intentions to move are realised. In line with the thought that homeowners usually do not move out of homeownership unless there is an urgent need to do so, homeowners who prefer to move to a rental home have a particularly high probability of realising their intention to move. Conversely, renters who prefer to move within the rental housing sector have the lowest probability of moving. This finding may reflect the barriers to moving within the social rental housing sector, which comprises three-quarters of the rental

housing sector in the Netherlands. Individuals who prefer to move to a rental dwelling in the social sector are often confronted with waiting lists and allocation rules limiting the type of homes and locations to which they can move. Thus, the individual mobility decision-making process cannot be separated from the context in which residential choices are made; the context determines individuals' housing market opportunities to move to a home suiting their residential preferences. Therefore, it is no surprise that intended filterers who prefer a home in the Randstad, a densely populated region with relatively high housing market pressure, are less likely to change residence than those preferring a home in the national periphery. Another noteworthy finding is that the urgency of the intention to move increases the likelihood that intended filterers will change residence within two years.

### **Intentions to move and actual moving behaviour in the Netherlands**

Elaborating on Chapter 2, Chapter 3 addresses the following research question: *To what extent do anticipated triggers for moving, the strength of the intention to move, resources and restrictions, and the preferred search location play a role in the realisation of an intention to move?*

The logistic regression analysis of actual mobility behaviour demonstrates that the realisation of intentions to move is affected not only by current background characteristics, as documented in previous research, but also by the expectation or preference for accomplishing something in a particular life course career after the intended move. Mobility intentions that are accompanied by an anticipated or preferred change in the housing or household situation are more likely to be realised. Singles who expect to form a multi-person household after an intended move are more likely to move than are stable singles, which corresponds to the idea that intended moves prompted by a household change are more necessary than intended moves of households that are expected to remain the same. Furthermore, the probability of actually moving is particularly high for those who prefer to move from owner-occupied to rental housing.

Chapter 3 demonstrates that the extent to which individuals realise their intention to move depends on the strength of the intention to move. Individuals with a strong intention to move are almost four times as likely to move as individuals with a less strong intention to move. Although homeownership is often believed to form a barrier to moving, homeowners (irrespective of housing tenure preferences) are more likely to realise a strong intention to move than renters who prefer to move within the rental sector of the housing market. As expected, intended movers whose search location is in the Randstad have a lower probability of moving than those who search for a home in the national periph-

ery. Finally, the impact of hampering and facilitating factors on actual mobility behaviour may differ between all individuals with an intention to move and individuals with a strong intention to move. For individuals with a strong intention to move, triggers for moving that stem from anticipated changes in the household career do not significantly affect the probability of moving. Similarly, whereas a high income is important for the realisation of strong intentions to move, a high education or employment proved more important for the realisation of intentions to move in general, irrespective of the strength of the intention to move.

### **Life events and the gap between intention to move and actual mobility**

In Chapter 4, the focus shifts to the role of unanticipated life course changes in the discrepancy between stated attitudes towards moving and actual mobility behaviour. The chapter addresses how unanticipated life course changes, which are life events that were not taken into account in the “mental calculus” of the initial attitude towards moving, may lead to behavioural inconsistencies in the individual mobility decision-making process.

Employing logistic regression analyses of person-years, this chapter shows that the formation or dissolution of a co-residential union, the birth of a child, or a change or loss of a job may trigger an individual to move despite of their initial intention to stay in their current home. This finding supports the hypothesis that unanticipated life events may create an unexpected trigger for moving and subsequent move within a short time period among individuals who did not intend to move prior to the occurrence of the event. The majority of moves following union dissolution are attributable to individuals who initially did not intend to change residence. Furthermore, union dissolution, union formation, and childbirth lead to a higher likelihood of moving among individuals who intended to move for reasons other than household or job changes prior to the occurrence of the event. This finding suggests that unanticipated life course events may increase the urgency of previously reported intentions to move, resulting in an extra stimulus to move within a short period. The hypothesis that certain unanticipated life events may also result in the postponement or cancellation of the intention to move was not confirmed. Although becoming a widow(er) and the loss of a job may negatively affect the financial resources that individuals can spend, or are willing to spend, on a new home, no significant effects were found of becoming widowed or becoming unemployed on the probability of moving among those intending to move.

There are two other noteworthy findings. First, the impact of life events and personal characteristics, such as migrant status, on subsequent mobility

behaviour may differ among individuals at various stages of the mobility decision-making process. For instance, the effect of becoming unemployed on the probability of moving is significantly different for individuals with and without an initial intention to move. Second, a high income facilitates the realisation of intentions to move as well as “unforeseen” moves. Apparently, individuals with a higher income have more opportunities to move shortly after the formation of an intention to move.

### **Longitudinal analysis of the formation and realisation of preferences to move into homeownership in the Netherlands**

From Chapter 5 on, this thesis focuses on the second part of the main research question, the realisation of residential preferences. Chapter 5 focuses on the formation of preferences to move into homeownership and the actual residential behaviour of aspiring homeowners, thereby distinguishing between moving to own, moving to rent, and remaining in the current home. The research question is as follows: *To what extent do individual characteristics and contextual circumstances influence the formation and realisation of preferences to move into homeownership, and in which of these two stages do the various determinants have the largest impact?*

Descriptive analyses show that a minority of intended movers who have not yet entered homeownership prefer to move into homeownership. Only 31 per cent of these aspiring homeowners subsequently realise their preference to move into homeownership within two years. Another 13 per cent moved to a rental home, and the vast majority did not move at all. The results of a multinomial logistic regression of actual residential behaviour suggest that aspiring homeowners who are in a less favourable socioeconomic position particularly struggle to realise their preference to move into homeownership. Aspiring homeowners without a job or with a low income are less likely to move into homeownership and are more likely to move to a rental home than those with a high income or a full-time job.

Chapter 5 also reveals that individuals tend to adjust their housing tenure preferences to their socioeconomic resources and the housing market circumstances. A high income, higher education, a full-time job, and low costs of owning relative to renting in the preferred housing market region make intended movers more likely to prefer to move into homeownership. The finding that intended movers tend to adjust their tenure preferences to their financial means and the regional housing market circumstances may explain why these factors have a more modest impact on the realisation of preferences to move into homeownership than initially expected.

## **Once an outsider, always an outsider? The accessibility of the Dutch rural housing market among locals and non-locals**

Chapter 6 addresses the following research question: *Do intended local movers realise their rural location preference (i.e., their preference to move to a rural area within their current municipality) less often than intended non-local movers, and to what extent do income and the local housing market pressure influence the realisation or substitution of rural location preferences?* Despite the concern, as expressed in the rural gentrification literature, that rural residents may have difficulties moving within their rural localities due to the demand for rural housing by relatively wealthy non-locals, this study suggests that, at least in the Netherlands, rural residents do not have greater problems securing rural housing than non-locals.

Findings from a multilevel multinomial logistic regression analysis of the realisation of rural location preferences show that rural residents are far more likely to move to rural areas in their preferred municipalities (i.e., their current municipality) than intended non-local movers originating from urban areas or other rural areas. Intended non-local movers are more likely to move to a location other than their initial preference: urbanites are more likely to move to (or within) an urban area and non-urbanites to a rural area in a municipality other than their initial preference. These findings suggest that the rural location preferences of intended non-local movers are less rigid than those of intended local movers. The results also stress the relevance of current residential ties and place attachment above financial resources in the extent to which individuals realise or adjust their rural location preferences.

Furthermore, Chapter 6 shows that the local housing market pressure directly affects actual residential behaviour. Preferring to move to a rural area with a highly pressured housing market, which is often a rural area within the urban sphere of influence, decreases the likelihood of realising a rural location preference and increases the likelihood of moving to an urban area. Surprisingly, rural residents do not seem to adjust their location preferences to the perceived local housing market opportunities in advance. The proportion of rural residents preferring to move to a rural area within their current municipalities does not differ between rural areas with a highly pressured housing market and rural areas with a lower pressured housing market. Rural residents are presumably emotionally attached and have local ties to their rural localities, which may make them less likely to prefer to move beyond the boundaries of their current locality, even if the local housing market pressure is high.

## **Conclusion and discussion**

By following individuals longitudinally regarding their actual residential behaviour conditional on their stated mobility intentions and residential preferences, this thesis has provided a better understanding of the factors that hinder and facilitate the realisation (or substitution) of intentions to move and residential preferences. The actual mobility behaviour of intended movers depends not only on life course characteristics but also on the anticipated and unanticipated changes therein. Changes may act as triggers for moving, and some changes are more urgent reasons for moving than others. Depending on their associated need for moving, both anticipated and unanticipated changes may provide an extra stimulus to change residence. Furthermore, preferences regarding the home and residential location and the willingness to accept a home that does not meet initial residential preferences affect the likelihood of realising an intention to move.

This longitudinal study provides a new perspective on previous findings. Although homeownership is generally perceived as a barrier to moving, homeowners do not have more difficulties than renters in realising their intentions to move. Furthermore, despite the concerns that rural residents are squeezed out of their rural localities due to rural housing demand by relatively wealthy non-locals, it is demonstrated that rural residents are more likely to move to a rural area within the preferred municipality (i.e., their own) if they prefer to do so than intended non-local movers are. The longitudinal approach reveals that behind the mobility patterns at the aggregate level, diffuse residential mobility decisions made at the individual level may hide. The results of this thesis suggest that stated and revealed preferences alone are unable to tell the full story of the complex individual mobility decision-making processes underlying potential moves.

Although the large discrepancy between stated preferences and revealed preferences may raise questions about the predictive value of stated mobility intentions for actual mobility behaviour, individuals with an intention to move relocate considerably more often than individuals who initially intended to remain in their current homes. Intentions to move, particularly strong intentions to move, are therefore important predictors of actual mobility behaviour. However, when using stated preferences as an indicator for housing preferences and future migration flows or housing demand, housing researchers should bear in mind that stated preferences only offer a glimpse into the actual residential choices of individuals. Furthermore, stated preferences may reflect not only what people desire to accomplish in their housing career but also what individuals

perceive to be possible given their financial means and the housing market circumstances.

The analyses presented in this thesis are based on a longitudinal data set in which large-scale, cross-sectional housing surveys are enriched with longitudinal register data. This innovative longitudinal data set has some important advantages over the (often small-scale) panel surveys generally used to investigate the intention–behaviour gap. Whereas panel surveys often face difficulties in tracking the same respondents over time because of respondent dropouts caused by moves, deaths or refusals to continue, the longitudinal data set used for this thesis is free from panel attrition and attrition bias. The combination of survey and register data allowed for easy tracking of all respondents over time and for creation of a data set large enough to perform in-depth analyses with great statistical power.

Some drawbacks of this study should be addressed. First, if an intended mover does not move within two years, it is impossible to determine whether this is truly a “non-realisation”. Whereas some intended movers may still be searching for new homes, others may no longer intend to move or may have postponed their intention to move. Intentions may fade, and the data do not indicate whether or how quickly this happens. Second, it is difficult to explain why individuals do not behave according to their initial mobility intentions based on life course-related factors, residential preferences, and contextual circumstances. This difficulty might be related to the fact that some of these factors are also taken into account in the formation of mobility intentions and residential preferences. Alternatively, other factors may interfere in the outcome of the individual mobility decision-making process. For example, many people intending to move may not have passed the critical threshold level at which the benefits of moving surpass the costs of moving, compelling them to begin searching for a new residence. The findings of Chapter 6 show that the inclusion of socio-psychological factors, such as attachment to the home, residential environment, or locality, might provide a better understanding of why intended movers realise and substitute their mobility intentions and residential preferences. Future research is needed to further unravel the interwoven factors, including motivational, life course-related, contextual, and socio-psychological factors, that may lead to behavioural inconsistencies in the individual mobility decision-making process. In particular, in-depth qualitative research will be a valuable tool for better understanding the dilemmas, considerations, barriers, and deeper socio-psychological processes that may interfere with the realisation of mobility intentions and residential preferences.

# Summary in Dutch

VERHUIS*intenties*, WOON*voorkeuren* EN *verhuis*GEDRAG:

EEN LONGITUDINAAL PERSPECTIEF

Individueel verhuisgedrag en individuele woonkeuzes dragen bij aan processen op een geaggregeerd niveau, zoals de segregatie van lage-inkomensgroepen in achterstandswijken. Daarbij rijst de vraag in hoeverre zulke processen zijn toe te schrijven aan verschillen in woonvoorkeuren of aan verschillen in restricties op verhuizen en mogelijkheden op de woningmarkt, waarbij sommigen in staat zijn hun verhuisintentie te realiseren en anderen genoeg moeten nemen met een woning of woonlocatie die niet overeenkomt met hun aanvankelijke woonvoorkeur. Het is daarom belangrijk om meer inzicht te krijgen in de factoren die een rol spelen bij de realisatie van verhuisintenties en woonvoorkeuren, de omstandigheden waaronder individuen naar een woning of woonlocatie verhuizen anders dan aanvankelijk gewenst, en de mate waarin het daadwerkelijke woongedrag (een overkoepelende term voor het verhuisgedrag en de woonkeuzes) het resultaat is van voorkeuren enerzijds en restricties en beperkingen op het micro- en het macroniveau anderzijds.

Al decennialang trachten onderzoekers meer grip te krijgen op het individuele verhuisproces. Dat besluitvormingsproces begint met het ontwikkelen van een positieve verhuisattitude (een wens, gedachte, intentie of verwachting), gaat vervolgens over in het zoeken naar een woning die past bij de woonvoorkeuren en de mogelijkheden op de woningmarkt, en resulteert uiteindelijk in de beslissing om al dan niet te verhuizen. Uit zowel internationaal als Nederlands longitudinaal onderzoek blijkt dat veel mensen niet verhuizen ondanks hun aanvankelijk positieve verhuisattitude, en dat anderen verhuizen terwijl ze aanvankelijk geen wens of intentie hadden om dit te doen. Er zijn, met andere woorden, inconsistenties tussen de aanvankelijke attitude en wat mensen daadwerkelijk doen. Hoewel eerder onderzoek veel licht heeft geworpen op de factoren die een rol spelen bij het daadwerkelijke verhuisgedrag, bestaan er nog altijd “zwarte gaten” in de kennis over gedragsinconsistenties in individuele verhuisprocessen.

Ten eerste is in eerdere studies nauwelijks aandacht besteed aan de invloed van verwachte en onverwachte veranderingen in de levensloop op de discrepantie tussen de aanvankelijke verhuisattitude en het daadwerkelijke verhuisgedrag. Verwachte veranderingen, zoals gaan samenwonen, kunnen

aanleiding zijn om te (willen) verhuizen, waarbij sommige veranderingen gepaard gaan met een hogere verhuisurgentie dan andere. Als verhuismotief kunnen verwachte veranderingen dan ook direct invloed uitoefenen op de realisatie van positieve verhuisattitudes. Onverwachte veranderingen, zoals het overlijden van een partner, kunnen op hun beurt ook invloed hebben op eerder geuite verhuisattitudes, wat uiteindelijk kan resulteren in gedragsinconsistenties in het individuele verhuisproces.

Ten tweede is in eerder onderzoek weinig aandacht besteed aan de rol van woonvoorkeuren. Hoewel de voorkeur voor een huur- of koopwoning of voor een specifieke woonlocatie invloed uitoefent op de mogelijkheden die mensen hebben om te verhuizen, is er weinig aandacht voor de invloed van woonvoorkeuren op het realiseren van positieve verhuisattitudes, laat staan voor de mate waarin individuen hun aanvankelijke woonvoorkeur realiseren of, wanneer de gewenste woning niet wordt gevonden, aanpassen dan wel bijstellen.

Het doel van dit proefschrift is om inzicht te krijgen in de mate waarin levensloopkenmerken (zoals de situatie in de huishoudens- en arbeidsmarkt-carrière) en de veranderingen daarin, woonvoorkeuren en contextuele omstandigheden bijdragen aan de discrepantie tussen geuite verhuisintenties en daadwerkelijk verhuisgedrag in Nederland op individueel niveau. Het hebben van een verhuisintentie houdt daarbij in dat mensen binnen twee jaar willen verhuizen; in Nederlandse woononderzoeken worden mensen met een verhuisintentie vaak aangeduid met de term “verhuisgeneigden”. De centrale onderzoeksvraag van deze studie luidt als volgt: *Welke rol spelen verwachte en onverwachte veranderingen in de levensloop en woonvoorkeuren in de discrepantie tussen geuite verhuisintenties en daadwerkelijk verhuisgedrag, en wat maakt dat verhuisgeneigden hun woonvoorkeuren realiseren of aanpassen?*

Om deze centrale onderzoeksvraag te beantwoorden, is een longitudinaal databestand gecreëerd. Daarbij zijn grootschalige, cross-sectionele woononderzoeken – voorheen het WoningBehoeftte Onderzoek (WBO), tegenwoordig WoonOnderzoek Nederland (WoON) geheten – uit 1998, 2002 en 2006 op individueel niveau verrijkt met administratieve gegevens uit het longitudinale Sociaal Statistisch Bestand (SSB) van het Centraal Bureau voor de Statistiek. Waar de enquêteonderzoeken informatie verstrekken over verhuisintenties en woonvoorkeuren, geeft het SSB informatie over het verhuisgedrag, de woonkeuzes (wat betreft de locatie en de keuze tussen huren of kopen), en levensloopgebeurtenissen van diezelfde respondenten in de jaren na het enquêteonderzoek. Om de centrale onderzoeksvraag te beantwoorden, zijn vijf complementaire onderzoeken uitgevoerd.

## **De realisatie van verhuisintenties: longitudinale en cross-sectionele analyses van geuite intenties en daadwerkelijk gedrag**

In hoofdstuk 2 wordt beargumenteerd dat verhuismotieven, zoals verwachte veranderingen in het huishouden en woonontevredenheid, niet alleen belangrijk zijn voor de vorming van verhuisintenties, maar ook voor de mate waarin deze verhuisintenties vervolgens daadwerkelijk worden gerealiseerd. De volgende onderzoeksvraag wordt beantwoord: *In welke mate wordt de realisatie van verhuisintenties belemmerd dan wel bespoedigd door verhuismotieven, woon(on)tevredenheid, en woonvoorkeuren?* Om deze onderzoeksvraag te beantwoorden, is een logistisch regressiemodel geschat voor de zogenaamde aspirant-doorstromers: individuen die vanuit een zelfstandige woning naar een andere zelfstandige woning willen verhuizen.

De longitudinale analyse laat zien dat veruit het merendeel (ongeveer twee derde) van alle mensen die in 2002 aangaven binnen twee jaar te willen verhuizen dat uiteindelijk niet heeft gedaan. Bovendien zijn sommige mensen verhuisd, terwijl ze dat aanvankelijk niet van plan waren. Sommige van deze “onverwachte” verhuizers zullen een verhuisintentie hebben ontwikkeld na het moment van interview, en zijn er tevens vrij snel in geslaagd om deze verhuisintentie te realiseren. “Onverwachte” verhuizingen kunnen echter ook het gevolg zijn van minder vrijwillige verhuismotieven, zoals sloop en herstructureringsmaatregelen. De analyses tonen aan dat een aanzienlijk deel van het totale aantal verhuizingen in een bepaalde periode op het conto komt van mensen die aan het begin van de periode helemaal geen intentie hadden om te verhuizen. Vanwege het plaatsvinden van “onverwachte” verhuizingen, resulteren cross-sectionele benaderingen van de discrepantie tussen verhuisintenties en -gedrag in een te positief beeld van de mate waarin verhuisintenties daadwerkelijk worden gerealiseerd. In cross-sectionele benaderingen wordt het aantal mensen dat wil verhuizen afgezet tegen het aantal mensen dat recentelijk is verhuisd. Omdat in de vergelijking uitgebleven verhuizingen van verhuisgeneigden worden gecompenseerd door “onverwachte” verhuizingen, resulteren cross-sectionele benaderingen vergeleken met longitudinale benaderingen in een kleinere discrepantie tussen verhuisintentie en -gedrag. De cross-sectionele benadering geeft daarom een minder accuraat beeld van de mate waarin mensen erin slagen hun verhuisintentie te realiseren.

Uit de logistische regressieanalyse blijkt, conform de verwachting, dat het verhuismotief van invloed is op de mate waarin verhuisintenties worden gerealiseerd. Een gangbare gedachte is dat voorgenomen verhuizingen die gepaard gaan met verwachte veranderingen in het huishouden, zoals het gaan samenwonen of het uit elkaar gaan, een hoge verhuisurgentie hebben. In dit

soort gevallen kan de voorgenomen verhuizing immers minder goed worden uitgesteld dan bij een voorgenomen verhuizing ingegeven door de wens om naar een mooiere of ruimere woning te verhuizen. Conform deze gedachte laten de resultaten zien dat aspirant-doorstromers die vanwege demografische motieven willen verhuizen, een grotere kans hebben om binnen twee jaar te zijn verhuisd dan degenen die dat vanwege de woning of woonomgeving willen doen. Ook ontevredenheid over de woning vergroot de kans dat aspirant-doorstromers daadwerkelijk verhuizen.

De analyses tonen ook aan dat woonvoorkeuren ten aanzien van de woning en locatie een directe invloed hebben op de realisatie van verhuisingintenties. In lijn met de gedachte dat huiseigenaren alleen de koopsector verlaten als daar een urgente reden voor is (zoals een scheiding, het overlijden van een partner of ouderdom), geldt dat huiseigenaren die naar een huurwoning willen verhuizen een vergrote kans hebben om te verhuizen. Huurders die binnen de huursector willen verhuizen, hebben daarentegen juist een relatief kleine verhuiskans. Een vermoedelijke verklaring kan worden gevonden in de belemmeringen op verhuizen in de sociale huursector, een sector die in Nederland bijna twee derde van de huursector beslaat. Degenen die naar een sociale huurwoning willen verhuizen, worden vaak geconfronteerd met lange wachtlijsten en toewijzingscriteria. Hierdoor kunnen ze lang niet altijd op elke woning en in elke regio reageren op het woningaanbod. Het individuele verhuisproces kan dus niet los worden gezien van de context waarbinnen de verhuisbeslissingen en woonkeuzes worden gemaakt. De context bepaalt de mogelijkheden die individuen hebben op de woningmarkt om te verhuizen naar een woning die past bij hun woonvoorkeuren en financiële hulpbronnen. Het is dan ook geen verrassing dat degenen die een voorkeur hebben voor een woning in de Randstad – het meest verstedelijkte gebied in Nederland, met een relatief hoge druk op de woningmarkt – een kleinere verhuiskans hebben dan degenen met een voorkeur voor een woning in de perifere delen van Nederland, zoals de drie noordelijke provincies en Zeeland. Een andere noemenswaardige bevinding is dat aspirant-doorstromers met een urgente verhuisingintentie een grotere kans hebben om binnen twee jaar te zijn verhuisd dan degenen met een minder urgente verhuisingintentie.

### **Verhuisingintenties en verhuisgedrag in Nederland**

Voortbordurend op hoofdstuk 2, wordt in hoofdstuk 3 de volgende onderzoeksvraag beantwoord: *Wat is de invloed van verhuismotieven, de sterkte van de verhuisingintentie, hulpbronnen en restricties alsmede de voorkeur voor een woonlocatie op de realisatie van een verhuisingintentie?*

Uit de logistische regressieanalyse van het gebleken verhuisgedrag komt naar voren dat de realisatie van verhuisintenties niet alleen wordt beïnvloed door huidige achtergrondkenmerken, zoals eerder is aangetoond in ander onderzoek, maar ook door de verwachting dan wel voorkeur om met een verhuizing een bepaald doel te bereiken in een van de carrières van de individuele levensloop. Zowel het verwachten van een verandering in de huishoudenscarrière als de voorkeur voor een verandering in de wooncarrière vergroot de kans om een verhuisintentie te realiseren. Alleenstaanden die verwachten dat het huishouden na de verhuizing uit meerdere personen bestaat, hebben een grotere verhuiskans dan alleenstaanden die geen verandering in het huishouden voorzien. Deze bevinding correspondeert met de gedachte dat voorgenomen verhuizingen die zijn ingegeven door een verandering in het huishouden, een verhoogde verhuisurgentie hebben. In dit soort gevallen is het immers niet altijd wenselijk of mogelijk om de voorgenomen verhuizing uit te stellen. Overeenkomstig de bevindingen uit hoofdstuk 2, geldt ook hier dat huiseigenaren die naar een huurwoning willen verhuizen een relatief grote verhuiskans hebben.

De analyses laten tevens zien dat het uiteindelijke verhuisgedrag in hoge mate afhangt van de sterkte van de verhuisintentie. Individuen met een sterke verhuisintentie (zij willen “beslist” binnen twee jaar verhuizen) hebben een bijna vier keer zo grote kans om binnen twee jaar te verhuizen dan degenen met een minder sterke verhuisintentie. Hoewel eigenwoningbezit veelal wordt gezien als een belemmering voor verhuizen, geldt dat huiseigenaren (ongeacht of ze een huur- of een koopvoorkeur hebben) een grotere kans hebben om een sterke verhuisintentie te realiseren dan huurders die binnen de huursector willen verhuizen. Zoals verwacht, geldt dat verhuisgeneigden die een voorkeur hebben voor een woning in de Randstad, een kleinere kans hebben om te verhuizen dan degenen met een voorkeur voor een woning in de perifere delen van Nederland. Uit de resultaten blijkt, tot slot, dat de invloed van hulpbronnen en restricties soms verschillend is voor individuen met een sterke verhuisintentie en voor alle verhuisgeneigden tezamen. Zo geldt voor degenen met een sterke verhuisintentie dat verwachte veranderingen in de huishoudenscarrière juist niet de kans vergroten om binnen twee jaar te zijn verhuisd. En waar voor alle verhuisgeneigden tezamen geldt dat vooral het opleidingsniveau en het hebben van werk invloed uitoefenen op de kans om te verhuizen en de hoogte van het inkomen er nauwelijks toe doet, geldt voor de realisatie van sterke verhuisintenties precies het omgekeerde.

## **Levensloopgebeurtenissen en de discrepantie tussen verhuisintenties en verhuisgedrag**

In hoofdstuk 4 verschuift de aandacht naar de invloed van onverwachte veranderingen in de levensloop op de discrepantie tussen geuite verhuisattitudes en het daadwerkelijke verhuisgedrag. In dit hoofdstuk wordt de hypothese getoetst dat onverwachte levensloopgebeurtenissen, ofwel gebeurtenissen die niet zijn meegenomen in de aanvankelijke verhuisattitude, kunnen leiden tot gedragsinconsistenties in het individuele verhuisproces.

De resultaten van logistische regressieanalyses van verhuisgedrag met als analyse-eenheden persoonjaren bevestigen dat gaan samenwonen en uit elkaar gaan, de geboorte van een kind, alsmede een verandering of verlies van baan inderdaad een verhuizing teweeg kunnen brengen onder degenen die eerder nog geen verhuisintentie hadden. Onverwachte levensloopgebeurtenissen kunnen dus onder individuen die aanvankelijk, voordat de gebeurtenis plaatsvond, helemaal geen intentie hadden om te verhuizen, een onverwacht verhuismotief met zich brengen en vervolgens vrij snel resulteren in een verhuizing. Een interessante bevinding is dat het merendeel van de verhuizingen die gepaard gaan met een (echt)scheiding op het conto komt van mensen die aanvankelijk geen verhuisintentie hadden. Daarnaast geldt dat de levensloopgebeurtenissen van (echt)scheiding, gaan samenwonen en de geboorte van een kind de kans om te verhuizen vergroten voor degenen die al een verhuisintentie hadden voortkomend uit andere verhuismotieven dan een verandering in de huishoudens- of werksfeer. Deze bevinding suggereert dat onverwachte levensloopveranderingen de urgentie van eerder geuite verhuisintenties kunnen vergroten, wat een extra stimulans kan geven om daadwerkelijk op korte termijn te verhuizen. De hypothese dat onverwachte levensloopveranderingen ook kunnen resulteren in het uitstellen of opgeven van verhuisintenties is niet bevestigd. Hoewel verweduwing en werkloosheid een negatieve invloed kunnen hebben op de financiële hulpbronnen die individuen kunnen of willen inzetten voor een nieuwe woning en de verhuizing, verkleinen deze levensloopgebeurtenissen niet de kans om eerder geuite verhuisintenties te realiseren.

Hoofdstuk 4 heeft, tot slot, nog twee andere vermeldenswaardige bevindingen opgeleverd. Ten eerste is gebleken dat de invloed van levensloopgebeurtenissen en persoonlijke kenmerken, zoals herkomst (autochtoon, westerse allochtoon of niet-westerse allochtoon), op het daadwerkelijke verhuisgedrag kan verschillen al naar gelang de fase van het verhuisproces waarin het individu zich bevindt. Zo geldt dat het effect van werkloosheid op de verhuiskans significant anders is voor individuen met en zonder een aanvankelijke verhuisintentie; waar het verlies van een baan de verhuiskans vergroot voor degenen

zonder aanvankelijke verhuisintentie, geldt voor degenen met een aanvankelijke verhuisintentie een negatief (maar niet significant) effect van werkloosheid op het daadwerkelijke verhuisgedrag. Ten tweede is gebleken dat een hoog inkomen zowel de kans vergroot om een verhuisintentie te realiseren als om “onverwacht” te verhuizen. Dit is een indicatie dat individuen met een hoog inkomen meer mogelijkheden hebben op de woningmarkt en gemakkelijker in staat zijn om van woning te veranderen kort na het ontstaan van een verhuisintentie.

### **Longitudinale analyse van de vorming en realisatie van koopvoorkeuren in Nederland**

De laatste twee empirische hoofdstukken van dit proefschrift zijn gericht op de beantwoording van het tweede deel van de centrale onderzoeksvraag: de realisatie en aanpassing van woonvoorkeuren. In hoofdstuk 5 wordt allereerst gekeken naar de uitkomst van de afweging tussen huren of kopen onder niet-huiseigenaren, waarbij de focus ligt op de vorming van koopvoorkeuren. Vervolgens wordt gekeken naar het feitelijke woongedrag van aspirant-huiseigenaren, waarbij onderscheid wordt gemaakt tussen verhuizingen naar koopwoningen, verhuizingen naar huurwoningen, en het uitblijven van verhuizingen. De onderzoeksvraag die in dit hoofdstuk wordt beantwoord, luidt: *Wat is de invloed van individuele kenmerken en contextuele omstandigheden op de vorming en realisatie van koopvoorkeuren, en in welke van deze twee fasen hebben de verschillende factoren de sterkste invloed?*

De beschrijvende resultaten laten zien dat slechts een minderheid van de verhuisgeneigde niet-huiseigenaren een voorkeur heeft om naar een koopwoning te verhuizen. Van deze aspirant-huiseigenaren is vervolgens slechts 31 procent daadwerkelijk binnen twee jaar naar een koopwoning verhuisd, 13 procent is naar een huurwoning verhuisd, en het merendeel is helemaal niet verhuisd. Uit een multinomiaal logistisch regressiemodel blijkt dat aspirant-huiseigenaren die in een minder gunstige sociaaleconomische positie verkeren, er minder goed in slagen om hun koopvoorkeur te realiseren. Aspirant-huiseigenaren zonder werk of met een laag inkomen hebben een kleinere kans om naar een koopwoning te verhuizen en hebben een grotere kans om naar een huurwoning te verhuizen dan aspirant-huiseigenaren met een baan of met een hoog inkomen.

Hoofdstuk 5 toont ook aan dat individuen geneigd zijn om huur- of koopvoorkeuren af te stemmen op de eigen sociaaleconomische situatie en de woningmarktomstandigheden. Een hoog inkomen, een hoog opleidingsniveau, voltijds werken en lage kosten van kopen ten opzichte van huren in het geprefereerde woningmarktgebied vergroten de kans dat verhuisgeneigde niet-huiseigenaren de voorkeur hebben om naar een koopwoning te verhuizen. Dat in

de vorming van koopvoorkeuren sprake is van een aanpassingsmechanisme, verklaart mogelijk waarom financiële hulpbronnen en de regionale woningmarkt-omstandigheden vervolgens een bescheidener invloed uitoefenen op de realisatie van koopvoorkeuren dan aanvankelijk was verwacht.

### **Eens een buitenstaander, altijd een buitenstaander? De toegankelijkheid van de landelijke woningmarkt voor plattelandsbewoners en aspirant-nieuwkomers**

In hoofdstuk 6 is gekeken naar de mate waarin verhuiscandidate met een voorkeur voor landelijk wonen in een bepaalde gemeente (een landelijke locatievoorkeur) er in slagen deze voorkeur in de gewenste gemeente te realiseren. Hierbij is onderscheid gemaakt tussen plattelandsbewoners die binnen de eigen gemeente willen verhuizen en aspirant-nieuwkomers: stedelingen en plattelandsbewoners met een landelijke woonvoorkeur die woonachtig zijn in een andere gemeente dan de gemeente waar ze naartoe willen verhuizen. De volgende onderzoeksvraag wordt beantwoord: *Hebben plattelandsbewoners die binnen de eigen gemeente willen verhuizen meer moeite om hun landelijke locatievoorkeur te realiseren dan aspirant-nieuwkomers, en in hoeverre spelen inkomen en de druk op de lokale woningmarkt een rol bij de realisatie of aanpassing van landelijke locatievoorkeuren?*

Hoewel in Nederland zorgen bestaan, vooral op lokaal niveau, dat het voor plattelandsbewoners lastig is om binnen de eigen gemeente te verhuizen als gevolg van de vraag naar landelijk wonen door relatief koopkrachtige nieuwkomers, toont deze studie aan dat, althans in Nederland, plattelandsbewoners niet meer moeite hebben hun landelijke locatievoorkeur te realiseren dan aspirant-nieuwkomers. De resultaten van een multilevel multinomiaal logistisch regressiemodel tonen aan dat, ongeacht of er wel of geen rekening wordt gehouden met inkomensverschillen, plattelandsbewoners die binnen het landelijk gebied van de eigen gemeente willen verhuizen juist een grotere kans hebben om hun locatievoorkeur te realiseren dan de doorgaans kapitaalcrachtiger aspirant-nieuwkomers. Aspirant-nieuwkomers hebben een vergrote kans om te verhuizen naar een andere locatie dan aanvankelijk gewenst, waarbij stedelingen een vergrote kans hebben om te verhuizen naar een stedelijk gebied en niet-stedelingen een grotere kans hebben om te verhuizen naar een landelijk gebied in een andere gemeente dan aanvankelijk gewenst. De huidige woonlocatie is hiermee een belangrijke determinant voor de realisatie dan wel aanpassing van landelijke locatievoorkeuren. Dat aspirant-nieuwkomers minder vaak hun landelijke locatievoorkeur realiseren en vaker naar elders uitwijken dan plattelandsbewoners die binnen het landelijk gebied van de eigen gemeente willen verhuizen, is mogelijk een indicatie dat de landelijke locatievoorkeuren van

aspirant-nieuwkomers minder rigide zijn dan die van plattelandsbewoners die binnen het landelijk gebied van de eigen gemeente willen verhuizen. De bevindingen wijzen ook op het belang van de band met de gewenste gemeente en gehechtheid aan de plaats boven financiële hulpbronnen voor de mate waarin individuen hun landelijke locatievoorkeur realiseren dan wel aanpassen.

Verder blijkt uit de analyse dat de druk op de lokale woningmarkt invloed heeft op de realisatie van landelijke locatievoorkeuren. Zowel voor plattelandsbewoners die binnen het landelijk gebied van de eigen gemeente willen verhuizen als voor aspirant-nieuwkomers geldt dat een hoge druk op de lokale woningmarkt van de geprefereerde landelijke woonlocatie (dit zijn veelal gebieden in de nabijheid van verstedelijkte gebieden) de kans verkleint om de landelijke locatievoorkeur te realiseren en de kans vergroot om naar een stedelijk gebied te verhuizen. Anders dan gedacht, tonen aanvullende beschrijvende analyses aan dat plattelandsbewoners hun locatievoorkeur niet aanpassen als de druk op de lokale woningmarkt hoog is. Ondanks dat een hoge woningmarktdruk een verondersteld negatief effect heeft op de mogelijkheden die mensen hebben om een woning te vinden, geldt zowel in landelijke gebieden met een hoge woningmarktdruk als in landelijke gebieden met een lagere woningmarktdruk dat ongeveer 45 procent van de verhuisgeneigde plattelandsbewoners naar een landelijk gebied wil verhuizen binnen de eigen gemeente. Mogelijk zorgen factoren als emotionele gehechtheid aan de plaats en locatiespecifiek kapitaal ervoor dat plattelandsbewoners niet geneigd zijn om op voorhand vaker over de grenzen van de eigen gemeente heen te kijken als de druk op de lokale woningmarkt hoog is.

### **Conclusie en discussie**

Met het longitudinaal in kaart brengen van het verhuisgedrag van individuen nadat zij hun verhuisintenties en woonvoorkeuren hebben uitgesproken, draagt deze studie bij aan de kennis over de factoren die een rol spelen bij de realisatie en aanpassing van verhuisintenties en woonvoorkeuren. Het uiteindelijke verhuisgedrag van verhuisgeneigden is niet alleen afhankelijk van levensloopkenmerken, maar ook van verwachte (dan wel gewenste) en onverwachte veranderingen in deze kenmerken. Veranderingen kunnen een aanleiding vormen om te (willen) verhuizen, waarbij sommige verwachte veranderingen gepaard gaan met een hogere verhuisurgentie dan andere veranderingen. Afhankelijk van de verhuisurgentie, kunnen zowel verwachte als onverwachte veranderingen een additionele of juist een onverwachte stimulans geven om te verhuizen. Daarnaast is duidelijk geworden dat de realisatie van verhuisintenties wordt beïnvloed door voorkeuren ten aanzien van de toekomstige woning en woonlocatie, alsmede

door de bereidheid om een woning te accepteren die niet op alle fronten voldoet aan de aanvankelijke woonvoorkeuren.

Deze longitudinale studie heeft in vergelijking met eerder verhuisonderzoek nieuwe inzichten opgeleverd. Hoewel in de verhuisliteratuur eigenwoningbezit in het algemeen wordt gezien als een belemmerende factor voor verhuizen, is in deze studie aangetoond dat huiseigenaren zeer zeker niet meer moeite hebben om hun verhuisintentie te realiseren dan huurders. Vooral huurders die binnen de huursector willen verhuizen, hebben een vrij geringe verhuiskans. Ook is er geen bewijs gevonden dat plattelandsbewoners worden verdrongen als gevolg van de vraag naar landelijk wonen door koopkrachtiger aspirant-nieuwkomers; een zorg die met enige regelmaat terugkomt in de literatuur over gentrificatie op het platteland. Ondanks dat aspirant-nieuwkomers doorgaans kapitaalkrachtiger zijn dan plattelandsbewoners en dat in veel plattelandsgebieden de uitstroom minder kapitaalkrachtig is dan de instroom, geldt dat plattelandsbewoners die willen verhuizen naar een landelijk gebied binnen de eigen gemeente daar vaker in slagen dan aspirant-nieuwkomers. De longitudinale onderzoeksbenadering maakt duidelijk dat achter verhuispatronen op het geaggregeerde niveau, complexe individuele verhuisprocessen verscholen kunnen gaan. Al met al laten de resultaten zien dat het afzonderlijk bestuderen van geuite verhuisintenties en woonvoorkeuren (*stated preferences*) en gebleken verhuisgedrag en woonkeuzes (*revealed preferences*) onvoldoende zicht geeft op het complexe individuele proces dat ten grondslag ligt aan potentiële verhuizingen.

Hoewel de grote discrepantie tussen de aanvankelijke houding jegens verhuizen en het daadwerkelijke verhuisgedrag vragen oproept over de voorspellende waarde van geuite verhuisintenties voor daadwerkelijk verhuisgedrag, is het ook waar dat individuen met een verhuisintentie nog altijd vaker verhuizen dan individuen die geen verhuisintentie hebben. Verhuisintenties, en dan vooral sterke verhuisintenties, zijn hiermee belangrijke voorspellers van verhuisgedrag. Bij het gebruiken van geuite verhuisintenties en woonvoorkeuren als indicatoren voor toekomstige verhuisstromen en woningvraag dienen woononderzoekers zich wel te realiseren dat *stated preferences* slechts beperkt zicht geven op de uiteindelijke woonkeuzes van individuen. Daarnaast weerspiegelen geuite verhuisintenties en woonvoorkeuren niet noodzakelijkerwijze wat mensen daadwerkelijk wensen dan wel nastreven in hun wooncarrière, omdat zij hun woonvoorkeuren, bijvoorbeeld voor het huren of kopen van een woning, deels afstemmen op de financiële hulpbronnen en de woningmarktomstandigheden.

De analyses in deze studie zijn gebaseerd op een longitudinaal databestand waarin grootschalige, cross-sectionele woononderzoeken op individueel

niveau zijn verrijkt met longitudinale administratieve gegevens. Het gebruikte databestand heeft belangrijke voordelen ten opzichte van de (veelal kleinschalige) panelstudies die doorgaans worden gebruikt om de discrepantie tussen geuite verhuisattitudes en gebleken verhuisgedrag te onderzoeken. Waar panelonderzoekers veelal moeilijkheden ondervinden om dezelfde respondenten in de tijd te kunnen volgen (vanwege uitval van respondenten door verhuizingen, overlijden, of wegeringen om deel te nemen aan het vervolgonderzoek), is het gebruikte longitudinale databestand vrij van problemen rondom (selectieve) paneluitval. Door het verrijken van enquêtegegevens met administratieve gegevens, was het niet alleen eenvoudig om alle respondenten in de tijd te volgen, maar ook om een databestand te creëren dat groot genoeg is om diepgaande analyses uit te voeren, zowel voor Nederland als geheel als voor afzonderlijke regio's. Er kleven echter ook nadelen aan het bestand. Zo geven de administratieve gegevens geen uitsluitsel over de vraag in hoeverre het uitblijven van een eerder voorgenomen verhuizing daadwerkelijk kan worden geïnterpreteerd als "niet-realiseren". Na twee jaar zullen sommigen van de oorspronkelijke groep verhuisgeneigden nog steeds de intentie hebben om te verhuizen, terwijl anderen hun verhuisintentie, om wat voor reden dan ook, mogelijk hebben laten varen. Intenties kunnen verdwijnen en het databestand geeft geen zicht op de mate waarin dit inderdaad het geval is. Een andere kanttekening bij het onderzoek is dat het vrij lastig is om aan de hand van levensloopgerelateerde factoren, woonvoorkeuren en contextuele omstandigheden te verklaren waarom individuen zich niet gedragen conform hun eerder geuite verhuisattitude; de verklaringskracht van de multivariate regressiemodellen was doorgaans beperkt. Een mogelijke verklaring is dat veel van de factoren die een rol spelen bij de realisatie van verhuisintenties vaak ook een rol spelen bij de vorming van verhuisintenties en woonvoorkeuren, en dus reeds ten dele zijn ingecalculleerd. Vermoedelijk spelen ook nog heel andere factoren een rol bij de uiteindelijke uitkomst van het verhuisproces. Mogelijk is een deel van de verhuisgeneigden bijvoorbeeld nog niet de kritische drempelwaarde gepasseerd waarop de baten van verhuizen groter zijn dan de kosten ervan, waardoor nog niet is begonnen met het actief zoeken naar een nieuw onderkomen. De resultaten van hoofdstuk 6 lijken te suggereren dat het opnemen van sociaalpsychologische factoren, zoals gehechtheid aan de plaats en de woning, meer inzicht kan bieden in de realisatie (en aanpassing) van verhuisintenties en woonvoorkeuren. Toekomstig onderzoek is nodig om de brij van factoren, zowel sociaalpsychologisch, levensloopgerelateerd als contextueel, die kunnen leiden tot gedragsinconsistenties in het individuele verhuisproces verder uiteen te rafelen. Kwalitatief onderzoek, en in het bijzonder diepte-interviews, zal

naar verwachting een waardevol instrument zijn om meer inzicht te verwerven in de persoonlijke dilemma's, achterliggende overwegingen, de ervaren beperkingen, en sociaalpsychologische processen die uiteindelijk kunnen leiden tot een discrepantie tussen wat mensen zeggen te willen gaan doen en wat ze daadwerkelijk doen.

# Curriculum Vitae

Carola de Groot was born in Naarden on the 15th of August 1980. She studied Economics, with a specialisation in Spatial Economics, at the Free University of Amsterdam from 2000 until 2005. In her final year of study, she investigated the suburbanisation of non-Western migrants for the case of Amsterdam while stationed at the former Ministry of Housing, Spatial Planning and the Environment (VROM), which resulted in her Master's dissertation titled "Black Flight". After obtaining her Master's degree cum laude in 2005, she started working at the PBL Netherlands Environmental Assessment Agency in The Hague as a researcher on residential mobility decision processes, demography, and the connection between spatial and demographic developments, such as the greying of the population and population decline. In 2006, she became a PhD student at the Amsterdam Institute for Social Science Research (AISSR) of the University of Amsterdam, resulting in this thesis.