

Residential preferences for areas of population growth or decline:

An analysis of the characteristics, motivations and housing preferences of migrants



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Summary

In this Master's Thesis, a research design is created to answer the research question: What differences in characteristics, motivations and housing preferences of migrants can be recognised between movers to areas of population growth and movers to areas of population decline? Answering the question is meant to substantiate policy makers in the question what type and quantity of housing needs to be realised in what place, but also what type of migrant moves where, what is their motivation for moving and what type of residential preferences do they have. In the end, this information can be used in order to determine what type of housing needs to be realised in areas of decline, as opposed to areas of growth. This is a question that has become more pressing with the current housing shortage in the Netherlands. The hypothesis is that the research will show that movers to areas of population decline will have an increased interest in a bigger house with more space and a garden as opposed to movers to areas of growth.

Several theoretic approaches have been discussed, after which could be concluded that the lifestyle variable approach would be used for this research, because this fitted the research design best. This approach means that a number of different variables have been discussed in a theoretic section, to then continue to use those variables in the analysis.

For the analysis, data from the Netherlands' Housing Survey (WoON, 2018) is used. With this data, both bivariate and multinomial logistic regression analyses have been performed. This has yielded in a great amount of output, from which could be derived that the mentioned differences between movers to the demographically different areas exist. Significant differences were found for characteristics, as well as for both motivations and preferences.

The results have given the overall view that movers to areas of growth generally have a higher income and are higher educated, but movers to areas of decline generally bought a house with more rooms and more often a garden. Whereas movers to areas of growth were motivated to move by work or education-related reasons and housing characteristics, movers to areas of decline from a different municipality wanted to live closer to family and friends, whereas those movers from the same municipality moved more often because of housing characteristics and physical qualities. Finally should be added that a higher rate of elderly people has moved to areas of decline.

It can thus be concluded that the research has shown that the hypothesis was correct, although it included only a part of the obtained results from the analyses.

Keywords:

- Characteristics of migrants
- Motivations for moving
- Residential preferences
- Population decline
- Multinomial logistic regression

Preface

When writing my Master's Thesis, I was privileged to receive help and guidance from an inspiring professional; my supervisor Dr. Huub Ploegmakers. His help has been a great support in the completion of this thesis. Therefore, I would like to thank him for all his ideas, rightfully critical view and pleasant manners.

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Introduction

Research problem & societal relevance

Currently, a housing shortage exists on the Dutch housing market, counting a shortage of 3.8% in 2019 and 4.2% in 2020 (Ministry of the Interior and Kingdom Relations, 2020; ABF Research, 2020). This means the housing shortage is growing. Although this shortage exists for several years now, the government seems unable to provide enough housing or to even lessen the existing shortage (Boelhouwer, 2020; Huisman, 2016). How can this be? The existing shortage was primarily caused by the financial crisis. The impact of the financial crisis in 2008 caused a lack of production (Boelhouwer, 2020; Huisman, 2016). This lack of production was caused by rapid unemployment increments in the construction industry, mortgages that exceeded the value of the dwelling and a new policy course set by government in September 2012 that made it tougher to get a loan (Boelhouwer, 2017). According to the Planbureau voor de Leefomgeving (2019), by average, 37% less was built than was expected on the short term before the financial crisis. This lack could not be solved in the following years. The financial crisis thus formed the first cause for the housing shortage that currently still exists.

On the basis of the current amount of plan capacity can be said that the current housing shortage will be difficult to solve. According to the Ministry of the IKR (2020), the ratio between plan capacity and expected rise of the housing demand is 136% for the coming 5 years and 120% for the coming 10 years. They argue that additional plan capacity is needed in order to catch up with the current shortage of 4.2%. The Ministry of the IKR (2020) holds in mind the possibility of failure or delay of 30% of the plans. This would mean an insufficient plan capacity exists in order to catch up with the current housing shortage and meet the growing demand. Other sources state, however, that enough plan capacity does exist, but just is not being used (Buitelaar & van Schie, 2018). Still, 67% of this plan capacity consists of so-called 'soft plans', meaning that they are not immediately ready for implementation (Ministry of IKR, 2020). Yet even if enough plan capacity exists, the building sector in the Netherlands has a limited capacity and is not able to make big increasements relative to the current building pace (Schilder et al., 2021).

However, this is not the only problem of the Dutch housing market. The second problem is that certain sorts of housing are overrepresented, while other sorts of housing are underrepresented. Several kinds of this mismatch between supply and demand can exist. These different kinds can concern the tenure type of housing, the location of housing of the dwelling type of housing. Regarding tenure type, particularly the middle income groups "fall between two stools". Due to changes in the social rented sector, the middle income groups are not eligible for the social rented sector, but there is a gap in the supply for housing for income groups just above social rented sector (Hoekstra & Boelhouwer, 2014).

Regarding locational differences, a possibility is that there is enough plan capacity, but not in the right place. It can be that even if on paper enough housing is provided, thus the figure of the current amount of houses in the Netherlands would meet the figure for the demand of housing, some areas of the Netherlands still experience a lack of housing while other areas are provided well enough. This possibility can be verified by comparing the need for housing to the plan capacity for housing per province. This shows that 10 of the 12 Dutch provinces currently have enough plan capacity, despite some of the needs for housing are quite big. The only provinces that do not have enough plan capacity are the provinces of Friesland and Gelderland, having respectively 86% and 88% of plan capacity relative to the number of housing that is needed. Meanwhile, the province of Zeeland has 148% of plan capacity relative to the number of housing that is needed and the province of Limburg even has 278% (Ministry of the Interior and Kingdom Relations, 2020). This does not only show that there are quite enormous regional differences in housing shortages, but it also shows that

the provinces that are known to have regions of population decline have the most fluctuation in housing shortages, while all other provinces are less extreme and somewhere in the middle.

Concerning the type of dwelling, Schilder et al. (2021) state that not only a quantitative housing shortage exists, but also a qualitative shortage. Although it seems that it is hard to predict the effects of future demographic developments, currently two trends or shifts in the demand for housing are noticed. First, due to aging the demand for certain housing is growing, which means that not only housing that is close to services such as a supermarket but also a doctor, but also the demand for clustered housing, possibly with care, is growing (Schilder et al., 2021). Second, suburbanisation has formed a trend in the past few years. People tend to avoid living in bigger cities and prefer to live in a quieter place with more space (ABF Research, 2020). This trend might be reinforced by the covid-19 crisis as people have more possibilities of working at home, which makes commuting distance less important and the residential living situation more important. It is, however, too early to determine the exact consequences of this crisis (Schilder et al., 2021).

An example of an area that experiences a mismatch between the housing supply and demand, is the Achterhoek. Research by Moventem & Companen (2017) has shown that there is a mismatch of housing supply and demand in the Achterhoek, which is a region in the Netherlands that is often associated with population decline. By making more clear what reasons migrants have for choosing to live in an area of population decline or not, strategies of policy-makers can be adjusted so that the supply fits the demand. But by having different knowledge, another strategy might be chosen. Mulder (2006) believes that there are two problematic scenario's for the choices regarding housing in areas of population decline. First, if the choice is to still build housing in order to try and attract migrants so that the population decline can be minimized, the risk is that these housing will be built but not enough migrants are attracted, resulting in big costs and empty houses. But if another strategy is chosen, the population decline is accepted as is and none to a tiny amount of housing is built in order to prevent the first scenario, the risk is that migrants are not attracted at all and the population decline increases because of this policy.

This has shown that the housing market is under pressure and a shift might take place from the Randstad area to other, more rural areas such as areas of population decline. However, clear information on areas of decline seems to be lacking for policy makers. By showing that the housing market is under pressure and having elaborated on the need for not only housing, but also the right housing in the right place, the importance of right decision-making and fitting policies has become apparent. Before a solution can be developed, this thesis aims to not only show the interest of migrants in areas of population decline, but also investigate what type of migrants are attracted, what type of housing has their preference in an area of population decline and why that area has motivated them to move there. Those elements are specifically investigated by analysing data of characteristics, motivations and housing preferences of migrants. This way, the demand for housing becomes more insightful and the question what type of housing should be build and where can be answered more adequately. As Jansen (2020, p. 228) states, planners can thus be provided: "meaningful recommendations for planning practices that contribute to residents' wellbeing." This information is needed as Schilder et al. (2021) state that it is currently unclear what type and place of housing needs to be provided most urgently and what is less urgent. Also, Stuart-Fox et al. (2019) state that when population decline continues, along with a decline of the number of households, this will increase the consequences for the liveability and the housing market, thus increasing differences between areas of population growth and population decline. They continue to say that future research to relations between housing and population decline is therefore needed in order to keep informed, so that policy makers can anticipate on the consequences of population decline in certain areas. This has formed a clear indication that research on residential preferences in areas of population decline is needed and will contribute to societal wellbeing.

Research aim

The aim of this research is to provide more information on what type of migrant wants to live in an area of population decline and what type does not, why do they make the choice they make and what are their residential preferences. Providing more information on this topic can help to determine the demand for certain housing in different places. This information can then be used by policy makers to further base decisions regarding housing in areas of population decline on what is known about what the migrant wants. This can help to provide the right amount and kind of housing in the right place. In the end, serving all population groups with a suitable and realistically priced home in the area they want should come a bit closer.

To achieve this aim, this research will try to gain knowledge on what type of migrant wants to live in areas of population decline, what is their motivation for doing so and what type of housing they are looking for. By having more knowledge on this subject, the supply for housing can be adjusted more precisely to the demand for different kinds of areas. Planners can then make sure that a higher percentage of migrants can find a suitable residence in both qualitative and quantitative terms.

Research questions

Central question

-What differences in characteristics, motivations and housing preferences of migrants can be recognised between movers to areas of population growth and movers to areas of population decline?

Sub questions

-What differences in characteristics of migrants can be recognised between movers to areas of population growth and movers to areas of population decline?

-What differences in motivations for choosing a certain area of migrants can be recognised between movers to areas of population growth and movers to areas of population decline?

- What differences in housing preferences of migrants can be recognised for movers to areas of population growth and movers to areas of population decline?

Elaboration

In the sub questions, a distinction has been made between characteristics, motivations for moving and housing preferences of migrants. There has been chosen for this distinction, as those three factors can better be examined when they are separated, which allows for a better distinction of the effect of each individual variable.

Hypothesis

Expected is that the research will show that movers to areas of population decline will have an increased interest in a bigger house with more space and a garden as opposed to movers to areas of growth. This is possible due to the fact that housing prices in areas of decline have not risen as much along with housing prices in other areas, making it possible for people that have ended their mortgage to move to an area of decline and buy a bigger house with more space and quietness.

Scientific relevance

In this paragraph, an overview will be given of existing literature on related matters to this research, which will be done in order to establish the position and scientific relevance of this research.

Van der Vlist, Gorter, Nijkamp & Rietveld (2002) have examined linkages between mobility rates at the household level and the structure of local housing markets. This has shown that local housing-market conditions, such as urbanization rates, influence not only mobility rates but also differences between housing tenure types. The specific situation that population decline created for the housing market was not taken into account yet, which was only done in later studies. An example of such has been done by Haase, Seppelt & Haase (2007), who have analysed what impact demographic changes has had on trends and spatial patterns in urban regions. They discuss several types of structures and elements that can be related to population decline. The study provided general insights for European countries, for some of which population decline was a relatively new concept. The study yielded, however, no insights for the Netherlands specifically. For this, information on demographic trends would be needed first. This information is given by Haartsen & Venhorst (2009), who have given an overview of regional population trends in the Netherlands, up to 2040. They show that, per region, both population growth and population decline can occur next to each other, in both urban and rural areas. Related phenomenon can be strengthened by the trend that the number of single-person households is expected to keep growing, although this differs substantially between urban and rural areas. This kind of research has mainly yielded more questions, as a great number of facts are given, but little explanations or consequences for policy-makers have been added. Therefore, it forms a basis for many further studies. Some of those further studies focussed on the relation between age and mobility. These studies will now be discussed.

Geist & McManus (2008) have applied a life-course approach to migration in order to investigate residential mobility and migration among American adults. By doing so, Geist & McManus found that economic status and family status account for a substantial amount of both long as short-distance moves. Next to that, both an increased risk of economic instability and family or employment changes are associated with residential mobility and migration. Whereas Geist & McManus (2008) found more status-related, economic and family related outcomes for American adults, De Jong, Rouwendal, Hattum & Brouwer (2012) found some other conclusions in the Netherlands. De Jong et al. (2012) state that mobility on the housing market strongly declines with age. In their research, they tried to show what are the reasons for elderly people to 'stay put'. De Jong et al. (2012) showed that older age groups have particularly strong preferences for their current dwelling. Other findings were that elderly people tend to prefer dwellings with certain age-related elements, such as the absence of staircases. De Jong (2020) also did research on relations between age and mobility, but added a specific distinction between moving intentions and actual moving behaviour in her research. De Jong states that as populations age, there is a growing potential for later-life migration. Therefore De Jong investigated which factors are likely to influence moving intentions and actual moving behaviour. This research showed that the factors which were most likely to influence actual mobility were associated with the dwelling, while the neighbourhood characteristics explained a substantial part of older adults' propensity to move.

The approach of making a distinction between moving intentions and actual moving behaviour was not new. De Groot, Mulder & Manting (2011) have investigated whether people who have strong intentions to move are more likely to actually move than people that have less strong intentions to move. They also examined whether certain characteristics were interrelated with certain decisions within this research. It turned out that homeowners are more likely to develop strong intentions to move than renters, while people with more resources were more likely to actually move. Kooiman (2020) used a similar approach, but applied it to a more specific group for gaining more specific information. Kooiman (2020) has analysed differences in intentions to move

and actual mobility behaviour of young families in the Netherlands, as to find out whether cities have become more popular locations to raise children. His research has shown that the transition to parenthood still incite people to leave the city.

One unique study has been about the influence of telecommuting possibilities on residential preferences, a concept that is highly relevant to areas of population decline. In this study by Muhammed, Ottens, Ettema & De Jong (2007) is stated that for residential locational preferences, one of the main explanatory factors has been identified as commute distance. Their research hypothesis is that the increased possibilities of telecommuting has influenced the effect of commute distance on residential locational preferences. The study has shown that telecommuting has enabled people to commute longer distances by a small amount.

Areas of population decline are often seen in relation to rural areas (Stuart-Fox et al., 2019). Previous studies to migration to rural areas have yielded several results. Van Dam, Heins & Elbersen (2002) have tried to show whether a 'rural idyll' exists among people migrating towards the countryside. They provided empirical evidence that suggests that perceptions, preferences and behaviour pertaining to the countryside are interrelated. They then proceeded by comparing stated and revealed preferences of urban households for rural living in order to show the influence of individual images of the countryside on the choice where they want to live.

Bijker, Haartsen & Strijker (2013) have used Chi-square tests to test the significance of the variables in their descriptive statistics. As opposed to many other studies that have examined migration to rural areas in the Netherlands, Bijker, Haartsen & Strijker (2012) have not used popular rural areas, known for being attractive in terms of a rural idyll, in their research. They have explored motivations for migrating towards rural areas that are not necessarily idyllic. This has shown that besides a rural idyll, reasons for choosing a rural area are a mixture of housing characteristics, physical qualities, personal reasons and housing prices. The study also showed that the group of movers that mentioned personal reasons were more often the youngest or oldest age groups and lower income groups while the group of movers mentioning physical qualities were more often people with high incomes, aged between 35 and 64. In a later study, the difference between popular and non-popular areas has been further investigated. In this study, Bijker, Haartsen & Strijker (2013) have tried to show to what extent the conceptualized view of urban, middle-class movers that strive after an idyllic rural setting is correct. Within this setting, migrants' motivations were focussed upon. The outcomes showed that movers to popular areas more often met the conceptualized view while less-popular areas often attracted movers that were attracted by low housing prices or moving in with a partner. However, both types of areas attracted urban movers.

Lastly, Jansen (2020) has investigated what preference for residential environments people have and why. The research was carried out because of a demographic transition into more but smaller and older households and greater possibilities of satisfying people's preferences due to rising incomes and technical advances. The study has yielded the following list of preferences: Smaller municipality (36%), City edge (32%), Rural area (13%), City centre (11%), No preference (7%). Each type of area also had its own elements that were peoples reasons for preferring that type of area.

This overview has shown that there are groups of studies on a variety of subjects, such as: age related mobility, distinctions between moving intentions and actual moving behaviour and migration to the countryside. There is also literature about the trend of population decline and its consequences. However, no literature is available about residential preferences in areas of population decline and differences between areas of decline and growth, while the literature about the trend of population decline implies that population decline is a source of spatial issues (Haartsen & Venhorst, 2009). This will be further elaborated on in the theory. Because of this existing gap in current literature, this research will set the first steps in this particular subject. In doing so, this research might make use of similar approaches to some of the mentioned studies.

Theory

Introduction

Housing choices and preferences of migrants have always attracted interest of researchers from a variety of disciplines. Timmermans et al. (1994) mention, for example, environmental psychology, urban planning, geography, regional economics and urban sociology. The consequence is that housing choices and preferences have been studied from many theoretical perspectives and using all sorts of methodological approaches. Some researchers see houses as bundles of attributes to determine preferences for housing, others look at the process of housing choice and then there are researchers that focus mainly on outcomes of housing choice processes (Coolen & Hoekstra, 2001). Before the chosen theoretical approach of this thesis will be elaborated on, a brief overview of relevant theoretical approaches will be given.

Perspectives

Jansen (2020) states that traditionally the most important factors for determining residential migration have been regarded as economic and demographic factors. The subject of this thesis is, however, more related to residential preferences. Residential preferences have been studied from various perspectives and by researchers from different disciplines, state Hasanzadeh, Kyttä & Brown (2018). Although they continue by adding that most studies have identified demographic and socioeconomic variables as primary determinants of preference. Thus there seems to be a small difference in the most common perspectives for residential migration and residential preferences. The use of both demographic and socioeconomic perspectives is explained by Hasanzadeh, Kyttä & Brown (2018). The influence of demographic variables is clear as a certain household size requires certain housing needs. When the size and/or composition of the household changes, residential preferences are likely to change as well. Regarding the socioeconomic perspective, variables such as income, education and ethnicity are often used to examine residential preferences for certain population groups, as these variables cover mostly how characteristics are defined in these type of studies. These socioeconomic variables thus form the reason for using a socioeconomic perspective.

Different studies have thus mentioned different approaches that are most common in the examination of residential preferences and migration. Yet Muhammed et al. (2007) do also mention environmental characteristics as a determinant for residential locational preferences, which would mean that also environmental aspects such as availability of green and degree of pollution should be considered when investigating residential preferences. They argue so because the increased possibility of working from somewhere else (telecommuting) might cause people to be willing to live further away from their work and allow them to live in a more attractive living environment.

Although the influence of socio-demographic characteristics seems to be established in research to residential preferences, some questions can be placed in this sense. Namely, the influence of those characteristics on housing preferences is prone to change. This change has three main reasons: First, the trend of a decreasing household size means that both an increase in the number of households and a decrease in the size of households can be expected. Second, the variety in household arrangements is growing, while the relevance of traditional family models is declining, also resulting in a quantitative increase of the housing demand and a change in the type of housing demand. Third, it is argued that certain motivations such as housing preferences or quality of life issues are becoming more important for predicting mobility patterns, which is partially due to technological advancements and rising incomes, increasing the possibilities to satisfy residential preferences (Jansen, 2020). In line with this argument, Hasanzadeh, Kyttä & Brown (2018) argue that sociodemographic variables are not fully able to explain residential preferences, as research has shown that different residential preferences exist for people with similar sociodemographic profiles.

On top of that, considerable economic and cultural changes have taken place in western countries in the past decades, broadening the variety in residential preferences.

All these reasons together make that traditional sociodemographic characteristics might not suffice for explaining or predicting residential preferences anymore. A different approach that might suffice better and is therefore suggested by a number of different studies is to use lifestyle variables (Hasanzadeh, Kytä & Brown, 2018). Lifestyle variables in this sense can be seen as the translation of sociodemographic characteristics into consumer preferences, as a number of different variables about characteristics as well as preferences are used that in the end show what type of consumer has what preference. Therefore, the gap between traditional variables and consumer variables is filled. This way, urban planners are allowed to identify relations between characteristics of residential settings and the residential choices of inhabitants better, while it allows the researcher to fit the approach to a more specific research design (Hasanzadeh, Kytä & Brown, 2018).

As can be derived from this discussion, the use of specific theoretic perspectives in research to residential mobility is little and therefore not described in detail. This discussion of perspectives has therefore referred to only a small number of studies, as other studies simply did not mention the use of a perspective at all. This, in combination with the suggestion from the literature, has made that a theoretic discussion per variable, rather than using one theoretic perspective, gets the preference for this thesis. But before a choice will be made, a series of relevant models will be discussed.

Approaches & models

In the literature, a number of different models to explain residential preferences and migration can be found. A well-known example of such is the classical housing lifecycle model by Rossi (1955). This model assumes that a change in the household formation can lead to different needs, thus to dissatisfaction in case the dwelling or environment does no longer meet the households' requirements. A change as such can mean the transition to parenthood, changes in household size or cohabitation. In this sense, residential mobility can be seen as the principle of families' housing getting in line with their residential needs. Rossi (1955) used this principle to relate residential mobility patterns to indications as age and household size in order to distinguish differences in mobility for different stages in the family life cycle. He argued that a young and growing household was most likely to have high mobility rates due to that type of household having a higher chance of perceiving a mismatch between current and needed housing. More recent research has shown that age-specific patterns of spatial mobility have the tendency of moving down the urban hierarchy for people above the age of 30 (Kooiman, 2020), in other words, families with parents above the age of 30 tend to move out of the city. What has become clear is that the life-cycle model can provide a perspective for determining motivations for relocation that are broadly applicable (Geist & McManus, 2008).

Another model that is often used to explain the dynamic nature of many household transitions is the life-course model (De Jong, 2020). This life-course model, not to be confused with the lifecycle model, has an emphasis on variations in timing and sequencing of life events (Geist & McManus, 2008). The model is a step towards the re-thinking of residential mobility and does so by providing two types of links and connections. The first type indicates that residential moving or staying in the same place creates a social network that can influence decisions made by potential migrants (Coulter, van Ham & Findlay, 2016). The second type makes a connection between life courses of individuals and certain influences of structural forces, meaning that certain forces such as employers, landlords or mortgage providers can affect the supply and demand for certain housing in certain locations (Coulter, van Ham & Findlay, 2016).

Although these models are used for related studies with similar research aims, no model seems to explicitly fit the type of research that is planned in this thesis. The lifecycle model by Rossi (1955) might show some interesting insight in the age-related side of this research, but lacks in the explanation of other variables such as income, education level or household composition. The life-course model is too abstract and will not fit to the research questions in this thesis. After all, this shows that no exact model seems to fit this thesis. Together this has formed enough reason for using the lifestyle variable approach, on which has been elaborated in the previous paragraph.

Lifestyle variable approach

The used variables will be divided in three sections: characteristics of migrants, motivations for moving and housing preferences. For all these variables, the first part will be dedicated to the relation to migration behaviour and the second part will be dedicated to the relation to areas of population decline, or something similar. Before the three sections will be discussed, population decline will shortly be discussed in the light of earlier findings.

Population decline

Population decline is literally the shrinking of the size of a population (Haartsen & Venhorst, 2009). Population decline has made its introduction in the Netherlands in the past decades, as can be seen in figure 1 & 2. According to Haartsen & Venhorst (2009), a lot of worries have come with this upcoming trend of population decline in some municipalities in the Netherlands. They argue that the background for these worries has two components.

First, the decline would be associated with negative spirals for (spatial) developments. Second, the Dutch planning tradition has the urge to organise, plan and guide developments that might have an impact on spatial planning. Therefore, policy-makers in areas of population decline are urged to develop and organise all sorts of plans in order to make up for the influence of the

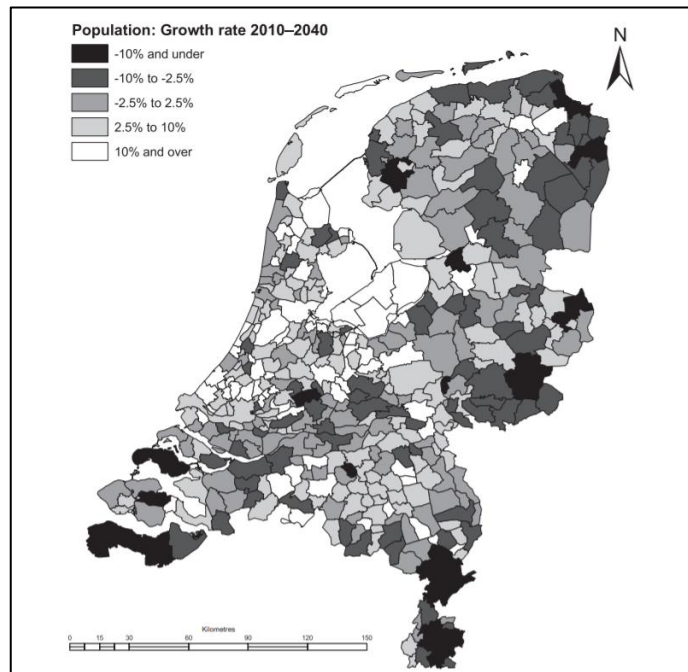


Figure 1: Regional population projection, municipality level, the Netherlands, 2010–2040 (Haartsen & Venhorst, 2009).

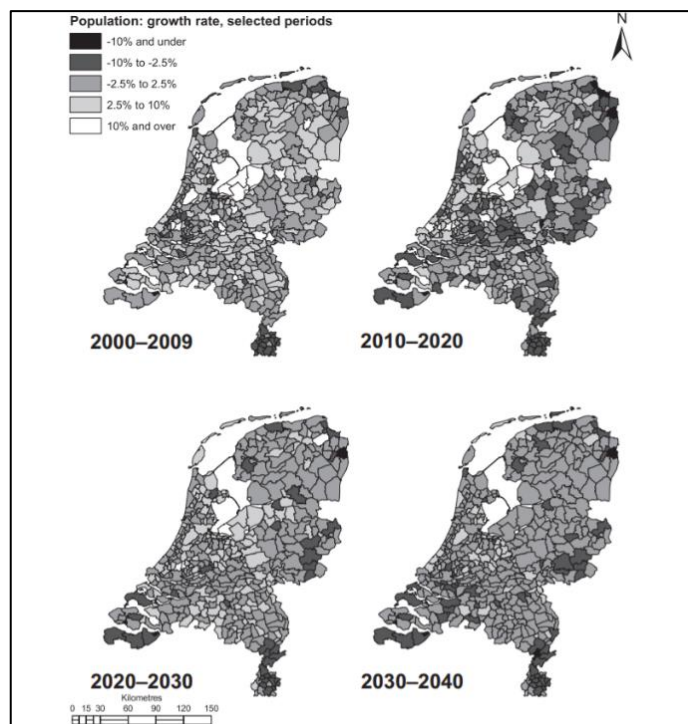


Figure 2: Actual and projected regional population growth, municipality level, the Netherlands, in 2000–2009, 2010–2020, 2020–2030 and 2030–2040 (Haartsen & Venhorst, 2009).

decline of the population in the area. As can be seen in figure 2, the percentage of population decline per decade is not enormous. However, figure 1 shows that these percentages do add up over the decades, which all in all makes for a serious difference that needs to be taken into account in policy-making (Haartsen & Venhorst, 2009). Although figures 1 and 2 do not show the exact areas that will be defined as the areas of population decline in this study, they do show that population decline is a development that will not be over within the coming years. Therefore, it is needed to track the changes and to adjust research and policy-making processes to the developments and expectations of population decline.

Characteristics

The used variables to determine characteristics have been based on a number of previous studies with a similar approach for answering a similar research questions (Bijker, Haartsen & Strijker, 2013; Fitchen, 1995; Foulkes & Newbold, 2008; Stockdale, 2006).

Age

According to previous studies, age is believed to have an effect on both having intentions to move and actual moving behaviour. Both of these situations are already influenced by the fact that younger people do more often experience transitions that change their residential preference. Transitions as such can be related to changes in household composition, education or career (Niedomysl, 2011). As opposed to younger people, older people often tend to move only when there are unsatisfactory conditions of the current neighbourhood or dwelling. When people of an older age do move, they are likely to look for areas with little nuisance, little deprivation and a high level of social cohesion (De Jong, 2020). On top of that, when people of an older age currently live in an area with little social cohesion, they are three times more likely to be planning to move within the coming two years (De Jong, 2020). Generally speaking, studies have shown that migration behaviour tends to decline with age (De Jong, 2020; Coulter, 2013; Geist & McManus, 2008). However, migration behaviour also depends on the housing-market circumstances. Younger groups of age can for instance have trouble leaving home due to difficult access to mortgages, a high level of home-ownership and high housing prices (Mulder, 2006).

Previous studies into what groups of movers are attracted by rural areas have shown that the physical qualities of the rural environment attract mostly people aged between 35 and 64. The same areas also attract the youngest and oldest age groups, but shows that these groups of movers are more often motivated by living close to family and friends (Bijker, Haartsen & Strijker, 2012; Bijker, Haartsen & Strijker, 2013).

For areas of population decline, mostly people within 18 and 29 years old tend to move towards other regions. In other words, for the age group 18 to 29, a relatively big negative migration balance exists for areas of population decline. The same goes for the age groups of 30-34 and 65+, however to a lesser extent (Stuart-Fox et al., 2019).

Education level

When discussing relations between education level of people and their moving behaviour, a number of things need to be considered. First, a positive relation exists between income and education level. A higher education level thus means a higher probability for a high income (Clark & Dieleman, 1996). As can be expected after these considerations, people with a higher level of education do more often form intentions to move than those with a lower level of education (De Groot, Mulder & Manting, 2011). However, not only income is positively influenced by a higher education level, also career prospects, forming a second stable factor that can positively influence moving behaviour (Helderman

et al., 2004). Lastly, highly educated people seem to be less sensitive to commuting distances and thus have a bigger region of housing choice when work is in a certain place (Bauernschuster et al., 2014). On the other hand, highly educated people often work in branches that can be found in less places across the country, making their commuting distance higher already and diminishing the effects of the previous argument (Muhammed et al., 2007). Still, previous studies have found that higher educated people tend to move more often than lower educated people (De Groot et al., 2011; Niedomysl, 2011).

As has briefly been pointed out in the previous paragraph, highly educated, middle-aged people are more often attracted by physical qualities of the countryside, while less educated people are more often motivated by living close to family and friends for moving towards the countryside (Bijker, Haartsen & Strijker, 2012). Respondents with a rural preference in general mentioned, however, freedom, peace and quiet as attractive factors of the countryside (Jansen, 2020).

A high percentage of younger people that migrate towards, as well as from areas of population decline have a high level of education. Between migration towards and from areas of population decline, no big differences can be found. Younger people that move or stay within areas of population decline tend to have a somewhat lower level of education. Also, within the age groups of 18-25, the percentage of people that is still being in education is slightly higher for people that move from areas of population decline than for people that move towards them (Stuart-Fox et al., 2019).

Income

People with greater financial means have greater possibilities of meeting their housing preference. A higher income can thus be a facilitating or less hampering factor in forming an intention to move (Basolo & Yerena, 2017). A reason for the difference between low-income groups and high-income is that low income-groups consider their financial situation to be a hampering factor for moving (De Groot et al., 2011). It has been found, however, that not only the intention to move is positively influenced by a higher income. Also the actual moving behaviour has a positive relation with higher incomes (Clark & Dieleman, 1996, Coulter, 2013; Helderman et al., 2004). The higher rate of realising the intention to move for high incomes is often argued to be because of higher incomes having greater possibilities of encountering a dwelling matching their preference, as the choice set of dwellings widens along with greater financial means (Clark & Dieleman, 1996; Helderman et al., 2004). Low-income groups, however, have a limited choice set of dwellings, reducing their rate of both forming and realising an intention to move (Coulter & Van Ham, 2013). On top of that, low-income groups do more often face other constraints, such as limited abilities of realising a mortgage (Helderman et al., 2004).

Not all studies have found such strong effects of income though (Goetgeluk, 1997; Kan, 1999). De Groot et al. (2011) present two theories that could explain this lack of effect. First, they state that high-income groups could only look at the upper end of the market and therefore do not have a bigger choice set of dwellings. Second, they suggest that the moving behaviour is mediated by the intention to move, because people consider their possibilities of moving in relation to their financial situation, which would mean that differences for income groups could only be found for the intention to move.

For rural areas, it is found that particularly non-popular rural areas attract people because of low housing prices, while popular rural areas attract people for non-financial reasons (Bijker, Haartsen & Strijker, 2013). People with high incomes tend to look for physical qualities of the rural landscape, rather than housing prices (Bijker Haartsen & Strijker, 2012).

Concerning areas of population decline, it is noted that no specific differences in income can be found between groups that migrate towards areas of population decline and groups that migrate from areas of population decline (Stuart-Fox et al., 2019). Although no differences in income are found, overall there is more migration from areas of population decline than vice versa (Stuart-Fox et al., 2019).

Household composition

With the life cycle approach, Rossi (1955) argued that people have different needs in terms of space in different stages of the life cycle. This also means that a certain household composition has certain needs in terms of space. When the requirements for a specific household composition are not met by the residence, an intention to move is likely to form. Although it can thus be confirmed that the household composition does have an effect on having an intention to move, no direct relations can be made. For instance, studies have shown that moving has a negative influence on both children's social as educational functioning when the move also requires a change of school, which might be a hampering factor for parents in forming an intention to move (Coley & Kull, 2016). It has also been found that singles and one-parent families do more often form intentions to move, which has been argued to be due to singles and one-parent families having no partner's preferences to consider (Helderman et al., 2004). Lastly, it has been found that singles and cohabitants do more often form intentions to move than married people, possibly because married people do more often already live in long-term housing (Clark & Coulter, 2015).

One direct relation that can be determined is that having children is often regarded as an obstacle for moving, as children are, same as with a partner, additional family members that are concerned in the decision-making process of moving (Clark & Davies Withers, 2009). Generally can thus be concluded that the bigger the number of family-members, the less likely the household is to move (Helderman et al., 2004). This is, however, not always the case. Since singles or people who are divorced or widowed do not have a partner, they also are not able to share an income with a partner, which often results in a lower general income. These people therefore have a fewer dwellings that are within their financial reach, decreasing the chance that a preferred residence can be found and thus decreasing their chance of moving (Mulder & Hooimeijer, 1999). Still, it should be said that people who are divorced or widowed have proven to be far more likely to form new household formations by re-marrying for instance, which greatly increases their chance of moving into new homes (Boyle et al., 1998).

The main remarkable point that can be derived from the literature on the relation between household composition and areas of population decline are that migration from other countries to a Dutch area of population decline consist more often of single-person households than to other regions. This is also the case for migration from areas of population decline to an area of population growth. It should be noted that for migration from other countries, the migrants often consist of (temporary) labour migrants, while migration from areas of population decline to areas of population growth consists of relatively many younger singles. Lastly, it is noted that relatively many married couples without children do not form an intention to move in areas of population decline (Stuart-Fox et al., 2019).

Motivations for moving to this area

A number of different kinds of motivations for moving and for moving to a certain area can be found in other studies. These motivations vary from social reasons, such as living close to relatives, to financial reasons, such as more affordable housing, location-related reasons, such as living close to

work or education, and qualities of the new residence and area, such as housing characteristics or physical qualities of the area (Halfacree, 1994).

By lack of studies to areas of population growth or decline, this section will discuss what is found for migration to rural areas, so that later the types of migrants can be compared. This kind of migration is often motivated by physical features, for which should be thought of for example fresh air, attractive landscape and fresh air, and social features such as peaceful living, less crime and friendly people (Gkartzios & Scott, 2009; Halfacree, 1994). These factors are often connected to the existence of a rural idyll, which represents a way of living that includes a less hurried lifestyle, more greenness, space and quietness (Van Dam et al., 2002). However, different types of motivations for moving to the countryside are sometimes mentioned as well. A different type of migrant is often found to motivate his migration by employment considerations, housing reasons, living closer to relatives and sometimes more affordability of housing (Fitchen, 1995; Foulkes & Newbold, 2008; Stockdale, 2006).

Housing preferences

Housing preferences is a broad term, consisting of many different aspects, which can be understood as housing fulfils many different goals for people. Jansen (2020) differentiates three types of housing preferences: First are the attributes of the dwelling, which are for example the size of the dwelling, the number of rooms or the presence of a garden. Second are the attributes of the dwelling environment, meaning the type of neighbourhood, the peacefulness of the surroundings or the amount of contact with the neighbours. Third are the attributes of the wider area, which should be seen as facilities in the area or proximity to nature or cities. All these choices not only have a lot of consequences, but also influence each other. For example, preferences for attributes of the neighbourhood influence the choice for a certain location, which on its turn has economic, social and environmental consequences (Lovejoy, Handy & Mokhtarian, 2010).

Residential preferences

Housing preferences are closely related to residential satisfaction. Residential satisfaction is determined by objective and subjective characteristics of the environment, in combination with the personal characteristics (Amerigo & Aragones, 1997). The subjective aspects are mostly more important than the objective ones. This means that for example dwelling size is rated in relation to someone's opinion, rather than rated to its actual size (Jansen, 2020). A small dwelling might thus be found too small by one couple because of the lack of space and freedom to move, while another couple might appreciate the small effort of cleaning the home and keeping it tidy.

When comparing home seekers in areas of population decline with home seekers in other regions, it is striking that they have the same priorities exactly in terms of both dwelling and location. This means that 40% of home seekers prioritise the type of dwelling, 40% prioritise the location of the residence and 15% prioritise the price (Stuart-Fox et al., 2019). However, because residences are often less expensive in areas of population decline, it is easier for home seekers to change to a higher price class for housing in areas of population decline. Home seekers in areas of population decline are also less willing to do concessions when it comes to searching for a different type of dwelling (Stuart-Fox et al., 2019).

Residential environment

Along with other types of residential satisfaction, neighbourhood satisfaction can be regarded to reflect residents' residential preferences (De Vos, Van Acker & Witlox, 2016). Namely, residents who

think they match with their residential preferences experience higher residential satisfaction than residents who think they have a mismatch between the preferred housing situation and their actual housing situation (Cao & Wang, 2016). In other words, the degree to which people think they match with their dwelling influences also their opinion on other residential aspects, such as the residential environment. In the end, the importance of residential satisfaction is that residential satisfaction is not only known to be able to predict, but also enhance the quality of life, which is often regarded as an objective of urban planners (Mouratidis, 2018).

No studies have been found that examine what type of location people prefer in areas of population decline. However, there have been similar studies, showing what type of location people prefer in general. These studies showed a significant discrepancy between respondents who stated that they prefer living in a rural area and respondents that actually lived in a rural area (De Vos et al., 2012; Jansen, 2020). Jansen (2020) even found that 28% of people with a rural preference actually lived in a rural area. An explanation for the fact that a significant amount of people that does not live in rural areas still seem to prefer it, can be explained by the use of a “rural idyll”. Which can be described as a more pure and simple living style with a lot of natural amenities, space and greenery (Barcus 2004; Heins 2004). This might create an overly positive picture that results in an increased desire for living in rural areas, even though this is not practically possible or realistic due to distance to work, scarcity on the housing market or household members having different preferences (Jansen, 2020). In this sense, it is found that people often like the idea of living on the countryside, but also like to live close to their work and facilities in their more urban areas. Their ideal might therefore be unattainable, making their rural preference more of an ideal picture than a realistic intention (Van Dam, Heins & Elbersen, 2002). Lastly, possibilities for living in rural areas are limited due to needs for agriculture, recreation and nature conservation (Van Oostrom, 2001).

Other aspects

Although many factors in housing preferences and housing choices have been studied, it seems that not so much attention has been given to certain specific housing aspects, such as the availability of a garden, the housing size, the number of rooms of the house or the house being an elderly home or not, especially in relation to areas of population decline. Although no theory on these exact variables has been discussed, these variables might still be used in a later stadium of this research.

Discussion of the theory

This theoretic chapter has not been able to completely confirm the hypothesis of this research, nor to deny it. The expectation that a certain type of migrant will be attracted to areas of decline for getting a bigger house with more space for a lower price could not be found in other literature, as the literature on migration to areas of decline is still very little. Earlier studies have shown that the average migrant to an area of decline differs from the average migrant to an area of growth in terms of a lower income and lower education level, but these differences are slight. In terms of housing preferences, no difference has been determined yet. This task is thus still set for this thesis. It has been shown, however, that a lot of influences and aspects come into play when determining residential preferences. If significant differences between the migrants to demographically different types of areas appear to exist, these could be found in many different ways, given the great number of variables that seem to be concerned.

All in all, the extent to which the hypothesis of this thesis is right will have to be found out from the results of this research, as earlier studies have not given a decisive answer concerning the hypothesis.

Conceptual model

From the theory, the following conceptual model has been derived for operationalising the variables. The variables are grouped in characteristics, motivations and housing preferences for this model.

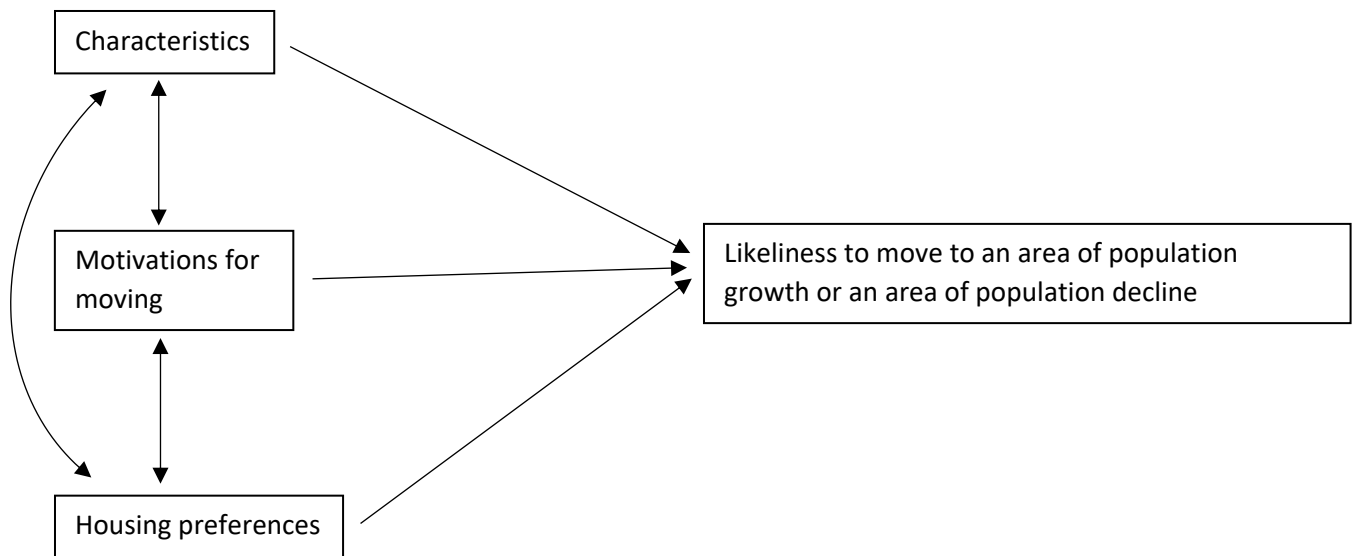


Figure 3: conceptual model

Methodology:

Research philosophy

For the research philosophy of this thesis, positivism will be used. This means that the study will follow a deductive approach. Positivism namely means that all genuine knowledge can only be derived from experiencing natural phenomena. In this thesis, the theory is applied by making a research design that is deductive in nature (Bryman, 2012; Gray, 2014). Positivism does not only mean that genuine knowledge can only be derived from natural sources. It also means that research should be done in a value-free way. A researcher thus needs to be objective and independent of the observed (Guba & Lincoln, 1994). Besides, positivism always searches for the truth in the sense that phenomena can only be seen as knowledge when they have been confirmed by research (Bryman, 2012). On top of that, positivist research aims to identify causality between variables as to determine a relation between those (Gray, 2014). Lastly, positivism makes a clear distinction between normative and scientific statements. This means that scientific statements are seen as the truth, thus scientists should stay in that domain (Bryman, 2012).

The positivism approach fits this thesis best, as all the knowledge of this thesis is derived from natural phenomena, in the form of a large number of respondents that have given their opinion on matters that are relevant for this thesis. The opinion of the respondents has been gotten in the most value-free way as were possible and will be used to check whether phenomena can be confirmed to be seen as knowledge. The thesis will namely confirm whether the phenomena of people that have moved to an area of population decline show certain differences to people that have moved to an area of population growth, or not. This will be done by identifying causality between variables such as having moved to a certain area and housing preferences, as to determine possible relations between those.

Research strategy

This research will try to analyse whether demographic characteristics, motivations for moving and housing preferences differ between migrants to growing and declining areas. The research will thus make use of a number of groups of migrants to a different area. Between these different groups of migrants, significant differences in characteristics, motivations and housing preferences of the migrants will be tried to find. To do so, a quantitative research design was chosen. This seemed like the best choice to address the research, as this study will examine and measure the relationship between variables, for which quantitative research fits appropriately (Creswell, 2002). By using quantitative research methods, differences between categories of variables can be measured and comparisons between different groups can then be made, which will be necessary in order to answer the research questions. Within the quantitative research design, the survey was chosen as the strategy for the collection of data. The survey has been chosen because it seems to fit best in order to answer the research questions, as this allows the study to generate as much explanatory knowledge about a causal relationship between characteristics of migrants, their motivation to move, housing preferences of migrants and, demographically seen, the kind of area they migrate to (Draper, 2004). On top of that, the use of a large-scale survey will help to ensure that reliable statements can be made for all three categories that have been set up. Finally, the use of a survey will also help the researcher to keep a distance from what is observed, allowing the researcher to improve the value-free way of conducting the research.

Data collection

As has been said in the previous paragraph, this study will make use of a survey. It will not do so by using a self-constructed survey, but will instead use the data collection from the 2018 Housing Survey from the Netherlands, called WoonOnderzoek (also: WoON). The WoON is a national housing study that is conducted by Statistics Netherlands under a joint co-operation between the Ministry of the Interior and Kingdom Relations (BZK) and Statistics Netherlands (CBS, 2018). This dataset has been used by many other housing related studies in this field (Muhammed et al., 2007; Van der Vlist et al., 2002; De Jong, 2020; Clark, Deurloo & Dieleman, 2006). The WoON is done every three years in order to gain insight in developments of the housing market, which can then be used to form new housing policies (WoonOnderzoek, 2018). The latest edition of the WoON has been published in April 2019 and has collected its data in the period of August 2017 – April 2018, making the study cross-sectional (Ministerie van BZK, 2018a). This is the version that will be used in this study.

Statistics Netherlands (CBS, 2018) has surveyed the selected respondents, consisting of people that live in the Netherlands, were 18 years or older on the first of January 2018, were registered in the Dutch population registry and were a household member in the sense that they had or shared a living space that secured the basic necessities of daily life. A random sample of 115.000 persons has been drawn from this group, although some corrections have been done in order to ensure the representativeness per municipality (Ministerie van BZK, 2018a). This sample yielded about 43.000 respondents, making the WoON a large-scale study (WoonOnderzoek, 2018.). In order to keep group sizes big enough to make reliable statements on smaller areas such as municipalities or neighbourhoods, 24.000 respondents were added through a number of oversampling methods as to make sure that the number of respondents was great enough for these kind of areas (Ministerie van BZK, 2017; Ministerie van BZK, 2018b). After the corrections, approximately 63.000 respondents participated to the survey.

Variable construction

Dependent variable

The dependent variable that is used in this research is whether the respondent that has moved in the past 2 years moved to an area of population decline, or not. This also means that from the dataset of approximately 63.000 respondents, only the data from respondents that have moved in the past 2 years has been used, which resulted in a remaining 9.256 respondents. This way, it allowed this research best to find differences between migrants to areas of growth and migrants to areas of decline, which is needed in order to answer the research question and check the degree to which the hypothesis was correct. The group of migrants that moved to an area of population decline was then again divided into two groups: migrants that moved from the same municipality and migrants who moved from a different municipality. This was done in order to check whether the migrants to an area of population decline came from a different area, and thus specifically chose to move to an area of population decline, or that the migrant already lived in the same area and did not find enough reason to move elsewhere. This distinction was made via this way as this was the only variable of the dataset that provided usable information in this sense about the previous residence or location of the migrant and allowed for a practical way of using it. It was chosen to apply this difference only on the migrants to an area of population decline, as this is the group that is examined for the research question and might possibly diverge from the 'control group'; migrants to an area of growth. In the end, three groups of migrants are created that together form the dependent variable. The group of migrants to an area of growth consists of 4886 respondents, the groups of migrants to areas of decline consists of 216 respondents from a different municipality and of 622 respondents from the

same municipality. Before these variables will be used, the definition for population decline that is used in this research will be elaborated on first.

Population decline

As the survey data that will be used in this study comes from a secondary source, a definition of areas of population decline has already been determined. Stuart-Fox et al. (2019) have used current statistics to determine what areas are dealing with population decline, to then divide these areas into 7 regions, as can be seen in figure 3. These regions are: Achterhoek urban, Achterhoek rural, Limburg urban, Limburg rural, North-East Friesland, North and East Groningen and Zeeuws-Vlaanderen. Together, these regions are the same as the 9 standardised regions of population decline as determined by the Ministry of the Interior and Kingdom Relations (2017). In total, the 7 regions count 1.3 million inhabitants, together forming 622.000 households. Within the areas of the Achterhoek and Limburg, a distinction between urban and rural areas has been made because these areas differ substantially in terms of liveability, available facilities and the functioning of the housing market (Stuart-Fox et al., 2019).

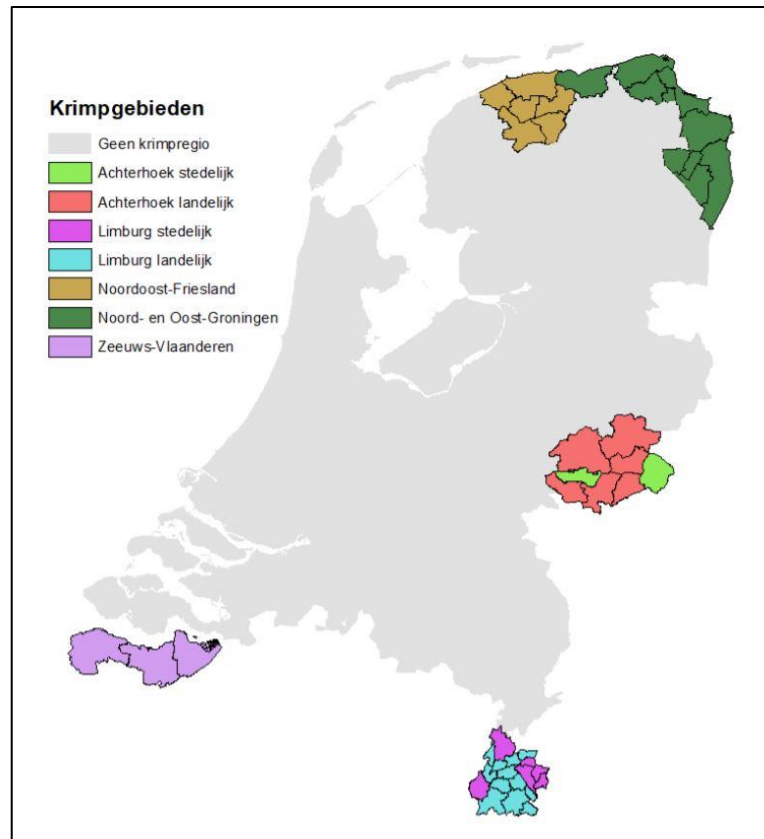


Figure 1: Areas of population decline, as defined for the data set and thus for this study (Stuart-Fox et al., 2019).

Independent variables

In this section, the choices that have been made regarding the use of variables will be described. All variables have been based on the theory and the conceptual model that derived from the theory. This means that three types of variables have been used that together determine a migrants' likelihood to move to an area of population growth or an area of population decline. These three types of variables are characteristics of the migrant, motivation for moving to a certain area and housing preferences. Within each of these three types of variables, a number of variables has been described in the theory. This list of variables is what will be used for the research methods where possible. Due to the dataset in which pre-determined variables have been created, the used variables might not exactly match with the list of variables from the theory. Sometimes, a variable from the theory might not be found in the dataset and sometimes variables from the dataset might form a worthy addition to the variables of the theory, as no theoretic background from the literature could be found for every variable. The choices for the variables will now be discussed per type of variable, meaning that first characteristics will be discussed, followed by motivations for moving to a certain area to then finish with housing preferences.

Characteristics

By including characteristics of migrants, an image is created of the type of migrant that has ambitions to migrate to certain areas. This can show whether specific characteristics of migrants belong to migrants that migrate towards specifically areas of population decline or areas of population growth.

From this concept has derived a number of characteristics that have been used as independent variables. For these characteristics, it has been tried to, to the extent that is possible with the used dataset, create a similar list of variables to the list in the theory. This has resulted in the use of the variables 'age', 'education level' and 'income'. The variable 'household composition' was mentioned in the theory and would have been used, but this variable had a high rate of non-response, which would have negatively influenced the reliability and validity of the models. As the variable also did not show any significant results, it has been decided not to use 'household composition' as a variable in the models.

The income groups were changed to only factors of a modal income, as this was the only way in which the dataset provided income levels. Education level was expanded to three levels, because mentioning only two groups would make the lowest groups of people who did not finish any school seem educated the same as someone received a foundation degree on a university of applied science, while more groups would decrease group sizes too much. The age groups have been based on previous, similar studies (Bijker, Haartsen & Strijker, 2013; Fitchen, 1995; Foulkes & Newbold, 2008; Stockdale, 2006).

Motivation for choosing a certain area

No specific list of variables can be derived from the theory, as no literature was found that specifically discusses different types of motivations for choosing a certain area. However, similar research has been done in the past. The categories of motivations will thus be based on previous similar studies (Bijker, Haartsen & Strijker, 2013; Bolton & Chalkley, 1990; Gkartzios & Scott, 2009; Halfacree, 1994; Halliday & Coombes, 1995; Walmsley, Epps & Duncan, 1998). Again, some differences were inevitable due to the dataset, which has resulted in the following deviations to similar studies:

Motivation categories used in previous, similar studies	Motivation categories used in this study
Physical qualities	Physical qualities
Housing characteristics	Housing characteristics
Living close to family and friends	Living close to family and friends
Work-related	Work or education-related
Quietness	-
Familiarity of the area	-
Location	-
Moving in with partner	-
Low house price	Financial reasons
Social qualities	-
-	Health reasons

Figure 4: Comparison of used motivation categories

As can be seen, no differences exist between the first four categories, other than the edition of education-related moving motivations to work-related, which has been done because both require people to be in a certain place regularly. The next four categories are, however, not used in this study as no data could be found for those categories. Eventually, the category 'moving in with partner' would have been used but was later cancelled due to the non-response that made that it did not fit

the logistic regression models properly. The category 'low house price' was made a little broader by transforming this category into 'financial reasons'. 'Social qualities' were not found in the data, but 'health reasons', in which age can play a big role, were added as the research will later also include a question about elderly homes.

Housing preferences

In the theory, a number of major housing preferences have been discussed, while more detailed preferences have not. Both types of preferences will be investigated, although the selection will be somewhat different. For the definition of housing preferences of migrants that will be used in this study, much more items have been asked than for characteristics. In fact, too many questions were asked to all be included in the models. That is why a selection of items best representing housing preferences had to be made. This selection has been made on the basis of the variables that are discussed in the theory. The variables in the theory were again chosen by investigating and elaborating on what is known from the literature. The variables that were expected to show the best correlations, are meaningful for answering the research question and provide the best information for policy makers and future research were chosen.

The survey contains data on 26 different topics. One of these topics is 'characteristics desired residence'. Of this topic, still too many items have been asked to use, thus a selection still has to be made. For every different subject, such as dwelling type or availability of a garden, the most important and representative questions for that item will be used. For instance, for the size and layout of the house, the main question about the amount of rooms that is desired will be used, while a question about the floor on which the living room is desired to be will not be used as it is too detailed and not necessarily relevant for this study. In the end, a reasonable impression of every desired aspects can so be created.

For the housing preferences, the pull-factors have been used. This means that housing preferences have been established in the following way: All respondents have moved in the past two years. Their current dwelling is where they moved to, and is what attracted the migrant. The housing preferences will thus be determined by characteristics of the current dwelling of the respondent.

To not only measure characteristics of the current dwelling, but also an opinion of the respondents about their current situation, three items on satisfaction have been added.

This selection has resulted in nine variables, four of which are items with only 'yes' or 'no' answer categories. Those are: 'House newly build', 'availability of a garden' and 'elderly home'. For the other variables, more answer categories will be used, which will now be elaborated on. For the variable 'Type of residence', the answer categories of 'Flat, apartment or storey house', 'Terraced house', 'Semi-detached house', 'Detached house', 'Farmhouse' and 'Other' were used. In the dataset, two more categories were used that had very low answer rates and were therefore categorized as 'other' in this study. The categories would otherwise not have reached 30 respondents and would not have had much explanatory power (Field, 2017). For the variable 'Number of rooms', the different answer categories served the purpose of giving a global idea of the number of rooms. Therefore, only the following answer categories were made: '1-2 rooms', '3 rooms', '4 rooms', '5 rooms' and '6 or more rooms'. The last three items contained a question about the level of satisfaction on an aspect of living. These aspects were the respondents' current home, current living environment and current living area. For these variables, the answer categories of the dataset have been used as these were already logical and suitable for this study. Those categories were a Likert scale of 5, namely: 'very satisfied', 'satisfied', 'neutral', 'unsatisfied' and 'very unsatisfied'.

Research methods

Bivariate analyses

This thesis will first present results of the bivariate analysis of the used variables from the data. This will form the first ideas of the direction that the results will take, before the actual major model of the data analysis is performed. The method that will be used is the Chi-square test. Chi-square tests are possible to use in order to find a relation between variables when the dependent variable is nominal. If a specific relation between two variables is to be proved, chi-square tests can bring outcome. This method has been used in several other, similar studies before (Van Dam, Heins & Elbersen, 2002; Bijker, Haartsen & Strijker, 2013). The advantage of this method over other methods is that it is very suitable to use with a large collection of data, or in other words, a large number of respondents. If Kruskal-Wallis tests were to be used for example, it would have been too time consuming for this thesis to customize the method to every respondent. The chi-square test shows exactly whether the relation between a dependent and an independent variable is significant, which can then be interpreted easily for a large number of independent variables. The big amount of respondents then only helps to improve the validity of this research.

In order to create the tables of the descriptive statistics, a number of actions have been performed. First, the variables as they have been described in the previous subchapter have been created. Then, the respondents that moved in the past two years have been filtered, so that only those respondents remained in the dataset. With these respondents, the tables could be created using crosstabs. The dependent variables that were used were whether people lived in an area of population decline and whether they moved from the same municipality. This way, the distinction was made between people that moved to an area of growth in the past two years, people that moved to an area of decline from a different municipality in the past two years and people that moved to an area of decline from the same municipality in the past two years. All the other variables were then inserted as independent variables and the tables were created.

Logistic regression

The major method that will be used in this research is the multinomial logistic regression analysis. This method has been used before in similar studies. For example, Bijker, Haartsen & Strijker (2012 & 2013) have done two studies in order to see whether different areas in the Netherlands attract different kinds of people and whether differences in housing preferences and characteristics of migrants apply between popular rural areas and non-popular rural areas. A major difference, however, is that those studies by Bijker, Haartsen & Strijker (2012 & 2013) have both used their own data, which will be too time consuming and difficult for this study. This study will thus be using data from the most recent data from the WoOn (2018), as has been explained previously.

The logistic regression analysis is chosen for this research because of a number of reasons. First, this research makes use of a statistical research approach. The logistic regression is a statistical method that shows correlations between variables, which can then be interpreted and placed into the context of the research to make statements on the chosen subject. Second, the logistic regression analysis is very suitable with large, quantitative datasets such as the dataset that is used in this study. Third, the data of this thesis consists of nominal data. This type of data cannot be analysed with every model. For example, a linear regression will not work as this model uses only dependent variables of an interval or ratio level of measurement. The logistic regression is eminently suitable for data of a nominal level of measurement. All in all, given the dataset that is used and the research question that needs to be answered, the logistic regression is the most suitable method for this thesis. Because the dependent variable consists of more than two categories, a multinomial logistic regression is used in order to include all three types of respondents into one model, the three types

of respondents being: respondents that have moved to an area of growth, respondents that have moved to an area of decline from the same municipality and respondents that have moved to an area of decline from a different municipality.

For the logistic regression, much the same applies as for the descriptive statistics. The only difference is that all answer categories of variables with multiple possible answers were created as individual variables. This way, all answers can be compared between different models. For the first model, only the variables about characteristics were included in the model, for the second model, the variables about the motivation for choosing this area were added and for the third model, the variables about housing preferences were added. By creating three different models, the explanatory value of each model can be compared so that the best model can be used in the end. This explanatory value will be checked with the Nagelkerke R squared, which shows the goodness-of-fit for an entire logistic regression model. The reference categories were again based on previous studies (Bijker, Haartsen & Strijker, 2013; Fitchen, 1995; Foulkes & Newbold, 2008; Stockdale, 2006).

Validity and reliability of the research

Internal validity

It is important to check and examine the internal validity of a research. This means that the researcher should check whether claims can be made regarding the causal relations in the research (Bryman, 2012). When for example a causal relationship is found between the availability of a garden and having moved to an area of population decline, the variable of the availability of a garden should at least partly be responsible for variations in having moved to an area of population decline (Bryman, 2012). In this study, the internal validity is secured by including as many variables that can explain both characteristics and housing preferences. In this way, it can be checked whether explanations using other variables are possible for explaining variations in characteristics or housing preferences.

The way in which the data is collected can influence the results. To ensure the internal validity, three methods of collecting data were used by Statistics Netherlands: computer-assisted web interviews (CAWI), computer-assisted personal interviews (CAPI) and computer-assisted telephone interviews (CATI). Of these three ways, CAWI was used the most, as 65% of respondents filled in the survey themselves using the online questionnaire (Herbers, 2019).

Although this is the most discrete way of holding a survey, a risk is that questions are misunderstood, enhancing the amount of mistakes or missed questions (Bryman, 2012). Still, the Ministry of the Interior and Kingdom Relations has tried to remove all errors or inconsistencies by predetermining requirements in the quality and controls. If the quality of answers did not meet the requirements, that respondent was removed in order to enhance the quality of the data. Because of these measures, it can be said that the dataset has a high level of trustworthiness (Ministerie van BZK, 2017; Ministerie van BZK, 2018b).

The other two ways of collecting data also carry a risk; because of the presence of an interviewer, as opposed to self-completion questionnaires, the results can be influenced (Bryman, 2012). But this risk was also minimized by using well-trained interviewers. Both self-completion questionnaires as structured interviews thus carry problems, although these can both be minimized. Between the two ways of holding a structured interview, CATI is found to be more influenced by the presence of the interviewer, although the presence also allows for better understanding of the question in certain cases (Bryman, 2012). For the WoON survey, 21% of respondents were interviewed through a structured interview by telephone (CATI), while 14% of respondents conducted through a computer-assisted personal structured interview (CAPI) (Bryman, 2012; Herbers, 2019).

External validity

It is not only important to check and examine the internal validity of a research, the same can be said for the external validity. As opposed to the internal validity, the external validity refers to whether the outcome of a research can be generalised to a population, beyond the specific research context (Bryman, 2012). For research that uses a survey, certain problems often occur. Those problems are non-response and non-random sampling, which can both affect the external validity in a negative way. In this sense, non-response means that people that are selected to participate in the survey refuse to participate. A problem can then occur when the group that refused to participate differs from the group that did participate, as the sample is then less representative for the population (Bryman, 2012). The other problem, non-random sampling, means that the participants of the sample are not randomly chosen. This can occur when, for example, human judgement affects the selection process. The result is that certain people are more likely to be chosen to participate in the survey, while others are less likely. This can again result in a less representative sample, forming the risk that the research outcomes are less valid (Bryman, 2012).

As this study uses a secondary data source, the external validity depends largely on how that survey is done. Therefore, it is difficult to check whether the first possible problem, non-response, may have endangered the external validity of this research. In the data, only information about respondents who have filled in the survey completely has been used, whereas data from respondents that did not complete the survey is also needed in order to ensure that no group is underrepresented in the data. This way, the representativeness of the sample can be secured and thus the external validity. In order to still check if the sample was representative for the entire Dutch population, the background characteristics of the sample group will be compared with those of the entire Dutch population. By doing so, this study will still be able to determine with more certainty whether the sample group was representative of the entire Dutch population.

As opposed to the problem of non-response, the problem of non-random sampling is taken care of by the Ministry of the Interior and Kingdom Relations. By selecting respondents in a stratified random sampling manner, the respondents were arbitrary chosen, but still in proportion to the population per municipality (Ministerie van BZK, 2017;). This way, the research was more representative for both the entire Dutch population as the populations per municipality (Bryman, 2012).

Reliability

For the set of items 'housing preferences', it should be held in mind that the percentages can correlate to the amount of that type of houses that exists in the area, instead of people's preference. For example, the higher figure of people that have moved to an area of growth into a newly build house can be because people that move to an area of growth are more inclined to buy a newly build house, but it is also likely that the percentage of newly build houses is bigger in areas of growth than in areas of decline. That being said, the two groups of movers to an area of decline can be compared without differences in the availability of certain characteristics, as the same areas are compared. It also does not affect the last three items in which is asked for a degree of satisfaction and the other variables of characteristics and motivations.

Data analysis

In this chapter, the results will be presented and discussed. As can be seen in figure 5, all of the respondents have moved in the past two years. The respondents that have not moved in the past two years, which is substantially bigger, has already been filtered out. Of the remaining 5724 respondents, 4886 respondents have moved to an area of growth, 216 respondents have moved to an area of decline from a different municipality while 622 respondents have moved to an area of decline from the same municipality. Although these are still groups of considerable size, for some very specific questions it might be necessary to check whether a minimum group size of 30 is achieved for certain answers, as to ensure the external validity (Field, 2017).

First, the bivariate analysis will be presented and discussed, followed by the multinomial logistic regression analysis. When these are both presented, a discussion and comparison of both will follow.

Bivariate analysis

Presentation of the outcomes

	<i>Moved to/within area of population growth in the past 2 years</i>	<i>Moved to area of population decline in the past 2 years from a different municipality</i>	<i>Moved to area of population decline in the past 2 years from the same municipality</i>
Characteristics			
Income			
Beneath modal (.275)	34.4	32.4	37.3
Between 1 and 1.5 times modal (.108)	19.5	25	20.9
Between 1.5 and 2 times modal (.998)	16.4	16.2	16.4
Between 2 and 3 times modal (.982)	19	18.5	19
More than 3 times modal (.002)***	10.7	7.9	6.4
Education level			
Low (.000)***	20.2	22.2	27
Average (.109)	32.7	31.9	36.8
High (.000)***	47.2	45.8	36.2
Age			
17-34 (.000)***	44.1	33.3	36.3
35-44 (.041)**	19.3	13.9	16.6
45-54 (.003)***	12.8	19	16.1
55-64 (.001)***	9.6	16.7	12.1
65 or older (.004)***	14.2	17.1	19
Motivation for moving			
Physical qualities (.744)	17.1	19	16.7

Housing characteristics (.000)***	27.2	13.4	29.7
Living close to family and friends (.000)***	13.2	23.6	10.5
Work or education-related (.000)***	18.4	14.4	9.5
Financial reasons (.624)	13.2	12.5	11.9
Health reasons (.000)***	6.9	11.1	10.8
<i>Housing preferences – pull factors (current home)</i>			
House newly build (.000)***	13.4	4.2	8.5
Type of residence			
Flat, apartment or storey house (.000)***	42.1	27.8	27.8
Terraced house (.001)***	34	24.5	28.5
Semi-detached house (.000)***	9.1	18.1	17.8
Detached house (.000)***	9.9	23.6	20.9
Farmhouse (.008)***	0.6	1.4	1.6
Other (.522)	4.3	4.6	3.4
Availability of garden (.000)***	57.5	67.6	72.3
Number of rooms			
1-2 rooms (.000)***	17	12	8.8
3 rooms (.070)*	24.3	20.4	20.7
4 rooms (.000)***	22.6	29.6	29.7
5 rooms (.182)	20.9	15.7	20.9
6 or more rooms (.000)***	15.2	22.2	19.8
Elderly home (.008)***	8.7	8.8	12.5
Satisfaction current home			
Very satisfied (.013)**	43.8	38.4	48.9
Satisfied (.505)	43.1	45.4	41.2
Neutral (.010)***	9.4	14.4	7.4
Unsatisfied (.385)	2.9	1.9	2.1
Very unsatisfied (.281)	0.8	0	0.5
Satisfaction current living environment			
Very satisfied (.374)	37.2	39.4	39.9
Satisfied (.684)	48.3	47.2	50
Neutral (.044)**	10.3	11.6	7.2
Unsatisfied (.179)	3.2	1.9	2.1

Very unsatisfied (.305)	1	0	0.8
Satisfaction current living area			
Very satisfied (.224)	35.4	30.1	33.8
Satisfied (.220)	57.6	62.5	59.8
Neutral (.494)	5.5	6.9	4.8
Unsatisfied (.454)	1.4	0.5	1.1
Very unsatisfied (.359)	0.2	0	0.5

Figure 5: Bivariate analysis of the characteristics variables in percentages of the respondents that moved in the past 2 years

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$ (Chi-Square test).

Analysis of the outcomes

In the bivariate analysis (figure 5) percentages of certain groups of movers are shown that can be compared. Both the significant and non-significant values will now be discussed in terms of the meaning of those values.

For the characteristic 'income', only one income group seems to differ significantly in size between the three groups of movers. Of these three groups, the people that have moved to an area of growth are generally most likely to have an income of more than three times modal. People that have moved to an area of decline from the same municipality are least likely to have such an income. For the other income groups, no significant differences between the three groups of movers were found.

Concerning the education level, the figures of both 'low education level' and 'high education level' differ significantly between the three groups of movers, whereas the figures of 'average education level' do not. The figures clearly show that movers to an area of decline are generally less educated, especially the movers from the same municipality.

All the age group sizes differ significantly between the three groups of movers. Generally speaking, it can be said that more younger people have moved to an area of growth while more older people have moved to an area of decline. This statement is consistently correct when regarding the ages 17-44 as younger people and 45 or older as older people. However, some exceptions can be distinguished within movers to areas of decline. Generally, more younger and less older people have moved to an area of decline from the same municipality, except for the age group 65 years or older.

Having discussed the 'characteristics' section in figure 5, the 'motivations for choosing this area' section will now be discussed. Of the six possible mentioned motivations by the respondent, four types of motivations differ significantly in frequency between the three groups of movers. The first type of motivation is physical qualities. No significant differences were found for this variable.

Concerning housing characteristics, it is highly notable that only for the group movers to an area of decline from a different municipality this motivation is mentioned significantly less often. For the movers to an area of growth or an area of decline from the same municipality, no big differences can be found.

The next motivation is 'living close to family and friends'. The most significant figure here is the figure of movers to an area of decline from a different municipality. This figure is about twice as high as for the other groups of movers.

For the motivation 'work or education-related', the highest percentage can be found in movers to an area of growth. Movers to an area of decline from the same municipality have the lowest rate.

Financial reasons showed no significantly different rates between the three groups of movers.

Health reasons are mentioned more often for movers to areas of decline.

The first item in the set of 'housing preferences' is whether the house is newly build or not. Some significant differences can be seen. As has been mentioned in the method section, it should be held in mind that the difference between areas of growth and areas of decline might be affected because there are simply more houses of a certain type in areas of growth or decline, rather than the figure showing the actual preference. This does, however, not count for the difference between having moved to an area of decline from the same municipality or not. Therefore, the differences between the two groups of movers to an area of decline will be focussed on in this part. It is thus certain that people that have moved to an area of decline from the same municipality are more likely to buy a newly build house than those that moved to an area of decline from a different municipality.

Concerning the type of residence, it is mostly worth noting that movers to an area of decline from the same municipality have more often bought a terraced house than those from a different municipality, whereas those movers from a different municipality have more often bought a detached house. For areas of growth, it appears that movers have more often bought a flat, an apartment or a terraced house, while movers to areas of decline have more often bought a detached house. Also, farmhouses were moved into more often in areas of decline.

Movers to areas of decline more often have the availability of a garden. Movers to an area of decline from the same municipality even have a slightly higher rate of having a garden than those movers to an area of decline from a different municipality.

Movers to an area of decline generally seem to have the availability of slightly more rooms in their dwelling than movers to an area of growth. Between the two types of movers to an area of decline, no significant differences can be found, other than the fact that movers from a different municipality more often have both 1-2 rooms or 6 or more rooms.

The rate of having moved to an elderly home is also higher for the group of movers to an area of decline. Older people that have to move to an elderly home seem to prefer staying in the same municipality.

Concerning the satisfaction with their current dwelling, the group movers to an area of decline from the same municipality is most often very satisfied, followed by movers to an area of growth, while movers to an area of decline from a different municipality were least often very satisfied. Being neutral about their current dwelling also showed significant differences. For this score, the order was the other way around.

For the satisfaction of the current living environment, only the score 'neutral' differed significantly between the three groups. No major statements can be made on the basis of these differences.

No significant differences between the three groups were found in the scoring of the satisfaction of the current living area.

Multinomial logistic regression analysis

Presentation of the outcomes

	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>	
Ref. category: people who have moved to an area of growth in the past 2 years.	People who have moved to an area of decline in the past 2 years.					
	Moved from a different municipality	Moved from the same municipality	Moved from a different municipality	Moved from the same municipality	Moved from a different municipality	Moved from the same municipality
<i>Characteristics</i>						
Income (ref. < modal)						
Between 1 and 1.5 times modal	.768 (.162)	.969 (.792)	.791 (.220)	.991 (.940)	.952 (.812)	1.365 (.016)**
Between 1.5 and 2 times modal	.968 (.881)	1.003 (.982)	.996 (.984)	1.035 (.791)	1.409 (.158)	1.884 (.000)***
Between 2 and 3 times modal	1.031 (.888)	.958 (.738)	1.076 (.736)	.995 (.970)	1.688 (.035)**	2.091 (.000)***
More than 3 times modal	1.484 (.182)	1.585 (.016)**	1.456 (.207)	1.659 (.008)***	2.657 (.003)***	4.117 (.000)***
Education level (ref. low)						
Average	.892 (.577)	1.028 (.819)	.854 (.445)	.990 (.932)	.932 (.738)	1.006 (.960)
High	.829 (.354)	1.429 (.004)***	.782 (.233)	1.328 (.023)**	.775 (.221)	1.232 (.105)
Age (ref. > 65 years)						
17-34	1.687 (.018)**	1.464 (.004)***	1.282 (.307)	1.235 (.143)	1.510 (.117)	1.155 (.378)
35-44	1.654 (.058)*	1.316 (.077)*	1.335 (.300)	1.209 (.241)	1.870 (.035)**	1.460 (.037)**
45-54	.792 (.342)	.948 (.730)	.647 (.092)*	.872 (.395)	.870 (.610)	1.036 (.842)
55-64	.685 (.124)	.991 (.957)	.595 (.041)**	.919 (.610)	.718 (.215)	.964 (.837)
<i>Motivation for moving</i>						
Physical qualities	-	-	.860 (.408)	1.011 (.927)	.889 (.531)	1.115 (.366)
Housing characteristics	-	-	2.266 (.000)***	.920 (.386)	2.119 (.000)***	.888 (.232)
Living close to family and friends	-	-	.545 (.000)***	1.320 (.047)**	.553 (.001)***	1.353 (.035)**

Work or education-related	-	-	1.301 (.213)	1.866 (.000)***	1.280 (.257)	1.608 (.002)***
Financial reasons	-	-	1.119 (.597)	1.143 (.314)	1.010 (.962)	1.086 (.544)
Health reasons	-	-	.720 (.188)	.816 (.201)	.591 (.043)**	.679 (.022)**
<i>Housing preferences – pull factors (current home)</i>						
House newly build	-	-	-	-	3.153 (.001)***	1.556 (.005)***
Type of residence (ref. flat, apartment or storey house)						
Terraced house	-	-	-	-	.595 (.085)*	.903 (.579)
Semi-detached house	-	-	-	-	.184 (.000)***	.321 (.000)***
Detached house	-	-	-	-	.178 (.000)***	.271 (.000)***
Farmhouse	-	-	-	-	.183 (.012)**	.177 (.000)***
Other	-	-	-	-	.525 (.085)*	.659 (.108)
Availability of garden	-	-	-	-	1.186 (.516)	.726 (.047)**
Number of rooms (ref. 1-2 rooms)						
3 rooms	-	-	-	-	.886 (.658)	.618 (.007)***
4 rooms	-	-	-	-	.671 (.167)	.435 (.000)***
5 rooms	-	-	-	-	1.197 (.588)	.531 (.003)***
6 or more rooms	-	-	-	-	.678 (.230)	.469 (.000)***
Elderly home	-	-	-	-	1.144 (.650)	.741 (.077)*
Satisfaction current home (ref. very satisfied)						
Satisfied	-	-	-	-	.769 (.126)	1.106 (.331)
Neutral	-	-	-	-	.472 (.004)***	1.193 (.349)
Unsatisfied	-	-	-	-	.911 (.865)	1.391 (.316)
Very unsatisfied	-	-	-	-	151122 (.978)	1.676 (.421)

Satisfaction current living environment (ref. very satisfied)						
Satisfied	-	-	-	-	1.134 (.462)	.967 (.750)
Neutral	-	-	-	-	1.032 (.909)	1.165 (.426)
Unsatisfied	-	-	-	-	1.686 (.348)	1.235 (.521)
Very unsatisfied	-	-	-	-	209696 (.975)	1.294 (.635)
Satisfaction current living area (ref. very satisfied)						
Satisfied	-	-	-	-	.734 (.066)*	.866 (.157)
Neutral	-	-	-	-	.643 (.173)	.860 (.497)
Unsatisfied	-	-	-	-	1.401 (.746)	.771 (.554)
Very unsatisfied	-	-	-	-	47823 (-)	.261 (.061)*
N	5724		5724		5724	
Nagelkerke R²	.022		.041		.131	
X²	80.874 (.000)***		148.723 (.000)***		492.865 (.000)***	

Figure 6: logistic regression analysis of all respondents that have moved in the past 2 years, showing all odds ratios (exp(B)).
*p<0.10, **p<0.05, ***p<0.01 (Chi-Square test).

Analysis and discussion of the outcomes

As has been discussed in the methodology, three different multinomial logistic regression models have been made. Model 1 has only characteristics of the respondent as variables, for model 2 the motivation for choosing this area is added and model 3 uses all relevant variables, having added housing preferences.

All three models have used the same respondents, which has resulted in the population size (N) staying the same for all three models. The goodness of fit can be checked with the Nagelkerke R². These figures show that the additions of more variables to the models has resulted in higher explanatory power. Model 3 clearly has the highest explanatory power. The Chi-square value of all the models is significant, which shows that no model can be determined to be fitting badly on the account of this figure. However, the Chi-square of model 3 is again clearly the highest, which, despite the fact that this model has a more degrees of freedom, shows that this model fits best. Model 3 is thus the model that will be used most for the analysis. First, the characteristics will be discussed, then the motivations and finally the housing preferences.

When looking at the first independent variable of model 3, it can be seen that especially for the group 'moved from the same municipality to an area of decline', the effect of all income groups on what type of area people moved to is significant. For movers that are not in the highest income group, the odds for moving to an area of decline from the same municipality, when compared to moving to an area of growth, are 312% higher than for movers that are in the highest income group. This value indicates that people of the highest income group are much less likely to have moved to an area of decline from the same municipality than to an area of growth. The other odds ratios can

be interpreted in the same way, but are less remarkable. For the respondents that moved from a different municipality, the odds ratio of only the highest two income groups is significant. This might be influenced by the smaller group size of respondents that moved from a different municipality. The effect does not need to be substantially different from the group of respondents that moved from the same municipality. It can thus be concluded that the level of income has an effect on whether people move to an area of growth or an area of decline. It also has an effect on whether people that move to an area of decline move to the same municipality or not. Those effects are greatest for the higher income groups. In combination with the previous table can be said that people with a higher income do more often move to an area of growth, but when they move to an area of decline, they more often lived already in the same municipality. Although this largely matches the results by Stuart-Fox et al. (2019), which say that no differences can be found, this has yielded the insight that people with an income of more than three times modal more often tend to move to an area of population growth, or else from the same municipality to an area of decline.

For the education level, no significant effect on where people moved is found in the logistic regression analysis of model 3. Models 1 & 2 did, however, find some significance. Only the bivariate analysis has showed significant outcomes. People with a higher education level seem to move more often to an area of growth or to an area of decline from a different municipality. For people with a lower education level, the opposite applies. The logistic regression did, however, not show any significance for these results. Still, differences between the three groups exist and suggest that people with a lower education level tend to move more often to areas of decline. If this effect were to be assumed, this could be explained by higher educated movers do more often move for work, as higher sector work is often more specialized and can be found less, so people in those sectors have to move further if they start working somewhere else. Those findings would also be in line with previous findings from the theory. It should, however, be added that movers to an area of decline from a different municipality are more often higher educated, while those from the same municipality are more often less educated.

Model 3 shows only one age group that has a significant effect on the dependent variable: 35-44. In the bivariate analysis, this was the only age group that was not significant with $p < .01$. Although no strong effect is found in the logistic regression analysis, the bivariate analysis showed that there are large differences in the sizes of age groups between the three respondent groups of movers. Although the age group might not be suitable for predicting what type of area someone moves to, age is a factor that differs between movers to different types of areas. This differentiation can be summed up straightforward, younger people move more often to areas of growth, while older people move more often to areas of decline. It is possible that this is due to a higher aging rate in areas of decline. This might be explained by the fact that people of 65 years or older often move from their previous dwelling to a nursing home, which means that they need to move because of health reasons, rather than wanting to move because of dissatisfaction with the dwelling or living environment. They would then more often be inclined to stay close to their previous dwelling. The most remarkable odds ratio of the logistic regression is that for movers that are not in the age group 35-44, the odds for moving to an area of decline from a different municipality, when compared to moving to an area of growth, are 87% higher than for movers that are in the age group of 35-44. In other words, areas of decline are less attractive for movers in the age group 35-44 from a different municipality. Between the two groups of movers to areas of decline, it appears that more younger people move from the same municipality, while more middle-aged people move from a different municipality.

The first motivation for choosing a certain area is the physical qualities of the area. One would expect that physical qualities differ substantially between areas of growth and areas of decline. On top of

that, in the literature this motivation was mentioned as an item that differed between movers to popular rural areas and non-popular rural areas (Bijker et al., 2012). Still, mentioning this motivation did not have a significant effect on the area choice when moving. No significant difference or correlation is found in either the bivariate- or the logistic regression analysis.

It is clear that housing characteristics did have a significant effect on the choice for the type of area for movers to an area of decline from a different municipality. This was already shown in the bivariate analysis, which showed that only for movers to an area of decline from a different municipality, this motivation was mentioned substantially less often. Apparently housing characteristics mean less for movers to an area of decline that move from a different municipality. For movers that did not mention housing characteristics as a motivation for moving, the odds for moving to an area of decline from a different municipality, when compared to moving to an area of growth, are 112% higher than for movers that did mention housing characteristics as a motivation. The following explanation could be the cause of these remarkable results: people that move to an area of growth are generally more often motivated to move because of housing characteristics than movers to areas of decline, which explains the higher figure of this group. The difference between the two groups of movers to an area of decline can then be accounted to the fact that movers within the same municipality are apparently satisfied already with their living environment, hence the reason for moving to the same municipality. The motivation for moving must come from another factor, which makes housing characteristics more likely to be mentioned for movers from the same municipality.

Living close to family and friends shows an interesting, but partially expected difference between the three groups of movers. Respondents that moved from the same municipality have mentioned this motivation significantly less often than respondents that moved from a different municipality or an area of growth. For movers that did not mention living closer to family and friends as a motivation for moving, the odds for moving to an area of decline from a different municipality, when compared to moving to an area of growth, are 45% lower than for movers that did mention living closer to family and friends as a motivation for moving. This was to be expected as moving within a municipality will less often be needed in order to live closer to family and friends as moving within a municipality will often not have major influence on the distance to family and friends. But this explanation does not explain why the percentage of movers to an area of growth that mentioned this motivation is substantially lower than for movers to an area of growth from a different municipality. This would suggest that people that move to an area of decline find living close to family and friends more important than people that move to an area of growth, but this cannot be known for sure on the basis of this data. It can only be said that from these figures, it seems that people do not feel the need to move for family or friends within the same municipality, which is not unexpected. However, there seems to be a difference between movers to an area of growth and movers to an area of decline. Apparently, movers to an area of decline are more often inclined to do so because they want to live close to family and friends. Another explanation is that the higher amount of less educated people that moved to areas of decline form the reason for mentioning this motivation more often, as Bijker et al. (2012) have shown that this group mentions this motivation more often. However, this can, again, not be said with certainty.

For work or education-related moving, much the same idea applies. This motivation is less often mentioned by people that move within the same municipality. which could be due to the fact that moving within the municipality seems unnecessary for living closer to work or school. The higher figure for movers to areas of growth can be due to the fact that areas of growth offer more places to work and attend (higher) education. In the logistic regression is shown that for movers that did not mention a work or education-related motivation for moving, the odds for moving to an area of

decline from the same municipality, when compared to moving to an area of growth, are 61% higher than for movers that did mention this motivation.

The literature mentioned that non-popular rural areas often attracted more people for financial reasons, while popular rural areas attracted more people because of physical qualities of the area. Although income showed some significance regarding moving to different types of areas, no significant difference or correlation is found for mentioning financial reasons in both the bivariate- and the logistic regression analysis.

Health reasons are mentioned more often by respondents that moved to areas of population decline. This could, again, be influenced by the higher aging rate of people in areas of population decline, as people of a higher age tend to have more health problems and will thus more often need to move because of health reasons. For movers that did not mention health reasons as a motivation for moving, the odds for moving to an area of decline from a different and from the same municipality, when compared to movers to an area of growth, are respectively 41% and 32% lower than for movers that did mention health reasons.

Housing preferences show several significances, some of which should be held in mind that not only preferences are being measured, but also the amount of units of that category in the area. For the first item, whether the house was newly build or not, the figures show that less newly build houses were moved into by the respondents that moved to an area of decline, especially those that moved from a different municipality. For movers that did not buy a newly build house, the odds for moving to an area of decline from a different municipality, when compared to movers to an area of growth, are 215% higher than for movers that did buy a newly build house. For movers to an area of decline from the same municipality, this is 56% higher when compared to movers to an area of growth. An explanation for the difference between the two types of movers to areas of declines could be that people that move to a different municipality are more attracted by the place and area, while those people that move to the same municipality were more often already satisfied with the place but not with the house. This explanation is strengthened by the previously mentioned higher figure of mentioning housing characteristics as a motivation for moving of people that moved to an area of decline from the same municipality. The higher percentage for movers to an area of growth could be explained by a higher building rate in areas of growth, thus the availability of more newly build houses in areas of growth.

The type of residence that is bought by the respondent varies between the different groups of movers. Slightly significant is the smaller amount of terraced houses bought by movers to an area of decline from a different municipality. More significant is the greater amount of semi-detached houses that is bought by both types of movers to areas of decline. The same applies to detached houses and farmhouses, last of which was to be expected in the more rural areas that areas of decline can often be associated with. Still, respondents who have moved to an area of decline substantially more often bought a detached or semi-detached house, while respondents who have moved to an area of growth have substantially more often bought a terraced house. Whether the availability of these houses differs so much between those different areas or respondents preferences cannot be derived from the performed analyses. Still, these differences are remarkable, as people that move to an area of decline are apparently more often able to buy a (semi-) detached house. People who move from a different municipality most often bought a (semi-) detached house. For people that did not buy a detached as well as a semi-detached house, the odds for moving to an area of decline from a different municipality, when compared to moving to an area of growth, are 82% lower than for movers that did buy a detached or semi-detached house. Although this does not per se say something about the housing preferences of the respondents, as has been explained previously, this does say something about the differences in living conditions between the different

types of areas. The amount of farmhouses that was moved into is also bigger in areas of decline, which could be expected as areas of decline are often associated more with the countryside and farms than areas of growth and might attract more people for a 'countryside style living'.

When comparing the availability of a garden between the movers to an area of decline, the respondents from the same municipality significantly more often bought a house with the availability of a garden. As both groups of respondents moved to a similar area, this difference can be attributed to their housing preferences. Apparently, people that move within their municipality attach most value to having a garden. Respondents that moved to an area of growth least often had a garden, which again might be both because of availability overall in these areas, or preferences of the respondents. The odds ratio does therefore not have very much explanatory power for this variable.

Regarding the number of rooms, only the figures of movers to an area of decline from the same municipality are significant. This shows that the amount of rooms for movers from the same municipality is mainly divergent. The amount is often higher for this type of movers, but also for all movers to an area of decline. Movers to an area of growth more often buy a single or two room residence. Remarkable is that movers to an area of decline from a different municipality have least often bought a dwelling with 5 rooms, but most often with 6 or more rooms. Apparently, bigger dwellings are more often bought by this type of mover.

A slight significance is shown by movers from the same municipality for having moved to an elderly home. This is in line with the argumentation behind the higher rate of mentioning 'health reasons' of people that have moved to an area of decline from the same municipality. For movers that did not move into an elderly home, the odds for moving to an area of decline from a different municipality, when compared to moving to an area of growth, is higher than for movers that did move into an elderly home, while the odds are lower for moving to an area of decline from the same municipality. The reason for this has been discussed previously and can again be applied to these figures.

For all types of satisfaction, little significance is found. Some extreme values can be found for the scores of 'very unsatisfied', which should be ignored. This answer is seldomly given, which makes that the group sizes for this answer category are very small and the values of the logistic regression get very extreme. The bivariate analysis showed that movers to an area of decline from the same municipality seem to be satisfied most with their dwelling, while movers to an area of decline from a different municipality seem to be satisfied the least with their dwelling. Concerning the satisfaction with the living environment and area, no meaningful significant results are found. Of course, no significance also has a meaning. This shows that movers to an area of decline are not significantly less satisfied with their area than movers to an area of growth, or vice versa.

To summarise, of all the variables from the characteristics, motivations and housing preferences, some variables are significant in both analyses and some are not. From combining the meaning of the significant and non-significant figures in both analyses, a conclusion can be drawn.

Conclusions and recommendations

Conclusion

This thesis has been built around the following research question: what differences in characteristics, motivations and housing preferences of migrants can be recognised between movers to areas of population growth and movers to areas of population decline? In this chapter, the sub questions will first be answered, to then give the obtained answer to the research question.

From the results has become clear that characteristics differ between movers to different kinds of areas. Three types of variables have been measured, which all showed significance to a certain extent. First, a very high income, more than three times modal, is more often found for movers to an area of growth. For movers to areas of decline, a higher income is also found more often for movers from the same municipality. Second, movers to areas of decline are generally less educated than movers to areas of growth, who are more often highly educated. Third, younger people have moved more often to areas of growth, while older people moved more often to areas of decline. Of the movers to areas of decline, a higher percentage of people in the age group 55-64 moved from a different municipality, while in the age group 65+ a higher percentage moved from the same municipality. Apparently, retirement often goes along with a reduced wish of moving to a different municipality. People that move to an area of growth thus generally have a higher income, are higher educated and younger than people in areas of decline. Although some of these findings were also found in previous literature (Stuart-Fox et al., 2019; Bijker et al., 2012; Bijker et al., 2013), the differences between movers to demographically different areas might have become even more apparent from these results. For the movers to areas of decline, the movers from a different municipality generally have a slightly lower income, are more often of an age between 35-64 and are often higher educated, while those from the same municipality often are of a younger age group (<35) or an older age group (>65) and are often less educated.

Concerning the motivations for moving to a this type of area, not all individual variables showed significant outcomes. Physical qualities and financial reasons both showed no significant differences in the frequency of being mentioned for the different groups of movers. Both these factors formed no bigger importance for movers to an area of decline than for movers to areas of growth, despite a lower income and attractive physical qualities are both associated with areas of decline or rural areas (Barcus, 2004; Heins, 2004). Housing characteristics were mainly less important to movers to an area of decline from a different municipality. This group often found living close to family and friends more important, while the other groups did not. Work or education-related motivations were mostly mentioned by movers to areas of growth and least by movers from the same municipality to an area of decline. Health reasons were mostly mentioned by movers to areas of decline, which might be coherent to the higher average age in areas of decline. Movers to areas of growth thus more often move because of work, education or characteristics of their house. Movers to areas of decline from a different municipality move more often because of the distance to family and friends and more often because of health reasons. Movers to areas of decline from the same municipality often move because of housing characteristics and health reasons, and less often because of the distance to relatives or work and education.

Housing preferences have been measured using two kinds of variables, the characteristics of their current dwelling and the satisfaction of their current residence. The current dwelling of the different groups of movers showed several significant differences. Houses of movers to an area of growth were more than three times more often newly built than houses of movers to an area of decline from a different municipality. For movers from the same municipality, this figure was in between the other two groups. Residences of movers to areas of decline were more often (semi-) detached houses

while movers to areas of growth more often bought a terraced house or a flat or apartment and less often had the availability of a garden. Movers to areas of decline more often bought a house with 6 rooms or more while movers to areas of growth more often bought a house with 1-2 rooms. People that moved to areas of decline can be said to generally have bought a bigger house with more space. Finally, movers to areas of decline from the same municipality more often bought an elderly home than the other two groups of movers. This again reinforces the argument that elderly people in areas of population decline tend to stay in their own municipality when moving, although this is possibly the same for elderly people in areas of growth. With respect to the satisfaction of the residence, no significances were found that were strong enough to draw any conclusion of an existing difference between the three groups of movers. Despite the differences in characteristics, motivations and housing preferences of the different groups of movers and the differences in the areas they moved to, the movers can be said to be generally equally satisfied about their dwelling, the living environment and the area they live in.

A number of these observations are comparable to the outcomes of research to differences between rural and non-rural areas or popular and non-popular areas. A number of conclusions that derived from the observations were, however, new. The following conclusions about differences between the groups of movers can be drawn. For movers to areas of growth can be said that they are generally higher educated, younger and have a higher income, but yet they also generally buy a house with less rooms and less often a garden. Their migration is mostly motivated by living closer to their work or education and searching for other housing characteristics. Movers to population decline often have a house with more rooms and more often have the availability of a garden, despite their lower education and income on average. The motivation for moving is mostly motivated by living closer to relatives and work or education for those movers from a different municipality, whereas those movers within the municipality are more often motivated by housing characteristics. More elderly people have also moved to areas of population decline, which might be coherent to the higher amount of health reasons that are mentioned for choosing that area to migrate to.

With these observations it has been determined that differences in characteristics, motivations for moving to an area and housing preferences between migrants to demographically different types of areas exist, which shows that the hypothesis is correct, although more differences between the groups of movers are found than was assumed in the hypothesis.

Recommendations for practice

This research has given several insights that can help policy makers in being informed on differences between movers to area of growth and areas of decline. Being informed can then allow policy makers to better understand a certain situation, which helps to base decisions in this field.

From this thesis, it has become clear that movers to areas of growth generally have more to spend when moving, due to their higher education and higher income. This does, however, not mean that the dwellings provide more space, inside and outside of the house. A dwelling with more space is more often obtained by movers to areas of decline, both from the same municipality or not. Assumed can be that movers that are interested in having more space will consider moving to an area of decline, as the same budget generally yields more space. The satisfaction of the inhabitants concerning their dwelling, neighbourhood and area does not differ between the different groups of movers, which shows that the area, whether growing or declining, does not influence happiness of the inhabitants.

In areas of growth can thus be built for certain groups that might have more to spend, but are not necessarily interested in a bigger house with a bigger garden, or more space in general. The research has shown, however, that this type of mover is most often moving because of housing characteristics, which means that not only location, size and space are important. Also shown is that moving to areas of growth is most often motivated by work or education-related reasons. Location thus can be assumed to be an important factor in the reason for moving.

For movers to areas of decline, this is different. This type of mover from a different municipality most often moves to live close to family and friends, while physical qualities are also an important motivation. A detached house is bought more often by this group of movers than by other groups and the group of movers consists of relatively many movers within the age of 55-64. For the movers to areas of decline from the same municipality, it can be seen that housing characteristics are mostly mentioned by far as a reason for moving. Second, physical qualities are often mentioned. When people move within the same municipality, it is clear that a more desired living situation is tried to be obtained. This is the group that consists the least of middle-aged people, is generally lower-educated and has a somewhat lower income, although no extreme differences with other groups of movers are found. Movers to areas of decline are thus often interested in space and physical qualities, although their budget might form a constraint for obtaining a residence with these qualities.

Recommendations for further research

Further research is needed to clarify more aspects of moving behaviour with regards to demographically different types of areas. When this is done, it is important to create a setup that allows for the examination of the aspects that are to a lesser extent or not included in this research. An overview of these aspects and other limitations of this research will now be given.

First, this research has been able to involve the previous location of the movers only to a limited extent. For future research it would be recommended to at least involve the groups of 'moved from the same municipality' for the movers to areas of growth, so that people that stay in the same place can be compared for all types of movers. It would be even better if would be included whether the place that is moved from is an area of growth or decline, so that can be checked whether the mover already lived in the same type of area or not.

Second, the variables that measure housing preferences have yielded the least significant results. This can both be caused by the difficulties that came with measuring the housing preferences or the housing preferences that showed less differences between the three groups of movers. To be sure, housing preferences could be measured in a more direct way. This research has used the chosen residence to measure housing preferences, but this does not necessarily mean that the chosen residence met all the desired criteria for the mover. In order to measure these preferences more directly, specific questions should be asked to the respondents about what criteria are desired for the new residence of a mover. This way, the researcher can be sure whether when certain groups of movers bought a newly build house more often for example, these groups are more interested in newly build houses, rather than more new houses that are being built in the areas these groups moved to.

A final limitation of this research is that different variables have not specifically been linked to each other. For future research, it would be a worthy addition to know whether people of for example a certain age, education or income are more inclined to move into residences with specific characteristics concerning size, garden or other variables or have moved more often for specific reasons. This way, policy makers can more precisely know what type of mover is interested in what type of dwelling and moves for what reason, so that policies can be adjusted to this knowledge.

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Enclosure

Multinomial logistic regression showing regression coefficients

	Model 1		Model 2		Model 3	
Ref. category: people who have moved to an area of growth in the past 2 years.	People who have moved to an area of decline in the past 2 years.					
	Moved from a different municipality	Moved from the same municipality	Moved from a different municipality	Moved from the same municipality	Moved from a different municipality	Moved from the same municipality
Characteristics						
Income (ref. < modal)						
Between 1 and 1.5 times modal	-.264 (.162)	-.031 (.792)	-.234 (.220)	-.009 (.940)	-.049 (.812)	.311 (.016)**
Between 1.5 and 2 times modal	-.033 (.881)	.003 (.982)	-.004 (.984)	.035 (.791)	.343 (.158)	.634 (.000)***
Between 2 and 3 times modal	.031 (.888)	-.043 (.738)	.074 (.736)	-.005 (.970)	.524 (.035)**	.737 (.000)***
More than 3 times modal	.395 (.182)	.461 (.016)**	.376 (.207)	.506 (.008)***	.977 (.003)***	1.415 (.000)***
Education level (ref. low)						
Average	-.115 (.577)	.027 (.819)	-.158 (.445)	-.010 (.932)	-.070 (.738)	.006 (.960)
High	-.188 (.354)	.357 (.004)***	-.245 (.233)	.284 (.023)**	-.255 (.221)	.209 (.105)
Age (ref. > 65 years)						
17-34	.523 (.018)**	.381 (.004)***	.249 (.307)	.211 (.143)	.412 (.117)	.144 (.378)
35-44	.503 (.058)*	.274 (.077)*	.289 (.300)	.190 (.241)	.626 (.035)**	.378 (.037)**
45-54	-.233 (.342)	-.053 (.730)	-.436 (.092)*	-.137 (.395)	-.140 (.610)	.035 (.842)
55-64	-.378 (.124)	-.009 (.957)	-.519 (.041)**	-.085 (.610)	-.332 (.215)	-.036 (.837)
Motivation for choosing this area						
Physical qualities	-	-	-.150 (.408)	.011 (.927)	-.117 (.531)	.108 (.366)
Housing characteristics	-	-	.818 (.000)***	-.084 (.386)	.751 (.000)***	-.119 (.232)
Living close to family and friends	-	-	-.608 (.000)***	.278 (.047)**	-.593 (.001)***	.302 (.035)**

Work or education-related	-	-	.263 (.213)	.624 (.000)***	.247 (.257)	.475 (.002)***
Financial reasons	-	-	.112 (.597)	.133 (.314)	.010 (.962)	.082 (.544)
Health reasons	-	-	-.329 (.188)	-.203 (.201)	-.526 (.043)**	-.387 (.022)**
<i>Housing preferences – pull factors (current home)</i>						
House newly build	-	-	-	-	1.148 (.001)***	.442 (.005)***
Type of residence (ref. flat, apartment or storey house)						
Terraced house	-	-	-	-	-.519 (.085)*	-.102 (.579)
Semi-detached house	-	-	-	-	-1.690 (.000)***	-1.136 (.000)***
Detached house	-	-	-	-	-1.725 (.000)***	-1.307 (.000)***
Farmhouse	-	-	-	-	-1.699 (.012)**	-1.732 (.000)***
Other	-	-	-	-	-.645 (.085)*	-.417 (.108)
Availability of garden	-	-	-	-	.170 (.516)	.320 (.047)**
Number of rooms (ref. 1-2 rooms)						
3 rooms	-	-	-	-	-.121 (.658)	-.481 (.007)***
4 rooms	-	-	-	-	-.400 (.167)	-.833 (.000)***
5 rooms	-	-	-	-	-.180 (.588)	-.633 (.003)***
6 or more rooms	-	-	-	-	-.388 (.230)	-.757 (.000)***
Elderly home	-	-	-	-	.134 (.650)	-.299 (.077)*
Satisfaction current home (ref. very satisfied)						
Satisfied	-	-	-	-	-.263 (.126)	.101 (.331)
Neutral	-	-	-	-	-.750 (.004)***	.177 (.349)
Unsatisfied	-	-	-	-	-.094 (.865)	.330 (.316)
Very unsatisfied	-	-	-	-	11.926 (.978)	.516 (.421)

Satisfaction current living environment (ref. very satisfied)						
Satisfied	-	-	-	-	.126 (.462)	-.033 (.750)
Neutral	-	-	-	-	.031 (.909)	.153 (.426)
Unsatisfied	-	-	-	-	.522 (.348)	.211 (.521)
Very unsatisfied	-	-	-	-	12.253 (.975)	.258 (.635)
Satisfaction current living area (ref. very satisfied)						
Satisfied	-	-	-	-	-.310 (.066)*	-.144 (.157)
Neutral	-	-	-	-	-.442 (.173)	-.151 (.497)
Unsatisfied	-	-	-	-	.337 (.746)	-.260 (.554)
Very unsatisfied	-	-	-	-	10.775 (-)	-1.343 (.061)*
N	5724		5724		5724	
Nagelkerke R²	.022		.041		.131	
X²	80.874 (.000)***		148.723 (.000)***		492.865 (.000)***	

Figure 7: logistic regression analysis of all respondents that have moved in the past 2 years, showing the regression coefficients (B).