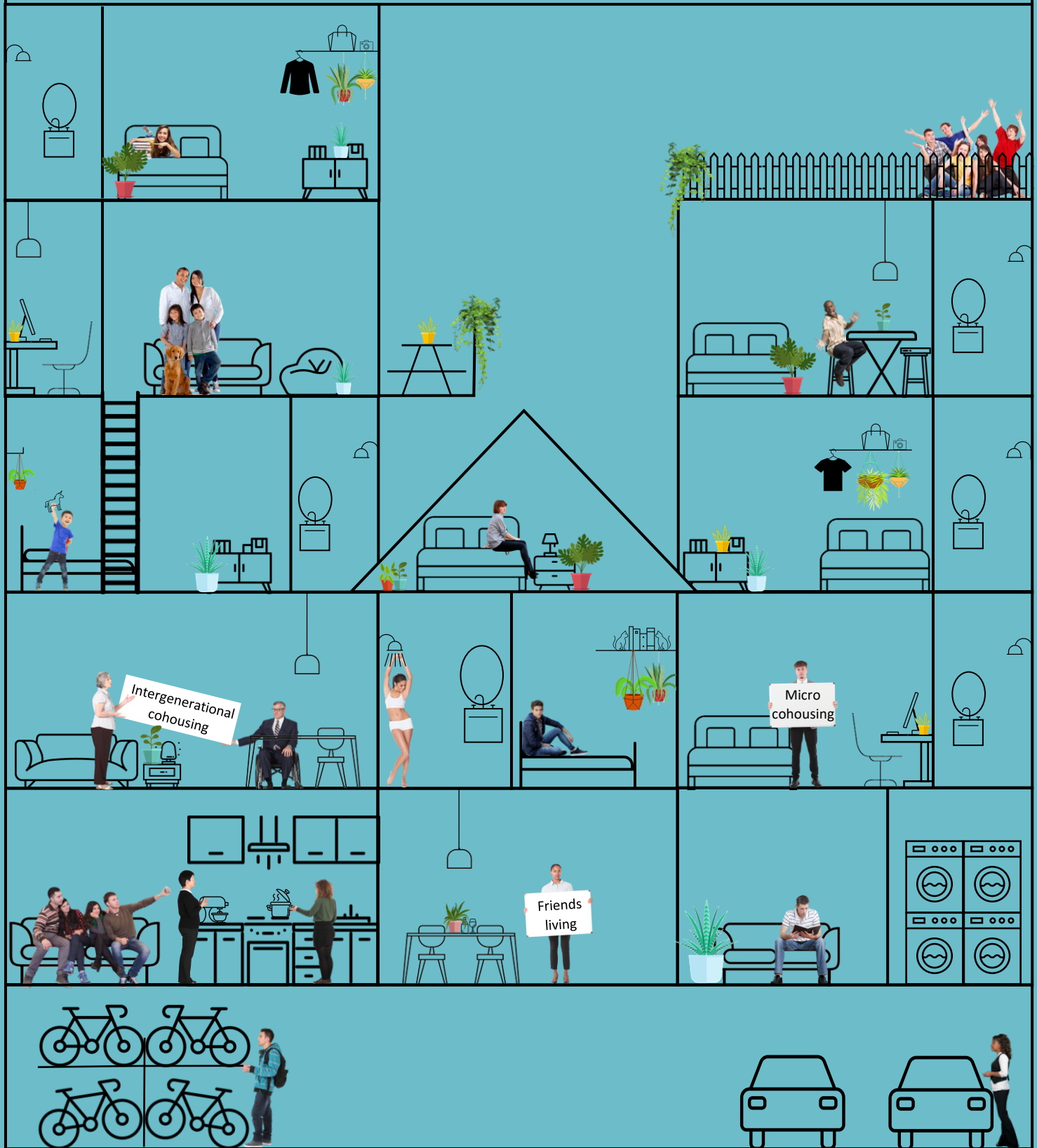


# Exploratory research into the concept of cohousing to create more accessibility on the housing market in the municipality of Utrecht



## COLOPHON

<b>Title:</b>	Cohousing as a strategy for more accessibility on the housing market for starters in the urban area of the municipality of Utrecht
<b>Subtitle:</b>	Master thesis, academic year 2019/2020
<b>Author:</b>	Lis van de Leur Student
<b>Internship company:</b>	<i>abcnova</i> Utrecht
<b>Contact details:</b>	Marloes van Noorden Process manager area development
<b>Education:</b>	Spatial Planning Planning, Land and Real Estate Development Nijmegen
<b>1<sup>st</sup> supervisor:</b>	Pascal Beckers University of Nijmegen Faculty of management science
<b>2<sup>nd</sup> reader:</b>	Huub Ploegmakers University of Nijmegen Faculty of management science
<b>Place:</b>	Utrecht
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## PREFACE

In front of you, you find the research report about the concept of cohousing as a strategy for more accessibility on the housing market for starters in the urban area of the municipality of Utrecht. The research into the concept of cohousing was carried out at *abcnova* in Utrecht and written in the context of my master's thesis. This thesis was carried out for the master Spatial Planning with the specialisation Planning, Land, and Real Estate Development at the Radboud University in Nijmegen in collaboration with my internship company from March 2020 to October 2020.

Together with my supervisor Marloes van Noorden from *abcnova*, I came up with the research question for the master thesis. By using extensive desk research and field research, I was able to answer the research question. During the research, I could always approach, my supervisor, Marloes van Noorden, and my university supervisor, Pascal Beckers, for any question. They answered my questions so that I could continue with my research, and this always made me feel like I was on the right track.

I want to thank my supervisors for the guidance, their involvement, and support during the research in these extraordinary circumstances, concerning COVID-19. I also want to thank all respondents who contributed to the research; without their cooperation, I could not have completed the research. Furthermore, I want to thank my colleagues at *abcnova*, especially Annet de Lange, for the great opportunity she gave me. And lastly my family and friends for their interest and involvement.

I hope you will enjoy reading it.

Lis van de Leur

Utrecht, October 19, 2020

## SUMMARY

The housing market in Utrecht is currently inaccessible for starters. There is a shortage of between approximately 500 and 1,500 homes in Utrecht per year. This shortage is exacerbated by the municipality of Utrecht's focus on urban area development since many factors can impose obstacles in the urban area, such as existing functions. Furthermore, while these two problems have created an inaccessible housing market, the privatisation of the social rental housing segment also has generated only limited benefits for starters. Consequently, many starters are being forced into the private rental housing segment. However, this segment has no rental limit, which has resulted in a severely limited supply of mid-segment rental houses. Moreover, the reduced production of newly built homes puts further pressure on the existing buyers' market, which has led to rapidly rising housing prices. Therefore, increasing numbers of starters can no longer move into an appropriate house.

Starters themselves are searching for alternative forms of housing due to the inaccessible housing market. They are increasingly interested in shared living, which is part of a future trend towards houses that are smaller and more efficient. It is, therefore, urgent to rethink and devise creative housing solutions. The innovative living concept of cohousing can absorb these changes and is in line with the adjusted preferences of starters. In this study, cohousing is evaluated as a strategy for facilitating greater accessibility on the housing market for starters in the urban area of the municipality of Utrecht.

Accordingly, this research aims to explore the concept of cohousing and its associated housing types for both the rental and buyers' markets, specifically in the urban area of the municipality of Utrecht. To this end, the various possibilities and barriers involved in the implementation of cohousing in these markets are investigated to determine how this concept can contribute to creating greater accessibility on the housing market for starters. The following research question has been formulated: *"Which possibilities and barriers, resulted from market-oriented and governmental actors, emerge in the implementation of the associated housing types related to cohousing on both the rental and buyers' markets, to contribute to better accessibility on the housing market for starters in the urban area of the municipality of Utrecht?"*

The research question was answered based on various theories, models, and concept arising from the literature in combination with interviews. The literature covered four subjects: (1) accessibility on the housing market, (2) the target group of starters, (3) the concept of cohousing, and (4) actors related to the implementation process. These actors formed the basis for conducting the interviews and were identified based on the case study of the urban area of the municipality of Utrecht conducted for this research. The four topics outlined above determined the structure of the interviews.

Three housing types are shown to be suitable for contributing to better accessibility on the housing market for starters. Friends living offers the most accessibility for starters. It is more affordable than traditional housing types and can accommodate more people in a single house. The most creative solution for increasing accessibility lies in the buyers' market. Through a housing corporation (*woonvereniging*) and an umbrella mortgage, it is possible to divide existing homes into units. Moreover, this approach is a sustainable addition to the housing market. However, questions remain concerning what starters most prefer. The second type, micro cohousing, can also create solid accessibility because the houses are smaller and thus more affordable. Furthermore, more significant quantities come onto the market. Nevertheless, this approach must be treated as a social model to ensure that rent and possible purchases remain affordable. Finally, intergenerational cohousing is the least suitable type for creating accessibility because it appears to be a small-scale approach and it is uncertain how much demand starters have for this type. However, the discount provides more affordability for starters, and such an advantage can certainly be exploited. The most critical barriers and possibilities per housing type are presented over the next three pages through infographics.

### Affordable for starters

Friends living is affordable because it allows several starters to share rent. Thus, for example, instead of paying €1,000, one would only have to pay €500 or less.

Friends living also offers affordability on the buyers' market. Several starters can finance part of a house through a 'woonvereniging' or the cadastral division of the parcel.

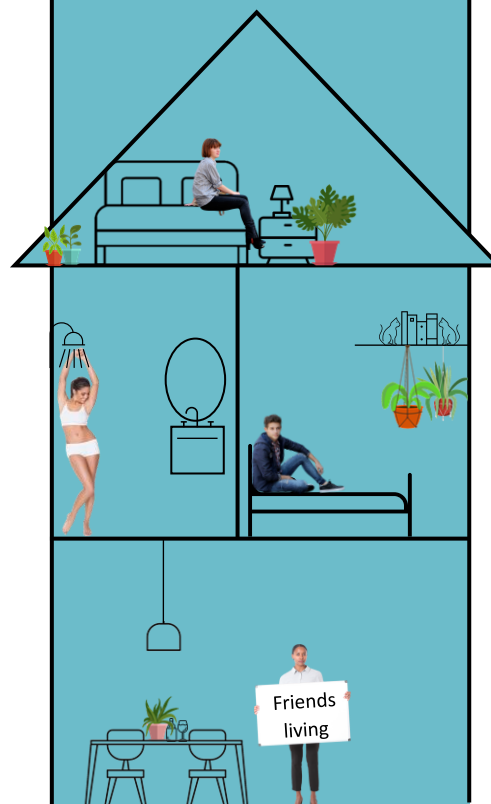
### Creates accessibility

In addition to affordability, friends living also promotes accessibility. More starters can be located in one house on both the rental and buyers' market. This makes it possible to offer more starters affordable living spaces. Starters can buy a house in the higher segment where there is more supply, making the housing market more accessible.

### Sustainable addition to the housing market

Friends living is a sustainable addition to the housing market because it concerns the same houses used as traditional homes. The only difference is that the properties are handled differently. Should the concept not work well, it is always possible to rent or sell the house in the usual way. This makes friends living a futureproof and flexible housing type.

## BARRIERS & POSSIBILITIES



### More difficult to manage

Friends living can be more challenging for people to manage than living in traditional homes because several people live in one house, leading to more turnover in terms of tenants and lease agreements. This turnover makes management more intensive. However, it is possible to overcome this barrier by adopting a different approach to management.

Furthermore, it is also more difficult for starters on the buyers' market to buy a house, as more work is involved than when buying a traditional house.

### Other management approach needed

Although a different management approach ensures that friends living is easier to manage, it can also be seen as a barrier. There must be room within the organisation to implement a new approach, which can require a transformation of the company.

### Less municipal cooperation

Friends living can only become a success should municipalities cooperate with starters and companies. However, many municipalities currently have a negative impression of small spaces, splitting houses, and more than two households living in one house.

## Creates accessibility

Micro cohousing ensures access to the housing market in the municipality of Utrecht because more studios can be placed in one building. This makes it possible to accommodate more starters than in a traditional house. This statement applies to both the rental and buyers' markets.

## Possibly more affordable for starters

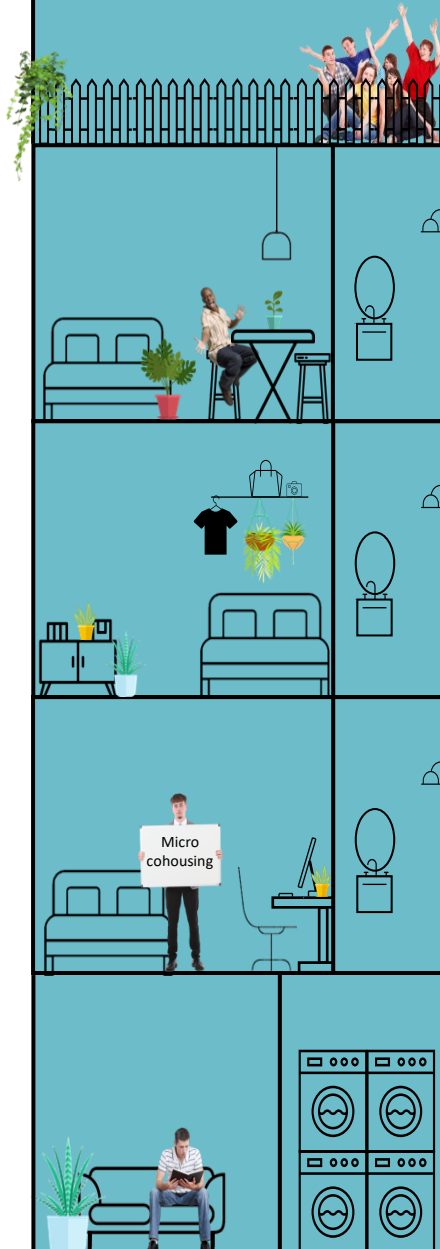
This type is in principle more affordable than buying or renting a traditional house. However, it must also be managed by the investors themselves.

The houses are smaller, making them more affordable for starters than traditional housing types. The common areas compensate for the smaller private spaces. Starters do pay service costs in addition to their rent for these common areas.

## No legal restrictions

Both the literature and interviews conclude that there are currently no known restrictions in the area of legislation for micro cohousing. This makes the housing type easier to implement than, for example, friends living.

# BARRIERS & POSSIBILITIES



## Higher constructions costs

This type has higher constructions costs because bathrooms and kitchens have to be installed in every studio. This entails the risk that the approach ultimately becomes less affordable than anticipated and may perhaps not ensure greater accessibility for starters.

## Less futureproof

Micro cohousing is only focused on one target group, and the buildings themselves are less flexible. This means that micro cohousing is seen as less futureproof than the other two housing types.

## Should not become a financial model

Even though micro cohousing could be affordable, it should not be considered a financial model in the eyes of investors but rather as a social model.

If investors start to consider micro cohousing a financial model, it will eventually become less affordable for starters. According to some actors, this would make it even more expensive than other traditional housing types. The above statement must be taken into account, as it is about giving starters more accessibility, not about creating a new financial model.

## Affordable for starters

Intergenerational cohousing offers starters affordability because the houses used are smaller than traditional houses. Furthermore, starters receive a discount on their rent when they help the elderly and families. This makes the type affordable for starters.

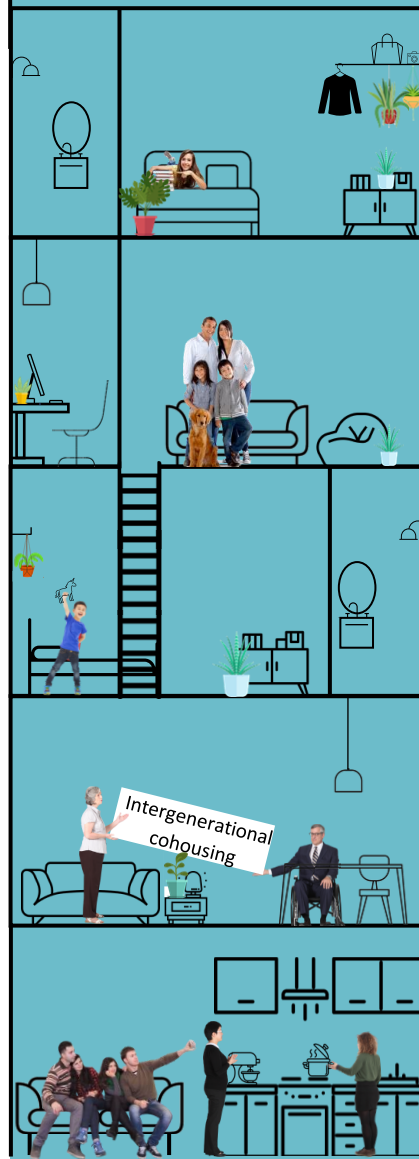
## No legal restrictions

Both the literature and interviews indicate that there are currently no known restrictions in the area of legislation. This makes the housing type easier to implement than, for example, friends living.

## Futureproof

Intergenerational cohousing is considered futureproof because the buildings used can be flexibly arranged and used for any target group. It is not only the flexibility of this approach that makes it futureproof but also the fact that it features an entirely new type of social thinking. An increasing number of older people are forced to stay at home for longer periods of time due to the current political system. Intergenerational cohousing means that these older people can be cared for at the building and neighbourhood levels. It is therefore a solution not only for starters but also for other target groups.

# BARRIERS & POSSIBILITIES



## Small-scale approach

According to the actors, this type is seen as a small-scale approach because it is not easy to organise. This also means that intergenerational cohousing cannot provide the accessibility that starters need, even though it is undoubtedly a concept that can contribute to society on a social level.

## Demand is questionable

It is unclear how much demand there is from the starters themselves. This approach imposes an obligation on starters to help others, but, in return they are given an affordable space.

## More difficult to manage

Intergenerational cohousing is also more challenging to manage than traditional housing types. This is partly because starters receive a discount on their rent for helping. This entails additional administrative tasks, which means that investors will drop out more quickly.

However, with the cooperation of relevant parties, such as the government, housing associations, and healthcare institutions, intergenerational cohousing can be organised in such a way that manageability does not need to be a barrier.



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# 1 | INTRODUCTION

Chapter 1 introduces this research and provides insight into the problem description, which elucidates the reason for conducting this study in terms of an underlying problem. It is then explained how this problem led to the development of the study's research aim, the main research question, and sub-questions. Finally, the reading guide is presented.

## 1.1 | PROBLEM STATEMENT

In the Netherlands, there is a shortfall of almost 300,000 houses below current housing needs, which mainly affects starters and will continue until at least 2040 (Hochstenbach & Boterman, 2014; Groot & Vrieselaar, 2019). Multiple factors including urbanisation, decreased production due to the economic crisis, deregulation of the central government, privatisation in the social rental housing segment, and the expensive ground positions of urban areas have caused this housing shortage (Lennartz, 2018).

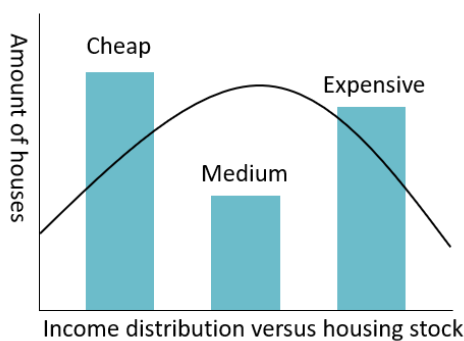


Figure 1: *Mismatch in Dutch housing market* (Jonger-Verkaart & Wassenberg, 2015)

The limited accessibility on the housing market for starters is ascribable to the privatisation of the social rental housing segment, which forces starters to move towards the private rental housing segment. However, this sector has no rental limit, which has resulted in a severely limited supply of mid-segment rental houses. In addition, the recent economic crisis has reduced the production of newly built homes, putting pressure on the existing buyers' market for houses. As a result, house prices are rising rapidly (Boterman et al., 2013). As shown in Figure 1, these factors have ultimately led to a mismatch between housing demand and supply, especially for starters.

The problems in the housing market occur in and around urban areas in the Netherlands. These areas are mainly situated in the Randstad, which includes, among others, the four largest cities in the Netherlands: Amsterdam, The Hague, Utrecht, and Rotterdam. In this region, there is a shortfall of houses of around 180,000 below current housing needs, and the population within these cities is expected to increase by 15% by 2030 (Groot & Vrieselaar, 2019). Different actors are investing in upgrading these cities to attract more, mostly young, new residents. However, this upgrading process leads to higher prices, which is problematic for young people because it is precisely this group that lacks the financial resources to live in a city when prices are rising (Hoolachen et al., 2017; Lennartz et al., 2015; Hochstenbach & Boterman, 2014). Within the scope of this research, young people are defined as starters aged 25 or older, who are typically first-time individual renters or buyers and on average prefer a location in or around the city centre. These individuals have a middle to high income and can afford to purchase a house for up to 200,000 euro or rent a house for approximately 700 to 900 euro (Sievers, Boogaard & Ligtvoet, 2009). Starters are more vulnerable to the shift of increased prices, stricter mortgage lending, and higher income requirements. Therefore, the current housing paradigm is overly expensive, inflexible, limiting, and isolating for starters (Wilson, 2018). Given the features of this paradigm, starters are seeking to enter a housing market that does not provide accessibility for them and are consequently searching for alternative forms of housing. Accordingly, starters are increasingly interested in shared living, which forms part of a future trend towards houses that are smaller and more efficient but also provides tenants with the feeling of alliance instead of loneliness (Nelson, 2018).

The mismatch on the housing market and the increasing preferences of starters for shared living indicate the urgent need to rethink and develop creative housing solutions. The traditional houses, which are nowadays widely used no longer addresses the needs of starters. Consequently, starters usually lack suitable houses due to the scarcity of appropriate housing options (Sargisson, 2012). Since starters are already searching for alternative housing types, it is interesting to examine innovative living concepts as a solution for the mismatch on the housing market. The innovative living concept of cohousing can absorb these changes and is in line with the adjusted preferences of starters. Cohousing is characterised by a specific focus on sharing, collectivity, and community (Tummers, 2015). Furthermore, it balances between the need for privacy and the independence of separate living units combined with shared facilities. This concept responds to accessibility by virtue of its focus on smaller private living units, reducing living costs through cooperation, and sharing common facilities. This approach could save monthly costs on both the rental and buyers' markets, which would directly improve the ability of starters to achieve their financial goals (Eerenbeemt, 2017; Garciano, 2011). Consequently, the concept of cohousing and its associated housing types offer a promising alternative housing solution to the problem of limited accessibility for starters. Nonetheless, for the market-oriented and governmental actors operating in the housing market, this change requires a certain degree of flexibility and innovation to facilitate an adequate response to this relatively new innovative living concept. These actors often avoid risk and prefer to take well-known routes (van Dam & Marcus, 2005; Cagan, 2019). Such caution makes it challenging not only to solve the problem of inaccessibility for starters on the housing market but also to successfully implement new and possibly more suitable housing concepts.

## 1.2 | RESEARCH AIM

This research aims to explore the concept of cohousing and its associated housing types for both the rental and buyers' markets, specifically in the urban area of the municipality of Utrecht. Accordingly, the various possibilities and barriers involved in the implementation of cohousing in these markets are investigated to establish how this concept can contribute to creating greater accessibility on the housing market for starters. Furthermore, the market-oriented and governmental actors are offered some recommendations for praxis to advice on how they can organise a successful implementation process.

## 1.3 | RESEARCH QUESTION

The main research question to achieve the research aim outlined above is formulated as follows: *"Which possibilities and barriers, resulted from market-oriented and governmental actors, emerge in the implementation of the associated housing types related to cohousing on both the rental and buyers' markets, to contribute to better accessibility on the housing market for starters in the urban area of the municipality of Utrecht?"*

### 1.3.1 | Sub-questions

Four sub-questions, each focusing on a different aspect of the main research question and leading to the final definitive answer, have been proposed. The sub-questions are developed as follows:

- 1) Which factors affect the accessibility for starters on the housing market in the municipality of Utrecht?
- 2) What are the underlying housing types of cohousing in both the rental and buyers' market that are best suited for starters?
- 3) Which possibilities and barriers occur within the implementation of the different housing types, associated with specific locations in the urban area of the municipality of Utrecht, to achieve greater accessibility?
- 4) Which roles and influences do different market-oriented and governmental actors have in the implementation process of the underlying housing types in both the rental and buyers' markets of the municipality of Utrecht?

## 1.4 | RELEVANCE

The relevance of this research can be explained from two different perspectives: scientific and societal relevance. Scientific relevance addresses the question of how the research will contribute to academic knowledge. Societal relevance concerns the question of how the research contributes to the solution of real-life issues.

### 1.4.1 | Scientific relevance

The introduction demonstrated the need for investigating new housing solutions capable of increasing accessibility on the housing market for starters. Czischke (2017) agrees, indicating that there is a growing tendency in the scientific literature to study alternative forms of housing provision that can offer possible solutions for the starters on the housing market. This substantiation shows that the present research contributes to the scientific debate by investigating different cohousing types. Furthermore, many people believe that cohousing is a method that can provide affordability and create more accessibility for starters who cannot enter the housing market. However, this viewpoint is not yet supported by much existing scientific literature and, therefore, remains more an intuition than an evidence-based position (Coldwell, 2019; Garciano, 2011). The available scientific literature on this specific topic consists of different master's theses: Morrison (2013) discussed cohousing as a model for affordability in the UK; Zeulevoet (2016) examined collective self-organised housing and affordability; and, lastly, Risik (2019) researched the emerging concept of commercial co-living and its influence on users' affordability and developers' profitability. Thus, this subject is not widely researched, and the current study consequently provides a needed contribution to the existing literature from a different angle. Moreover, while the previous studies focus only on affordability, this research goes further and considers accessibility in a broader sense. The intuition that cohousing can provide affordability and create more accessibility, as mentioned, earlier, is taken as a starting point and hypothesis in this research, which is further substantiated by relevant scientific literature.

The concept of cohousing used in numerous studies conducted by scholars mostly deals with resident-led cohousing (Boyer & Leland, 2017). This research examines both the rental and buyers' variants of cohousing, which makes it appealing to examine both resident-led and developer-led cohousing. Not many researchers have investigated cohousing for both the rental and buyers' markets and developed a comparison between them. Therefore, this study contributes to obtaining a broader view of the concept of cohousing and supplements the existing literature. Besides this gap, much of the cohousing literature focuses on themes concerning the ageing society, sustainability, social cohesion, and neighbourhood community (Labit, 2015; Bamford, 2005; Droste, 2015).

In addition, literature about the accessibility of the housing market is examined by various researchers. For example, Hochstenbach and Arundel (2019) have investigated the spatial housing market polarisation, while Rigterink (2017) has examined young adults as starters in the Dutch housing market and their expectations, bottlenecks, and possible solutions. As noted earlier, such studies indicate that the two separate research areas concerning cohousing and the housing market for starters have seldom been combined. This separation generates a lack of literature that reviews the concept of cohousing as an opportunity for starters, thereby adding to the current knowledge gaps in the scientific literature. Consequently, this research contributes to the existing knowledge base by taking the first step in exploring the different types of cohousing as a new perspective on alternative housing solutions for starters on the housing market, with a focus on creating more accessibility in the municipality of Utrecht.



### 1.4.2 | Societal relevance

As explained in the introduction, the housing accessibility for starters has decreased in recent decades. Primarily, this group is more vulnerable to shifts in the housing market (Forrest & Yip, 2013; Mackie, 2016). This research contributes to high social relevance because it examines the concept of cohousing as an opportunity to create more accessibility on the housing market for starters. It focuses on creating a long-term perspective because this method will enable several generations of starters to rely on the results presented. Considering cohousing from a long-term perspective ensures that the problem on the housing market will shrink rather than expanding further. This approach makes cohousing and its associated housing types a sustainable addition to the housing market, further enhancing the social relevance of this study. Furthermore, it makes starters less vulnerable to a shift of increased prices, stricter mortgage lending, and higher-income requirements. By examining the cohousing types for starters, this work might offer a trajectory to improve the future development of urban areas, along with providing the societal side effect of solving urban loneliness.

In addition to the inaccessibility on the housing market for starters, cohousing is becoming an increasingly popular phenomenon. As noted earlier, starters are becoming more interested in several housing types related to the concept of cohousing (Nelson, 2018). Nevertheless, despite the growth from starters and emergence of news reports regarding these specific housing types, the concept is typically aimed at people with a higher income or financial capital on a non-commercial basis, named resident-led cohousing (Camp, 2017). It is, therefore, socially relevant to examine the concept of cohousing and the different housing types in a broader view. In this way, cohousing can be used for broader purposes, which also ensures that more housing options will be added to the housing market. By being able to offer more housing options, it would not only create accessibility but also generate the most appropriate house in accordance with the needs of most starters. Therefore this research contributes to addressing the real-life issue. Since the needs of starters are largely unmet by the current housing options, they have grown increasingly interested in concepts such as cohousing.

Furthermore, despite this growth, there is only limited attention from several market-oriented actors to implement this concept in the housing market. Cohousing is a new concept among many actors because it is still in its infancy on a commercial level in the Netherlands. As a result, the concept is seen as riskier, while most actors avoid risk, which makes them more likely to follow more well-established approaches (Stumpel, 2014). Without the support of actors, it could be the case that the implementation is not forthcoming. Through conducting this research and providing recommendations for praxis to achieve a successful implementation, these actors may obtain a better experience of cohousing. They would, therefore, be more inclined to adopt this approach and develop it further, which would ultimately ensure more creativity in the housing market. If this is the case, it will increase the social relevance of this research.

## 1.5 | READING GUIDE

The entire report consists of two sections. The first section concerns the research report and describes the main topics of the research. The second section consists of the Appendix and contains further elaborations, explanations, or substantiations of the most important topics discussed in the first section. The outline of the research report is divided into six chapters. Chapter 1 contains the central introduction and is situated above. Chapter 2 examines the theoretical framework in which the topics of the sub-questions return. Subsequently, Chapter 3 presents the methodology that applies to the research, while Chapter 4 describes the case study about the urban area of the municipality of Utrecht. In Chapter 5, an analysis is conducted using interviews, focusing on the various actors and their roles within the implementation process. After this analysis, an answer is given to the main research question in the conclusion. Finally, a reflection is offered in which the limitations, possibilities for further research, and recommendations for market-oriented and governmental actors are explained.

## 2 | THEORETICAL FRAMEWORK

This chapter describes the fundamental concepts arising from the main research question. The theoretical framework is divided into four different themes: (1) accessibility on the housing market, (2) the motives of starters when moving, (3) the concept of cohousing, and (4) the different actors that can play a role in the implementation process. These four themes, which are identified based on academic literature are eventually operationalised in the form of a conceptual framework. The framework and literature are used as a starting point for the analysis to determine how these four themes are shaped in practice.

### 2.1 | ACCESSIBILITY ON THE HOUSING MARKET

In general, accessibility is described as the extent to which it is possible to access something. In this research, this general definition is applied to the housing market. Accessibility, therefore, indicates to what extent different households have access to appropriate housing without needing assistance from, for example, the government (Gurran & Bramley, 2017).

The literature shows that access to the housing market is determined by several factors, which can be divided into three societal domains, namely the market-oriented, governmental, and civil society domains (Steurer, 2013). Mekaway's (2014) research applies to the market-oriented and governmental domains. Mekaway examined the role of various planning mechanisms within the planning system in terms of their contribution to maintaining accessibility. Planning mechanisms concern how resources can be distributed when the market system (in this case, that of the Netherlands) fails. Within the Netherlands, the market is responsible for providing appropriate housing. However, as noted in the introduction, the market system currently does not offer the accessibility that starters need. An overview of the factors contributing to this issue is presented in Appendix A. While Mekaway's (2014) study features a detailed discussion of the factors creating access to the housing market, it is limited in that it does not provide an overall overview of all the factors that can influence accessibility. Other studies, indicate that access to the housing market is determined by not only planning mechanisms but also capital and that housing and lifestyle preferences are related to the civil society domain (Boterman 2012).

#### 2.1.1 | Influencing factors from the governmental domain

According to the literature, three influencing factors are essential in the governmental domain, namely support, policy, and legislative framework. However, these factors have a more indirect than direct influence because, in recent decades, a shift has been observed whereby local authorities withdraw from providing accessible housing. As noted previously, the market is now mainly responsible for providing these types of accessible houses (Mekaway, 2014). Nonetheless, greater accessibility on the housing market can only be ensured when both central and local government support planning approaches. Support may consist of funds or subsidies related to housing programs that are focused on creating appropriate housing. Support, in this sense, is limited to the financial aspect. Despite that support is limited, the influential factors go beyond the financial aspect and are related to policies. These policies consist of setting visions regarding affordable houses or a particular target group. These visions are not binding, but they do serve as guidelines for a specific region or city and provide goals for housing programs. The housing programs functions as a political strategy intended to pay more attention to providing appropriate housing (Mekaway, 2014). Another policy factor is related to planning capacity, through which the government can make specific locations available for cultivation. Using this policy factor, government can designate additional construction sites, which could lead to more accessibility. However, these places should actually be developed for target groups that have difficulties in finding appropriate homes (Michielsen, Groot & van Maarseveen, 2017).

Furthermore, the legislative framework needs to be adequate (Curran & Wake, 2008; Austin et al., 2013). The legislative framework ensures that fundamental rights are established regarding a housing program. Therefore, the established housing program is not only a vision; rather, it can actually affect the housing market. A zoning plan is an essential aspect of the legislative framework. A zoning plan regulates and identifies requirements concerning land use development. These regulations and requirements can serve as a useful tool for limiting the amount of land to be used for creating affordable housing solutions for people who need housing. In addition, permits are related to the zoning plan and therefore also fall under the legislative framework. Through issuing permits, the public authority can impose restrictions concerning building particular buildings or making changes in building function (Mekaway, 2014). All these factors can positively or negatively affect accessibility and are therefore essential to include in this research.

### 2.1.2 | Influencing factors from the market-oriented domain

Within the market-oriented domain, there are three influencing factors that are most important, namely flexibility, opportunities for development, and the current housing stock. Flexibility is related to the various housing options that exist in the housing market. Greater flexibility leads to a wider variety of housing options, which can be used to meet the needs of specific target groups. Flexibility is therefore of significant importance for the housing market, as it determines the degree of accessibility. Market-oriented actors are among the players responsible for determining flexibility because they build or transform houses. However, it is not only the market that is responsible for creating flexibility, as the government provides guidance through housing programs and regulatory framework. As a result, market parties are forced to operate within these frameworks, which can limit the possibilities in terms of flexibility (Mekawy, 2014).

The second factor concerns the possibilities for development. When market-oriented actors fully exploit these possibilities, they can create more accessibility in the housing market because it will create more supply. More supply will eventually bring housing prices down and thus offer people more equal opportunities on the housing market. However, this factor partly depends on governmental policies concerning the planning capacity and is therefore not only related to the market-oriented domain. In the market-oriented domain, this factor depends on the willingness to create appropriate houses within the development area. Thus, if sufficient planning capacity is offered by the governmental domain, the market-oriented domain must be willing to build on the available land (Curran & Wake, 2008). However, other sources indicate that some of the planning capacity is underutilized. This underutilization is partly due to issues of feasibility in terms of finances and slowly changing strategic land policies on the part of developers (Adams, Leishman & Moore, 2019). When the housing market functions correctly, it should provide appropriate houses for society as a whole. This perfect functioning is related to the information that market-oriented actors have access to concerning not only local housing needs but also, and more importantly, current housing stock. The current housing stock is divided into existing and newly built homes. Hardly any influence can be exerted on the existing housing market. More influence can be exerted on the newly built housing market because it is possible to build for a specific target group. Nevertheless, new build homes are also bound by rules and visions from the governmental domain, such as the zoning plan and permits (Mekawy, 2014).

Furthermore, a relationship is noted between flexibility and opportunities for development on the one hand and the current housing stock on the other. If there is less flexibility in terms of housing options, the housing stock will be affected and results in a mismatch between the current housing stock and the needs of particular target groups. Nevertheless, flexibility affects not only the current housing stock but also development opportunities. If there are fewer development opportunities, it may not be possible to foresee the needs of target groups, which can lead to less suitable current housing stock (Mekawy, 2014).

### 2.1.3 | Influencing factors from the civil society domain

Bourdieu's concept of capitals can be used to describe the different influencing factors related to the civil society domain. In the present study, civil society is related to the citizens within society who may influence the accessibility of the housing market. Bourdieu's concept of economic capital is seen as an influencing factor and refers to the financial aspect. The financial aspect consists of income, financial assistance, and other family resources relevant to buying or renting a house. Income indicates how much an individual can pay for a rental house or borrow to buy a house. Financial assistance is related to income. People with lower incomes receive support from the government to help them find the most appropriate housing. Some people also receive financial support from their families when buying a house, for example (Boterman, 2012; Hochstenbach & Boterman 2014). Economic capital can have an influence therefore on the user's view of the perspective accessibility. The user's view of accessibility is a collaboration between the financial aspect of the civil society domain and the current housing stock on the housing market of the market-oriented domain. In addition, other sources show that not only economic capital but also the housing and lifestyle preferences of users influence how accessibility is perceived (Jansen, 2008). According to Jansen (2008, p. 1), Gibson's affordance theory is a driver of these preferences. This theory considers the relationship between the functional properties of the environment and the actual behavioural responses of these properties (Jansen, 2008). Suppose that civil society maintains a high standard concerning housing and lifestyle preference; in that case, it can more quickly lead to a mismatch on the housing market. This is because people do not always have the financial ability to fulfil these preferences, which allows them to perceive inaccessibility more quickly. Thus, accessibility is not only determined based on the market-oriented or governmental domain, as civil society also has a substantial influence on the experience of accessibility. For this reason, it is essential to include the civil society domain in this research. The factors consisting of economic capital and preferences are further elaborated on in Section 2.2 (target group: starters).

### 2.1.4 | Theoretical overview of accessibility on the housing market

Figure 2 provides an overview of the factors that are taken into account in this research. The arrows show the connections between the market-oriented and governmental factors. While market-oriented and governmental factors arise from the planning mechanisms, the civil society factors are not only based on facts, such as income, but also on the impression of accessibility. The factors can have a positive or negative influence on the actual accessibility of the housing market and can therefore differ by region or city within the Netherlands.

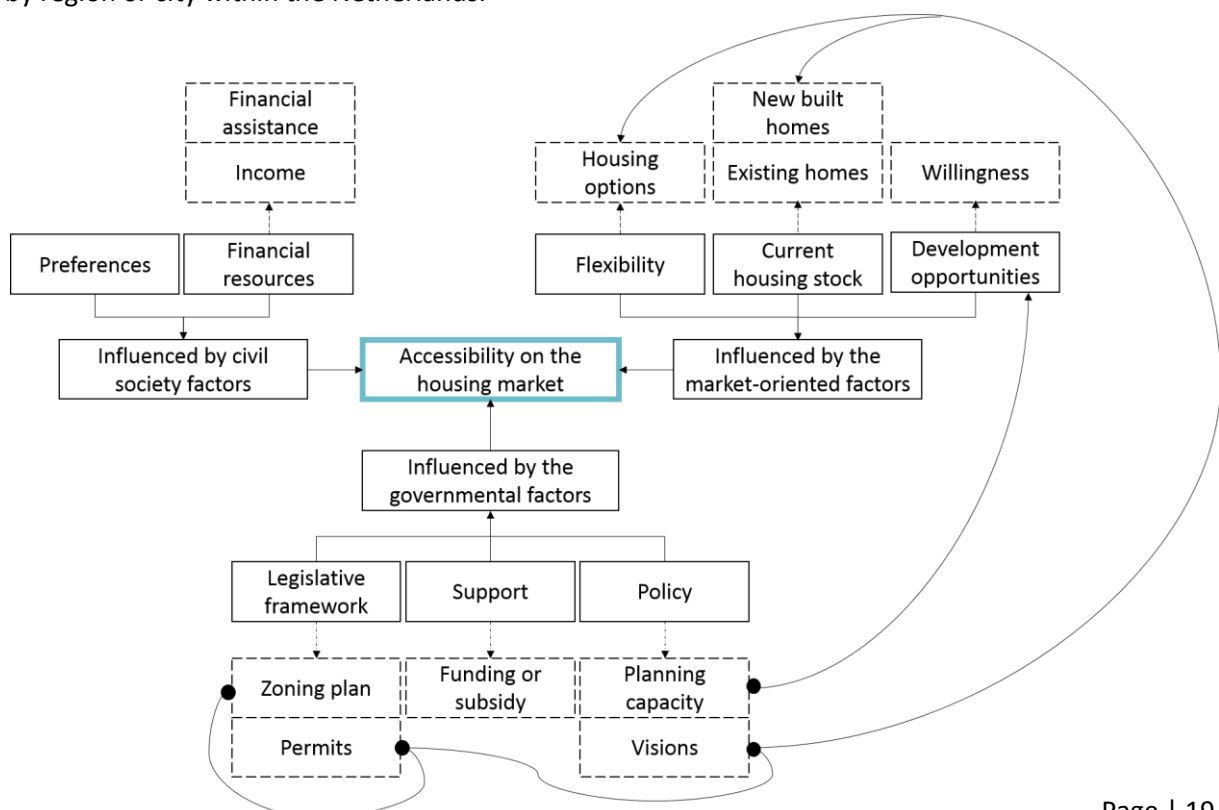


Figure 2: Factors influencing the accessibility of the housing market (created by the author)

## 2.2 | TARGET GROUP: STARTERS

Starters can be defined based on different models and analyses, including the BSR model, the mentality model, mosaic analysis, lifestyle analysis, and the WIN model (Ouwehand, Doff & Adriaanse, 2011). Within the scope of this research, the target group, which consists of starters, is defined based on a lifestyle analysis. This approach is best suited to this research because the focus is on starters. In contrast, other studies are more abstract or analyse multiple target groups. The differences between the characteristics of starters are large, and this group therefore cannot be considered homogeneous. These differences are determined by age, living situation, stage of life, socio-economic status, and the behaviour of starters on the housing market (Kruythoff, 2007; MBZK, 2012). This also makes it impossible to discuss 'the starter'. However, to operationalise the research, it was decided to indicate guidelines for determining who falls into the starter category. According to these guidelines, starters have an age of 25 or older and are typically first-time individual renters or buyers who, generally speaking, prefer a location in or near the city centre. They have average to high incomes and can afford to buy a house costing up to €200,000 or to rent a house for approximately €700–900 (Sievers, Boogaard & Ligtvoet, 2009).

### 2.2.1 | Life course factors

There are different life course factors which may inform the relocation motives of starters. Different studies have investigated the motives of both individuals that are looking for their first house or have previously moved independently (Mulder & Hooimeijer, 2002). This research focuses on starters looking for a first rental or a buyers' house and therefore only considers studies relevant to this group. The first life course factor consists of motives. According to the literature, up to 60% of starters feel the need to live independently and have the intention of moving from their student accommodations or their parents' homes (Kruythoff, 2007; van der Mooren, 2015). Various motives can be identified for a starter's desire to move out. The most relevant motives for starters are finding employment and the desire for autonomy and privacy. However, motives for leaving can vary by age. Households consisting of younger people generally move to a new location when they find or change employment; in contrast, households consisting of older people are expected to be less concentrated due to having permanent employment and a desire for stability. In addition to the differences in motives among people of different ages, it is also plausible that motives may change over time. In this sense, the motive to live independently has increased in recent decades, which is the result of a society that has come to place a greater emphasis on freedom and self-fulfilment (Mulder & Hooimeijer, 2002).

The second life course factor, which is seen as a restriction on the motives for moving, is related to resources. These resources are dependent on income and level of education. The more resources a starter has access to, the more likely it is that his or her preferences will expand compared to those of individuals with access to fewer resources. One-person households often have lower incomes than two-person households, which makes them more vulnerable and therefore occasionally dependent on parental or governmental support. Contextual factors are the final life course factors that inform relocation motives. These factors are related to the availability of appropriate housing and job opportunities. In most of the urban areas of the Netherlands, housing shortages remain an issue, which decreases the likelihood of finding an appropriate home. The housing stock and distribution of housing types are crucial factors influencing the choice to move, which was also evident in the factors that influence the accessibility of housing for starters. Starters may therefore find it less easy to move to a new home. Furthermore, more job opportunities are available in urban areas. As a result, households are more inclined to move to these regions. At the same time, however, there is a lack of availability of appropriate housing in most urban areas. Moving behaviour may develop differently for starters living in more rural areas because there is a greater availability of appropriate housing in such areas (Mulder & Hooimeijer, 2002; de Groot, Mulder & Manting, 2011).

## 2.2.2| Stated and revealed preferences

There are two ways to determine moving behaviour; these are depicted in Figure 3. These ways involve considering stated or revealed preferences. Moving behaviour is influenced by the life course factors discussed previously. Stated preferences describe the ideal situations of different households, which are related to the subjective choice to move (Abdullah, Markandya & Nunes, 2011; de Groot, Manting & Mulder, 2013). The subjective choice to move is related to the preferences that a household has. These preferences consists of the ideal image that fits their career course and the life goals they intend to pursue. Priemus (1969, p. 42) described the ideal image as *'the housing aspect that households consider as ideal regardless of the housing supply and their financial resources'*. Given the preferences of a typical starter, this ideal image will often be a spacious apartment with a low price located in the centre of a city. However, such an ideal image is generally not realistic or achievable. Such an ideal image often results in a gap between the subjective choice to move and the objective change to realise this moving behaviour. The ideal situation will therefore be adjusted to be more in line with any restrictions related to the life course factors of availability, market conditions, and income resources. This modified image is called the aspiration image (Priemus, 1969). Priemus (1969, p. 42) defines this term as referring to *'the home that the household uses within the framework of the supply on the housing market in the attainable price range considered ideal, given its specific circumstances'*.

However, in practice, it is often the case that this adjusted image is not always achievable due to market forces (Priemus, 1969). The second way to determine moving behaviour applies here. A household's revealed preferences refer to its real moving behaviors in the world as it currently exists (Abdullah, Markandya & Nunes, 2011). In this sense, households need to decide whether to move not at all or whether to move to another home that may not be preferred. The literature indicates a remarkable difference between the number of households that prefer to move to a house and the number of households that move. Concerning the target group of this research, starters move less often than planned to desired owner-occupied or rental houses (MBZK, 2012). In the period between leaving the parental or student house and securing an independent rental or owner-occupied home, a starters official housing situation may deviate somewhat from the actual situation. The social rental sector has long waiting lists, while the liberalized sector has high income requirements. Finally, in the middle rental sector, there are hardly any rental homes available. As a result, starters are become dependent on owner-occupied houses, but the budgets of starters are generally insufficient with regard to current housing stock (Treur, 2016). Therefore, positioning in the housing market for starters is largely not a choice but rather a matter of constraint (Kruythoff, 2007). Although the revealed preferences may differ from the previously stated preferences, the preferred condition to move will remain. This means that the choice to move involves striking a balance between the stated and revealed preferences.

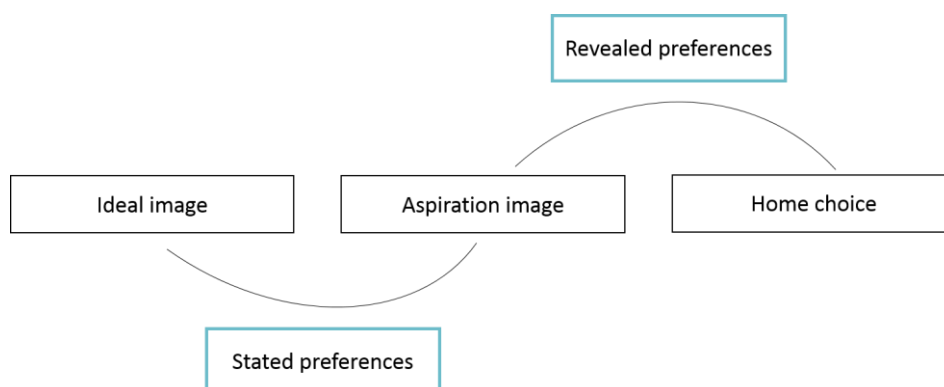


Figure 3: *Stated and revealed preferences* (created by the author)



### 2.2.3| Revival of the commons

Privatisation has become increasingly popular in recent decades. The idea that producing and managing worked more effectively and efficiently on an individual basis made sure that collectives came under pressure. However, a minor revolution has taken place towards more shared goods. After two centuries of individualistic thinking, partnerships are once again gaining ground. Citizens are becoming increasingly aware of the solutions that they can create for themselves and each other. There is a new interest in all types of shared management of property and community goods due to, among other factors, changes in the economy. The concept behind the commons is that people do not need to own things if they have access to or are capable of sharing them (Camp, 2017; de Moor, 2012).

According to Schmid (2019, p. 19), the revival of the commons should not be limited only to goods but should also include collective living. A new way of thinking generally influences ways of living. Collective living is, generally speaking, a conscious choice and can be understood as a response to traditional living styles (Schmid, 2019). More people within the young generation are open to collective living and are adopting more compact and shared lifestyles. This change in outlook is reflected by the fact that starters themselves are increasingly interested in shared living (Nelson, 2018). As a result, they are gradually adapting their stated preferences, which could bring their stated and revealed preferences closer together. When starters already thinking about sharing living space in their stated preferences, these preferences will be closer to the revealed preferences, which will make the gap between stated and revealed preferences smaller.

### 2.2.4| Theoretical overview of the target group: starters

Figure 4 provides an overview of factors related to the moving behaviour of starters. Many starters prefer to move to an independent house. However, there is a remarkable difference on the housing market between starters who prefer to move and starters who are moving. There are limited housing opportunities within the current housing stock that meet their stated preferences. Due to this gap, starters are stuck in the housing market. However, this gap can be narrowed by the revival of commons because such a revival would make it easier for starters to meet their needs. The sharing of living space is becoming increasingly accessible and acceptable among starters, which brings their stated and revealed preferences closer together.

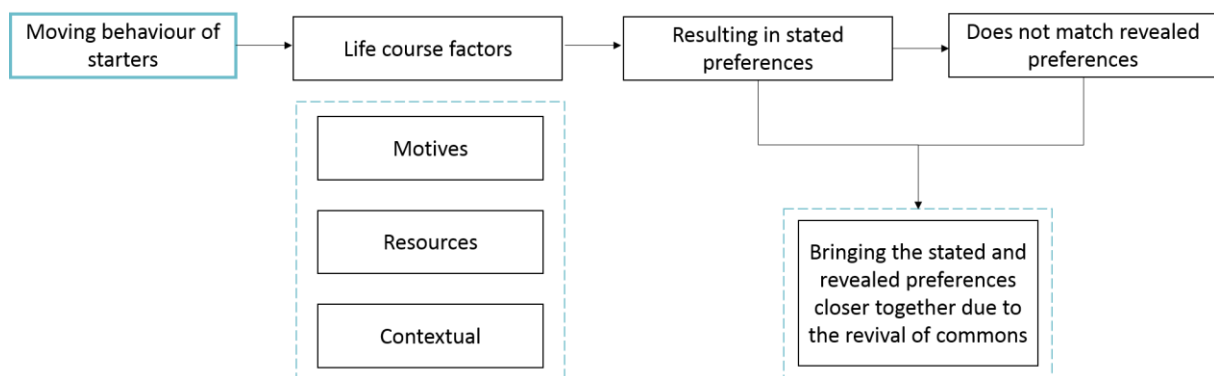


Figure 4: From moving behaviour to revealed preferences (created by the author)



## 2.3 COHOUSING AS A LIVING CONCEPT

Cohousing is a broad concept that describes a wide variety of initiatives. For this reason a comprehensive definition of this topic consisting of different elements is used; these elements are shown in Figure 5. These elements are collective living, collaboration, and cooperation. While these are all elements of cohousing, one can be present in the absence of the others (Fromm, 2012). Collective housing is the most recognisable form of cohousing. It assumes that private living units are combined with communal facilities in one building. It is therefore more focused on forming a community together in which they share space. This element occurs both on the buyers' and rental markets. Another element is collaborative housing, which is oriented towards collaboration among several residents to achieve a particular goal. In other words, it is a form of self-organised collective housing, such as collective private commissioning, where the focus is on collaboration and co-production. As a result, collaborative housing is mainly found on the buyers' market. Thus, it is generally understood as resident-led cohousing. The last element, cooperative housing, is an entirely different form of cohousing that does not imply any shared living situations; it only relates to cooperative ownership of housing (Tummers, 2017; Vestbro & Horrelli, 2012; Czischke, 2017). A cooperative housing organisation positions itself in between residents and other housing associations, which allows these residents to participate in the decision-making process regarding their housing situation (Lang & Novy, 2014). However, critically reviewed, Tummers (2017) argues that cooperative housing is not a type of cohousing because it is not based on common spaces or shared facilities.

To delineate the research, it was decided to only deal with the elements of collective cohousing, which concerns the sharing of space. The research is not limited to only resident-led cohousing, however, as it also concerns commercial-led cohousing. This means that investigating the concept of collective cohousing best suits the goals of this research because the other two elements are only focused on resident-led cohousing. The final definition of cohousing used in this research is: Cohousing is a living concept in which private living units are combined with communal facilities.

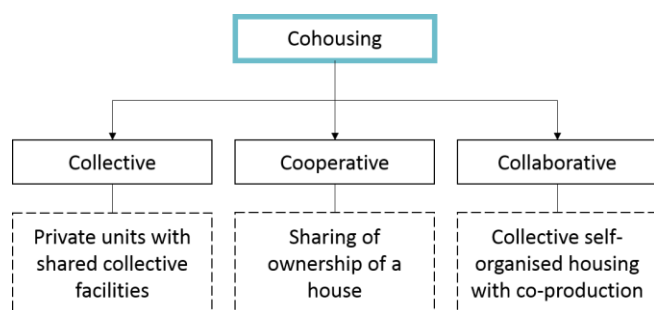


Figure 5: *Elements of cohousing* (created by the author)

As mentioned previously, this study makes a distinction between the rental and buying concepts of cohousing. In this sense, resident-led cohousing is a form of owner-occupied housing. An essential characteristic of this form is the intention or motivation of starters to share several elements (Sargisson, 2012). In contrast, commercial-led cohousing relates more to the rental market. The characteristics of this form are based on less private space, which is compensated by shared facilities. However, it is also a response to the trend of the younger generation being priced out of urban areas. Commercial-led cohousing is a top-down response to market demand, as opposed to private-occupied cohousing, which is more of a bottom-up initiative (Wood, 2018; Green, 2017).

### 2.3.1 | Spatial dimension framework

It is possible to distinguish four different spatial dimension frameworks that can be used to more accurately describe the concept of cohousing. According to Falkenstjerne-Beck (2019, p. 45), these spatial dimensions are (1) the vision and value-oriented dimension, (2) the organisational dimension, (3) the relational dimension, and (4) the physical dimension. These four dimensions are shown in Figure 6. These dimensions are interwoven with each other, which means that they cannot be considered separately.

The first dimension is related to shared visions and values, with a focus on the social aspect and concerns how to live together. Most cohousing projects arise due to different residents having shared values. According to Falkenstjerne-Beck (2019, p. 45), an essential aspect of cohousing is striking an appropriate balance between privacy and collective life when living together by providing everyone with their own unit. New possibilities for living and lifestyles will arise from these shared vision and values. In this sense, cohousing is seen as a modern utopia in that it creates a living model that is a better alternative for society than traditional housing concepts (Falkenstjerne-Beck, 2019).

The organisational dimension is based on the question of how cohousing can be organised, both financially and legally. Organisationally collective cohousing can be based on private ownership; alternatively, it can rely on a rental model, which can involve either private renting or the rental of properties owned by housing associations. However, the cohousing model can be difficult to organise in terms of finances due to the need for shared facilities and can therefore be challenging to implement. In addition to the fact that it must be adequately organised, it is also an issue within which frameworks cohousing remains legal (Falkenstjerne-Beck, 2019). This dimension is the most important of the four because without organising cohousing, it is not possible to undertake a project and carry out the activities that fall under the other dimensions.

The third dimension relates to relationships among the residents within a cohousing complex and a group dynamic based on belonging and togetherness. One of the most general characteristics of cohousing is the creation of relationships. In this sense, cohousing allows people to socialise and learn from each other. This dimension is connected to the physical dimension because motivations and feelings about something affect the visible and are fixed in the layout of the house (Falkenstjerne-Beck, 2019). As stated by Falkenstjerne-Beck (2019, p. 48), *'cohousing is a living arrangement in which the dimension reveals a setting and system that cultivates an intentional negotiated ethos of sharing'*.

The last dimension is related to the physical layout of the cohousing concept in terms of the combination of private units and shared facilities. The transition between the physical layout of these public and private spaces is shown in Appendix B. The physical layout of these houses needs to be designed based on social interaction. There must be thought of shared rooms, such as a dining area, laundry facilities, guest rooms, and workspaces. Private units generally have less floor area, but this is compensated by the shared rooms (Falkenstjerne-Beck, 2019).

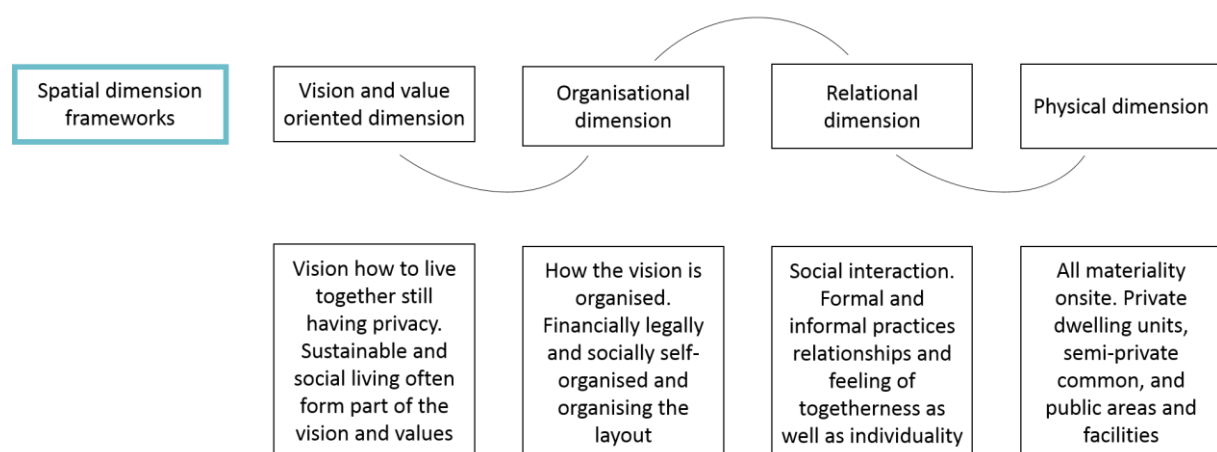


Figure 6: *Four spatial dimensions for cohousing* (created by the author based on Falkenstjerne-Beck, 2019)

### 2.3.2| Types of cohousing

Within the element of collective cohousing and the spatial dimensions, there is a wide variety of types and sizes. In this study, different types are selected by considering their suitability for starters and bearing in mind the urban area of the municipality of Utrecht. Other types, such as elderly cohousing and integration cohousing, have therefore been omitted, as they are not relevant for starters. Three housing types suit starters: friends living, micro cohousing, and intergenerational cohousing. This study elaborates on the three housing types, taking the four spatial dimensions into consideration for each.

#### Type 1: Friends living

Living together with friends in one house is the most common definition of friends living. This type offers residential advantages because it provides optimal flexibility, is more cost-efficient, and reduces individualism. However, this does not mean that there are no possible restrictions associated with friends living. Figure 7 shows the essential features of friends living. Appendix D presents a mood board depicting this type.











Spatial dimensions friends living	Vision and value oriented dimension	Organisational dimension	Relational dimension	Physical dimension
	 Same visions and values  Fast compromises (due to small number of inhabitants)	 (mostly) 2 or 3 friends  Rental and buyers' market  Possibility of restrictions	 Living with friends  (strong) feeling of togetherness	 Private space 10 m <sup>2</sup> to 25 m <sup>2</sup>  Private bedroom  Other units are shared

Figure 7: *Spatial dimensions related to friends living* (created by the author)

When focusing on the relation dimension, it can be seen that this type creates a feeling of togetherness by allowing people who live together to become a family. The often strong relational bond is expressed in an equal vision and value-oriented dimension. The equal vision and values are also reinforced because a house will often be inhabited by a limited number of people, which makes it easier to reach agreements concerning visions and values. However, it should not be overlooked that visions and values are not always shared. The characteristics within the physical dimension can differ from house to house. However, the most common features of a house used for friends living consist of a communal kitchen, living room, and bathroom. The residents do have their own private bedroom units, but the model can be changed such that each private bedroom has its own bathroom. The surface of both the private units and the common areas differ by house. However, most private units have an average surface area of between 10 m<sup>2</sup> and 25 m<sup>2</sup>. This average surface area resembles the principle of a student house. A question that thus arises is why an entirely new plan should be implemented with regard to the organisational dimension when student houses already exist; the difference is that student houses only accommodate students. This means that when students complete their studies, they need to secure new accommodations. Furthermore, these homes are organised on a rental or occupation basis, whereby generally two or three people live together. In practice, there are also larger homes in which at least five to nine people live in one house. However, this depends, among other factors, on the size of the house (Camp, 2017).

Friends living is mainly used in the context of the organisational dimension as a renting type. However, it is also possible to extend this type to the buyers' market. Therefore, friends living can be both a form of resident-led and commercial-led cohousing. In the sense of commercial-led cohousing, every tenant has their own lease contract and is not dependent on someone. However, they all are responsible for paying the rent. When one of the residents moves out, the rest of the residents do not have to leave, but they will need to search for a new candidate (Camp, 2017). This makes it possible to rent a house in the upper segment, where there are more possibilities for finding suitable accommodation. These possibilities will broaden the search to find an appropriate house. However, there may be a restriction regarding the rental type of friends living that may make it more challenging to initiate such a living

arrangement. A restriction is related to public policies within specific cities and involves the rules regarding sharing a house in the Netherlands. In some areas, a permit must first be applied before renting a shared house (van den Bussche, Thion & Remerie, 2017). In the social rental sector, multiple households cannot share a house. In addition, in the liberalized rental sector, many owners cannot or do not want to rent out a home to more than one household. Many zoning plans explicitly state that a home is intended for one household (Treur, 2016).

However, as mentioned previously, it is possible to extend this type to the buyers' market. Due to the limited supply on the buyers' market for starters and the fact that the market is rarely focused on individual households, this type offers a solution. Furthermore, there are also stricter lending standards and more stringent requirements on the parts of banks. Acquiring one's own home requires creative solutions. When buying together with friends, it is also possible to get a higher lending. A higher lending makes it easier to find a suitable home in a higher price range. Groups of friends are increasingly buying houses together (Camp, 2017). However, there are also potential restrictions on the buyers' market. Unlike the rental market, these are restrictions concerning mortgage loans. There are several options when it comes to securing a mortgage to buy a property to be used for friends living. The first option involves only one individual buying the house. To pay the fixed costs, the other person(s) pays the rent. Unfortunately, the lender must give permission to rent out part of the house, and this often does not happen. The first option reduces the costs for starters, but it does not offer the potential of buying a property in a more expensive segment. The second option is buying a house together. The mortgage will then be in the name of both individuals. The income of the person who earns the least determines 80% of the mortgage value. Furthermore, it is also riskier for the starters themselves because they are responsible for repaying the loan and thus cannot simply leave the house (van den Bussche, Thion & Remerie, 2017).

## Type 2: Micro cohousing

The second housing type consists of micro cohousing. Micro cohousing consists of several micro apartments in one building where everyone has their own private rooms but has access to several shared facilities. In this type, starters can enjoy all of the advantages of living in a city without being confronted with significant fixed costs (Schreter, 2019; Groot, 2017). This type of cohousing is suitable for starters because, in the long term, they still want to have their own accommodation and to reduce costs. Nevertheless, this does not mean that there are no restrictions associated with micro cohousing. Figure 8 shows the essential features of micro cohousing, while Appendix E presents a mood board depicting this type.











Spatial dimensions micro cohousing	Vision and value oriented dimension	Organisational dimension	Relational dimension	Physical dimension
	 (mostly) different visions and values  Fast compromises (due to the willingness of these people)	 Number of persons differ  Rental and buyers' market  Possibility of restrictions	 Living with other unknown people  (lower) feeling of togetherness	 Micro apartment 27 m <sup>2</sup> or smaller  Own studio with all the amenities  Extra shared facilities

Figure 8: *Spatial dimensions related to micro cohousing* (created by the author)

In this type, the relational dimension is quite different from that of the first type (friends living). More people live in micro cohousing arrangements when compared to friends living, and they generally do not know each other beforehand, which makes it less easy for them to create a strong feeling of togetherness. This can affect the dimension related to visions and values because everyone within a building or on a selected floor could have different visions and values. Nevertheless, most people who are open to micro cohousing are willing to consider the needs of others, which makes it easier to compromise. Thus, it is very dependent on the people who live in such a building. Zooming in on the physical dimension, inhabitants have their own studios with all amenities but also have access to communal

areas, such as a large living room, a kitchen, and a laundry area. These shared facilities can be found either on each floor area or only in one central place and thus differ by building. Micro cohousing can be considered to be opposed to friends living because micro cohousing is based on independent living spaces, with residents not living together with friends but sharing common spaces. Furthermore, most of these micro apartments are 27 m<sup>2</sup> or smaller. However, such apartments are typically designed in an efficient way. The number of people who can live within a micro apartment typically varies by building (Camp, 2017; Infranca, 2014).

Micro cohousing is mainly used in the rental market, not in the buyers' market. Nevertheless, to keep the scope of this research sufficiently broad, it was decided to include the buyers' market. Although the private space found in buildings used for micro cohousing is generally smaller than that found in a traditional space, the total area may be larger in this type due to the additional collective space. This not only increases the total surface area but also makes it cheaper for the residents because only part of this collective space must be paid for (Rissik, 2019). As a result, rental costs may be lower, which could increase accessibility. However, as with the type of friends living, there may also be restrictions associated with this particular type of cohousing. These restrictions are not associated with the public policies of a city but rather with the residents themselves, as people's behaviour is an essential factor in determining the success of a cohousing venture (Lietaert, 2009). When it comes to micro cohousing, most inhabitants of a building will be unknown to each other, which can make it more difficult to ensure effective cohousing. However, this could be solved by paying attention to this topic in the lease contract. Another possible restriction arises when loans are needed. According to Infranca (2014, p. 84), is it possible that lenders may undervalue this type of house due to unfamiliarity with it, as it represents a new way of living compared to living in traditional houses. This also makes them assess their risk higher due to concerns of the future market demand for this housing type.

However, this housing type also offers possibilities for the buyers' market. Micro apartments are smaller than traditional houses, which makes it possible to buy in a lower price category and offers starters better opportunities on the housing market. However, it should be taken into account that there are also communal areas within a building, so that restrictions may apply here. Arranging or selling a shared area is complicated. One of the options is to sell a percentage of the communal area. Another possibility is arranging service costs that must be paid every month, with the management thereof being transferred to a professional party (Infranca, 2014). However, such service costs will make the total payments higher, possibly making them too expensive for the target group.

### Type 3: Intergenerational cohousing

Intergenerational cohousing is defined as different age groups living together in a residential building. This means that the type is not only related to starters. Nevertheless, it can help starters by creating more accessibility. In this type, starters enjoy the advantage of living in buildings in which there is more diversity. In this type, great diversity is available in the field of cooperation between the different age groups. Intergenerational cohousing could prove advantageous for starters, as it can reduce costs due to the access to communal facilities and differing house sizes (Camp, 2017). Nevertheless, this does not mean that there are no restrictions associated with intergenerational cohousing. Figure 9 shows the essential features of intergenerational cohousing, while Appendix F presents a mood board.

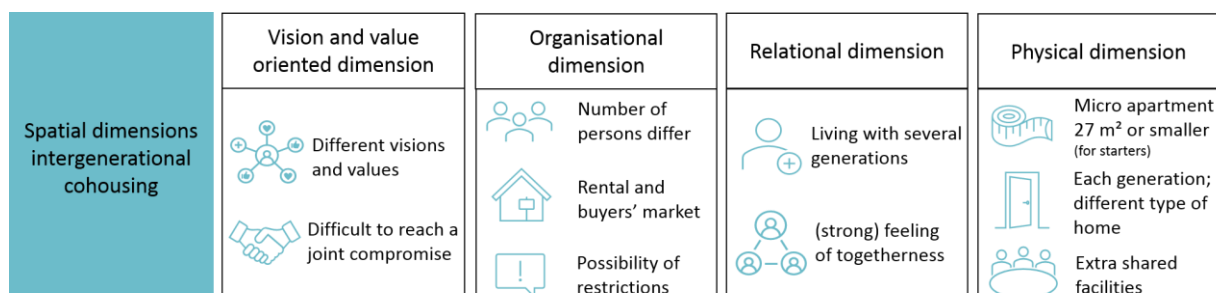


Figure 9: *Spatial dimensions related to intergenerational cohousing* (created by the author)



The relational dimension in this type is different from friends living and micro cohousing. As previously described, several generations live together. These generations consist of starters, families, and the elderly. Although several generations may be living in the same building, they will often have a pronounced feeling of togetherness. This is partly because in this type, the intention is to help each other where necessary. For example, starters can have their rents reduced when they look after the children of other tenants or help the elderly with their chores. As a result, elderly tenants and families living in the same building can benefit from the support of others. Zooming in on the vision and value-oriented dimension, it can be said that in this housing type, every generation has its own vision and value, which are often quite distinct. This means that it may also be more difficult to reach a compromise that is acceptable to all parties. Furthermore, within the physical dimension, it can be noted that every generation has a particular type of apartment or home that suits their general preferences. Starters have their own micro apartments but have access to all the amenities and shared areas, as is the case in micro cohousing. Communal areas can include courtyards and shared laundry areas. Thus, it is less focused on having communal living areas and kitchens, although this is still a possibility. Most of the micro apartments for starters in this type are 27 m<sup>2</sup> or smaller, but they have a smart interior design so that it can be classified very efficiently (Camp, 2017; Coele, 2014; Fedrowitz, 2010). In the physical dimension, it is possible to extend the type with the concept of flexible houses. Every generation can select different units that satisfy their minimum needs. This led to a building that is arranged as efficiently as possible (Schneider & Till, 2005; Calgary, 2017). Moreover, organisationally, it differs per building how many people live within this type.

In the organisational dimension, this type is often used in the buyers' market. Mostly, groups consisting of people of all ages prefer buy this type. The houses inhabited by members of this group are generally privately owned or cooperative, which means that it is more related to the cooperative and collaborative elements of cohousing (Falkenstjerne-Beck, 2019). Nevertheless, it is also possible to sell these homes when a developer organisation builds them. However, there is not much literature related to this kind of organisation, as this seldom occurs in practice. Selling these types of homes is not likely to be an issue. The smaller surface area of such homes increases the availability of accommodation for starters in suitable price ranges. Despite, it should be taken into account that there are also shared areas within a building, meaning that certain restrictions may apply. Arranging or selling a communal area is complicated. One of the options is to sell a percentage of the common area. Another possibility is to arrange service costs that must be paid every month, with the management thereof being transferred to a professional party (Infranca, 2014). However, such service costs will make the total payments higher, possibly making them too expensive for the target group. Although this type is mostly used on the buyers' market, it is possible to extend it to the rental market. The rental market may be less known in the literature and practice but fits into the operationalisation of the present research. The literature does not indicate any restrictions related to this type of cohousing. Every age group has unique needs and preferences with regard to homes. As a result, houses can be divided differently, including in terms of size (Fedrowitz, 2010).

### 2.3.3| General challenges related to cohousing

This research would not be sufficiently objective when it only consider the benefits of cohousing. In addition to the possible restrictions associated with the previously discussed housing types, there are also more general criticisms, challenges, and contradictions associated with the concept of cohousing. The first limitation is related to the behaviour of residents within these cohousing projects. Living in a cohousing project does not automatically mean that everyone will have the same values and vision, which may ultimately result in lower costs not being realised. However, there is a trend in which new generations of residents are increasingly focused on combining their individual visions. Furthermore, communal facilities should not be idealized either. Some residents will be more driven than others to engage in collective activities such as cooking together (Lietaert, 2009; Garciano, 2011). These two limitations can be divided in the vision and value-oriented dimension.

Beyond the behavioural limits, there are also limits related to the share of costs. This challenge is related to the organisational dimension. The majority of the residents living in these projects belong to the upper-middle class. For people belonging to other social classes, it is not easy to buy a home, particularly in a cohousing project. A cohousing project is usually more expensive due to the shared facilities. Thus, should the concept of cohousing become a popular way to live in urban areas it will be necessary for local authorities to help individuals with financial support. It is not only local authorities but also private parties that can help to develop cohousing concepts, as private individuals can leverage their investments, knowledge, expertise, and relationships with local authorities (Lietaert, 2009). Furthermore, Garciano (2011, p. 175) indicates that while cohousing may provide a more comfortable living experience, it is not necessarily cheaper than a traditional home. This is partly due to the higher costs of new and customised constructions, the larger communal areas, and the facilities related to these common areas. These do not always outweigh the savings that come from sharing. Nevertheless, Garciano (2011, p. 176) also mentions that it would not be impossible to create a more affordable form of cohousing. Practice has also shown that it is possible to make cohousing more affordable than traditional houses.

### 2.3.4| Theoretical overview of cohousing

Figure 10 provides an overview of cohousing and its housing types. These types are a selection of the cohousing concept and were chosen because they are suitable for urban areas and starters. Friends living is characterised by private space being combined with shared facilities, such as a bathroom, living room, and kitchen. The second type is related to micro cohousing. It is characterised by shared facilities, such as a living room and kitchen. However, unlike friends living, this type offers more privacy. The final type consists several generations living together in one building. Each generation has its own private space, with these spaces differing in terms of layouts and sizes.

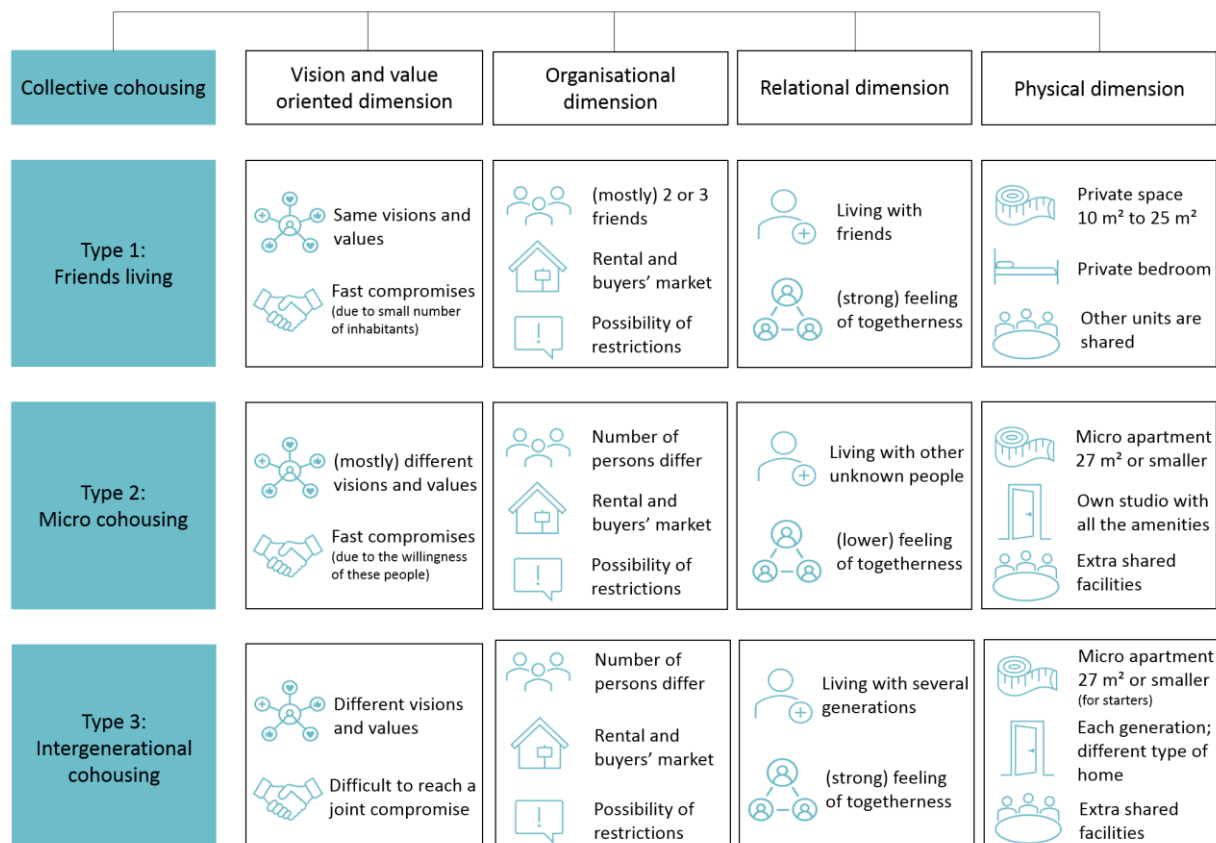


Figure 10: Collective cohousing and the related housing types, along with their characteristics, for starters (created by the author)



## 2.4 | ACTORS IN THE IMPLEMENTATION PROCESS

As stated previously, this research limits itself to the market-oriented and governmental actors. For this reason, this section only considers these two actors. The role-based model of Adams and Tiesdell (2013), which is shown in Appendix C, provides an indication of which actors there are and the kind of roles they play. Roles are parts that actors play in the implementation process and can be both negative and positive. The model identifies seven essential markets that are involved in the real estate market. The actors and roles identified in the model fall into these seven categories. The important markets for this research are the political, financial, and investment property markets. There are various actors in these markets, such as developers, local authorities, mortgage lenders, and real estate investors (Adams & Tiesdell, 2013). These actors are likely to play a role in the process of implementing cohousing.

Successful implementation of projects depends on coordination among the roles. However, from a critical perspective, this role-based model only provides a general representation of the actors and their roles, as the relative importance of the categories of participants may vary from project to project. Furthermore, the model is only focused on the development market, which means that the model is not fully applicable to the present research because this study should consider both newly built homes as well as existing ones. Nevertheless, this model can undoubtedly contribute to this research because certain actors and roles can play an important part. Other studies show that housing associations also play a role in the implementation, development, and management of appropriate housing opportunities for starters (Mekawy, 2014), which suggests that the present research should not be limited to the role-based model alone.

Furthermore, these actors need to be divided into the rental and buyers' markets, as this research is not limited to only one market. Figure 11 presents an overview of the actors and their links to the rental and buyers' markets. Developer organisations are active in both the rental and buyers' markets. They can sell houses to private individuals or to investors and housing associations for rental purposes. Local authorities are also active in both markets because they regulate both markets through establishing rules and providing a vision and leadership. Mortgage lenders are related to the buyers' market; this is because they must provide mortgages to starters who are willing to purchase a house. Investment in the rental market is not required from the starters because they do not need their own capital. Therefore, banks have no relationship to the rental market. Investors are only active in the rental market because they invest in rental houses to generate revenue. Therefore, there are hardly any investors in the buyers' market. Starters generally buy their houses by themselves, usually with the support of a bank. Finally, housing associations are, in principle, mainly focused on the rental market. A small part of their strategy is focused on the buyers' market. Their involvement in the buyers' market is limited to when they dispose of houses from their portfolios or offer social houses on the buyers' market. Therefore, the present research assumes that housing associates are active in both the rental and buyers' markets.

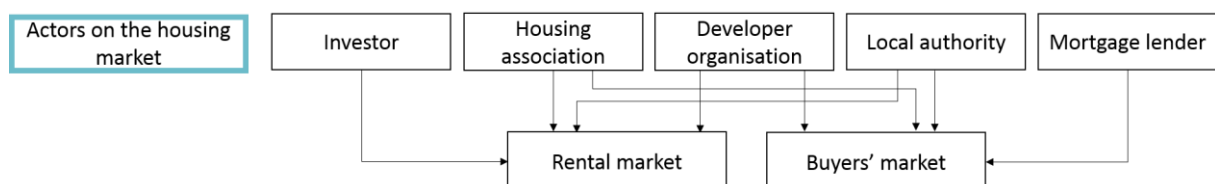


Figure 11: Actors on the housing market related to the rental and buyers' markets (created by the author)

### 2.4.1 | Role of developer organisations

Actors that carry out roles related to a developer can be individuals or organisations. Such actors include private individuals, development companies that focus on specific projects, or local authorities that drive the development of a specific area (Adams & Tiesdell, 2013). However, in the present study, the term developer refers only to a development company that initiates a development. A local authority has different roles in the research, and private individuals fall outside of the scope of this study because starters do not have the financial support required to act as private individuals. Therefore, it is possible to describe a developer as an investor in the development and realisation of real estate projects for the market and not for personal use. Developer organisations are therefore bear risk for or realise real estate projects on behalf of third parties, such as housing associations, local authorities, or investors (Nozeman, 2010; van Gool, et al., 2013).

Since these developer organisations have the potential to shape the future of places, it is crucial to understand the drivers of their behaviour. The expertise of a developer lies in identifying development opportunities, choosing the appropriate target group, and resolving complaints to allow developments to proceed as planned. As stated by Adams and Tiesdell (2013, p. 170), *‘developers are portrayed as impresarios, orchestrating the development performance by bringing capital, labour and rights in land together to create the right product in the right place at the right time’*.

According to Adams and Tiesdell (2013, p. 167), a developer can potentially play up to four different roles. The first role is that of a master developer, in which a developer operates strategically and drives the overall development of an area. The second role is that of an infrastructure provider that ensures the provision of roads and sewers. The third role is that of a developer responsible for organising the development of parcels. The last role that a developer can play is that of a building contractor, in which the developer constructs actual homes. However, these four roles are carried out differently in different circumstances and are therefore not always considered necessary. Due to the need to operationalise, only the roles related to being a master developer and building contractor are considered in this research. This choice was made because this research focuses on an abstract level; as such, discussing the respective roles of infrastructure providers and parcel developers would require going into excessive detail (Adams & Tiesdell, 2013).

#### Possibilities and barriers that can occur concerning cohousing

A strength of a developer is that it can build quickly and efficiently, which reduces construction costs and grants more access to starters. However, it also includes barriers in the context of the cohousing principle. First, the developer that spends its money on a project and takes on the associated risk will retain complete control from beginning to end. This means that it is possible that the end-user will not be fully considered, meaning that the outcome of the project may differ from starters’ expectations. Furthermore, should a developer have an opportunity to build homes in a more expensive segment that will generate more profit, the developer is likely to prefer to build these types of homes and to disregard the target audience of starters. Thus, developers have significant power in the real estate branch. Furthermore, a barrier can arise that a developer compromise excessively on the design (e.g., with regard to shared facilities) due to the concern that it will not be possible to find enough buyers interested in the cohousing concept. This makes it a better match for general housing buyers who prefer more privacy and comfort but deviates from the cohousing principle (Scotthanson & Scotthanson, 2005).

However, a possibility also arises in that, as mentioned previously, a developer can build a product quickly and efficiently. If a developer is sensitive to the needs of cohousing for starters and believes that buyers will purchase the product, it may provide a delightful place. Furthermore, the building process can be completed quickly, which increases the likelihood that starters will be able to find appropriate houses that suit their needs sooner and will make it easier to solve the problems faced by starters on the housing market (Scotthanson & Scotthanson, 2005).

### 2.4.2| Role of local authorities

In this research, local authorities are considered to be official organisations that are responsible for governing all the public services and facilities in a particular region. These local authorities consist of local government and municipalities. The central government stands above these organisations; as such, the way in which these organisations work is partly influenced by the central government (Adams & Tiesdell, 2013).

There are four main roles for local authorities: provider, funder, regulator, and leader. For example, they can serve as providers of housing for starters. While the importance of this role has decreased in recent years, local authorities still offer housing corporations land at lower prices. The role of funder is aligned with that of provider because local authorities can assist in providing appropriate housing for starters by funding market-oriented actors and helping such actors to create more innovative housing solutions. However, most local authorities expect that market-oriented actors will self-fund their building activities (Douglas, 2004).

The third role is that of a regulator and can be divided into three different themes, namely land-use planning, building regulations, and development incentives (Douglas, 2004). Land-use planning focuses on the local level and concerns how places should look and function in the future. They make zoning plans that can impose restrictions concerning the function of a piece of land (Needham, 2016). Zoning plans are a powerful mechanism by which local authorities can encourage or discourage certain types of development (Mekawy, 2014). Furthermore, local authorities need to issue development permits, which can be considered a form of building regulations (Adams & Tiesdell, 2013). With development incentives, they can use planning instruments to provide development contributions intended to create more appropriate housing (Douglas, 2004). Furthermore, local authorities also play a vital supportive role. They are responsible for formulating strategies related to spatial developments, supporting construction plans, and facilitating the ideas of market-oriented actors (Mekawy, 2014).

The last possible role concerns leadership. Besides their supportive roles as regulators and politician, local authorities need to assume the role of effective leaders. In this sense, a local authority needs to drive forward action, create confidence, encourage the participation of developers and housing associations, and reduce the risks associated with any development. As a leader, it is possible to stimulate the overall level of development or the development of a particular housing type (Adams & Tiesdell, 2013). For example, local authorities can coordinate new development initiatives.

### Possibilities and barriers that can occur concerning cohousing

Local authorities can be seen as a great possibility because they are the key actors in the successful implementation of cohousing for starters. They are in charge of processing planning applications, support the allocation of land for cohousing purposes, and provide grants or financial support to these projects to create more accessibility on the housing market. Local authorities also have the expertise as direct strategic enablers in the local housing market (Quinio & Burgess, 2019). When local authorities take the lead in their respective regions, they can stimulate the development of a particular housing type, “in this case cohousing; such efforts can drive new developments in the housing market.

However, local authorities are under increasing pressure due to lengthy social housing wait lists, increasing homelessness, and a lack of affordable housing for both starters and others. This limits their ability to commit to alternative housing solutions for starters such as cohousing and can therefore be seen as a barrier (Quinio & Burgess, 2019). Furthermore, educating local authorities on the value of cohousing for starters is an extremely time-consuming process. Because accessibility for starters is an acute problem, the amount of time needed to convince local authorities can be seen as a barrier (Weeks, et al., 2019). The regulators within the local authorities have little incentive to reduce the information demand on applications or to accelerate the decision-making time, which further serves to complicate implementation (Adams & Tiesdell, 2013).

### 2.4.3| Role of mortgage lenders

Mortgage lenders, which are usually banks, offer mortgages on buyers' homes. This research focuses on retail lenders, referring to parties such as banks that perform all loan origination functions by themselves. Mortgage lenders advance money on the security of a mortgage on a property such that the lender is always insured (Campbell, 2013; Draper, 1974).

Mortgages are of first-order importance for households that cannot afford a house by themselves. When someone wants to buy a house, they will in most cases require a mortgage. They can borrow the purchase amount of the house and repay this loan, the mortgage, in the form of monthly instalments. Here, the role of a mortgage lender comes into play because they can provide a loan to that specific person. The lender thus obtains a security interest in the property (Campbell, 2013). Mortgage lenders that advance mortgages to owner-occupiers will need a guarantee and the confidence that they can readily resell the house should the owner default (Adams & Tiesdell, 2013). This guarantee is also required since most mortgages today are issued over the long term, which means that a mortgage lender provides a mortgage for about 30 years. This reduces the risk of repayment (Draper, 1974).

### Possibilities and barriers that can occur concerning cohousing

Since friends living is related to the buyers' market, multiple households are associated with a mortgage, which can create a significant barrier to obtaining a mortgage. There is a legal risk that a lender could lose its security if one of the households can no longer make the mortgage repayments or wants to move. Therefore, mortgage lenders are cautious as to whom they give a mortgage. However, mortgagees need to sign a possession clause entitling the lender to sell the home on the open market to recover any outstanding debt. This is a benefit for a lender (Chappell, Heywood & Williams, 2018).

In contrast, providing mortgages to several households can also offer an opportunity for first-time buyers on the housing market. If it is possible to secure a loan with several households, the loan amount also increases. Thus, when cooperating, starters can search for houses in higher price ranges. There is a broader range of homes in this higher price range, which provides starters with more opportunities on the housing market; thus, starters choosing to buy a house together can be considered a promising approach. Furthermore, while the general cohousing sector does not make much use of mortgage lenders for support because they can already afford to buy a house, it is keen to ensure that these mortgage lenders understand the nature of the concept and consider these unique factors in their lending decisions (Chappell, Heywood & Williams, 2018).

### 2.4.4| Role of investors

In this research, an investor is defined as a party that buys and sells existing properties or real estate to be developed in the investment market. These investors are interested in income flow from rents, with their focus being on long-term income. Alternatively, they may be interested in selling properties, in which the focus is on the short term (Adams & Thiesdell, 2013; Theurillat, Rerat & Crevoisier, 2015). The present research focuses on long-term investors because they control the use of properties and therefore have considerable influence on the implementation process. Long-term investors seek returns from holding their real estate over extended periods and this return is expressed as liquidity.

An essential task of an investor in real estate development is preserving liquidity. Adams and Tiesdell (2013, p. 217) note that there is a general rule: *'the more development becomes standardised, the greater its perceived liquidity and, conversely, the more it becomes specialised, the less its perceived liquidity'*. This statement implies that investors have a strong interest in standardised development, even when such development does not suit the needs and desires of individual users. This priority also applies to real estate developers (Adams & Tiesdell, 2013).

In addition, investors also play a significant role in the rental market, as they ensure that enough rental homes are available for households but this is not always the case. Furthermore, an investor can require developers to incorporate certain products into a project. When they are at their most influential, investors may decide what is and is not considered achievable without considering the actual market and target audience, which can have negative effects. However, they do not want to expose themselves to excessive risk and therefore need to determine whether users want to rent their properties. This means that an investor is more likely to build in less risky places and in areas where there will probably always be demand. It can thus be concluded that an investor has more power than a developer (Adams & Tiesdell, 2013).

#### Possibilities and barriers that can occur concerning cohousing

As mentioned previously, investors are more interested in standard properties because such properties are less risky for them. This creates a barrier because cohousing is a concept that requires specific users and is therefore a potential risk for investors, which means that investors may not have faith in the concept and thus may not be quick to invest in properties used for cohousing. However, this barrier can also be converted into a possibility. When confidence in the concept is created by other actors and there are also many interested users, an investor that is focused on larger properties can start a project involving larger numbers of houses (Cagan, 2019). Such a decision can ensure that starters gain access to the housing market more quickly. However, care must be taken not to disadvantage the concept.

#### 2.4.5 | Role of housing associations

A housing association is a company that is engaged in building, managing, and renting out living space. According to van der Werf (2013, p. 158), a housing organisation is a *'hybrid organisation...an independent organisation between the state, market and community'*. The activities that need to be carried out are therefore performed on a non-profit basis. Thus, these corporations are private, but not commercial, organisations. They are government-approved and have an assigned public task, with their performance in this regard being monitored (van der Werf, 2013).

They are active in the housing market to provide housing for tenants with low income. As indicated previously, housing associations play a role on both the rental and buyers' markets, thereby separating social and commercial activities. Due to the hybrid nature, the activities are influenced by economic, political, and social forces. On the political level, housing associations are strongly affiliated with the government through finances, regulations, and supervision. This means that the government plays a decisive role within the field of activity of housing associations. They are also aimed at the market of supply and demand, which is based on the economic level and gives a commercial direction. Housing associations have been assigned the task of stimulating home ownership by selling rental properties or building owner-occupied homes; both of these tasks are part of the role that housing associations play in the housing market. They can sell houses at lower prices than other parties. Finally, housing associations also focus on social factors as part of their attempts to promote the interests of the community (van der Werf, 2013).

Furthermore, a housing association can purchase land at relatively cheap rates from a municipality, which makes it possible to build cheaper homes. However, the corporations are no longer under the control of municipalities, which means that these organisations must finance everything by themselves. Thus, they support their tasks by renting and selling houses. Social rental housing is therefore not profitable, which means that it has a negative return. As a result, housing associations must sell homes from their portfolios in addition to renting out properties (van der Werf, 2013).

### Possibilities and barriers that can occur concerning cohousing

Housing associations could play a significant role in the broader development of cohousing by not only developing cohousing projects but also facilitating them. As with developer organisations, it is possible for a housing association to assume the responsibility for and financial risk associated with developing cohousing projects. Such associations can also bring their expertise to projects, such as that concerning legal issues and the regulatory framework on housing policy. They can also sell their units for lower prices (Quinio & Burgess, 2019). Furthermore, housing associations can fulfil another crucial role as pioneers. Given their social aims, they can invent new housing concepts to develop, create innovative processes, and consider other forms of possible homeownership. By doing so, they can better respond to various demographic, technological, environmental, and cultural changes.

However, the primary focus of a housing association is on providing affordable housing for low-income households. Therefore, supporting more cohousing projects does not always fit within their existing system and could be more reserved. This can be seen as a barrier, as it changes the traditional roles and support function of housing associations (Quinio & Burgess, 2019).

### 2.4.6 | Theoretical overview of actors

Figures 11 and 12 provide a clear overview of all of the findings discussed above. First, the actors are linked to the rental and buyers' markets. Furthermore, Figure 12 also shows the roles that the various actors can play. Each actor assumes a different role in the implementation process. As described in the previous paragraphs, these roles can have both negative and positive influences on the implementation of cohousing. While investors and developers are risk-averse and tend to opt for standardisation rather than cohousing, a housing association could potentially focus on this innovative concept and bring it to fruition. Local authorities can steer this by acting as leaders or by making rules for both the rental and buyers' markets. Finally, mortgage lenders could ensure that starters have a better opportunities on the buyers' market.

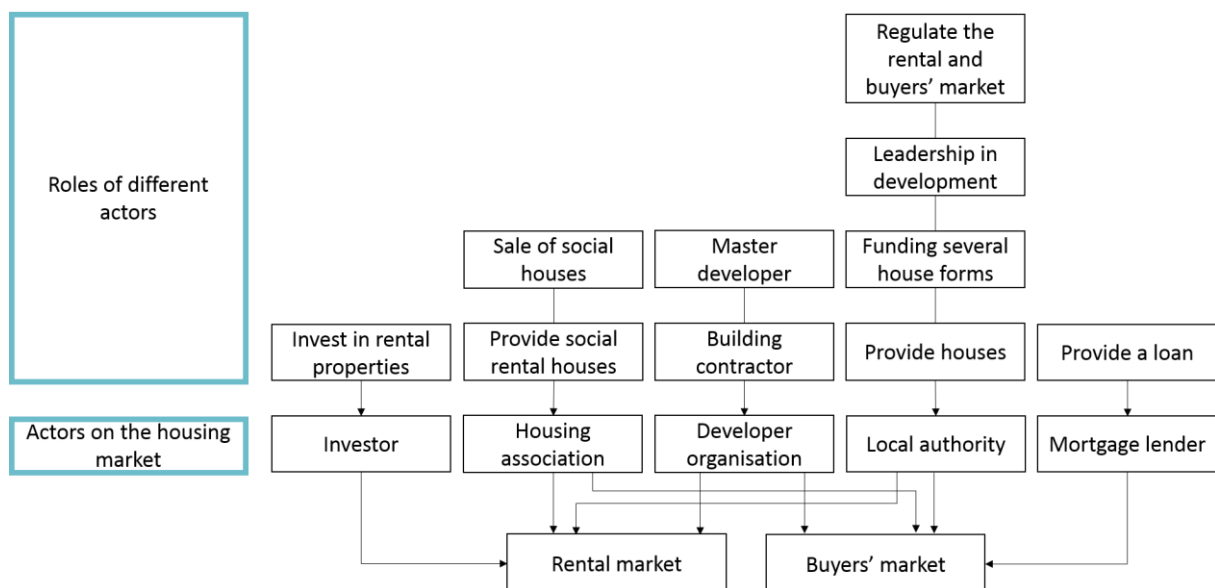


Figure 12: Actors and their roles on the rental and buyers' markets (created by the author)



## 2.5 CONCEPTUAL MODEL

The theoretical findings presented above are operationalised in the form of a conceptual framework, which is shown in Figure 13. The model shows the relationships among the actors related to the rental and buyers' markets, the factors that influence accessibility on the housing market, and collective cohousing's potential as an alternative solution intended to promote accessibility. The central point of the conceptual model consists of the term collective cohousing. Collective cohousing can consist of different housing types suitable for starters, namely friends living, micro cohousing, and intergenerational cohousing. The concept of cohousing is linked to both accessibility and the actors. As can be seen in the model, there are various actors active in both the rental and buyers' markets. These actors may have an impact on the implementation of the cohousing concept, in which they fulfil different roles. These roles are described in the theoretical framework for actors, but they are also related to the accessibility of the housing market. Accessibility on the housing market is determined by market-oriented and governmental influencing factors. Various connections between the different factors are uncovered and further described in the theoretical framework regarding accessibility. These factors come forward from the different actors. In the Netherlands, there is less accessibility, so an alternative housing solution needs to be found to create more accessibility. Collective cohousing may be of great importance in this process. Here, accessibility is linked back to the central point of the conceptual framework.

Furthermore, it was decided to omit the social domain of civil society, which consists of starters, from this research and thus also the related influencing factors and moving behaviour. This choice is due to the operationalisation of the research, which only deals with market-oriented and governmental actors. However, the civil society domain is reflected in the theoretical framework regarding accessibility and starters. This makes apparent what their influencing factors would be and how starters are defined in terms of their moving behaviour.

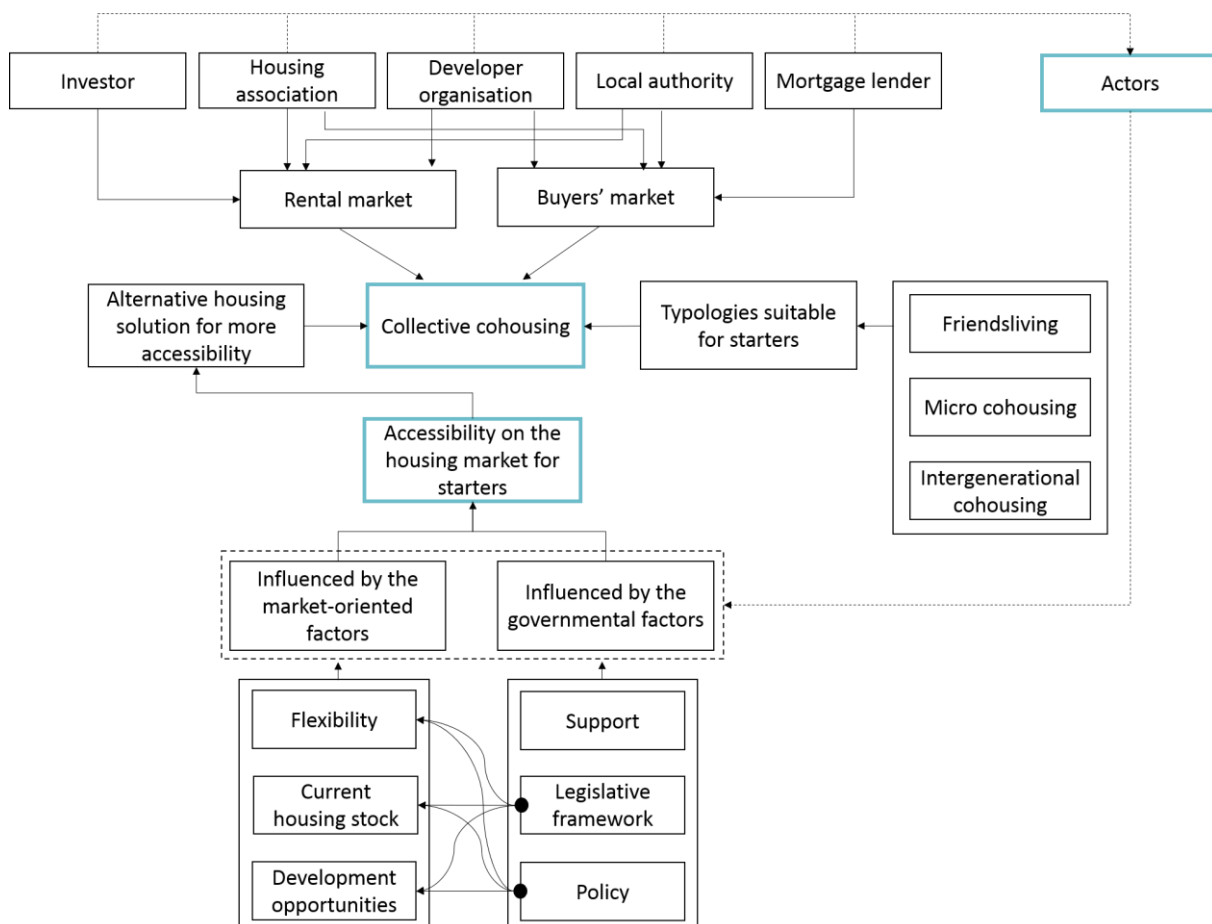


Figure 13: Conceptual model related to the theoretical framework (created by the author)



### 3 | METHODOLOGY

This chapter describes the development of this research. The focus lies on the strategy throughout the research process and the methodologies employed to answer the main question. In addition, this chapter describes the approach used to collect and analyse the data. Finally, the validity and reliability of the research are considered.

#### 3.1 | RESEARCH PHILOSOPHY

According to the literature, the philosophy of science entails an essential assumption concerning how knowledge and reality are considered by a researcher in the research process (Saunders et al., 2013; Creswell & Poth, 2018; van Thiel, 2014). The research philosophy thus forms the basis of research and determines both the methodology adopted and the way in which knowledge is interpreted. To define the research philosophy of this research, the research onion, which is depicted in Appendix G, is used, along with other concepts from the literature. This onion provides insight into the methodological choices made for this study

The research philosophy that best suits the present research is critical theory. When considering the sub-questions of this study, it appears that it is based on subjective perspectives. In addition, the sub-questions are answered with reference to both the theoretical framework and the experiences and views of the actors. These individual experiences and views are considered to reflect reality, meaning that critical theory is an appropriate philosophy. Within this philosophy, the reality related to the epistemology is supposed to be subjective and transactional. This is constituted by interpretations and experiences of subjects who play specific roles. The investigator and the investigated object are assumed to be interactively linked, with the values of the investigator inevitably influencing the inquiry; the findings are therefore value mediated. Through interviews, the investigator and investigated objects are interactively linked in this research. This link also creates a dialogic that relates to the methodology (Guba & Lincoln, 1994; Saunders et al., 2019). Furthermore, the ontology related to this philosophy lies in historical realism, which assumes that reality is shaped by social, political, cultural, economic, ethnic, and gender values. These values are crystallized over time (Guba & Lincoln, 1994; Saunders et al., 2019). In the present research, historical realism can be used to explore the roles of actors in the process of implementing process in the housing market which are historically shaped and crystallized over time. This is due to changes in political preferences resulting in new leading parties, cultural changes, economic deterioration or improvement, and changes in social thinking over time. This means that the implementation process is continually changing in response to new values.

Another important aspect of critical theory is the researcher's critical view on all of the information that is gathered. Thus, during the creation of the theoretical framework, the content of the sources used was critically examined, and additional sources were added where needed. In addition, both the positive and negative sides of the concepts were critically examined. The results are also critically examined, in which the focus is on the underlying interests of each actor and whether the answers obtained are reliable.

#### 3.2 | RESEARCH APPROACH

The methodology that best suits this study is a qualitative research approach. This is because qualitative research takes into account people's perceptions and underlying beliefs. In this research, the perceptions and underlying beliefs of the investigated actors were identified by means of interviews. Furthermore, this research has both a descriptive and an exploratory purpose. The descriptive purpose is based on the theoretical framework and involves investigating and critically examining existing literature related to accessibility, starters, cohousing, and actors. Literature reviews and document analysis were conducted for this purpose. In contrast, the exploratory aspect of this study was more focused on the possibilities and barriers that may arise during the implementation (van Thiel, 2014).

Furthermore, this research adopts an interpretative approach because the main research question is based on subjective implications. These subjective implications arise from the fact that the research question focuses on the possibilities and barriers identified by market-oriented and governmental actors. The empirical–analytical approach is not well-suited to this research because this approach is more focused on quantitative methods. In the empirical–analytical approach, the situation under study is investigated from a distance and in an analytical manner. Furthermore, it is recommended to adopt an objective approach to analysing data while using this approach, whereas qualitative research focuses on subjective data.

Although this research is interpretative and employs a qualitative methodology, which suggests an inductive character, it is in fact abductive. An inductive approach informs empirical research through the development of new theory. However, this research was developed based on various theories before empirical research was conducted. It was mentioned above that the research features a deductive character. However, such a character is usually better suited to the use of quantitative methods, wherein a research approach is developed based on various theories drawn from the literature, with these theories subsequently being investigated (van Thiel, 2014). For this reason, the research has a character that lies in between inductive and deductive. An abductive character assumes that hypotheses are generated based on the initial data. In this research, it is assumed that cohousing, along with its associated types, is a strategy for promoting greater accessibility in the housing market for starters in the urban area of the municipality of Utrecht. This assumption is substantiated based on the theoretical framework. The data that is gathered based on the hypothesis is tested against new data. Through empirical research in the form of interviews, it is determined whether the hypothesis is correct or conflicts with the new observations from the empirical research, which would mean that the hypothesis must be adjusted (Bosch, 2012).

### 3.2.1 | Research strategy

As mentioned above, to operationalise the research, the urban area of the municipality of Utrecht was selected. Each municipality has a specific housing market and vision. Suppose that this research opted to investigate all municipalities; in that case, it would be difficult to draw a reliable conclusion, which would reduce the external validity of the study. Therefore, a case study design with cross-sectional elements is most appropriate for this study. Bryman (2012) and Saunders et al. (2019) confirm this in their research. The case study is not the apparent object of interest; it is instead a case study on a location that serves as a backdrop to the findings. That is the reason for including cross-sectional elements in the strategy. Since the research is based on a qualitative approach, the design is focused on interviews with actors. These interviews were conducted at a single point in time, meaning that they were not repeated several times, which is an essential aspect of a cross-sectional strategy (Bryman, 2012).

There are many case study approaches. The approach of Stake (2006) is best suited to the goals of this research because it is qualitative in nature and features an interpretative approach. Other approaches are more related to post-positivist or pragmatic constructivist thinking, which are better suited to quantitative research (Harrison, Birks, Franklin & Mills, 2017). The interviews conducted for this research were held with actors related to the theoretical framework. These actors have given their opinions on the different housing types of cohousing by indicating whether or not they see potential in these types and what they think are the most crucial possibilities and barriers. This approach is in line with Stake (2006), who indicates that case studies need to be subjective and based on the perceptions and understandings of particular individuals. Furthermore, the selected case(s) need to be relevant to the purpose of the study which makes it possible to facilitate the understanding of the research. As mentioned previously, this case study serves as a backdrop to the findings instead of being the apparent object of interest. The object of interest relies on cohousing as a strategy to create more accessibility for starters, and Utrecht is therefore subordinate to it. It only makes the research more specific and more straightforward to conduct in practice. Thus, it facilitates the understanding of the problem of this research.

As shown in Figure 14, there are also several ways to conduct a case study. This research is descriptive and explorative in nature, as it focuses on investigating whether cohousing can create more accessibility for starters on the housing market and what possibilities and barriers may arise. The case itself focuses on the urban area of the municipality of Utrecht, where accessibility is currently not guaranteed. A single-case design is therefore most appropriate because only one location is investigated. A multiple-case study would only have been suitable if multiple locations been compared, which is not the case in this research. With a single-case design, it becomes possible to determine whether the theoretical framework is correct or alternative explanations are relevant, which is in line with the adductive character (Stake, 2006).

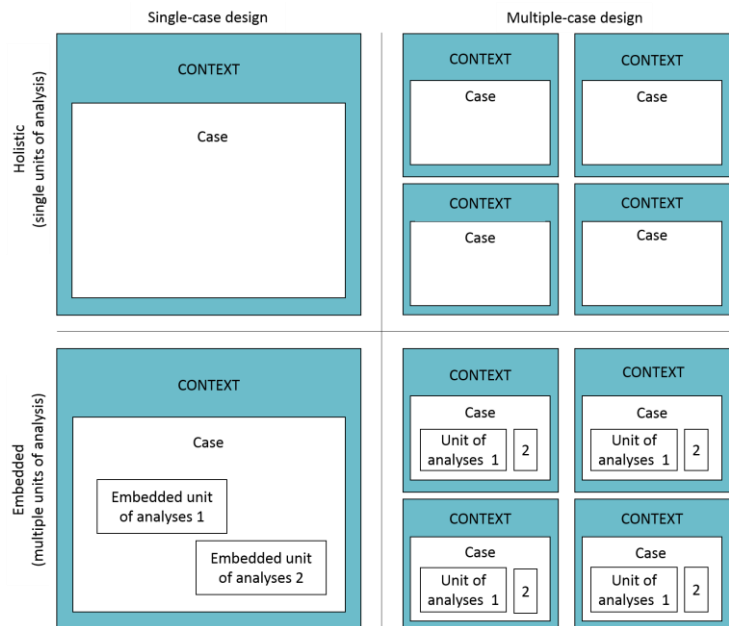


Figure 14: *Single- and multiple-case designs* (created by the author based on Yin, 2003)

This study further concerns a single unit of analysis, also known as holistic approach (Yin, 2003). A holistic case study does not distinguish between different subunits and only analyses a social phenomenon as a whole. Within the established case (i.e. Utrecht), only the urban area of the municipality was examined, with no distinction being made between different sub-regions. It therefore analyses the social phenomenon as a whole. This way of thinking is in line with the approach of Stake (2006), which is based on a single-case design that can be either holistic or embedded.

As mentioned repeatedly above, the urban area of the municipality of Utrecht was selected for the case study. This municipality was chosen based on several criteria. The first criterion is related to geography. As mentioned in the introduction, this research focuses on urban areas within the Netherlands; therefore, the case study needed to be in line with this criterion. This means that many urban areas other than Utrecht would also have been suitable. It is not easy to justify the choice of Utrecht above other regions based solely on this criterion. However, the case study needs to have a problem concerning starters in its housing market. Utrecht satisfies this criterion because it has seen the most substantial increase in house prices in the Netherlands and, together with Amsterdam, it is experiencing the most pronounced housing shortage in the country (RTVUtrecht, 2019). Furthermore, Utrecht is the most representative municipality of the Netherlands. Therefore, the results of this could be easily applied to other urban areas in the Netherlands.

Another criterion is related to the actors. The different actors must all be present within the case study, as, otherwise, the study would not be sufficiently representative. As noted in Section 3.3.1 (sampling of respondents), the purpose is also to find a balance between companies that may or may not have undertaken projects in the case study concerning cohousing. Utrecht, like many other cities in the Netherlands, is an innovative municipality where many developments are currently underway, including projects related to cohousing. Utrecht is also attractive to many actors. Finally, it is crucial in terms of scientific relevance that the research has added value. It is therefore essential to choose a region where little research has been conducted on cohousing, which is the case in Utrecht. Many studies have chosen Amsterdam as a case study, such as those of Groeneveld (2018), Kat (2019), and Griffioen (2019). Utrecht, however, has not been addressed in studies on cohousing. Based on all of these criteria, it can be concluded that Utrecht is the most interesting and suitable municipality for the case study.

### 3.3 | RESEARCH DESIGN

A research design shows the steps to be carried out in scientific research and plays a crucial role in this research. If the steps identified in Figure 15 were not completed in proper order, an unrepresentative conclusion would result. The different steps are based on Mason's (1996) research approach and are part of a case study design with cross-sectional elements. There are four phases, in which phase one is the literature review, which serves as an input for the conceptual framework. The conceptual framework serves as input for the preparation of the interviews, especially when it comes to choosing the respondents (Doorewaard, Kil & Ven, 2015). Phase two concerns the collection of the data. After this phase, the data can be analysed through a coding scheme using different codes. The last phase involves presenting the conclusion of the research.

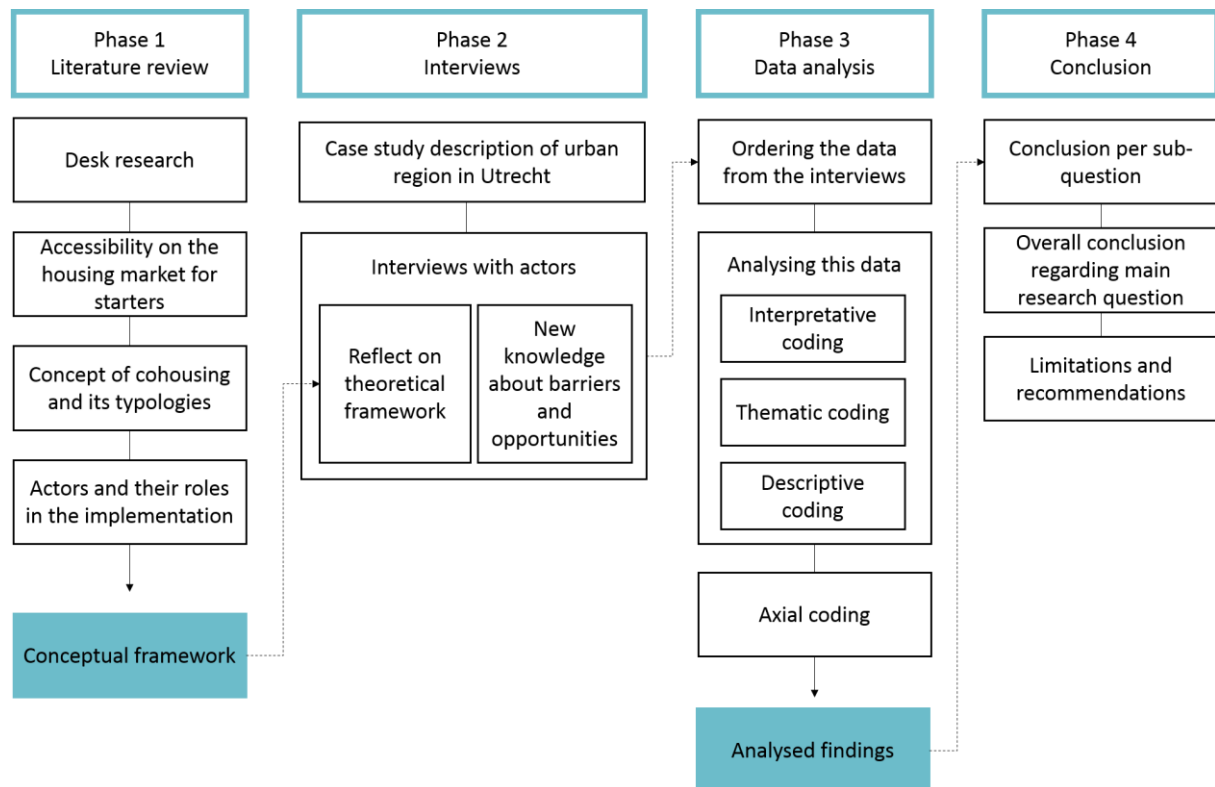


Figure 15: Research design with different phases (created by the author)

### 3.4 | DATA COLLECTION

The data collection step describes how the empirical research was carried out and how the data was collected. As described previously, this research focuses on qualitative data. For this reason, interviews were chosen as the data collection method for empirical research. The interviews conducted for this research were epistolary in nature, as opposed to face-to-face interviews. Epistolary refers to one-to-one interviews that are mediated by technology (Debenham, 2007; van Thiel, 2014). Unfortunately, due to the COVID-19 pandemic, it was not possible to physically interview the participants on location, which is the usual approach. Therefore, the choice was made to conduct the interviews through video calls. Usually, the questions to be asked in the epistolary interviews in this context are provided to the respondent in advance so that respondents can already give answers, and these answers are discussed online. However, for this research, it was decided to only conduct the interviews via video call and to not provide the interview questions to the respondents beforehand. This decision was made because the interviewer explained the meaning of certain concepts during the interviews, such as the definition of cohousing and its associated types. It would therefore not have been appropriate to send the interview questions in advance.

Furthermore, the interviews were semi-structured, which means that the researcher has a manual or topic list that is used as a guideline during the interviews. Due to the deductive character of this research, these topics were based on the operationalisation of the variables derived from the theory (van Thiel, 2014). In contrast to a structured interview, is it possible to deviate from the interview questions in a semi-structured interview. This creates room for the interviewees to share their opinions and allows the interviewer to be flexible and respond to the situation. Furthermore, if doing so is considered to add value, detailed questions could be asked (Verhoeven, 2014; Saunders et al., 2019). This also forms another reason why the interview was not given in advance because it becomes more challenging to respond to the idea of the interviewee. Furthermore, the interview guidelines are based on the structure of the theoretical framework to avoid irrelevant questions.

### 3.4.1 | Sampling of respondents

To obtain the most realistic results, it is essential to interview a wide variety of respondents (Miles & Huberman, 1994). Therefore, interviews were held with several actors, who may or may not have been aware of the concept of cohousing. This approach made it possible to obtain insights into the different opportunities and barriers related to the implementation of the cohousing concept. The respondents were chosen based on the literature and include developer organisations, housing associations, local authorities, mortgage lenders, and investors. Respondents representative of each group of actors were identified based on connections the researcher formed during the internship and by approaching various companies directly. However, people working in the field may have biases when evaluating only their own work, which may influence the answers they provide during interviews.

Certain criteria were identified to identify the most suitable and important respondents to be interviewed. These criteria consist of location, current projects, appropriate target group, and relevance of the company. Because this research is focused on the urban area of the municipality of Utrecht, the chosen respondents must be located in Utrecht or have undertaken projects in this area at the time of the interviews. The researcher sought to strike a balance between interviewing companies that had previously engaged with the cohousing concept or had been involved in projects related to starters and companies whose involvement with the concept was unclear or unknown. Finally, the relevance of each company to this study was determined. For example, large companies are quite interesting due to their broader outlook and greater range. However, it was also considered worthwhile to find respondents from companies that are more locally oriented because they might be more familiar with the region being investigated. Finally, based on these criteria, the researcher attempted to ensure variety in the sample in terms of interviewing larger and smaller companies.

As noted previously, it was considered important to find multiple respondents per type of actor. For this reason, it was estimated that it would be preferable to interview between two to four respondents per type of actor. Samples ranging from 12 to 20 respondents are standard in qualitative research. However, within qualitative research, numbers are not the most important factor; it is more important to continue with new input from interviews until saturation occurs (Verhoeven, 2014). Figure 16 summarizes the respondents. A total of 13 interviews were conducted with 15 respondents. Some of the respondents indicated that they preferred to remain anonymous. It was therefore decided to not identify any of the companies by their actual names.

Investor	Company: A Function: Development manager	Company: B Function: Acquisition manager	Company: C Function: Director & trainee	
Housing association	Company: A Function: Strategic advisor	Company: B Function: Manager special housing concepts		
Developer organisation	Company: A Function: Market analyst	Company: B Function: Region manager	Company: C Function: Director & director	Company: D Function: Concept developer
Local authority	Company: A Function: Senior policy advisor	Company: B Function: Project manager		Figure 16: <i>Overview of respondents</i> (created by the author)
Mortgage lender	Company: A Function: Financial advisor	Company: B Function: Coordinator mortgages		

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The first respondent, investor A, works for a company that is not based in Utrecht, but they do invest and develop in both the rental and buyers' markets in this municipality. This company works for insurers, other investors, and pension funds, which means that they are dependent on other parties. The second investor, B, is one of the largest companies in the Netherlands, and they invest on behalf of pension funds. They are also dependent on other parties. This company is not located in Utrecht, but they do invest in the rental market in this area. For them, the affordability of houses is of critical importance. The last investor, C, develops and invests in rental properties, both in Amsterdam and Utrecht. Their focus lies on affordable housing.

Housing association A only operates in Utrecht and surroundings, making them a local expert. They focus on social rental houses and do not invest much in the middle segment. This also applies to housing association B, as they are also located in Utrecht and are local experts. According to housing associations B, they are the largest housing provider in Utrecht and have a differentiated housing supply that includes both smaller and larger homes. They focus mainly on social rental properties and less on the middle segment. In addition to the housing associations, there are also developers. Developer A is located in Utrecht and mainly focuses on the Randstad. They are active in both the rental and buyers' markets, with their focus being on developing in the higher segment. Like developer A, the second developer, B, is also located in Utrecht. They primarily focus on housing development in Utrecht. They develop at their own risk, which means that they do not depend on other companies. Developer C is not located in Utrecht, but they are engaging in development projects in the city, one example of which is 'Het Platform'. They focus on difficult locations and generally developing mixed housing. Furthermore, they are active in both the rental and buyers' markets. The last developer, D, focuses on developing and investing for starters. The reason they focus on starters is that they are a subsidiary of SSH, which is a housing association for students located in Utrecht. The focus of developer D is mainly on social rental houses and is limited to middle segment houses.

Furthermore, concerning the local authority, respondents from both the municipality and province were interviewed. The province stimulates the municipality to develop houses and only sets quantitative requirements concerning the number of houses. In contrast, the municipality has various tasks, such as regulating the middle rent segment and formulating a housing vision. They also stimulate residents and market parties. The municipality itself does not implement an active land policy. Mortgage lenders represent the final type of actor; the focus of the lenders interviewed is on granting loans, and both lenders provide mortgages throughout the Netherlands.

### 3.4.2 | Setting up interviews

It was decided to prepare five different interview guides because the relevance of each type of actor differed. The overarching goal of the interviews was to gain an impression of why certain actors see or do not see a future for the different housing types of cohousing for starters in the urban area of the municipality of Utrecht. This goal was achieved by considering both the possibilities and the barriers associated with the different types as identified by the respondents. The interview questions were therefore composed with the interview goal and the findings presented in the theoretical framework in mind. Although some of the questions differed per actor, the overarching set-up begins with a general introduction that is adequate for all the interview guides. This introduction presents the researcher, the research, the purpose of the interview, expectations during the interview, and the ethical guidelines informing the interview; it also allows the interviewees to present themselves. The interview questions follow the introduction and can be found in Appendix H. Because these interviews differ, it is not possible to explain the structure unambiguously. However, the broad structure starts with questions concerning the problem faced by starters on the housing market in Utrecht. Thereafter, the actors themselves and the roles they play within the housing market are discussed. Questions are then asked about the concept of cohousing and the different housing types thereof. Finally, the interviews close with questions concerning the main possibilities and barriers. Before the data obtained from the interviews could be analysed, it needed to be transcribed.



To ensure that the interviewees were not influenced in advance by the theoretical framework, it was decided to explain the concept of cohousing and its associated types only during the interviews. This approach allowed the interviewees to create their own impression of the subject without being influenced by the research findings.

### 3.4.3 | Ethical guidelines for the interviews

When conducting interviews, it is important to bear ethical considerations in mind to ensure that the respondents are treated with respect and to allow them to feel that they can speak openly and honestly. When conducting scientific research with persons as participants, the researcher is obliged to adhere to several ethical rules. These rules are designed to protect the rights of participants and consist of providing complete information, written permission, debriefing, and confidentiality (Sales & Folkman, 2000). In the context of this study, complete information refers to informing the participant that the information provided during the interview will be used to analyse the theoretical framework. It is further noted that the author's supervisors will only see the transcripts of the interviews. Thereafter, the rule concerning confidentiality applies, with the researcher indicating to the participant that the information provided will be treated confidentially. If the respondent prefers, their name will not be mentioned in the research. A respondent's name will only be shared with an external party should the researcher obtain the respondent's permission to do so. Furthermore, the interviewee was also told that he/she could indicate not to answer a question. The third rule, obtaining written permission, concerns obtaining the participant's permission to use their name in the research, which is related to the rules concerning ensuring confidentiality and obtaining permission to record interviews (Sales & Folkman, 2000). This permission is asked prior to the interview. By recording the interview, bias on uneven information is reduced and it makes it easier for the researcher to transcribe the interview. The last rule concerns debriefing. At the end of the interview, the important points noted above are repeated. Subsequently, the respondent is asked whether they would like to read the transcribed interview before it is used and whether they wish to view the results when the research is completed.

### 3.5 | DATA ANALYSIS

After the data is collected, it must be ordered. To be able to order the data, it must be sorted systematically. The first phase is called data reduction, which provides insights concerning which data will be relevant to the research and which can be disregarded. After the data has been selected, the analysis of the interviews starts. According to the description provided by van Thiel (2014, p. 156), the analysis starts with the division of the data into smaller units, after which it is labelled with different codes. As mentioned previously, this research is deductive in nature, which means that it follows the operationalisation guidelines described previously. The output of the interviews is analysed in the same way to ensure that they are treated as objectively as possible.

Several types of codes are used for analysing the data. It should be noted that coding is not the same as analysis. Coding is part of the analysis process because it prompts the researcher to think about the data; however, the data still needs to be interpreted. Thus, coding is only a tool to do this systematically and transparently (Bryman, 2012). First, the transcribed interviews are descriptively coded. All 13 interviews were analysed separately, during which terms or statements that have the potential to contribute to answering the main research question are coded. This coding is done using, among other methods, open coding and in vivo coding. A general coding scheme, which is shown in Appendix I, is used for each transcribed interview. The data from different texts can, therefore, be compared easily because the codes used for each text are almost the same. Using this approach, statements made by different people of divergent backgrounds can be compared (Bryman, 2012). This static method of analysis ensures that this research is highly transparent.

Furthermore, it must be ensured that the codes do not overlap. If this is the case, they must be combined, because if specific data fits into different codes, a respondent may unconsciously connect these two. Therefore, it was determined per interview transcription whether similar codes could be merged. Subsequently, the transcribed interviews, along with the codes, were merged into Atlast.ti.8, which made it possible to conduct the analytical coding. Diverse groups are created based on thematic codes. These groups are related to the sub-questions of the research and consist of accessibility, cohousing, starters, and actors. They were chosen because they best encompass the different codes. Within these groups, there are again various subgroups, which are shown in Appendix I. The codes are further categorised. First, the main code group is mentioned, followed by a subcategory if necessary and, finally, the code name. The codes belonging to different code groups are all in the same colour. Axial coding is subsequently used to reflect on the patterns among the different codes and to answer the main research question (van Thiel, 2014). Several networks are formed, in which the most crucial codes are linked to the main subjects and concern all subgroups. Links are established among the various codes to identify different connections.

### 3.6| VALIDITY AND RELIABILITY

The quality of information and results is paramount when conducting research. The quality expresses itself in terms of reliability and validity (Verhoeven, 2014).

#### 3.6.1| Validity

Internal validity is increased by using multiple current and relevant scientific sources to ensure that the information used is substantiated and confirmed. This minimizes the possibility of working with incorrect and irrelevant sources. Furthermore, the use of peer evaluation, which involves scheduling multiple meetings with other researchers to evaluate and discuss one's progress, can lead to new ways of thinking and may yield new insights. This eventually improves the internal validity and increases the reliability of a study. The interviews are structurally examined, which makes it possible for the researcher to think about the relationships among specific codes. This creates internal validity (van Thiel, 2014).

In addition to internal validity, external validity must also be ensured. External validity is increased by ensuring the generalisability of a study. Even though the present research is focused on one municipality in the Netherlands, it is possible to apply the results on a broader scale to almost every urban region in the Netherlands. The broader view makes the findings of this study more generalisable. As a result, the potential criticism that a case study may not be sufficiently representative can be rejected (Fisher, 2010). Furthermore, the research area is well defined, which also creates greater validity. While this research has broad external validity, some elements result in weaker external validity. The approach used to analyse data, particularly in terms of the coding scheme used, can prove a disadvantage, as the text becomes fragmented, and its deeper meaning may be lost (Bryman, 2012). However, the researcher has described the deeper meaning of several codes in the results, meaning that this disadvantage does not apply.

Furthermore, interpretative research involves studying the perceptions of people included in a study, which makes it difficult to determine whether the knowledge acquired will be generally valid. A limited number of units in case studies could endanger the validity (van Thiel, 2014). However, the validity of a study can be supported by interviewing several actors, as the observations of one participant can be compared with those of the others.



### 3.6.2| Reliability

The reliability of qualitative research is far less clear-cut than that of quantitative research because the analysis of qualitative data generally occurs in the researcher's mind. Consistency is more difficult to achieve because, under similar circumstances, the same measurement should lead to similar results. This study is based on qualitative research and therefore on the different actors' interpretations of accessibility problem on the housing market in the municipality of Utrecht and their perception of the housing types related to cohousing to solve this problem. This makes it difficult to achieve consistency because other respondents could have different thoughts about the same subject (van Thiel, 2014; Tanveer et al., 2008). However, the input of the interview questions was kept the same for the different respondents, meaning that every interviewee was given the same input concerning particular subject. This approach is referred to as the standardisation of methods, and its application ultimately increases the reliability and thus the consistency of research.

Furthermore, sources play a significant role in determining the reliability of research. This means that the sources used need to be reliable, relevant, and current. Therefore, the sources used are evaluated in terms of their topicality, relevance, credibility, and reliability (Verhoeven, 2014). This is done using multiple sources that describe the same information and by considering recognised scientific literature.

## 4| CASE STUDY DESCRIPTION

This chapter provides insights into the current situation within the case study. These insights are based on, among others, the theory of accessibility. First, the geography of Utrecht is described. Thereafter, the housing market of the municipality in Utrecht is explained and, finally, the housing policy of Utrecht is reviewed.

### 4.1| GEOGRAPHY

To demarcate this research, it was decided to focus only on the municipality of Utrecht. The municipality is shown in Figure 17 in light blue. Utrecht is densely populated and centrally located in the Netherlands. In 2020, almost 360,000 individuals inhabited this municipality. Most inhabitants fall in the age category of between 25 and 45 years. Furthermore, the average income of the inhabitants of the municipality is around €28,000 per year (Gemeente Utrecht, 2020). The average age and income are in line with the scope of the research given its focus on starters.

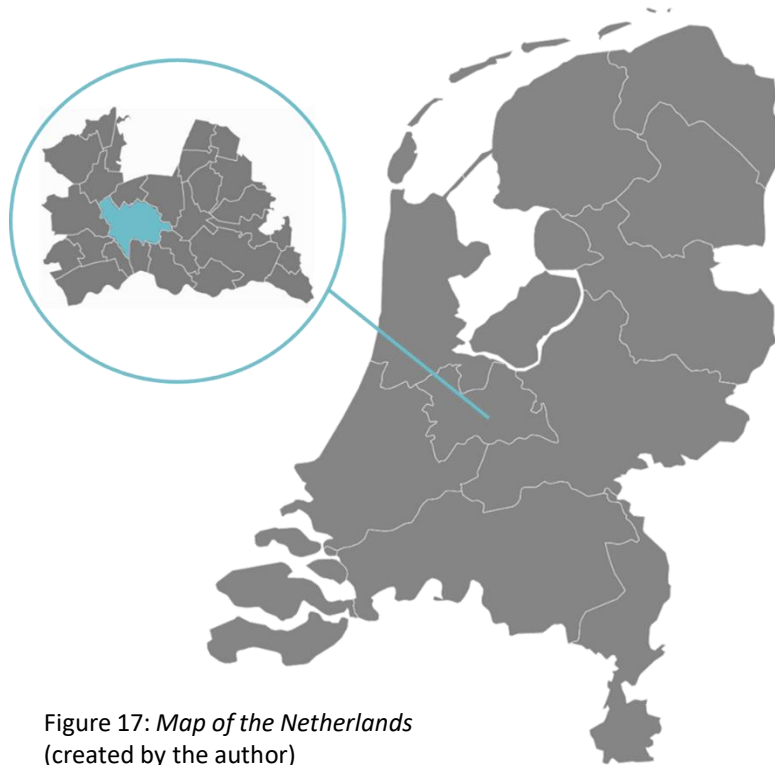


Figure 17: Map of the Netherlands (created by the author)

### 4.2| HOUSING MARKET IN THE MUNICIPALITY OF UTRECHT

In addition to the factors discussed above, it is important to specifically consider the housing market in the municipality of Utrecht. The urban area consists of almost 155,000 houses, and its characteristics are shown in Figure 18. First, the Figure shows the ownership situation. Ownership is evenly divided between owner-occupied and rental houses. Within the rental sector, a distinction is made between houses owned by housing corporations and those owned by private individuals or investors. The second Figure deals with habitation, referring to the number of houses that are occupied by at least one person. The last Figure concerns the housing type. There are more multi-family houses, including apartments, in Utrecht than single-family homes (Gemeente Utrecht, 2020). However, the difference is small.

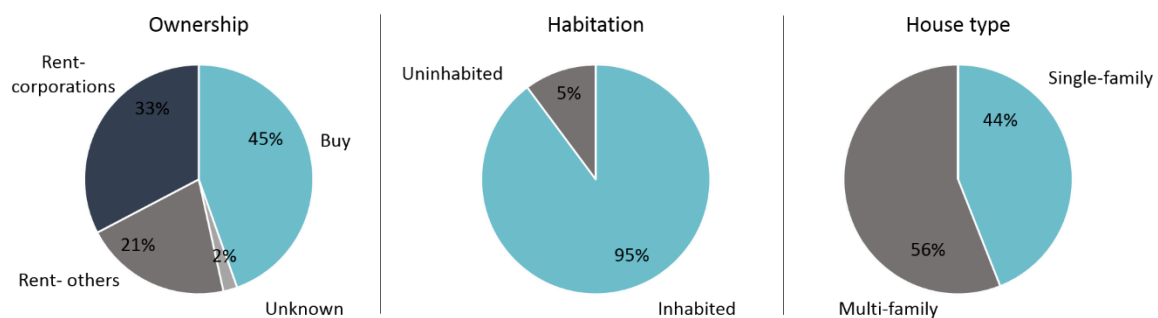


Figure 18: Characteristics of houses in Utrecht (created by the author based on Gemeente Utrecht, 2020)

According to the literature, there is an overall shortage of between approximately 500 and 1,500 homes in the municipality of Utrecht per year. This shortage is primarily in the rental market, which consists of both social rental houses (with a maximum rent of €710) and middle segment rental houses (with a minimum rent of €710 and a maximum of €950). These middle segment rental houses are subject to increasing demand. However, as shown in Figure 18, the houses in the middle segment owned by private individuals or investors constitute only 21% of the homes in the municipality of Utrecht. Therefore, the housing requirements, especially those of starters, cannot be fulfilled. Furthermore, house prices on the buyers' market have risen continuously in Utrecht, which makes the housing market less favourable for starters. The accessibility of the housing market has also deteriorated due to stricter mortgage rules and the reduced flexibility on the labour market. The inaccessible housing market raises thresholds for starters (Gemeente Utrecht, 2018).

Furthermore, the characteristics of the housing market in Utrecht show that the housing stock mostly consists of traditional homes and shared homes are often reserved for students. Flexibility of housing options in the existing housing stock, therefore, hardly occurs. Nevertheless, more houses are currently being built using innovative living concepts. Thus, while the municipality of Utrecht does not offer much flexibility in terms of different housing options, it is slowly gaining momentum.

#### 4.2.1 | Current housing developments

More newly build homes were licensed in Utrecht in 2019 than in any other municipality in the Netherlands. In 2019, the number of newly build homes was 3,342, of which 68% are rental homes (CBS, 2020). However, owner-occupied houses are quite expensive, with their prices starting at €300,000. This expensive buyers' market does not provide accessibility for starters. Furthermore, in 2019, the average sale price of an existing owner-occupied home in Utrecht was €380,000 (CBS, 2020).

Within the municipality of Utrecht, several projects relating to starters and the concept of cohousing have been completed. An example is Change=, which is a community concept for young working people. The independent studios in Change= range in size from 30 m<sup>2</sup> up to 72 m<sup>2</sup> and are combined with shared facilities. These studios are located in large cities, with public transport nearby. Rent begins at €581 per month. However, additional service costs are charged in addition to the rental price, which makes it less affordable. Change= is an example of micro cohousing. Another example is Platform, which also consists of micro apartments. The rent for one of these apartments is between €880 and €1,475. However, two people are allowed to live in an apartment/studio, making it more affordable. The living space varies from 48 m<sup>2</sup> to 91 m<sup>2</sup>. Commercial spaces are also found in the building. Although Platform is aimed at young people, it is more expensive than a traditional house. Figure 19 presents photographs depicting both projects. No specific projects focused on friends living were identified in the literature review. It appears that this concept has not yet been applied on a large scale. However, several private investors offer friends living accommodations on a small scale. According to Vereniging Gemeenschappelijk Wonen (2019), 15 projects related to intergenerational cohousing are situated in Utrecht. These projects emerged from resident-led cohousing, which means that they were set up by group of individuals. No large-scale projects directed by developers could be identified based on the literature review.



Figure 19: Images of the two projects (created by the author based on Change=, n.d. & Platform, n.d.)

### 4.3 | HOUSING POLICY IN THE MUNICIPALITY OF UTRECHT

The literature indicates that the municipality of Utrecht offers several subsidy options. However, the only subsidy aimed at starters is related to the addition of housing. This involves receiving a subsidy when existing buildings are converted into independent living spaces for starters (Gemeente Utrecht, n.d.). From the perspective of providing support, the municipality of Utrecht does not offer any subsidies for starters themselves.

Zooming in on the influencing factors related to the legislative framework, it is unclear whether zoning plans within the municipality of Utrecht support different types of cohousing. This is because each zoning plan features different rules, and thus no overarching answer could be identified. Furthermore, the municipality of Utrecht has implemented rules concerning a house being shared by multiple households. According to Dutch law, up to two households are allowed to share a house. The rules determining whether additional households can share a house are regulated by local ordinances, meaning that the rules differ by municipality. In Utrecht, the rules are most restrictive, and not many permits are granted for sharing a house. Various zoning plans in Utrecht also feature a prohibition on converting an independent living space into non-self-contained living spaces (Gemeente Utrecht, 2019).

In its housing vision, Utrecht describes itself as a central location with a growing economy, diversity in terms of living environments, good access to roads or public transportation, and many job opportunities. These advantages indicate that Utrecht is an excellent place in which to live (Gemeente Utrecht, 2010). The most important goals emerging from the housing vision are (1) addressing a shortage of appropriate owner-occupied homes and (2) ensuring an adequate supply of houses for starters. There is an urgent need for appropriate management of houses falling in the price range of €600 to €1,000 per month and the affordable buying segment. The vision indicates that the municipality focuses on the middle rental segment and affordable owner-occupied homes. The vision further indicates that the municipality seeks to promote new housing concepts and to eliminate the barriers on the housing market (Gemeente Utrecht, 2019<sup>1</sup>). The municipality of Utrecht is searching for innovative housing concepts such as cohousing. In addition to the housing vision, the municipality has also formulated a specific action plan for the middle rental segment. By means of this action plan, the municipality is attempting to establish rules related to create more middle rent houses using an anterior agreement (Gemeente Utrecht, 2017).

Furthermore, it can be seen that the current planning capacity up to 2030 is 5% greater than the average predicted increase in the housing demand, which means that the housing shortage is likely to decrease slightly. However, it is questionable whether full planning capacity could be achieved due to the scarcity of materials and labour. According to the literature, an excess of 30% in terms of planning capacity is reasonable in terms of being able to compensate for delays or plan failures. However, the municipality of Utrecht has not yet planned for such an excess (Gemeente Utrecht, n.d.<sup>1</sup>). It can therefore be noted that the planning capacity in the municipality of Utrecht is not sufficient to provide complete accessibility for starters. It is only when the system behind the planning capacity functions correctly that it can be concluded that the planning capacity is sufficient. However, the province and municipality of Utrecht are rapidly increasing their planning capacity. They have identified locations for 108,500 homes on the outskirts of Utrecht and strive to release more locations for building new homes to address the accessibility problems encountered by starters (Provincie Utrecht, 2020).

From the above paragraphs, it can be concluded that the housing market within the municipality of Utrecht is currently not accessible for starters. Nevertheless, developers are increasingly focused on improving the accessibility for starters by realizing innovative ideas. Furthermore, the municipality is currently investing in the target group by, among other approaches, seeking innovative housing solutions. However, the municipality has not yet made significant progress in terms of implementation. Furthermore, the rules and politics remain fairly general and do not offer details regarding specific housing types.

## 5 | RESULTS & ANALYSIS

In this chapter, the results of the thirteen interviews are described. The results are analysed by using the sub-questions, conceptual model, and a general code scheme. This coding scheme is situated in Appendix I. Based on the code tree, various network trees have been made whereby connections are situated between different codes and are shown in Appendix J. To perform the most objective analysis as possible, the backgrounds and any prior knowledge of these respondents were taken into account. The answers of respondents given in the interviews were critically examined in combination with their background and prior knowledge. A scheme has made to show the interplay between the background and prior knowledge of different respondents. This scheme is presented in Appendix K. Furthermore, the results in this chapter are simultaneously analysed and compared with the literature.

### 5.1 | INACCESSIBILITY IN THE HOUSING MARKET IS A PROBLEM FOR STARTERS

The interviews unanimous revealed that there is indeed a problem in the housing market of the municipality of Utrecht, in terms of accessibility for starters. This problem has existed already for years. According to almost every respondent, the leading cause of this problem lies in the current housing stock. On the existing housing stock, there is a shortage of houses mainly in the middle segment and social rental houses. This problem is caused because too little has been built in recent years. Besides, it was mainly indicated by the developers that the flow of social rental houses is inadequate. The people who would like to move to another house to take a step in their living career do not have the opportunity to do so. Therefore, they are continuing to live in cheaper houses because there are not enough middle segment rental houses and the buyers' market has become prohibitive. As a result, starters cannot move to a social rental house and the queues can run up to 10 years in Utrecht. When zooming in on the prohibitive buyers' market, a developer mentioned, among other things, that there are a lot of buyers' houses being built recently. Nevertheless, these are generally more expensive, making them unreachable for starters. In addition to the prohibitive buyers' market, looking at the financial resources, it is also difficult for starters to find a suitable mortgage. Thus, the existing housing stock is not sufficient to provide a house for a starter. Further, the new-build houses are often prohibitively, which means that the current housing market does no longer meets the preferences of the starters partly due to the few different housing options. This results in a mismatch between the demand from starters and the supply on the housing market in Utrecht, which will drive the starters out of the city. The above findings are consistent with the literature. As the model of Mekawy (2014) indicated: accessibility is determined by, among others, the current housing stock which consists of both the existing houses and new-build houses. Hardly any influence can be exerted on the existing housing market. Most of the influences can be exerted on the new-build housing market because in this market it is possible to build for a specific target group (Mekawy, 2014). However, as mentioned, this is currently not the case which creates an inaccessible housing market for starters.

Furthermore, it is striking from the interviews that the developers and an investor indicate high construction costs also a factor in the cause of the problem. A developer indicated that *"high constructions costs are the biggest problem at the moment"*. High construction costs cause developers to spend less money for a piece of land. Although the other respondents did not mention anything about it, it is still one of the most crucial factors that can influence accessibility. It is understandable that mainly the developer contributed this factor because they are most affected by the construction costs and are highly dependent on investors. With the current construction costs, which have increased enormously in recent years, the developer is sometimes forced to find at least a mix or invest in more profitable housing types. These housing types are mostly more expensive for starters. Since the construction costs are high, developers in the rental market rely on an investor who offers the most. However, the investor will only offer more if a higher rent can be requested. As a result, the new-build liberalised rental houses are often placed higher in terms of rent. The higher rent makes it inaccessible for starters. Thus, this is a new phenomenon for the research that can be added to Mekawy's model.

Next to the market-oriented factors and civil society factors, mentioned above, the governmental-oriented factors are also important in this study. As has emerged in the literature, the potential for development depends on governmental politics (Curran & Wake, 2008). This phenomenon was several times reflected in the interviews, whereby development projects have often seen as laborious starts. An investor said *“looking at the hard planning capacity of the municipality and the difficulty with which projects in Utrecht get off the ground, we as a sector are concerned, because other cities in the Netherlands have faster and better processes”*. Another actor, concerning the local authority, indicated that *“the tempo is not fast enough”*. The focus in Utrecht lies in urban area development, which is very difficult and much slower than in rural areas, according to a housing association.

In addition to the development opportunities, it is repeatedly stated that politics is also a factor in the lack of good accessibility for starters in Utrecht. The municipality of Utrecht has few locations in her portfolio, which means that they implement a passive land policy. This results in a low hard planning capacity. The land they own is generally located outside the city centre while it is precisely in the city centre where visions direct its development. This means that a developer is depending on a private landowner who often charges a high price making it more difficult to create affordable houses. However, it needs to be taken into account that these statements often came from actors other than the local authority itself which could, therefore, give a distorted picture.

Several respondents show that the problem with its associated factors is difficult to solve on a short term. It is indicated, for example, that development is often a long-time process and especially within the urban area of Utrecht. These are, among other things, processes drawn up from the municipality such as permits and the zoning plan. Besides, building in the urban area of Utrecht, as mentioned above, also creates barriers. A housing association said that *“within an urban area, developers must deal with the existing functions..., there are often already many buildings..., and plots are sometimes fragmented”*. This makes the acquisition more expensive and time-consuming, which means that less rapidly appropriate houses can be built for starters. Although it was mentioned only by the housing association it is worth mentioning to understand better why these processes are time-consuming. The question that arises is why there is not build within the outside area of Utrecht if the processes can then be accelerated. The interviews show that this is a problematic and political issue partly due to various interest, such as the preservation of the green area in Utrecht. Since the research only focuses on the urban area of the municipality of Utrecht, it is not further discussed. However, it is undoubtedly an important observation because developers are, therefore dependent on developments within the urban area. One of the developers that correspond to the difficulty to solve this problem stated:

Developer: *“Yes and that problem will remain for the time being, you know, despite the crisis such a shortage has already been built up, also because development projects got off the ground with difficulty, we must not forget that”*.

## 5.2 | COHOUSING AS A STRATEGY TO CREATE MORE ACCESSIBILITY

The questions in the interviews were based on the three housing types that emerged from the theoretical framework. However, other forms of cohousing were also mentioned several times by the respondents. For example, housing cooperatives (woon coöperatie) and kangaroo houses were designated as other forms. Since these forms are aimed at cooperative and collaborative cohousing they are not further discussed in the results because the research has delimited itself to collective cohousing. Nevertheless, worth mentioning was a statement made by an investor about another form of cohousing.

Investor: *“You have elderly people who live on their own and they often have a house with four rooms, why not put a starter with an older person, maybe that is very clever. But everyone says that is not possible, why not? Because that is simply not established and people are not enthusiastic about it”*.



The statement illustrates why certain forms may or may not be successful even though they can certainly be a solution for accessibility. The success factor depends on people's willingness to put their habits aside and discover new possibilities.

From the interviews, it is seen that half of the respondents indicated to know friends living. For example, an investor and the housing associations mentioned *"I known friends living"*. The other half did not indicate whether or not they knew friends living. With type two, micro cohousing, mainly the developers and investors knew it. The housing association indicated that they did not know this type. However, on the other hand, they knew the concept of micro houses. Intergenerational cohousing was the type that most respondents did not know beforehand. For example, two investors stated *"No, I do not know that last type"*. The interviews, furthermore, show that no project has yet been started for this type, which corresponds to each other. For micro cohousing, it emerged that only the developers have started projects with it. The projects were focused on rental studios and mainly situated in Amsterdam. Here, too, the prior knowledge corresponds to the actors who have started a project in micro cohousing. Projects have also been started with friends living; nonetheless, these are generally small scale projects. The findings above show that for these current projects, the organisation does not have to adapt its structure destructively. However, these questions did not specifically come back in every interview, which means that no value can be drawn from the answers here. Nevertheless, it is possible to conclude based on this knowledge, whether their knowledge influenced respondents who knew the type and started a project already. This allows the researcher to create a critical reflection on the results.

Related to the prior knowledge and current projects is the question about the degree of potency on both the rental and buyers' markets. Since most of the actors are mainly active in the rental market, the mortgage lenders have mentioned the potency on buyers' market almost exclusively. Nevertheless, it remains representative since mortgage lenders are one of the most crucial actors in the buyers' market. When zooming in on the buyers' market, it is seen that the most potency according to the actors lies in friends living. However, this potency was also questionable because, as the mortgage lender said *"it depends on the design whether or not it is successful"*. In addition, a mortgage lender indicated that it is a good opportunity to create accessibility because the houses are sold in smaller parts so that more people can live in one house. Additionally, it is striking that only an investor saw potential in micro cohousing while they are active in the rental market. The reason that other actors did not see or mentioned any potency in micro cohousing on the buyers' market was mainly because no particular business model had been set up within the organisation. It was furthermore still too unknown and it is not easy to sell these studios with common areas. Only one statement has been made about intergenerational cohousing on the buyers' market and is therefore not representative enough to draw conclusions on it. However, what can be said is that it could have a causal relationship with the aforementioned prior knowledge and current projects.

Many more answers emerged regarding the rental market. All developers saw potency in friends living. Besides, several investors and a housing association also indicated that they were interested in this housing type. They mentioned that it is a rental product and that the potential arises due to the growing number of one-person households. In micro cohousing, the developers, investors, housing associations, mortgage lender, and local authority saw potency on the rental market. This is partly because the starter has private space with communal facilities which is a preference of many starters. Not much is devoted to the last housing type. Only five out of thirteen respondents indicate whether or not they see potential in intergenerational cohousing and this may be due to the type's unfamiliarity. Nevertheless, the respondents who saw potency are very divided among the different actors. The main reason for this potency lies in the diversity of target groups and the social aspect. Here, too, you may wonder whether these actors stuck to their known paths or whether they thought further about all the real possibilities on both the rental and buyers' markets. However, it is memorable that the prior knowledge and current projects of an actor influence the potency of a particular housing type.



### 5.2.1 | Barriers on both the rental and buyers' markets

Even though the actors were not always aware of the different housing types many barriers and possibilities emerged. Some of these have already mentioned above and are further discussed in this section. Here, too, a line can be seen between the number of respondents who may or may not know a particular type and the number of barriers and possibilities. The codes that belong together are grouped according to the different dimensions. The dimensions did not emerge from the interview themselves. However, the researcher linked these dimensions to the codes whereby also new dimensions have arisen. For friends living, micro cohousing, and intergenerational cohousing, it appeared that most barriers are located in the organisational dimension. The barriers per type are discussed in more detail below.

#### Friends living

The main barrier within the organisational dimension concerns manageability for both the rental and buyers' markets. Looking at the rental market the respondents indicate that it is organisationally tricky concerning the rental agreements and management. The housing associations, therefore, indicate that they do not feel much for friends living in the rental market. This has to do with the fact that friends living does not have a central tenant who is liable, but everyone has their own contract within a rental unit. This rental agreement creates more risks and organisational work. The rental contract can, therefore, be seen as a barrier that falls under manageability. Due to the effort that must be put in this housing type, it is more likely that investors will drop out as this actor is responsible for the management. Friends living is, therefore, a more complicated model for investors. Striking here is that this does not correspond with the theoretical framework, since it is indicated that the renters are all responsible for paying the rent. When one of the respondent's leaves the other can stay, but they need to look for a new candidate (Camp, 2017). However, it is not only the investor for whom it is a difficult model but also for other actors. The actors need a complete changeover of their management within the organisation, which is a stumbling block. An investor stated:

*Investor: "I believe in the model, it only means if you are going to do that, then you have to set up your organisation and building according to the principles of friends living. That simply means that you have a different flow, and the houses are used differently. I do believe in the model, but you have to focus on the model and make a special program for it. We have not yet opted for that".*

In addition to manageability, vacancy risk is also seen as a barrier within the organisational dimension. This is caused by the fact that friends living is more aimed at one target group and generally gives more risk of vacancy. If the target group no longer has a demand for this type, it will become more challenging to sell the homes, according to an investor and housing association. However, this is a statement only made by two respondents and other respondents weather the statement within the possibilities. Nonetheless, it is essential to mention this barrier because it contains some truth. The vacancy risk also leads to the indication that there is a risk in the area of exit possibilities because it is more challenging to rent these houses to one family, as these consist of high rental costs.

When zooming in on the buyers' market, the mortgage lenders indicate that it is difficult to manage when starters are going to buy a house with friends and someone wants to leave. A housing association posed the question *"how should you organise this and what will you do as a bank when one starter can no longer pay for the house?"* It means that everyone within friends living is jointly and severally liable, which ensures many uncertainties on the buyers' market and gives a high degree of dependence. This barrier is in line with the literature related to friends living. According to the literature, it is also riskier for the starters themselves because they are attached to a loan and cannot just leave the house (van den Bussche, Thion & Remerie, 2017). In addition to the uncertainty aimed at starters, it is also riskier for the bank, according to the mortgage lenders. When a house is shared not everyone has its own front door or their own facilities which make it challenging to create a market value of the room in question, making it a riskier loan. Nevertheless, the mortgage lenders came up with a possible solution to remove the uncertainty and also improve manageability.

However, these are not the only barriers addressed in the organisational dimension. It appears that the cooperation of the municipality is not always evident. The local authority indicated that *“dividing houses into smaller spaces is not the way to propagate”*. Without the cooperation of the municipality it is not possible to sell these types of houses. It can, therefore, be seen as one of the main barriers in the area of friends living on the buyers’ market.

After the organisational dimension, the most common barrier focuses on the legal dimension. This has not appeared explicitly in the literature framework related to the spatial dimensions but can undoubtedly be added to it. The main barrier that emerged in the rental market was the number of people allowed to live in a house. The maximum in the municipality of Utrecht is set at two people. If more people who did not come from the same household want to live in a house, the owner needs a permit from the municipality. This barrier was also shown in the chapter of the case study description. However, as shown in the organisational dimension, this also depends on the cooperation of the municipality. Here, too, it is not always appreciated by the municipality. In addition to the fact that the lease agreement has been designated as an organisational barrier, it is also a barrier in the legal dimension. It concerns the division of rental contracts. Furthermore, these contracts have rental protection, which makes it difficult for an investor to sell out the houses at a given moment in time. This is due to the flow that continues to exist and is less the case with a traditional house. On the other hand, within the buyers’ market barriers arise in splitting the house. Nevertheless, according to the mortgage lenders *“splitting a house can ensure that friends living is a very clever solution to the buyers’ market”*. However, it is crucial to apply for a splitting permit. Here, too, the problem arises that the municipality must cooperate, which makes it more challenging to create a successful implementation. Both the barrier of the maximum amount of people on the rental market and splitting rules on the buyers’ market are in line with the barrier indicated in the theoretical framework. It shows that it is needed in some areas within the Netherlands to apply for a permit before it is possible to rent or buy a house (van den Bussche, Thion & Remerie, 2017).

Another new phenomenon is the market-oriented dimension. This dimension did not emerge in the theoretical framework and is part of the organisational dimension. A developer and investor showed that both the rental and buyers’ markets have a barrier related to the unfamiliarity of friends living. The developer mentioned that *“this can be reflected in the return of an investor”*. The developer stated that it could also be reflected in *“the provision of a loan from a mortgage lender”*. However, this is not endorsed by the mortgage lenders. Thus it cannot be determined with certainty whether this is the reason not to provide a loan. It should, furthermore, according to the local authority taken care that this type is not financially driven. The investor could ask for more rent in comparison to the house being rented out to one household. This must, therefore, be kept in mind if it is aimed at creating accessibility.

Finally, the financial dimension is discussed and is also part of the organisational dimension. The barriers that arise from this dimension are only aimed at the buyers’ market. It appears that it is a financially complex type because several starters buy a house together. Besides, it would be more challenging to get a loan, as mentioned earlier, partly because the mortgage lender does not want to finance it due to higher risks.

### Micro cohousing

The interviews show that one of the most significant barrier is also for micro cohousing the manageability related to the organisational dimension. However, most of the barriers differ widely from the previous types. The shared facilities within micro cohousing cause much maintenance and there is probably much flow because starters will not live in such a studio for a long time due to the outgrowing. This makes the manageability for the investor far more challenging. At the same time, as an investor, you also have to look if everyone pays monthly for the shared facilities or that you are going to work with a reservation system, which means that starters only pay when they use it. Thus the main barrier, therefore, lies in the management of the shared facilities. In addition to the manageability, it has been

mentioned several times by various actors that affordability on the rental market can play a fundamental problem with this type when looking at the aspect of accessibility. This shows that micro cohousing does indeed encounter other barriers than friends living. An investor mentioned:

Investor: *"If you are talking about whether it can specifically be a solution to breaking open the housing market, no. It is a qualitative addition, but if you are talking about making affordability and tempo, I do not think so, it is an extra tool. In fact, I think that micro cohousing is not even positive in terms of affordability. I think it is always a housing type that is more expensive in total housing costs"*.

The before mentioned barrier is related to the barrier focused on the financial dimension, consisting of high construction costs. This is not only caused by the high construction costs in general but also because each studio needs a bathroom and kitchen, which entails extra costs. These high construction costs are a factor that makes it a less affordable type. Another element that appears is the service costs associated with the common areas. Memorable from the results is that actors who already started a project with this housing type also indicated that it is not always cheaper than a traditional apartment. A developer stated that *"it is not cheaper unless you make the houses small enough so that you can take advantages of it"*. The local authority, therefore, mentioned that it must be very forcefully imposed that these types of small spaces do not become more and more expensive. It ultimately causes more unaffordability what results in even smaller spaces. These statements are consistent with the restrictions that occur in the theoretical framework. It was stated here that services costs would make the total payment increase, which could possibly make it too expensive for the target group (Infranca, 2014). Coupled with the statements about the lesser degree of affordability, there is also the barrier related to accessibility. Different actors state that this type does not offer more accessibility to the rental market than other traditional housing options partly due to the unaffordability.

Further, it is assumed by investors that micro cohousing is a more challenging model for housing associations because of the service costs related to the common areas since housing associations can hardly recover these from their tenants. What must be taken into account here is the fact that the housing associations themselves did not come up with this statement. However, the statement could be correct and can undoubtedly be placed in the research. It is, furthermore, mentioned that there is also a possibility of a higher vacancy risk with micro cohousing, which also came forward with friends living. This is because it is aimed at one target group and the houses are made specifically for them. That makes it a riskier investment for investors. Zooming in on the buyers' market, it is only indicated that micro cohousing may be more challenging to sell because of the common areas. A developer questioned by itself *"how are people going to organise these shared facilities?"* Anyway, only two of the thirteen respondents indicated this, which means not much value can be attached to the statement. However, it is certainly something to think about. Furthermore, this assertion has also emerged in the literature referring that it should be taken into account that common areas within the building need to be sold (Infranca, 2014).

Besides, several barriers are mentioned for both the rental and buyers' markets related to the market-oriented and physical dimension. Micro cohousing is according to several developers and a local authority *"less flexible"*, which results in *"less degree of futureproofness"*. Adding smaller houses to the housing stock is, among other things, mentioned as unsustainable developments. It is more challenging to transform due to technical difficulties than a traditional apartment that can be sold immediately. Suppose an investor wants to lead this type to a successful implementation. In that case, it is needed to think about the future of the model.

### Intergenerational cohousing

Although the theoretical framework indicated that little is known about the restrictions related to the rental market, the interviews revealed quite a few barriers. However, fewer barriers have emerged for intergenerational cohousing than the other two types. The first thing that stood out in the answers of the respondents is that most of the actors mainly spoke about starters and the elderly, which means that families were often disregarded. A reason why families were not involved has not emerged. One may wonder whether this is because they had too little knowledge about intergenerational cohousing. Nevertheless, a few respondents indicated that families do not need to be involved in this type. However, here too, the reason behind the fact why it is missing.

Furthermore, like the other two types, the most emerging barrier is manageability. It concerns arranging the discount on the rent for starters when helping the elderly, for example, with the groceries or chores around the house within the rental market. This requires direction and will not always be carried out on its own. Along with this statement, it is challenging to apply intergenerational cohousing on the buyers' market because there is no intermediate party present that can help with settling. In addition to manageability, several developers, investors, mortgage lenders, and local authorities indicated that this type is a small-scale approach for both the rental and buyers' markets. One developer indicated *"just bring together ten people who would like to live this way"*. Inline, a local authority mentioned that *"the majority of the Netherlands is not waiting for some kind of volunteer work"*. It is, therefore, mentioned that this would not work if investors impose the obligation on voluntary work according to some respondents. Nonetheless, this also depends on the location where it is situated. In a housing market such as Utrecht, where there is much scarcity, other respondents indicate that starters do everything they can do to be able to live in a cheaper house or even get a place to live at all. It is difficult to determine based on this statement whether this is based on truth or whether starters themselves think differently about it. Thus there should be looked further into it. One developer did say that *"companies sometimes just have to try new things out before they know whether it works or not"*. Coherent with the barrier related to the small-scale approach is the statement indicating that this type does not provide accessibility. For example, the mortgage lender indicated:

Mortgage lender: *"Well I do not immediately think of accessibility, I do immediately think of facilitating diversity. That is what I like about this housing type. I do not know whether it will be more accessible or not"*.

If it is indeed a small-scale approach it means that this type does not explicitly provide the accessibility that this research focuses on. Related to this barrier, concerning the market-oriented dimension, it is showed that this is, therefore, not a type for commercial-scale related to the rental market. However, only an investor makes this statement, so it may not be representative enough, but certainly worth mentioning because it is related to several previously mentioned barriers. Going back to the organisational dimension, a barrier is also aimed at the vacancy risk. This barriers also comes down to building for a specific target group and could be risky if there is no demand for it. It must also be taken into account for both the rental and buyers' markets that an even number of older people as starters need to live in the same building. Otherwise, the proportions will be out of balance which means that the type cannot work correctly.

Finally, it appears, different from the other two types that there is a barrier within the vision and value dimension. This barrier is based on the fact that different types of generations (elderly, starters, and families) live together in one building and need to help each other. Each generation has drawn up its own visions and values over the years. The literature mentioned that every generation has its own vision and values which could lead to more difficulty by creating a compromise (Camp, 2017; Coele, 2014; Fedrowitz, 2010). However, if different generations of people in the building adhere to almost the same standards and values, it does not need to be a barrier.

### 5.2.2 | Possibilities on both the rental and buyers' markets

In addition to the barriers, many opportunities have appeared for both the rental and buyers' markets. The possibilities also show that prior knowledge, current projects, and the degree of potency influenced the number of possibilities. It is also noticeable that the organisational dimension resulted in the most possibilities for friends living, micro cohousing, and intergenerational cohousing. The possibilities per type are discussed in more detail below.

#### Friends living

The most common possibility within the organisational dimension is the creation of accessibility. According to the respondents it is an interesting type for starters because on the rental market they pay instead of €1.100 only €550, for example. This saves in monthly costs. It is, therefore, certainly a solution to the accessibility problem in Utrecht according to almost every actor. This statement is in line with the theoretical framework, in which it is stated that friends living makes it possible to rent a house in the upper segment. This possibility gives more options to find something suitable for them and will further broaden the research (Camp, 2017). Another advantage of friends living is the fact that it not only creates accessibility in terms of affordability but also because more starters can be accommodated in friends living than in a traditional home. This provides an extra boost in tackling the problem in the housing market of Utrecht. A mortgage lender also indicates that *"this type will offer the most accessibility compared to the other two types"*. Even though the barriers indicated that municipal cooperation is necessary and that friends living is viewed differently by the municipality, it is nevertheless appointed by higher authorities as a solution. The municipality will, therefore, stimulate friends living where necessary. It can ensure accessibility not only on the rental market but also on the buyers' market. It concerns being able to buy in a higher segment where more options are available. If more starters can buy, it will eventually create a better flow. Furthermore, a developer and several investors mentioned that friends living could be a *"large-scale approach"* on the rental market. This makes it possible to build more houses or redevelop these houses so that it can create more access.

Zooming in on the buyers' market related to the organisational dimension, the mortgage lenders mentioned that *"splitting a house let arise the possibility to get a mortgage from the bank"*. However, it must be taken into account that it needs to be an independent house. For example, if the kitchen or bathroom are shared, it will be more challenging to get a mortgage. Nevertheless, as the literature also showed, some banks do give this possibility where two friends buy a house together and splitting the house will make that easier. However, it may be questioned whether other not banks should experiment further than stick to their current familiarity. As mentioned earlier, it is also a matter of being open to new possibilities because it requires different creative solutions to tackle the inaccessibility on the housing market. Nevertheless, this often turns out to be more difficult in practice. In addition to splitting a home, it is also possible that one starter buys a house and the other starter rents. This allows the rent to be included in the calculation of the loan so starters can borrow a little more. However, there are fiscal disadvantages, such as no mortgage interest deduction over the part that will be rented. This possibility also means that starters cannot get much extra loan. Nonetheless, the advantages are: more people can live in a house, there is a little more loan possible, the costs can be split, and starters are not necessarily dependent on each other. In addition to these two options for the buyers' market, a third option was put forward that could be a creative solution when it comes to buying a non-self-contained house. This concerns, according to the mortgage lenders, of *"a housing corporation"* (e.g. woonvereniging in Dutch). With this form, the starter buys a kind of stocks. The starters do not have the legal ownership but the right to live there. They can get an umbrella mortgage from the bank. Since splitting a house is in practice difficult due to the cooperation of the municipality, this would be an easier way to apply on new-build houses due to different rules. The other two options can also be applied to the existing housing stock. As the literature of Camp (2017) indicated, these options ensure that starters can find a suitable home that lies in a higher price range.

In addition to the organisational dimension, the market-oriented and physical dimension are also discussed here. The possibilities mentioned in both dimension can also be brought together. At least one respondent of every actor indicated that friends living is flexible on both the rental and the buyers' market. A developer showed that it is from a market perspective a useful and smart type, as it can quickly be returned to a traditional house. The type adds something sustainable to the housing stock and is appreciated by many respondents. Another developer stated:

Developer: *"It is also a fairly regular apartment, and the idea is that an investor can sell it in several years. This means that it adds something normal to the housing stock. If we only start making small apartments, the housing stock will only become smaller and smaller. How flexible is that?"*

Mentionable is that this developer has already started current projects with friends living that may have affected the comment. Besides, this type is flexible from a market-oriented perspective but is also physically flexible for the same reason. This results in the fact that friends living is seen as a futureproof model. Furthermore, it is mentioned that friends living is not only attractive for starters but also for companies because they can generate more income from it than if they rent the same house to only one household. Finally, within the framework of the governmental-oriented dimension, the local authority states that they *"support friends living"*. This contradicts the previously identified barrier to the cooperation of the municipality. However, it must be considered that many other actors really see it as a barrier and that it is not always the case when someone says something it is actually done.

### Micro cohousing

Although several respondents indicated that affordability is a problem in micro cohousing, other respondents indicate that micro cohousing does offer affordability on the rental market. A developer mentioned: *"micro cohousing has smaller units which makes them more affordable"*. This is more in line with the literature, which showed that the smaller units lower the rental costs (Rissik, 2019). However, the respondents mentioning the barrier already started a project with micro cohousing. The respondents who see affordability as a possibility have not yet started a project with micro cohousing. This is an explanation of why this section is divided among the respondents. Furthermore, when starters have freedom of choice concerning the shared facilities each starter can decide for themselves what he/she thinks of affordability. This would immediately ensure better accessibility. Not only because of the affordability but also the number of studios that can be accommodated in a building. This is also consistent with an investor's assertion on the physical dimension that *"more homes could be created with micro cohousing"*. As with affordability, the degree of futureproofness is also divided among the respondents. This is because the demand for smaller homes will not decrease so quickly. Nevertheless, the other respondents also have a point since micro cohousing is made specifically for one target group and is, therefore, less flexible and sustainable.

Just like with friends living, it should be noted that the mortgage lenders also talked about the possibility of a housing corporation (e.g. *woonvereniging* in Dutch). This could be placed in an umbrella mortgage or a *'mandelige'* mortgage. The difference with friends living is the intention that a more massive party owns the complex and thus give away some kind of stocks. Thus it is on a larger scale. This can indeed provide much organisational work for the housing corporation when there are many turnovers with starters. The common areas can be paid using service costs. This is contrary to the literature, which mentioned that arranging or selling the common area is complicated (Infranca, 2014). However, this could be the case if it is not arranged well enough on the front side.

Finally, possibilities emerged in the area of the market-oriented dimension. For example, it was indicated that smaller units yield higher profits. However, this should not be at the expense of affordability because it is about the social value of the type and not about the financial value. Nevertheless, it can certainly be an attractive option for financially driven companies because it yields more profit.



### Intergenerational cohousing

The results regarding the possibilities for intergenerational cohousing show that a housing organisation could be a suitable organisation for setting up this type. This is mainly due to the social aspect that hides behind the type, whereby the elderly are helped and starters get a chance in an affordable housing market. A housing association only justifies its investments if social objectives can be achieved. If this is not the case a housing association must apply for a loan through the regular channels and that is not the aim of a housing association. Furthermore, several investors and the local authority only indicated this statement, which means that it is still questionable whether the housing associations themselves think the same way. A local authority said that a housing association is a driving force for intergenerational cohousing:

Local authority: *“Well, I think you can see that in the projects, I know, the housing association is the driving force and it sometimes hires people for guidance, or they work together with care organisations”.*

Furthermore, the role of the neighbourhood is also becoming increasingly important in the Dutch health care system because older people have to live independently longer nowadays. With intergenerational cohousing it is possible to solve the problem for older people at the building level. It is, therefore, certainly an attractive type for the elderly. Nevertheless, whether starters are open to this type is questionable. A side effect of this phenomenon when looking at the governmental-oriented dimension, indicated by the local authority is that *“they create political support for intergenerational cohousing”*. This is due to the social aspect of the type and applies to both the rental and buyers' markets. Even though it was shown that this type only had a small-scale approach, it can be expanded to a large-scale approach only when the housing associations take the lead and enough starters are interested.

Coming back to the organisational dimension, it is also indicated that a housing corporation (e.g. *woonvereniging* in Dutch) could be suitable for the buyers' market, just as with friends living and micro cohousing. The difference here is that in addition to the housing association thought must be given to arranging the rent or buyers discount for starters and helping with the elderly. This is a complicated issue from an organisational point of view and especially in terms of buying. The studios do make the homes cheaper for starters but give a discount on the buyers' market is often challenging to implement. Nevertheless, these housing corporations (e.g. *woonvereniging*) could be combined with renting where the elderly and starters rent from the housing corporation. This housing corporation also quickly goes in the direction of a housing association making it easier to arrange this through a housing association that has been set up especially for this purpose. The respondents mention that this type is most suitable for the rental market and is more challenging to implement on the buyers' market compared to the other two types. Especially given the direction of the research, which focuses on accessibility, intergenerational cohousing does not quickly provide accessibility for starters on the buyers' market. Nevertheless, in the rental market it certainly can ensure accessibility because starters receive a discount on the rent, which makes it affordable for them, as mentioned by a developer and investor.

It should also be noted that a developer, several investors, and a housing association indicate that *“intergenerational cohousing is futureproof”* not only in terms of the organisational dimension but also the physical dimension. On the one hand, the buildings of intergenerational cohousing are futureproof due to the flexible layout. Furthermore, it is also organisationally futureproof because the respondents assume that *“intergenerational cohousing will still be suitable for the housing market in twenty years”* partly due to, as mentioned earlier, the more critical role at the neighbourhood level.



Zooming in on the vision & value dimension, a mortgage lender thinks that the mutation of target groups could be a possibility because different target groups can learn from each other values. However, this mortgage lender not only mentioned that this could be a possibility, but at the same time also mentioned that diversity of target groups is a barrier. This respondents, therefore, contradicts itself and little value can be attached to this statement partly because only one respondent mentioned this possibility. This conflict shows that each barrier or possibility must be critically examined in order to find out what value that specific barrier or possibility entails.

Finally, both a developer, investor, and housing association indicate in the field of the legal dimension that *“no restrictions are known for this type”* because it does not explain a barrier in the field of the legal dimension and can, therefore, be assumed to be true although not every respondent agreed. What should be taken into account is the fact that few respondents had prior knowledge, current projects, or saw potency in intergenerational cohousing, which can lead to information being based on the most logical answer of the respondents and not based on reality. It should, therefore, taken into account how many values can be attached to a specific possibility.

### 5.2.3 | Suitable location in the municipality of Utrecht

Not only barriers appeared from the three housing types but also concerning the supply of current locations. At least one respondent from every actor expects the mortgage lenders said that there is a shortage of locations in Utrecht. One developer stated:

Developer: *“If we want to build for starters, that means nine out of ten times there is a low land value related to it. Not every location is suitable for this and if a location is already suitable everyone wants to build on it”*.

Few locations are available that are suitable for starters because only a lower land price can be offered here. These locations are, therefore, attractive for almost all developers. Since locations are limited, especially in the city centre of the municipality of Utrecht, it affects the prices and these will rise. The rising prices make it even more challenging to build for starters and results in high land value. These rising prices are, therefore, the second barrier raised by many respondents. One reason for this phenomenon is the fact that, as indicated earlier, the municipality implements a passive land policy and private individuals own, therefore, many locations. Private individuals often demand a top prize for their location and only work with parties that offer them the most which make it challenging to build for starters.

### Locations

The respondents were very divided across the locations and no location stands out. It was decided, therefore, to include all locations in the results in order to provide a representative picture as possible. Not much value can be attached to these results. Some respondents specifically pointed to a location focused on a type and other respondents suggested more general locations. When looking at the general locations, the centre of Utrecht emerges the most because they indicated that the target group would like to settle here. The locations: Jaarbeursplein and Merwedekanaalzone are allocated in the centre of Utrecht. It was further said that the edges of the urban area could also be suitable for these types. Leidsche Rijn and Overvecht can be connected here. Besides, the local authority mentioned that *“these types are best suited for larger cities”*. This statement is not explicitly aimed at Utrecht, but it is worth mentioning as this research may also concern other cities in the Netherlands.

An investor indicated for friends living that *“it could be served in any city”*. This is not explicitly aimed at Utrecht, but worth mentioning because the research could also be implemented somewhere else in the Netherlands. It was also stated here that it could be placed on the edges of the urban area. However, no further criteria were attached to this statement, which makes it less representative. Nevertheless, they mention Kanaleneiland and Overvecht as specific suitable locations. These locations are seen as neighbourhoods with a less attractive liveability than within the city centre. However, according to an investor: *“these locations are precise areas where friends living is possible because starters are quite willing to live there if they can get a nice new-build house for a reasonable amount of money”*. Figure 20 gives an overview of the locations.



Figure 20: Map with locations (created by the author)

For micro cohousing, it emerged that it is mainly suitable for larger cities. Compared to friends living, micro cohousing could not be applied throughout the Netherlands, according to a developer and investor. It is also shown that it can be located on the edges of the urban area or in the urban area of Utrecht. Just like with friends living, this involves less attractive liveability such as Leidsche Rijn. Nevertheless, also urban areas were indicated as a suitable location and Merwedekanaalzone could be such an urban area. One investor mentioned that *“a certain coverage area must be present”*. This is the reason to choose for a location within the urban area. Another reason why the urban area was indicated was partly since micro cohousing concerns smaller spaces. Micro cohousing is more accepted in the urban areas than on the edges of the urban area. Figure 21 gives an overview of the locations.

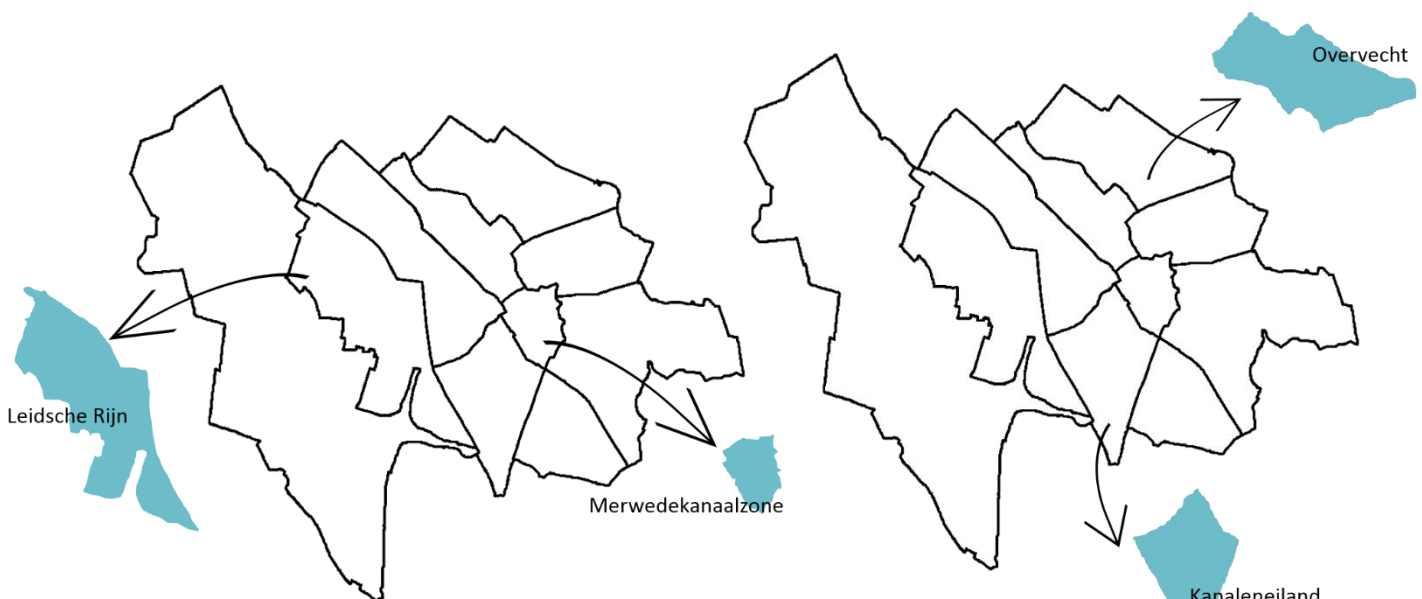


Figure 21: Map with locations (created by the author)

Figure 22: Map with locations (created by the author)

Only two respondents suggested locations for intergenerational cohousing. This may have to do with the fact that many respondents did not yet know this type well enough to give an opinion about a location. The locations that have been named are Kanaleneiland and Overvecht, thus on the edges of the urban area of Utrecht. Figure 22 gives an overview of the locations related to intergenerational cohousing.

The locations are sometimes only mentioned by one respondent, as mentioned earlier. Thus this is important to take into account. However, it does give a picture of the possible locations where it would be possible to place these types and it is certainly important to include all results. Each actor also has several reasons why particular locations should be chosen. This can also arise from their own interest. For example, the municipality prefers to build in areas that are now designated as neighbourhoods with lesser liveability and the housing association prefers to build in a cheap location and where not many rental properties are located yet. Developer and investors want the most advantageous location. However, an investor also wants a location that will still be in demand in forty years; thus, it is more a strategic choice. The mortgage lenders have no preference for a location as they only provide a mortgage.

### Location features

Some location features emerged from the results. However, these are very sketchy, causing that not much can be concluded from these results. Public transport was designated as the most prominent location feature and was appointed by nine respondents. Starters are often dependent on public transport and they often live nearby these transport possibilities. This also makes it possible to live a little further away from the urban area of Utrecht if these locations have good public transport possibilities. All locations that are marked have good public transport options to a greater or lesser extent. Besides, it is shown that these types must be located in an urban environment because starters can easily access various services. Finally, crowds were also mentioned as a feature since starters like to have cosiness around them.

#### 5.2.4 | Demand from the target group

Just like the locations, also the question about the degree of demand from the target group is very divided among the respondents. For this reason, all results are included. To strengthen the results, secondary data is used to support the statements. Some respondents indicated in general whether they thought they saw demand or not. The other respondents divided the demand from the target group over both the rental and buyers' markets. When looking at friends living, it can be seen that a developer and two investors indicated that there is a demand from the target group for this type partly because starters seek interaction with each other and would, therefore, enjoy living through this type. Furthermore, starters think it is okay to live together because of its affordability. However, a developer wondered whether there is much demand for living together with a group of friends. Nevertheless, this was only indicated by one respondent. Multiple other respondents mentioned that there is indeed a demand for this type; it must, therefore, be carefully considered to what extent this statement is reliable. Secondary data shows that there is indeed a demand for this type. Van Kleef (2015) wrote an article about friends living in 2015, which shows that there were already queues for these types at the time. On the rental market, it is also worth noting that most of the respondents indicate that the target group sees demand in friends living. This statement is mainly indicated by the housing association, local authority, investor, and developer. However, it was not only told that this question arose because of the preference but also because there is scarcity. For example, one investor said:

Investor: *"Yes, but there are of course many starters who are already happy that they have a roof over their heads, so whether they rent within micro cohousing or friends living, they are of course just looking for housing".*

The results, therefore, revealed several times that preference driven choices and scarcity driven choices of starters interact with each other as a reason to live in a friends living building. It was also indicated that it is pre-eminently a model for the rental market and not for the buyers' market. However, a comment must be made here, as most respondents focusing on the rental market and not the buyers' market and friends living is more unknown for the buyers' market. In contrast to the other respondents, one investor indicated that there is no demand from starters for friends living since they had researched the preferences of this target group and they often mentioned that they did not want to share a home. Apart from the fact that only one respondent indicated this, more value can be attached to this statement because it is based on research and not on the most logical answer. On the buyers' market, it was mentioned by the mortgage lenders that it is "*questionable*" whether there is a demand for friends living. However, according to the mortgage lenders, this was because it is still an unknown type for the bank and is therefore not promoted. It is actually because there are few opportunities for starters on the buyers' market that they have not come across it often. This does not mean that there is no demand for it. However, as the respondents indicated, it is more up to the bank than the starters that there would be no demand for it. There is certainly room for improvement here.

It was generally indicated that starters see demand in micro cohousing because they would like to interact with each other. It was also mentioned for the rental market that starters would have demand for this type. These were the same respondents who also mentioned that there was a demand for friends living. Furthermore, just like with friends living, it was stated several times that this demand was driven by scarcity. However, respondents also indicated that it also comes from their preferences because, as noted earlier, starters would like to have their own private space. This is in line with research done by AM about the preferences of millennials. This secondary data indicated that starters are looking for more private space (van Mullem, 2018). The results also show that it was not stated whether or not there is a demand from starters on the buyers' market. This should then show itself in practice whether or not it would be a success.

For the latter type, intergenerational cohousing, it was reported that developers, investors, and the local authority saw demand for this type. One reason that they see demand for this type was that starters could live in a beautiful part of Utrecht at an affordable price. However, these respondents indicated several times that the target group is smaller than with friends living or micro cohousing. This is because starters may not feel like performing tasks for the elderly and not everyone is open for it. Thus, this statement is essential to keep in mind as success depends on the demand from starters. On the rental market, it was also indicated that there is demand but that it is smaller than for the other two types. A housing association also indicated that it is unclear whether there is a demand for it or not. This respondent indicated earlier in the interview that they had no prior knowledge of intergenerational cohousing, which explains the statement. The other housing association mentioned that if several successful examples come onto the market, more starters will be open to it. However, there must be a party that takes the lead in realizing these examples. No statements were made about the demand on the buyers' market because it is still an unknown type for the respondents.

Furthermore, some more general statements were made for the buyers' market that was not necessarily related to a specific housing type. For example, it was said that the demand for the buyers' market would be smaller or questionable because it is still unknown to the respondents and there is a higher risk for the starter on the buyers' market than renting a house. Finally, it can be noted from the results that the feature demand is evenly distributed among the respondents. For example, seven respondents indicated that the demand was preference driven. Seven other respondents indicated that the demand was scarcity driven. Intergenerational cohousing is, therefore, an interplay between both preference and scarcity driven demand.

### 5.3 | ROLES AND INFLUENCES OF ACTORS IN THE IMPLEMENTATION PROCESS

From the interviews it appears that the roles named for each actor correspond with the roles suggested in the literature. For example, it is said that: the developer fulfils the role of a master developer, the investor invests in rental properties, the housing association rents and sells social houses, and the mortgage lender provides a loan. However, the roles related to the local authority go beyond the literature. The literature showed that the local authority: regulates, takes leadership, subsidises, and produces housing. From the interviews of the local authorities, it emerged that they do not produce houses themselves. They subsidise different housing forms, regulate, and take leadership through guiding developments. Additional roles emerged such as stimulating developments and connecting different actors.

In addition to the roles, the respondents also asked which actors are most important for the implementation process. The results show that seven respondents thought that the municipality is one of the crucial players. The local authority itself mentioned that *"it is an interplay between the different actors and not only one actor can be the most important"*. Therefore mainly other actors said that the municipality is an important actor. For example, it was mentioned that the municipality makes rules that can hinder these types such as not allowing multiple people in a house, which makes things more difficult more quickly. On the other hand, it is considered important because it should make land available that is cheaper for these types. When it comes to the zoning plan capacity, an important actor entails opportunities or barriers. The possibilities are in line with the literature. According to the literature, local authorities are in charge of the processing planning applications and support the allocation of land for cohousing purposes (Quinio & Burgess, 2019). After the municipality, the housing association and investors emerged as most important. The housing association was appointed because they build in a specific segment, which makes it easier for them to organise these types, according to an investor. However, the housing associations themselves indicated that they are *"hindered by the legislation"* and that *"it is not at all easier to realise these types"*. Moreover, the investors must be prepared to be able and willing to calculate with a specific financial model. Without an investor, it is not possible for a developer to develop these housing types. Furthermore, developers, builders, and other market parties were mentioned as necessary because they have to take the first step in terms of development.

#### 5.3.1 | Willingness to invest in the housing types

In addition to the three types, the respondents also showed barriers and possibilities that apply to themselves or other actors. The question was, therefore raised to what extent the actors would be willing to invest in these types if it generates less profit. Six respondents, included by developers and investors, indicated that they were willing to invest in these types if they would get less profit as a result. This question has not been asked to the mortgage lenders, local authorities, and housing association. The mortgage lenders and local authorities do not invest in these types because they only facilitate the possibility of these types. The housing association is in itself an organisation that invests in projects that yield less. This shows that almost every respondent who was asked the question answered yes. They are mainly concerned with the manageability and affordability of the houses. However, one investor also indicated that *"it is sometimes difficult for an investor or developer to invest if it yields less"*, as they are dependent on other parties. This investor also mentioned that when parties are willing to invest more, it does not always mean that it will result in lower rents. This is something to keep in mind for the research. As a tipping point, it is stated, among others, that the types should not have a high risk; otherwise, it will be too risky to invest in these types. Besides, exit options are also appointed as a tipping point since the houses must be saleable when they are rented out. Finally, it is also suggested that there must still be enough revenue for respondents to be willing to invest because people must be paid and the company must be able to continue to exist. What precisely the tipping point in percentage was not revealed.

### 5.3.2 | Barriers that negatively affect the implementation

The interviews reveal some barriers targeting: each actor, the investor, local authority, and the mortgage lender. The most emerging barriers targeting each actor consist of different visions, the dependence of other actors, and inclusive development that is important. Each actor has a different vision when it comes to the housing market. As a result, it is also referred by the respondents as a laborious combination of actors. Landowners, for example, want the highest amount for their land. The developer will rather go for a building where more profit can be made. This is in line with the findings from the literature. Scotthanson & Schotthanson (2005) mentioned that if a developer gets the change to build more expensive segment homes, which will give them more profit, they prefer it more and leave out the target group. This means that they have quite a lot of power in the housing market. Besides, they do not always feel the pressure to speed up. The municipality also has a vision that facilitates starters but on the other hand, directs developments at difficult locations. It was also indicated that they do not speak each other's language well, which makes it less easy to comprise. A local authority stated the following:

Local authority: *“If I know the investor, they always look at such a concept from a financial picture, while we look more from what does it do, what it is and what does it contribute. That is a different approach. Ultimately, I think it is important that it is affordable for all parties. I also think it is fine that such an investor makes a return on the investment. It is also necessary to fill those pension funds. At the same time, I think that you do not have to sit in it optimally. So, you always have to look where you can find each other”.*

This quote shows that each actor has its own vision on development and they must try to understand each other to reach a compromise. In line with this barrier, another barrier emerged concerning actors that are financially driven and make it more challenging to invest in these types. In addition to the fact that each actor has a different vision, many actors are also dependent on each other, as mentioned earlier. Developers mainly mentioned this statement as they depend on investors who buy the concept and building. Thus it is not always the case that parties do not want to, but other parties do not want to buy it. Further, investors are often dependent on pension funds for which they invest. These organisations are often risk-averse, and cohousing is quickly labelled as a substantial risk. This is consistent with another barrier related to the investor. It was mentioned that institutional investors are often risk-averse, which corresponds to the literature. The literature stated that investors are more interested in standard properties because this presents less risk. This creates a barrier because these housing types came from a specific concept that requires specific users and is, therefore, a potential risk for investors. This potential risk means that investors may not trust the concept and will not quickly invest in this specific property form (Cagan, 2019).

It was also regularly indicated by both the local authority and the market parties that inclusive development is essential. The local authority stated that they *“do not want to focus on one target group because all target groups are equally important”*. It is therefore difficult for them to only make visions for starters. On the other hand, market parties show that they would like to realise a building where different target groups are located, which reduces the risk of vacancy. That is indeed a barrier for friends living and micro cohousing since these types are aimed at only one target group. It also emerged that long-term processes are a barrier, as the developments are only realised after several years. Besides, new business models are needed if these types are going to be successfully implemented. This also requires a more extended period to organise. The new business model is one of the most critical barriers because many actors did not have chosen to invest in these three housing types. An organisation has to set up a whole new business line because the current one does not match with this concept. Furthermore, the unfamiliarity of the concept is also a barrier for many actors. They would like to see an initiator who can successfully implement these types before other actors will follow, making themselves reluctant.



In addition to the general barriers for each actor, there are also some specific barriers. For example, it emerged that investors are not always progressive and are therefore not willing to invest in these types. That jeopardizes the implementation. According to a local authority *“does this concept not fit the standard approach of banks”*. However, only the local authority indicated this and the mortgage lenders themselves did not. The reliability could therefore be questioned. Nevertheless, if this statement is correct, mortgage lenders need to understand the nature of the housing types better to consider these unique factors in their lending approach (Chappell Heywood & Williams, 2018). Finally, some more barriers emerged for the local authority. It was shown that the processes often take a long time, for example, changing a zoning plan. This is in line with the aforementioned barrier related to the risk of long-term processes. Further, according to a housing association, the local authorities lay down too many requirements, making it difficult to get out financially well. Moreover, lastly, there is often a different political view because politics change every year and the interests therefore shift.

### 5.3.3 | Possibilities that positively affect the implementation process

Just as with the barriers, several options emerged for each actor as well as for specific actors. For example, the mortgage lender indicated that they are open-minded and want to think beyond their standard approach, as previously mentioned as a barrier. Further, the housing associations and one investor mentioned that a housing association specifically aimed at starters could bring more accessibility because they are then focused on one target group and can develop and manage specific products. What should be mentioned here is that this question was only asked to these specific respondents. Thus, it can be noted that this question was entirely answered with yes.

A developer, furthermore, noted that the local authority should provide financial support when projects for starters are not profitable enough to set up on their own. Further, the local authority itself indicated that it is possible to adapt their regulations to these types in such a way that it fits together. Furthermore, it emerged several times, mainly by the developers, that *“the steering mechanism of the municipality could be a possibility”*. For example, the municipality has already regulated the middle rent segment. The steering mechanism assists the developers in determining the program during the development. Besides, they can still exert influence without owning the land through the zoning plan and the creation of preconditions. Lastly, a mortgage lender also indicated that the national government needs to give direction to the municipalities. This not directly relates to Utrecht, but certainly worth mentioning because, as mentioned earlier, this could also be a barrier if municipalities do not cooperate. This respondent stated:

Mortgage lender: *“That may even require the direction of the national government, which gives direction about, for example, how much per cent of every new-build project must contain houses for starters. Otherwise, you will get that one municipality willing to arrange this but pays the bill because it says I am satisfied with a lower housing price. In comparison, if they had a higher housing price, they would receive more tax every year, and more profit could be taken from the land”*.

As mentioned earlier, some options also emerged for each actor. For example, it was mentioned that it is essential to create expertise. Initial projects are often challenging to implement and financially complex. However, as more expertise is created for these types it will be easier to develop them. It was also mentioned that adjusting an organisational structure could also be a possibility. This was previously referred to as a barrier. However, suppose companies explicitly opt for this and set up a strong management organisation. In that case, these types can be successfully implemented. Furthermore, a mortgage lender indicated that they are currently thinking beyond their own role by offering workshops in the fields of CPO, for example. This could also be applied to each actor so that they look beyond their own role and bring more attention to the types. Finally, it was also mentioned that it is possible to include landowners in the process by asking a lower land value if, on the other hand, they are involved in, for example, the development.



#### 5.3.4 | Cooperation between actors

To successfully implement the three housing types, not only the barriers and possibilities of these actors are essential but also the way to cooperate. An investor indicated that *“cooperation is well united in Utrecht since an association has been established, named DNU, in which all parties are united”*. However, this did not emerge from other interviews. Other interviews highlighted two significant collaboration opportunities. For example, it is crucial to have good cooperation between the parties. Nevertheless, not only cooperation is essential but also the conversation between these parties is not superfluous. The parties should explain to each other what works and what does not. The parties need an open attitude towards each other; thus, they must be able to listen to each other. Furthermore, there must be an interplay between different actors and it is vital to get the right group of people together who see potency in these types. Furthermore, not unimportant is an initiator who can convince other parties of, for example, the low risk and the benefits of cohousing.

#### 5.3.5 | Solutions for the inaccessible housing market

Finally, some solutions to the inaccessibility have been put forward by several respondents and relate to development, location, organisation, and politics. The most discussed solution in the field of development is building. This needs no further explanation. The other solutions concern lower construction costs, lower land value, and smarter use of existing buildings. However, lower construction costs and lower land value are complex solutions to accomplish. This has to do with the market forces. Companies and landowners will not just lower their prices. The solution concerning the smarter use of existing buildings offers a severe possibility. This mainly related to friends living where it is possible to make the existing housing stock available for several households.

Reasonable possibilities also emerged from the solutions related to the location. For example, it was repeatedly mentioned that *“actors need to invest more in places outside the city centre of Utrecht”*. These places are generally more affordable for starters and can also be made more attractive when investing in public transport. A mortgage lender also indicated that *“it is also possible to create temporary locations for the rental market to provide starters with an affordable house in their first years”*. However, the municipality needs to facilitate these possibilities because the houses have no value anymore after a certain period of years. The named types could be suitable for this, among other things. An advantage of these temporary locations is that the municipality does not lose its ground position and that a faster solution is still available for starters. These processes can often be arranged more quickly. Another possibility was the creation of locations. However, this is a difficult solution as the locations are scarce in Utrecht, as shown earlier in the results.

Within the solution related to the organisation, it was stated that *“flow had to be created”*, among other things *“by giving starter priority over other groups”*. However, as already emerged with the barriers related to the actors, almost all actors want an inclusive development where groups do not have priority. This is not easy to organise in practice. Finally, the solutions in the field of politics are presented. It was stated, for example, that municipal processes should be accelerated. According to an investor, *“there is still a lot to be done here”*. How exactly this should take shape was not revealed in the interviews. Cooperation from the municipality was also seen as a solution. As seen before, this can also be a barrier. However, suppose the municipality will allow more. In that case, it will undoubtedly serve as a solution for these types and accessibility in Utrecht. Whether this is easy to implement in practice remains unclear. If the municipality wants to provide this cooperation, the policy and regulations will have to be changed in some places. Moreover, other rules will have to replace them. However, the literature shows that these decision-making processes take time which makes the implementation not easier (Adams & Tiesdell, 2013).

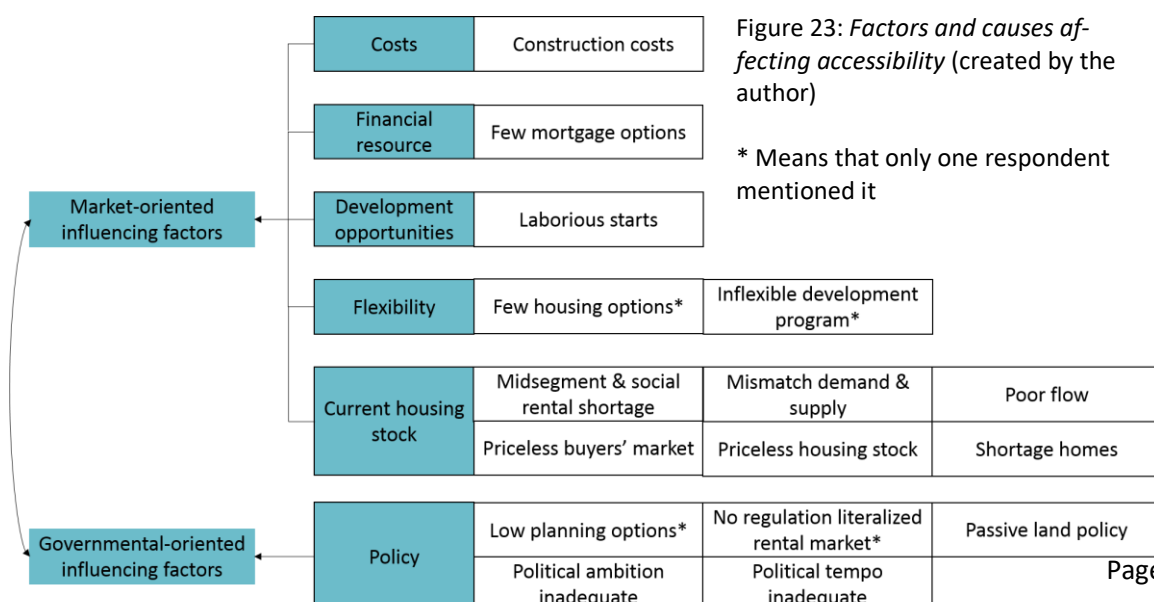
## 6 | CONCLUSION

This chapter presents the conclusion. The conclusion first addresses the sub-questions, after which the main question is answered. Based on the relevant literature, the theoretical framework, and the study results answers are provided to the questions posed in the introduction.

### 6.1 | FACTORS AFFECTING THE ACCESSIBILITY IN THE MUNICIPALITY OF UTRECHT

The first sub-question, “Which factors affect the accessibility for starters on the housing market in the municipality of Utrecht?”, examined the several factors influencing accessibility, whereby a distinction is made between different market-oriented and governmental-oriented factors. An overview of these factors with their causes, related to the literature framework and results, is presented in Figure 23. The study by Mekaway (2014) and the conceptual model demonstrated a more general perspective related to the factors that could affect accessibility on the housing market. These factors derived from two angles, consisting of market-oriented and governmental influences. The factors are related to support, legislative framework, policy, flexibility, current housing stock, and development opportunities. Compared to the literature, the present research provides a more specific view of the factors since it adds different causes under each factor. These causes are aimed explicitly at the municipality of Utrecht, thus contributing to a deepening of the existing literature.

As shown in Figure 23, almost every factor that occurred from the literature has been highlighted by different actors. Nonetheless, support and the legislative framework are not named as causes of the problem. Subsidising has a positive effect on accessibility, and when this factor is absent, it does not immediately mean that the accessibility is reduced. Actors did not specifically mention the legislative framework. However, the legislative framework that occurred from the literature can be scaled in the factor policy since it has been observed that the processes require a lengthy implementation period as, for example, in the zoning plan. Furthermore, financial resources appeared in the literature as a societal influencing factor. This factor was ultimately grouped with the market-oriented factors because the market rather than the society itself determines how many mortgage options are available. Lastly, a new factor is added, namely costs, which is related to construction costs. The costs for constructions are higher, causing developers and investors to rent or sell in a higher segment, thereby increasing inaccessibility for starters. Furthermore, the results show that the main causes of the problem are related to the supply from the current housing stock and the political ambitions of the municipality. This outcome largely corresponds to the literature of Mekaway (2014), although Mekaway does not directly indicate that the current housing stock is the main cause. However, it can be said that the current housing stock on the housing market has a major effect as this housing stock currently provides a lesser degree of accessibility for starters. To conclude, the factors that affect the accessibility of the housing market in Utrecht are costs, financial resources, development opportunities, flexibility, current housing stock, and policy.



## 6.2 | POSSIBILITIES AND BARRIERS THAT OCCUR RELATED TO THE HOUSING TYPES

The second sub-question, “What are the underlying housing types of cohousing in both the rental and buyers’ market that are best suited for starters?”, focuses on the concept of cohousing with its associated housing types. A distinction is made between the three housing types that could be suitable for starters. Figure 24 presents an overview of the three underlying types drawn from the literature and the conceptual model: friends living, micro cohousing, and intergenerational cohousing. The literature utilised in this research focuses more on the housing types themselves. In contrast, the present study provides more in-depth insight into which the housing types would be suitable for starters based on possibility and demand. This aspect of the research contributes to a deepening of the existing literature, as with the analysis of the factors.

The literature and the study results demonstrated that only friends living, micro cohousing, and intergenerational cohousing could be important for starters, although other forms of cohousing were mentioned several times. For example, housing cooperatives (*woon coöperatie*) and kangaroo houses. Nevertheless, these other forms are aimed at cooperative and collaborative cohousing, which was not part of this research. Accordingly, these categories are not taken into account for this sub-question. It can, therefore, be concluded that the underlying housing types of cohousing suitable for starters consist of friends living, micro cohousing, and intergenerational cohousing.

Furthermore, a distinction was made between these three types regarding which is more suitable for the rental or buyers’ market and which is most in line with the demands of starters. The greatest demand in the rental market is for friends living and micro cohousing. This conclusion is also confirmed based on secondary data. Friends living entails affordability, and micro cohousing provides enough private space, which is a feature that starters are looking for. The demand for intergenerational cohousing in the rental market is expected to be smaller due to the obligation to help older people. Nevertheless, since intergenerational cohousing is an unknown type, actors are not sure whether there could be a demand for it. On the buyers’ market, demand is only seen in friends living. This conclusion appears to be due to the unfamiliarity on the buyers’ market: nothing has been mentioned regarding the other types, so their status is therefore uncertain. The literature indicated that micro cohousing has not yet occurred in the buyers’ market. However, this approach could certainly be possible in the buyers’ market. Intergenerational cohousing is already being attempted on a small scale in the buyers’ market. However, the question here is also whether starters see any demand for this type. Nevertheless, the degree of demand was highly divided among the actors. Therefore, it must be kept in mind that these are statements made by the actors and not the starters themselves, which could therefore produce a distorted picture. This factor may also explain why the responses to this sub-question were so divided among the actors since they can only answer it from their own prior knowledge and perspective. Each actor is coloured differently by their prior knowledge, interests, and perspectives.

To conclude, for the rental market, it is mainly micro cohousing and friends living that meet the current demand. Nonetheless, for each type, there are possibilities, according to the literature. The buyers’ market is very uncertain and is moving more towards friends living. However, this does not mean that the other types are not possible on the buyers’ market.

Collective cohousing	Type 1: Friends living	Type 2: Micro cohousing	Type 3: Intergenerational cohousing
	Possibility rental market ✓	Possibility rental market ✓	Possibility rental market ✓
Possibilities and demand	Demand rental market ✓	Demand rental market ✓	Demand rental market ✗
	Possibility buyers’ market ✓	Possibility buyers’ market ✓	Possibility buyers’ market ✓
	Demand buyers’ market ✓	Demand buyers’ market ?	Demand buyers’ market ?

Figure 24: *Housing types suitable for starters with their possibilities and the degree of demand* (created by the author)

Furthermore, the third sub-question, “Which possibilities and barriers occur within the implementation of the different housing types, associated with specific locations in the urban area of the municipality of Utrecht, to achieve greater accessibility?”, can also be answered in this section. For this question, different possibilities and barriers that can occur during the implementation of the different types of cohousing on the housing market of the municipality of Utrecht were explored. Many possibilities and barriers have arisen from both the literature and the study results. The present research contributes to the literature since existing research is mostly limited to the financial, legal, and organisational dimensions of the topic and therefore appears to be limited. This study’s results add further dimensions in which possibilities and barriers emerge.

The barriers that occur concerning friends living are situated in the financial, legal, market-oriented, and organisational dimensions. Moreover, the possibilities that occur are related to the governmental-oriented, legal, market-oriented, organisational, and physical dimensions. An overview of the barriers and possibilities of friends living for both the rental and buyers’ markets is presented in Figure 25. Since these barriers and possibilities are further described in the results chapter, only the most noteworthy and striking matters are discussed here. In Figure 25 below, \* means that only one respondent mentioned the item.

Friends living	Barriers rental market	Barriers buyers’ market	Possibilities rental market	Possibilities buyers’ market
Financial dimension		<ol style="list-style-type: none"> <li>1. Obtain mortgage</li> <li>2. Tax implication*</li> <li>3. Financially complex</li> </ol>		
Legal dimension	<ol style="list-style-type: none"> <li>1. Splitting rules</li> <li>2. Lease agreement</li> <li>3. Maximum to persons</li> <li>4. Rental protection</li> <li>5. Share a house housing association*</li> </ol>	<ol style="list-style-type: none"> <li>1. Splitting rules</li> </ol>	<ol style="list-style-type: none"> <li>1. No restrictions*</li> </ol>	<ol style="list-style-type: none"> <li>1. No restrictions*</li> </ol>
Market-oriented dimension	<ol style="list-style-type: none"> <li>1. Unfamiliarity</li> <li>2. Higher risk developers*</li> <li>3. One target group*</li> <li>4. Financially driven*</li> </ol>	<ol style="list-style-type: none"> <li>1. Unfamiliarity</li> <li>2. Risk mortgage lender*</li> </ol>	<ol style="list-style-type: none"> <li>1. Flexibility</li> <li>2. Sustainable addition</li> <li>3. Higher profit</li> </ol>	<ol style="list-style-type: none"> <li>1. Flexibility</li> <li>2. Sustainable addition</li> <li>3. Saleability*</li> </ol>
Governmental-oriented dimension			<ol style="list-style-type: none"> <li>1. Political support*</li> </ol>	<ol style="list-style-type: none"> <li>1. Political support*</li> </ol>
Organizational dimension	<ol style="list-style-type: none"> <li>1. Manageability</li> <li>2. Risk exit possibilities</li> <li>3. Other management approach</li> <li>4. Difficult model for investors*</li> <li>5. Flow*</li> <li>6. Lease agreement</li> <li>7. Vacancy risk</li> </ol>	<ol style="list-style-type: none"> <li>1. Manageability</li> <li>2. Risk exit possibilities</li> <li>3. High dependence*</li> <li>4. Independent home for mortgage*</li> <li>5. Joint and several liability*</li> <li>6. Municipal cooperation</li> </ol>	<ol style="list-style-type: none"> <li>1. Affordable</li> <li>2. Buy and other person rents</li> <li>3. Creates accessibility</li> <li>4. New build houses*</li> <li>5. Dissolve lease*</li> <li>6. Large-scale approach</li> </ol>	<ol style="list-style-type: none"> <li>1. Affordable</li> <li>2. Buy and other person rents</li> <li>3. Creates accessibility</li> <li>4. New build houses*</li> <li>5. Split cadastral</li> <li>6. Umbrella mortgage*</li> <li>7. Woonvereniging</li> </ol>
Physical dimension			<ol style="list-style-type: none"> <li>1. Flexibility</li> <li>2. Future proof</li> </ol>	<ol style="list-style-type: none"> <li>1. Flexibility</li> <li>2. Future proof</li> </ol>

Figure 25: Barriers and possibilities of friends living (created by the author)

Based on the findings, manageability is the main barrier to both the rental and buyers' markets. This housing type is organisationally difficult regarding rental agreements and management. Therefore, investors are more likely to drop out, and friends living is consequently seen as a more challenging model for investors. In contrast, the study from Camp (2017) indicated that the rental agreement is not more complicated than a standard rental agreement. However, the actors involved need a complete change-over of their management, making this factor a barrier. Another significant barrier lies in the cooperation of the local authority because dividing houses into smaller spaces is not the way how the municipality wants to see her urban area to become. Without the cooperation of the municipality, it is not possible to sell these types of houses due to the permit required for splitting a house or a permit on the rental market into cases where more than two people from different households live together. The last notable barrier concerns the manageability on the buyers' market, where difficulties arise when starters are seeking to purchase a house and someone wants to leave. The organisational aspects of this arrangement are complex. This statement corresponds to the literature, which states that friends living is riskier for starters because they are attached to a loan and cannot simply leave the house (van den Bussche, Thion & Remerie, 2017). It is not only riskier for starters but also for mortgage lenders to provide a loan because the house is shared, while their standard approach does not fit with this kind of loan. Nevertheless, mortgage lenders have devised a solution: they see the possibility of setting up a housing corporation (*woonvereniging*) in which every starter receives an umbrella mortgage. However, there is another barrier related to this arrangement, namely the fact that only an independent house can obtain a loan.

Furthermore, the most common possibility is the creation of accessibility. Friends living is, therefore, certainly a solution to the accessibility problem in the municipality of Utrecht. Another advantage of friends living is that it not only creates accessibility in terms of affordability but also enables more starters to be accommodated than in a traditional home. Finally, friends living is highly flexible, both organisationally and physically. Thus, it is both futureproof and a sustainable addition to the housing market because the apartments can either be sold or rented out as a traditional home.

Second, the barriers for micro cohousing are related to the financial, market-oriented, organisational, physical, and relational dimensions. The possibilities are related to the legal, market-oriented, organisational, and physical dimensions. An overview of the barriers and possibilities of micro cohousing for both the rental and buyers' markets is depicted in Figure 26. Note that \* indicates that only a single respondent mentioned the item.

Micro cohousing	Barriers rental market	Barriers buyers' market	Possibilities rental market	Possibilities buyers' market
Financial dimension	1. Higher building costs	1. Higher building costs		
Legal dimension			1. No restrictions*	1. No restrictions*
Market-oriented dimension	1. Diversity housing stock*	1. Diversity housing stock*	1. Higher profit 2. Lower risk profile*	
Organizational dimension	1. Manageability 2. Saleability 3. Woonvereniging organize	1. Manageability 2. Housing associations difficult model 3. Less accessible 4. Less affordable 5. Vacancy risk*	1. Create accessibility 2. Future proof 3. New build houses* 4. Mandelige mortgage* 5. Umbrella mortgage* 6. Woonvereniging	1. Create accessibility 2. Future proof 3. New build houses 4. Affordability 5. Freedom of choice important
Physical dimension	1. Future proof	1. Future proof	1. More houses*	1. More houses*
Relational dimension	1. One target group*	1. One target group*		

Figure 26: *Barriers and possibilities of micro cohousing* (created by the author)



The most striking barrier that has emerged in micro cohousing also concerns manageability for both the rental and the buyers' market. This barrier arises because there are common areas which provide more management. The way of selling these shared facilities is not unambiguous. The literature supplements this barrier by indicating possibilities to sell micro cohousing. Each starter pays monthly service costs for the shared facilities (Infranca, 2014). Furthermore, micro cohousing could be seen as less accessible because it is not necessarily more affordable than traditional housing types. However, this pricing issue is also due to the higher construction costs that are prohibitive and the financial model behind it. A side effect occurs whereby more profit can be generated for actors, which will encourage them to switch more quickly to micro cohousing. Lastly, this housing type is less futureproof because it is physically more difficult to transform and is aimed at only one target group. Nonetheless, it could offer accessibility because more houses can be built in one building. Considering the possibilities more closely, no restrictions have been situated on the legal dimension, which means that processes may be executed faster. On the buyers' market, just as with friends living, there is the possibility of a housing corporation (*woonvereniging*). However, this corporation is much larger and can be arranged via an umbrella mortgage.

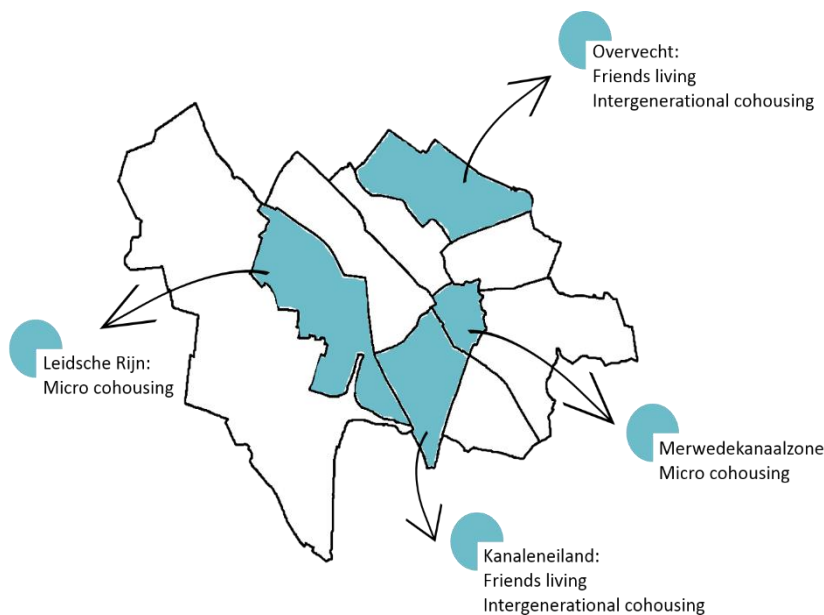
Third, intergenerational cohousing consists of barriers related to the market-oriented, organisational, and vision and value dimensions. The possibilities that occur for this type are related to the governmental-oriented, legal, organisational, physical, and vision and values dimensions. An overview of the barriers and possibilities of micro cohousing for both the rental and buyers' markets is presented in Figure 27. As above, \* means that only one respondent mentioned the item.

Since both the literature and the actors know the least about intergenerational cohousing, the fewest barriers and possibilities have appeared here. The most crucial barrier for this type also concerns manageability, but only on the rental market, as intergenerational cohousing is difficult to arrange given the rent discount and obligation to help. Moreover, it is seen as a small-scale approach for both the rental and buyers' markets. Each target group within intergenerational cohousing has a different vision which could be a barrier. However, this divergence is also seen as a possibility because they can adopt each other's visions. Besides, according to the actors and the literature, there are no restrictions known in the legal dimension. Furthermore, this type has political support which can ensure a faster development process. It is also futureproof because the houses are mixed and there will be a suitable home for each target group within intergenerational cohousing. Finally, this type can ensure affordability when the discount is applied, and starters can live more affordably.

Intergenerational cohousing	Barriers rental market	Barriers buyers' market	Possibilities rental market	Possibilities buyers' market
Governmental-oriented dimension			1. Political support	1. Political support
Legal dimension			1. No restrictions	1. No restrictions
Market-oriented dimension	1. Does not happen on commercial scale*			
Organizational dimension	1. Different proportional target groups* 2. Small-scale approach 3. Impose obligation 4. Manageability 5. Vacancy risk*	1. Different proportional target groups* 2. Small-scale approach 3. Realization	1. Creates affordability 2. Future proof 3. Neighbourhood role important* 4. Suitable for housing association	1. Creates affordability 2. Future proof 3. Neighbourhood role important* 4. Woonvereniging
Physical dimension			1. Future proof	1. Future proof
Vision & value dimension	1. Diversity target groups	1. Diversity target groups	1. Mutation of target groups	1. Mutation of target groups

Figure 27: Barriers and possibilities of intergenerational cohousing (created by the author)





This map (Figure 28) indicates the locations named in the results. These are areas that could be suitable for the development of the housing types.

The results were somewhat limited, so it cannot be concluded whether these locations are the best for such development. Nonetheless, they are an addition to the research, as the literature has not yet searched for suitable locations for starters in combination with cohousing.

Figure 28: Map with locations (created by the author)

Friends living is suitable for the edges of the urban area in the municipality of Utrecht. It could also be pursued in any city in the Netherlands. Micro cohousing is more suitable for larger cities. However, just like friends living, these types can be developed on the edge of the urban area in the municipality of Utrecht, as well as in the urban areas themselves. Intergenerational cohousing is situated on the edge of the urban area in Utrecht. Thus the associated locations for the three types are Leidsche Rijn, Kanaleneiland, Merwedekanaalzone, and Overvecht.

In conclusion, it can be said regarding all three housing types that the same barriers and possibilities often emerge, such as manageability. However, the description often differs for each type. This outcome suggests that unique barriers and possibilities have arisen for each type, making it more difficult to compare them. It is also notable that the number of barriers is related to the potency, prior knowledge, and current projects. For example, much is said about friends living and micro cohousing but less about intergenerational cohousing. It can be stated that the organisational dimension was most prominent in all three types for both the barriers and possibilities.

### 6.3 | ROLE AND INFLUENCES OF MARKET-ORIENTED AND GOVERNMENTAL ACTORS

The fourth and final sub-question, “Which roles and influences do different market-oriented and governmental actors have in the implementation process of the underlying housing types in both the rental and buyers’ markets of the municipality of Utrecht?”, indicated which actors can influence the implementation process. The actors can have both a negative and positive influence related to the rental and buyers’ markets. The literature and conceptual model showed that five different actors could exert the most significant influence on the implementation of the three housing types: the mortgage lender, the local authority, the investor, the developer, and the housing association. Each actor has specific roles that suit it, and the roles that emerged from the results almost all correspond to the literature. These actors and roles are depicted in Figure 29. Only for the local authority are there some differences. For example, they do not provide homes themselves, and they also have a stimulating and connecting role.

The results do not add significantly to the literature in the fields of actors’ roles. However, this research goes further than a consideration of such roles because it has investigated the barriers and possibilities of these actors. Some barriers and possibilities emerged from the literature, but this research provides a much more extensive representation of this topic.

Housing market type	Actors on the housing market	Roles of different actors		
Rental market	Investor	Invest in rental houses		
Rental & buyers' market	Housing association	Sale of social houses	Provide social rental houses	
Rental & buyers' market	Developer organisation	Master developer		
Rental & buyers' market	Local authority	Funding several house forms	Leadership in development	Stimulating development
		Connecting different actors	Regulate the rental and buyers' market	
Buyers' market	Mortgage lender	Provide a loan		

Figure 29: Actors with their roles related to the housing market (created by the author)

Furthermore, according to the results, the municipality, namely the local authority, has the most influence on the housing market. The local authority makes rules that can hinder the types, such as not allowing multiple people in a house. Conversely, it can have a positive influence by making land available through the zoning plan capacity. Nevertheless, the local authority itself indicated that the implementation process needs to be an interplay between all the actors and not only one actor. After the municipality, the housing associations and investors exercise the most influence. The housing association can build in a particular segment. However, these associations themselves indicated that they are hindered by current legislation that makes it difficult to realise these housing types. The investors must be prepared to be willing and able to calculate using a specific financial model. Without an investor, it is not possible to implement these types. Furthermore, the developers, builders, and other market parties were mentioned as vital because they have to take the first step in terms of development. Each actor can, as explained above, have a negative and positive influence on the implementation. The overview in Figure 30 shows which barrier and possibilities are relevant for each actor in this context. Only for developers were no specific barriers or possibilities mentioned in the results. Note that \* indicates that only one respondent mentioned the item.

Actors	Every actor	Investor	Local authority	Housing association	Mortgage lender	Developer
Barriers	<ol style="list-style-type: none"> <li>1. Confirm agreements*</li> <li>2. Dependence other actors</li> <li>3. Different visions</li> <li>4. Inclusive development important</li> <li>5. Leader needed before other actors will follow</li> <li>6. New business model needed</li> <li>7. Realizing these agreements*</li> <li>8. Unfamiliarity</li> </ol>	<ol style="list-style-type: none"> <li>1. Institutional investors avoid risk</li> <li>2. Progressive investor</li> </ol>	<ol style="list-style-type: none"> <li>1. Different political view</li> <li>2. Long processes</li> <li>3. Municipal requirements</li> </ol>		<ol style="list-style-type: none"> <li>1. Does not fit in the standard approach of banks*</li> </ol>	
Possibilities	<ol style="list-style-type: none"> <li>1. Adjust organizational structure</li> <li>2. Create expertise</li> <li>3. Lower land value by involving the landowners*</li> <li>4. Think beyond own role*</li> </ol>		<ol style="list-style-type: none"> <li>1. Adjustment regulation possible*</li> <li>2. Financial support municipality*</li> <li>3. Steering mechanism municipality</li> <li>4. Direction national government*</li> </ol>	<ol style="list-style-type: none"> <li>1. Housing association specific for starters</li> </ol>	<ol style="list-style-type: none"> <li>1. Open minded*</li> </ol>	

Figure 30: Barriers and possibilities related to the actors (created by the author)

In conclusion to the fourth sub-question, it can be stated that the roles of the different market-oriented and governmental actors mostly correspond with the literature; however, some additional roles were introduced, and the roles of the developer and local authority differ from the literature. Furthermore, the influences exercised by actors can be seen both as barriers and as possibilities. Therefore, there are many different influences related to the implementation of the underlying housing types. There is no single actor who exerts the most influence. Rather, the implementation process requires an interaction between the different actors. In Figure 30, most of the influences that can be designated, both positive and negative are presented.

## 6.4 | COHOUSING AS A STRATEGY TO CREATE GREATER ACCESSIBILITY

The main question that is answered, is formulated as follow: “Which possibilities and barriers, resulted from market-oriented and governmental actors, emerge in the implementation of the associated housing types related to cohousing on both the rental and buyers’ markets, to contribute to better accessibility on the housing market for starters in the urban area of the municipality of Utrecht?” All Figures that came back in the conclusion answer the main question.

Friends living can be considered the most significant contribution to better accessibility on the housing market for starters in the municipality of Utrecht because it offers accessibility on both the rental and buyers’ markets. Zooming in on the rental market, it can be concluded that this type provides better affordability since starters can share their rent with at least two people. Nonetheless, affordability is not the only benefit, given that more people can also be housed in a single home, thereby providing greater accessibility to the housing market. However, a disadvantage is that investors must set up a different organisational structure for friends living because it is a different management model, which makes this approach less manageable. When expertise has been built up, manageability will also improve. Moreover, the visions and legislation of the municipality of Utrecht do not correspond to this housing type because it is no longer permitted for more than two households to inhabit a single existing residential building. Consequently, the municipality’s vision is not aimed at realising this objective. A permit is required to achieve this housing arrangement, but it is not granted quickly. This disadvantage also applies to the buyers’ market. A solution, therefore, is to focus friends living more on new-build homes, as different rules govern such buildings. However, the local authority must also adopt new rules for this housing type to implement it successfully. The most creative solution for accessibility lies in the buyers’ market. Through a housing corporation (*woonvereniging*) and an umbrella mortgage, it is possible to divide existing homes into units. This arrangement means that every starter purchases a stock in the house and is therefore not dependent on other starters when they want to leave for another house. Moreover, the house could be split cadastral based on a similar principle as mentioned above, except that the starter does not buy stocks but a part of the house. The tipping point is that to obtain a mortgage, the house must be independent, and this is not the case with the housing corporation (*woonvereniging*). Thus, mortgage lenders and banks should think beyond their standard mortgage approach to make this arrangement possible to help solve housing inaccessibility, since this approach enables more starters to live in one home, thereby increasing overall housing availability for this group. Lastly, a side effect of this type is that it is considered flexible and futureproof because the houses can easily be converted into more traditional housing types. This feature reduces the risk and provides a sustainable addition to the housing market. It can thus be concluded that friends living could create better accessibility for starters in the urban area of the municipality of Utrecht.

In addition to friends living, micro cohousing can also provide more accessibility to the housing market for starters in Utrecht. Micro cohousing provides accessibility because more studios can be placed in a building than in traditional housing types. However, there is much disagreement whether this type is more affordable than traditional houses. Its affordability depends, among other things, on the construction costs. These costs are found to be higher than for traditional housing. If investors treat this type as a social model instead of a financial model, it can be implemented more affordably because the spaces are smaller. However, the common areas for which service costs must be paid need to be

taken into account. Some investors charge a high amount for service costs, which makes micro cohousing no more affordable than other options. When the starter is given a free choice in, for example, the common areas that he/she wants to use, this can also reduce costs. Each starter can, therefore, determine for themselves what they consider affordable. Here, too, the disadvantage is that investors need to adopt another organisational structure and apply a new management model. Nevertheless, as mentioned earlier, this requirement does not have to be a disadvantage if it is gradually incorporated into the company's structure. On the buyers' market, it is also possible, as with friends living, to start up a housing corporation (*woonvereniging*). The starter purchases a stock and pay service costs for the common areas. The advantage is that these houses are independent, so a loan will be provided more quickly. Therefore, this type has no restrictions in terms of rules for both the rental and buyers' markets. However, this approach is only suitable for new constructions, as the current housing stock does not physically match what is required for micro cohousing. This mismatch is an immediate disadvantage because this type is less flexible and therefore, less futureproof, which means it is not a sustainable addition to the housing market. Nevertheless, micro cohousing concerns smaller houses to which it can be applied on a larger scale, in turn providing greater accessibility for starters in the municipality of Utrecht. To conclude, micro cohousing is undoubtedly an added value that contributes to better accessibility in the housing market, provided that investors keep it affordable. Moreover, according to the actors, this type best suits the preferences of starters because starters like to have their own space.

In contrast to the other two types, intergenerational cohousing is viewed as less of an added value for solving accessibility problems. According to the actors, this type does not offer a large-scale approach because the question is whether many starters are interested in an obligation to help the elderly. However, the discount ensures that starters can rent more affordably than in a traditional house, which may make intergenerational cohousing attractive. It is mainly a small-scale approach on the buyers' market, where the housing corporation (*woonvereniging*) is also involved. In this context, it becomes more like cooperative cohousing. In the rental market, this approach could be applied on a larger scale, if the investors believe in the type and housing associations investigate the possibilities further. Moreover, cooperation is also required with care institutions and the municipality to ensure success when determining the discount that starters will receive. Compared to the other approaches, implementing this type successfully requires the most guidance and management, along with a different organisational structure. The advantage of intergenerational cohousing is that the approach not only creates accessibility for starters but also enables those older people who remain at home for more extended periods and are dependent on an increasingly important neighbourhood role. It is also flexible and futureproof. To conclude, intergenerational cohousing is a type that provides accessibility to a lesser extent but could undoubtedly contribute if it is adequately managed. However, this process requires more attention than the other two types. Moreover, while many actors deem it an interesting type, they do not see this approach being applied on a large scale yet.

Based on the above findings concerning the main research question, it can be concluded that friends living can offer the most accessibility for starters on the housing market in Utrecht. It is more affordable than traditional housing types and can accommodate more people in a single house. Thus, friends living is a sustainable addition to the housing market, although the question remains what starters would most prefer. Actors indicated that they would have more preference for micro cohousing. After friends living, this is the second type that can also create solid accessibility because the houses are smaller and therefore more affordable, and more quantities come onto the market. However, micro cohousing must be treated as a social model to ensure that the rent remains affordable. Finally, intergenerational cohousing, which is the least known, is considered the least suitable approach for creating accessibility because it appears to be a smaller-scale option and it is uncertain how much demand starters have for this type. However, the discount does provide more affordability for starters. Thus, this approach could help contribute to increasing accessibility. It is therefore vital to keep a mix of these new housing types and more traditional types.

## 7 | REFLECTION

The last chapter examines the limits of the research, both for the own process and the results. Some of the limits are used for recommendations for further research. They are related to broadening the research or give more depth in the research. Finally, recommendations have been given regarding the praxis.

### 7.1 | REFLECTION AND LIMITATIONS FOR OWN RESEARCH

Looking back at the period in which the research was conducted, the researcher is satisfied with the results. The combination of cohousing with the inaccessible housing market for starters was a reasonably new subject, which means that it has significant scientific as well as social relevance. Much literature on both subjects had to be linked together to provide a successful research. Nevertheless, both cohousing and the inaccessible housing market for starters had been examined separately by other researchers, and enough literature was available. This made the process easier, but also more difficult because not all information could be processed in the research. Therefore a good demarcation had to be made as to which literature was or was not useful. The researcher had to be selective with the literature, which could cause an observer bias. Although this term is often used in observations, it is also applicable here. This means that the researcher's interpretation may not ensure that all information is processed and could have caused a limitation (van Thiel, 2014). However, it was ensured that the research is well defined so that most likely, all critical information has been processed. Nevertheless, this can never be said with certainty.

In line with the above reflection and limitation, the first intention of the research was that there would be a combination between both qualitative and quantitative research. The qualitative part would then focus on the market-oriented and governmental-oriented actors, whereby knowledge would be gathered through interviews. The quantitative part would focus on the preferences of starters by conducting surveys. However, it turned out to be too large to stay within the schedule. It was therefore decided to further delineate the research by only carrying out qualitative research with market-oriented and governmental-oriented actors. Involving the starters in qualitative research would not be representative enough. If the research would be repeated, these results are not reliable enough, because, under similar circumstances, the same measurement should lead to similar results. The fact that the research focuses only on market-oriented and governmental-oriented actors could be seen as a large limit to the research. This is partly because starters are essential sources for this research to investigate whether these housing types can lead to success. Nevertheless, a master-research does not answer all the questions related to a specific topic. So, this will be a question that remains unanswered in some way in this specific research. This research is exploratory in character. Thus it is focused on whether these types create accessibility according to market-oriented and governmental-oriented actors, and what kind of barriers and possibilities occur. Starters do not have to come into play here. This limit shows that starters are not involved in the research. However, this is not the only a limit that can be seen here, but also that only qualitative methods have been used. Qualitative methods ensure lower external validity and reliability, as has been shown earlier. However, this also allows for a more in-depth look into the topic, which resulted in profound results and conclusions. Qualitative methods are, therefore, not only a limit but also a possibility in terms of depth.

Another limitation lies in the fact that the research only focuses on collective cohousing. The research is not limited to only resident-led cohousing, but also commercial-led cohousing was added. The other elements of cohousing, shown in chapter 2, were only focused on resident-led cohousing, and this study especially wanted to see whether market-oriented parties are interested in these housing types. Nevertheless, the interviews showed that some respondents indicated other types related to the other elements of cohousing. These have not been included, which is a limitation, mainly since the research was focused on critical theory as a philosophy where it is vital to take everything into account.

Finally, there is a limitation in the field of external validity and generalisation by choosing only one case study or one unit of analysis. By focusing only on the municipality of Utrecht, it makes the research less generalisable because every city in the Netherlands has different rules and market values. This could, therefore, lead to a limit of the research. However, as stated in the methodology, Utrecht is a city that is very representative concerning other cities of the Netherlands, compared to, for example, Amsterdam. It can, therefore, be questioned whether this is indeed a limit or not. Every researcher will have a different opinion about this statement, and it is, therefore, worth mentioning.

## 7.2 | LIMITATIONS OF THE RESULTS

In addition to the reflection and limitations for own research, there are several limitations related to the results of the interviews. Due to the circumstances surrounding COVID-19, it was no longer possible to physically interview the respondents on-site, as previously planned. This creates a distance between the researcher and the respondent, which can result in answers that are politically correct but not correspond to reality. This could, therefore, be a limitation of the results. However, the researcher did not experience this phenomenon, so most respondents spoke openly about the topic. Because the interviews were held via an online system, which depends on WIFI, the connection sometimes dropped. This turned out to be the case when listening back to the recorded interviews. Several times the respondent could not understand what was being said. Thus, if someone said something important at these moments, it can be seen as a limitation to the research since some results would then be missing.

Another limitation within the results occurs to the answers that were given. The answers that the respondents gave were not always aimed at the municipality of Utrecht because many of their current projects are located in Amsterdam. When, for example, something was said about a suitable location in Utrecht, opinions were very divided over the respondents. The information that is not aimed at Utrecht is a limitation of the results for the research. However, these were often answers to questions related to the types themselves. It can be concluded from this that it does not necessarily have to be a limitation, as this increases the external validity and generalisability. Nevertheless, it is a limitation to internal validity. Besides, the information in the field of the location feature and the demand from the starters was briefly. The results were, therefore, not always considered representative enough, which makes the study less reliable. However, attempts have been made to refine these results with secondary data to make them somewhat representative.

Finally, it emerged from the results that the respondents did not always know the three types at all or one of the three types. This limitation may lead to the respondents giving the most logical answers instead of the real answer. This can cause a bias in the results. However, after explaining the housing types, most of the respondents often knew what was meant by them and were able to produce realistic answers. Nevertheless, prior knowledge can limit positive or negative thinking about a particular housing type. This was also included in the results, so this limitation is mentioned in the conclusion.

## 7.3 | RECOMMENDATIONS FOR FURTHER RESEARCH

Despite the research having its limits, there are several recommendations for further research to be able to convert some of these limits into new research. Because the research had to be demarcated in advance, some subjects were excluded from the research. Firstly, the research was limited to collective cohousing. However, as mentioned in the results, other forms of cohousing also emerged that were more related to collaborative or cooperative cohousing. Further research can, therefore, be carried out into these two forms of cohousing to provide a broader view of the possibilities that this concept has to offer for starters. This recommendation goes further than just the lines within this research and can, therefore, expand new knowledge. This makes it possible to look even more critically at cohousing in general related to starters.



A second recommendation for further research also goes beyond the line of this research. The research is currently limited to market-oriented and governmental-oriented actors. This could be extended with societal-oriented actors, in other words, the starters. Whether there is a demand for these housing types cannot be determined explicitly from this research. It can only be assumed that the respondents have said something about the need for demand. However, this may be not always in line with the starters themselves. To successfully implement these types, it is crucial to investigate the demand side as well. Since the target group of starters is large, it would be best to apply quantitative research methods. That makes the research more objective and representative. A question that could be asked here for further research is: what is the actual demand of starters for cohousing with its associated housing types and what do they actually need? However, it is not only important to find out what the needs and demand of starters are, but also to find the underlying thoughts what motivates the target group, what choices they made, and why they make these choices. It is further essential to find out the actual wish of starters regarding the housing market and what they are willing to pay for it.

Furthermore, the research is currently limited to only market-oriented and governmental-oriented actors, as has already shown above. It might be interesting for further research to compare these findings with experts in the field of cohousing, to see if there are similarities in the results or if the experts view this topic differently, both positively and negatively. This creates a new scientific relevance by making a reflection between the different results. It also ensures that the limitation on the knowledge of respondents is removed because, firstly, they are compared with experts and, secondly, the experts have knowledge that can serve as an extra addition.

It would be useful to not only look at the recommendations that go further than the research itself but also look at the recommendations more related to this research. The literature and interviews mainly emphasised the organisational dimension of all three types, namely, friends living, micro cohousing, and intergenerational cohousing. The results showed that it is uncertain whether or not micro cohousing is more affordable than traditional housing. The financial aspect of these housing types has not been discussed in more detail. To get a better picture of the differences, it is useful to research this aspect further, for example, by using a case study that can be carried out both qualitative and quantitative. It would be possible to compare a traditional building with one of these new housing types on a financial basis that can be viewed quantitatively, and depth can be provided by qualitatively examining the background of these financial aspects among the relevant actors.

Not only the financial aspect has not yet been investigated deeply enough, but there is also a possibility for further research in the fact that several research questions are needed before intergenerational cohousing could be successfully implemented. Since three housing types have been discussed in this research, and not many respondents knew intergenerational cohousing on beforehand, it would generate more general answers. From the literature and results, intergenerational cohousing appeared to be still relatively unknown. Therefore the fewest barriers and possibilities have emerged for this type of house. It is a form that is increasingly discussed but is rarely used. Thus, when further research is done into this type alone, more depth can be added. This makes it possible to delve deeper into the relational dimension. What do elderly and starters think of this type and why should they choose it or not, but also how to deal with the discount and the obligation associated with it. It is essential here to interview more experts, for example, in the field of legislation and experience experts.

## 7.4 | RECOMMENDATIONS FOR PRAXIS

The conclusion did not address all the results, and therefore some results are included in the recommendations for praxis. First, it is highly recommended to create a housing association specifically for starters. Jebber is already one of the first examples in practice. However, more of these companies are needed to tackle the housing problem for starters in Utrecht. Investors often find it too risky to only invest in one target group; that is why a housing association aimed at starters provides a good outcome. This can be started by an existing housing association or with the help of, for example, the

municipality. Furthermore, not only creating a housing corporation for starters is essential, but also adjusting the organisational structure of different companies. The three types of housing, according to the results, are now seen as an additional product. They are currently not creating a new management approach for these particular types. It is therefore recommended to expand the organisational structure and create a new management approach. This creates expertise and enables the products to be implemented more successfully on a larger scale.

Nonetheless, it is not only essential to follow these two recommendations. Actors, namely, need to think beyond their own role. Many actors focussing on a role and perform it well. However, they often look no further than their own role and sometimes forget what is essential. By thinking beyond their role, it becomes possible to find an appropriate solution to the housing problem and other problems. In this way, all actors can bring their expertise together to achieve a social goal. It is not only essential to think beyond your own role, but good cooperation is equally important. For example, the actors must enter a conversation with each other. It is crucial to have an open attitude, where all ideas can be put forward. Only then it is possible to solve the problem with each other.

Another recommendation is more related to required locations. Because the municipality does not pursue an active land policy, it is not easy, according to the results, to find suitable locations for starters. Often this land belongs to private owners who ask a high land value and are not always socially involved. The municipality could invest more in places outside the city centre. Think, for example, of Overvecht or Kanaleneiland. When the infrastructure improves, and connections to the city centre are better, these places will also become attractive for starters which often rely on public transport. Investing in places outside the city makes it easier for developers and investors to buy less expensive land. Another recommendation is to utilize temporary locations. The land that the municipality or private owners may own but do not want to sell yet can be a terrific way to create temporary locations. However, this is only possible if the municipality cooperates, through subsidizing, and adjust their zoning plans, since the houses no longer have a value after the temporary location is discontinued. By facilitating temporary locations, starters can live affordable in their first years, and more supply is created. This is certainly a possibility that should be considered as a solution for the inaccessible housing market in the municipality of Utrecht.

Do not talk but act. This is the final recommendation. The results showed that many actors are willing to invest in these types of housing and therefore see potency or are interested in the living model. Nonetheless, in many cases, it remains a matter of narrating instead of starting projects, and therefore action must be taken. Developers and investors should take the lead here, as developers take the first step towards development, and investors can enable this development by investing in it. Other actors will follow them if it turns out to be a success.

## REFERENCES

- Abdullah, S., Markandya, A. & Nunes, P. (2011). Introduction to economic valuation methods. Research Tools in Natural Resource and Environmental Economics. Chapter 5, 143-187, World Scientific, US. DOI: 10.1142/9789814289238\_0005
- Adams, D. & Tiesdell, S. (2013). Shaping places: urban planning, design and development. Routledge: London.
- Adams, D., C. Leishman & C. Moore (2019), 'Why not build faster?: Explaining the speed at which British house-builders develop new homes for owner-occupation', in Town Planning Review, 80(3), 291-314
- Ahn, J., Tusinski, O. & Treger, C. (2018). Living closer: the many faces of co-housing. London: Studio Weave
- Austin, P.M., Gurran, N. and Whitehead, C.M. (2013), Planning and affordable housing in Australia, New Zealand and England: common culture, different mechanisms. Journal of Housing and the Built Environment.
- Bosch, R. (2012). Wetenschapsfilosofie voor kwalitatief onderzoek. Boom Lemma uitgevers: Den Haag
- Boterman, W. R. (2012). Deconstructing Coincidence: How Middle-Class Households use Various Forms of Capital to Find a Home. Housing, Theory and Society, 29(3), 321–338. <https://doi.org/10.1080/14036096.2011.638315>
- Boterman, W. R., Hochstenbach, C., Ronald, R., & Sleurink, M. (2013). Duurzame Toegankelijkheid van de Amsterdamse Woningmarkt voor Starters. Amsterdam: University of Amsterdam
- Boyer, W. & Leland, S. (2017). Cohousing for whom? Housing Policy Debate, 28(5), 653-667. DOI: 10.1080/10511482.2018.1424724
- Bryman, A. (2008) Social Research Methods. Oxford University Press: Oxford
- Bussche, van den, N., Thion, P. & Remerie, A (2017). Cohousing vandaag en morgen juridisch in kaart gebracht
- Cagan, M (2019). Real estate investing 101: from finding properties and securing mortgage terms to REITs and flipping houses, an essential primer on how to make money with real estate. New York: Adams Media. ISBN: 978-1-5072-1057-4
- Calgary, A. (2017). Cohouse, mixed use. Retrieved from <http://moda.ca/cohouse/>
- Camp, P. (2017). Wonen in de 21<sup>ste</sup> eeuw. Den Haag: Acco Uitgeverij B.V.
- Campbell, J. (2013). Mortgage market design. Journal Review of Finance, vol. 17(1), 1-33. DOI: 10.1093/rof/rfs030
- CBS (2020). Meeste vergunde nieuwbouwwoningen in Utrecht. Retrieved from <https://www.cbs.nl/nl-nl/achtergrond/2020/08/meeste-vergunde-nieuwbouwwoningen-in-utrecht>

- CBS (2020<sup>1</sup>). Bestaande koopwoningen: gemiddelde verkoopprijzen. Retrieved from <https://www.cbs.nl/nl-nl/cijfers/detail/83625NED>
- Change= (n.d.). Leidsche Rijn centrum medio 2021. Retrieved from <https://www.change-is.com/location/utrecht>
- Chappell, A., Heywood, A. & Williams, P. (2018). Community led housing and retail mortgage lending: building the partnership. The National Community of Land Trust Network & CDS Co-operatives
- Coele, M. (2014). "Co-housing and intergenerational exchange: exchange of housing equity for personal care assistance in intentional communities", *Working with Older People*, Vol. 18(2), 75-81. <https://doi.org/10.1108/WWOP-01-2014-0001>
- Coldwell, W. (2019). Co-living: the end of urban loneliness – or cynical corporate dormitories. The Guardian
- Creswell, J. & Poth, C. (2018). Qualitative Inquiry & research design: choosing among five approaches. Thousand Oaks, Canada: SAGE Publications.
- Curran, D., & Wake, T. (2008). Creating market and non-market affordable housing- A smart growth toolkit for BC municipalities. Smart Growth BC
- Czischke, D. (2017) Collaborative housing and housing providers: towards an analytical framework of multi-stakeholder collaboration in housing co-production. *International Journal of Housing Policy*. 18(1), 55-81. DOI: 10.1080/19491247.2017.1331593
- Dam, van, N., & Marcus, J. (2005). Een praktijkgerichte benadering van organisatie en management. Groningen & Houten: Noordhoff Wolters
- Debenham, M. (2007). Epistolary interviews on-line: a novel addition to the researcher's palette. England: Jisc TechDis
- Doorewaard, H., Kill, A. & Ven, van de, A. (2015). Praktijkgericht kwalitatief onderzoek (dr. 2). Boom uitgevers: Amsterdam
- Douglas, M. (2004). The role of local government in the provision of affordable housing
- Draper, D. C. (1974). Broken commitment: modern view of the mortgage lender's remedy. *Cornell Law Review*, 59(3), 418-439
- Eerenbeemt, M. (2017). Wonen op 40 vierkante meter rukt op: de microwoning is in opkomst. De Volkskrant
- Falkenstjerne-Beck, A. (2019). What Is Co-Housing? Developing a Conceptual Framework from the Studies of Danish Intergenerational Co-Housing, *Housing. Theory and Society*, 37(1), 40-64, DOI: 10.1080/14036096.2019.1633398
- Fedrowitz, M. (2010) Gemeinschaft in der Stadt - Das Modell des Mehrgenerationenwohnens (Community in the city - the model of multi generation housing). *RaumPlanung*, Vol. 149, 75-80

- Fisher, C. (2010). Researching and writing a dissertation. An essential guide for business students. Harlow: Financial Times Prentice Hall. ISBN: 978-0273723431
- Forrest, R., & Yip, N. M. (2013). Young people and housing: Transitions, trajectories and generational fractures. Taylor and Francis Ltd 5
- Fromm, D. (2012). Seeding Community: Collaborative housing as a strategy for social and neighborhood repair. Built Environment, 364-394.
- Garciano, J. (2011). Affordable cohousing: challenges and opportunities for supportive relational networks in mixed-income housing. Journal of Affordable Housing and community Development Law, 20(2), 196-192
- Gemeente Utrecht (n.d.). Subsidies wonen en leefomgeving. Retrieved from <https://www.utrecht.nl/bestuur-en-organisatie/subsidiehulp/wonen-en-leefomgeving/>
- Gemeente Utrecht (n.d.<sup>1</sup>). Woningvoorraad en nieuwbouw. Retrieved from <https://www.utrechtmonitor.nl/fysieke-leefomgeving/wonen/woningvoorraad-en-nieuwbouw>
- Gemeente Utrecht. (2010). Wonen in een sterke stad. Woonvisie gemeente Utrecht 2009-2019. Goudriaan: Gemeente Utrecht, Stadsontwikkeling
- Gemeente Utrecht (2017). Actieplan midden huur. Goudriaan: Gemeente Utrecht, Stadsontwikkeling
- Gemeente Utrecht (2018). Blik op de stad 2017: monitor wonen, werken & verblijven. Utrecht: Afdeling onderzoek
- Gemeente Utrecht (2019). Beleidsregels wijziging samenstelling van de woonruimtevoorraad in de gemeente Utrecht. Retrieved from [https://decentrale.regelgeving.overheid.nl/cvdr/xhtmloutput/Historie/Utrecht%20\(Utr\)/CVDR625458/CVDR625458\\_1.html\\_blanc](https://decentrale.regelgeving.overheid.nl/cvdr/xhtmloutput/Historie/Utrecht%20(Utr)/CVDR625458/CVDR625458_1.html_blanc)
- Gemeente Utrecht (2019<sup>1</sup>). Visie: Utrecht beter in balans. Goudriaan: Gemeente Utrecht, Stadsontwikkeling
- Gemeente Utrecht. (2020). Informatie gemeente Utrecht. Retrieved from <https://allecijfers.nl/gemeente/utrecht/>
- Gool, van, P., Jager, P., Theebe, M. & Weisz, R. (2013). Onroerend goed als belegging. Groningen/Houten: Noordhoff uitgevers
- Green, G. (2017). The Logistics of Harmonious Co-living. Linnaeus University.
- Groot, A. (2017). Stijlvol minimalisme in een micro-appartement van 30 m<sup>2</sup>. Retrieved from <https://www.hetkanwel.nl/2017/12/04/wonen-in-een-micro-appartement/>
- Groot, de, C. & Vrieselaar, N. (2019). Housing shortage continues to drive up house prices. Dutch Housing Market Quarterly
- Groot, de, C., Manting, D. & Mulder, C. (2013). Longitudinal analysis of the formation and realisation of preferences to move into homeownership in the Netherlands. Journal of Housing and the Built Environment, vol. 28(3), 469-488. DOI 10.1007/s10901-012-9320-7

- Groot, de, C., Mulder, C. & Manting, D. (2011). Intentions to move and actual moving behaviour in the Netherlands. *Housing studies*, vol. 26(3), 307-328. DOI: 10.1080/02673037.2011.542094
- Guba, E.G. & Y.S. Lincoln (1994) *Competing Paradigms in Qualitative Research*. In: Denzin, N.K. & Y.S.
- Gurran, N. & Bramley, G. (2017). *International perspectives for policy and practice. Urban planning and housing markets*, 1-427. DOI: 10.1057/978-1-137-46403-3
- Harrison, H., Birks, M., Franklin, R. & Mills, J. (2017). Case study research: foundations and methodological orientations. *Qualitative Social Research*, vol. 18(1), 1-17.
- Hochstenbach, C., & Boterman, W. (2014). Navigating the field of housing: housing pathways of young people in Amsterdam. *Housing and the Built Environment*, 30, 257-274. DOI: 10.1007/s10901-014-9405-6
- Hoolachen, J., McKee, K., Moore, T., & Soaita, A. M. (2017). 'Generation rent' and the ability to 'settle down': economic and geographical variation in young people's housing transitions. *Journal of Youth Studies*, 20(1), 63–78. DOI: 10.1080/13676261.2016.1184241
- Infranca, J. (2014). Housing changing households: Regulatory challenges for micro-units and accessory dwelling units. *Stanford Law & Policy Review*, Vol. 25(1), 53-90
- Jansen, S. (2008). Understanding preferences for the residential environment using Affordance-base theory. *Delf University of Technology, Faculty of Architecture, and the Built Environment*, 1- 23.
- Jonger-Verkaart, M., & Wassenberg, F. (2015). *Kansen voor particulier huur in Nederland Den Haag: Platform31*
- Kleef, van, S. (2015). Single? Wonen in een friends-huis. Retrieved from <https://nos.nl/op3/artikel/2045429-single-wonen-in-een-friends-huis.html>
- Kruijthoff, H. (2007). Starters in the housing market in an urban region: The case of the Randstad Holland, a diversified housing-shortage area, *Housing Studies*, vol. 9(2), 219-244, DOI: 10.1080/02673039408720784
- Lang, R. & Novy, A. (2014) *Cooperative Housing and Social Cohesion: The role of linking social capital. European Planning Studies*. Vol. 22(8)
- Lennartz, C. (2018) *De omvang en prognoses van "het" woningtekort*. Retrieved from <https://economie.rabobank.com/publicaties/2018/juni/deomvang-en-prognoses-van-het-woningtekort/>
- Lennartz, C., Arundel, R., & Ronald, R. (2015). Younger Adults and Homeownership in Europe Through the Global Financial Crisis. *Population, Space and Place*, 22(8), 823–835. DOI: 10.1002/psp.1961
- Lietaert, M. (2009). Cohousing's relevance to degrowth theories. *Journal of Cleaner Production*, vol 18(6), 576-580. DOI: 10.1016/j.jclepro.2009.11.016
- Mackie, P. K. (2016). Young people and housing: identifying the key issues. *International Journal of Housing Policy*, 16(2), 137–143. DOI: 10.1080/14616718.2016.1159273



- Mason, J. (1996). *Qualitative researching*. Thousand Oaks, Canada: SAGE publications
- MBZK (2012). *Koopstarters op de woningmarkt*. Arnhem: Companen
- Mekawy, H. (2014). Role of planning mechanisms in affordable housing delivery: Inclusionary zoning. *International Journal of Development and Sustainability*, Vol. 3(9). 1927-1945
- Michielsen, t., Groot, S. & van Maarseveen, R. (2017). *Prijselasticiteit van het woningaanbod*. Den Haag: Centraal Planbureau voor de Leefomgeving
- Miles, M., & Huberman, M. (1994). *Qualitative Data Analysis*. Sage Publications Inc
- Moor, de, T. (2012). De herontdekking van het collectief. *Samenleving en politiek*, vol. 4, 29-38
- Mooren, van der, F. (2015). *Het dynamische leven van twintigers*. Den Haag: Centraal Bureau voor de Statistiek.
- Mulder, C. & Hooimeijer, P. (2002). Leaving home in the Netherlands: timing and first housing. *Journal of Housing and the Built Environment*, vol. 17, 237-268.  
DOI: 10.1023/A:1020264417389
- Mullem, van, A. (2018). AM WE ME. Retrieved from <https://www.am.nl/wp-content/uploads/2018/01/am-me-we.pdf>
- Needham, B. (2016). *Dutch land use planning; the principles and the practice*. UK: Taylor & Francis Group
- Nelson, A. (2018). Small is necessary; shared living on a shared planet. DOI: 10.2307/j.ctt1zk0mpz
- Nozeman, E. (2013). *Handboek projectontwikkeling. Een veelzijdig vak in een dynamische omgeving*. (2<sup>e</sup> dr.). Doetinchem: Reed Business B.V.
- Ouwehand, A., Doff, W., & Adriaanse, C. (2011). *Voorkeur voor een leefstijl?* Delft: Onderzoeksinstituut OTB
- Platform (n.d.). *Het platform*. Retrieved from <https://hetplatformutrecht.nl/Index/#>
- Priemus, H. (1969). *Wonen-kreativiteit en Aanpassing*. The Hague: Mouton.
- Provincie Utrecht (2020). *Forse stijging plancapaciteit woningbouw in provincie Utrecht*. Retrieved from <https://www.provincie-utrecht.nl/actueel/nieuws/forse-stijging-plan-capaciteit-woningbouw-provincie-utrecht>
- Quinio, V. & Burgess, G. (2019). *Co-living for older people – stakeholder views*. Cambridge: centre for housing & planning research
- Rissik, L. (2019). *The emerging concept of commercial co-living and its influence on users-affordability and developers-profitability*. TU Delft
- RTVUtrecht. (2019). *Utrecht heeft sterkste huizenprijsstijging van grote steden*. Retrieved from <https://www.rtvutrecht.nl/nieuws/1976167/>

- Sales, B. D., & Folkman, S. (2000). Ethics in research with human participants. American Psychological Association
- Sargisson, L. (2012). Cohousing: a Utopian Property Alternative? Nottingham: Centre for the study of social and global justice.
- Saunders, M., Lewis, P., Thornhill, A., Booij, M., & Verckens, J. (2013). Methoden en technieken van onderzoek. Amsterdam: Pearson Benelux.
- Schmid, S. (2019). A history of collective living; forms of shared housing. Switzerland: Birkhauser
- Schneider, T. & Till, J. (2005). Flexible housing: opportunities and limits. Architectural Research Quarterly, 9(2), 157-166. DOI: 10.1017/S1359135505000199
- Schreter, C. (2019) Residents of Shared Housing. Social Thought. Vol. 10, 30-38. DOI: <https://doi.org/10.1080/15426432.1984.10383466>
- Scotthanson, C. & Scotthanson, K. (2005). The cohousing handbook; building a place for community. Canada: New Society Publishers
- Sievers, A., Boogaard, R., Ligtoet, M. (2009). Klaar voor de starter. Stadsregio Rotterdam
- Stake, Robert E. (2006). Multiple case study analysis. New York, NY: Guilford
- Steurer, R. (2013). Disentangling governance: a synoptic view of regulation by government, business and civil society. *Policy Sciences*, 46(4), 387–410. DOI 10.1007/s11077-013-9177-y
- Stumpel, B. E. (2014). Urban Development Trust: Possibilities and Limitations for Dutch urban development. Masterthesis, TU Delft
- Tanveer, A., Muhammad, B. & Muhammad A. (2008). Reliability and validity of qualitative and operational research paradigm. Pakistan Journal of Statistics and Operation Research. DOI: 10.18187/pjsor.v4i1.59
- Theurillat, T., Rerat, P. & Crevoisier, O. (2015). The real estate markets: players, institutions and territories. *Urban Studies*, vol. 52(8), 4-14. DOI: 10.1177/0042098014536238
- Thiel, S., van (2014). Research methods in public administration and public management. Taylor & Francis Ltd.
- Treur, L. (2016). Woonkeuzes van jongeren en ouderen. RaboResearch Economisch Onderzoek
- Tummers, L. (2015). Understanding co-housing from a planning perspective: why and how? Urban Research & Practice, 8(1), 64-78. DOI: 10.1080/17535069.2015.1011427
- Tummers, L. (2017). Learning from co-housing initiatives. Between Passivhaus engineers and active inhabitants. Delft: TU Delft
- Vereniging Gemeenschappelijk Wonen (2019). Adressen Woongemeenschappen. Retrieved from <http://www.gemeenschappelijkwonen.nl/adressen-woongemeenschappen>
- Verhoeven, N. (2014). Wat is onderzoek? Praktijkboek voor methoden en technieken. Amsterdam: Boom Lemma Uitgevers.

Vestbro, D. & Horelli, L. (2012). Design for Gender Equality: The History of Co-Housing 260 Ideas and Realities. Built Environment. Vol. 38(3), 315-335(21) Alexandrine Press.  
DOI: <https://doi-org.tudelft.idm.oclc.org/10.2148/benv.38.3.315>

Weeks, L., Bigonnesse, C., McInnis-Perry, G. & Dupuis-Blanchard, S. (2019). Barriers faces in the establishment of cohousing communities for older adults in Eastern Canada. Journal of Aging and Environment, 34:1, 70-85. DOI: 10.1080/02763893.2019.1627267

Werf, van der, S. (2013). Werken aan wonen; volkshuisvesting in Nederland.  
Bussum: uitgeverij coutinho.

Wilson, K. (2018). Is co-living the future of housing? Retrieved from  
<https://entrepreneurs.maqtoob.com/is-co-living-the-future-of-housing-4b2c2b7a6f4b>

Wood, H. (2018). Shared Living. Retrieved from <https://medium.com/space10/beyond-the-blueprint-shared-living-and-theimportance-of-architecture-and-design-580a5e5434b9>

Yin, R. (2003). Case study research. Design and methods, 19-56