Rethinking the development process of mid-segment rental housing in the Netherlands.

Exploratory research into the development process of mid-segment rental housing in the Netherlands.

Ameesh Meghal Karekar

Colophon

Name	*:*	*Ameesh Meghal Karekar*
Student number	*:*	*4797523*
Institution	*:*	*Delft University of Technology*
Faculty	*:*	*Architecture and the Built Environment*
Master	*:*	*Architecture, Urbanism and Building sciences*
Master track	*:*	*Management in the Built Environment*
Date	*:*	*21st January 2021*
Version	*:*	*P5*

Supervisors

Main mentor	*:*	*Prof. P.J. Boelhouwer*
Second mentors	*:*	*Ing. Peter De Jong*
External mentors (Sustay)	*:*	*Frank Pieper & Don Van Holten*

Abstract

With a shortage of approximately 315,000 homes, 4% of the existing stock, the Netherlands continues to face a significant and growing shortage of housing. This shortage is a result of various factors that either directly or indirectly have effect on the housing market. Of which some of the key factors are demographic developments such as population growth and changing household compositions; economic developments such as rising house prices, construction costs and income developments (affordability); political developments in regard to rising sustainability goals and changing regulations. These factors have a direct effect on all segments of the housing market, causing a shortage within all and predominantly for affordable of mid-priced rental homes with an estimated demand for 60,000 – 200,000 such homes over the next ten years. This demand or pressure on the mid-segment rental sector is a direct result of the inaccessibility to owner-occupied and social housing sector. As the house prices increase and the waitlist for social homes get longer the mid-segment housing market faces high demand and in turn pressurising both market parties and municipalities. Although there are developments within this segment and both parties are striving to ease the pressure on the market the supply of such homes is slow.

Hence this research aims ***to increase the supply of mid-segment rental homes and contribute towards reducing the housing shortage in the Netherlands*** by hypothesising that ***improving the existing development process and policies within the mid-segment rental housing market would in turn improve the supply.*** Which brings us to the goal of the research ***to recommend measures/changes, that municipalities and market parties, could possibly make to improve the supply off mid-segment rental homes in the Netherlands.*** Given the regional characteristics of the housing market, this research adopts a case study method to analyse the development process and policies within different market types. Implying that the cases are market types and the phenomenon being explored, the development process of mid-segment homes. Learning from professionals in practice with the assistance of semi-structured interviews to first understand the existing process and policies, the problems encountered by them in the past and then collating recommendations from these actors to as how the process could be improved. Synthesising the information collected from the field research with theoretical findings to arrive at conclusions and in turn trying to answer the main research question: ***How can the development process of mid-segment rental housing, in the Netherlands, be improved to meet the rising demand in this segment of the housing market?***

On completing the research, through the interviews conducted it was found that the various actors along the process face challenges predominantly in the planning phase and challenges that arise from each other hence creating a rather uncertain environment to act in. Thus, reluctance in taking initiative and the shortage of mid-segment homes, although through this research an attempt was made to answer the main question by concluding that in order to improve the delivery of mid-segment homes it would essential to establish a well determined process, seek alternative land development approaches, allowing flexibility during negotiations and regulations, improving actor relationships, and developing policies that would not only regulate this segment but also stimulate market actors to develop mid-segment homes. Following these conclusions and aligning to the goal recommendations were made to the actors involved at an organisational and project level. Of the made recommendations the ones that stand out would be of municipalities supporting one another, involved actors form consortiums to share development risks, development of policies at a national level and finally establishing a trustful, transparent, certain, and supportive environment for each other.

Keywords: Mid-segment rental, real estate development process, housing market, development feasibility.

Preface

While pursuing my master's studies at the faculty of architecture and the built environment TU Delft (master track – Management in the Built Environment), on multiple instances, I have had to comprehend the real estate development process on a theoretical front, particularly within the context of the Dutch housing market. Whilst doing so, I realised that the various actors in this process encounter quite some difficulties. Especially in the realisation of housing projects, which can be seen through the rising housing shortage in the country. That realisation, time and again gave rise to a lot of questions in my mind, particularly towards the housing sector, for example, *"what is being done wrong in the process, that is causing difficulties for the involved actors?"*, *"what is currently being done to improve this process?"*, *"how does one translate these theories into practice?"*, *"how can the Dutch government assist in reducing this shortage of housing?", etc.* Hence, in the last phase of my master's studies, through this thesis I tried to explore this simple, yet complex process of residential real estate development in the Netherlands. I say *"simple, yet complex"* as one can argue that real estate development is, like any other development process, cyclic or repetitive process that can be carried out for every project. On one hand it is a rather simple process although on the other the complexity, not directly lying in the process, lies within the context it is being carried out in. A wide range factors such as demographic developments, changing demands, available resources, political agendas, social & economic conditions, income & affordability, etc. directly have effect on real estate development, making the rather *"simple"* process complex. Along with these introspective encounters within my master studies, another reason for my interest in pursuing a research in the direction of understanding the real estate development process is my personal goal, to work as a project developer, actively be a part of the process and try to contribute towards improving it. This master thesis is my first and small step towards that goal, doing so by focusing on one segment of the Dutch housing market that particularly needs attention, the mid-segment rental housing market. This segment has been overseen in the past and recently due to the rising demand has drawn the attention of both private and public organisations. With the assistance of project developers Sustay B.V., who currently develop within the mid-segment, I try to present an understanding of the development process and policies within different market types, currently in practice, resulting in recommendations to improve both.

I would like to take the opportunity to acknowledge the support and guidance of my mentors, both at the faculty and at Sustay. My main mentor at the faculty Prof. Peter Boelhouwer, second mentors Dr. Ilir Nase, Ing. Peter De Jong, for their assistance and advise through the process of conducting research and writing this report. Frank Pieper and Don Van Holten from Sustay for their patience during my time with them, answering the questions I had and connecting me with the right people to conduct the required interviews. As without these 12 interviews this research would have been incomplete, I would like to thank and acknowledge the contribution they have made as well. Last, but not the least, I would like to acknowledge the immense support I had from my family and friends, especially my parents who were thousands of kilometres away and my two housemates here in the Netherlands. 2020 has been a difficult year for everyone, fighting through this pandemic has been a challenge and I only hope the future holds something better for all of us.

I hope this report informs you well.
Ameesh Meghal Karekar
Delft,
28th January 2021.

Executive Summary

Introduction

This research extends in the direction of two main themes, the housing market in the Netherlands and the real estate development process. Acknowledging that shortage of housing is currently a global phenomenon and currently rather evident in the Dutch housing market. Which brings us to the first theme of this research the housing market in the Netherlands, that currently faces a shortage of 4% and is being termed as an unaffordable or inaccessible market. This shortage is caused by various factors, of which some are rising house prices, contrition costs, desire to move towards cities, number of single person households, etc. These factors along with others would be further elaborated in the Market analysis section. In a nutshell, all segments of the housing market in the Netherlands face a shortage of supply and this can be clearly seen in the Interior Ministry's National Housing Plan 2018 – 2021 has three key objectives: *(i) Build more homes and build them faster; (ii) Continue to ensure a supply of affordable homes and (iii) Use the existing supply more effectively* (Bouwinvest, 2019). Moving on to the second theme, the real estate development process, it would be redundant to mention the details to ho these two themes go hand in glove. As it the market and the various factors that act as stimulants to the real estate development process. This research extends towards understanding the real estate development process of particular segment of the housing market, the mid-segment rental housing market. With an aim *to increase the supply of mid-segment rental homes and contribute towards reducing the housing shortage in the Netherlands.* Aligning with the aim, *the goal of the research is to recommend measures/changes, that municipalities and market parties, could possibly make to improve the supply off mid-segment rental homes in the Netherlands.* As from some preliminary search and interviews the problem that was defined was that there are hurdles along the process of delivering mid-segment homes. Hypothesising, *that improving the existing development process and policies within the mid-segment rental housing market could in turn improve the supply.* Bring us to the main research question of how can the development process of mid-segment rental housing, in the Netherlands, be improved? As answering this research question would further form the basis to achieve the goal of making recommendations to the involved actors along the process. In order to answer certain *sub-questions (see section 1.4.2)* needed to be answered, in turn gathering the required information to answer the main question. Spreading the research over five phases the first two would assist in exploring the required theoretical concepts and understanding the housing market in the Netherlands. The third and fourth being field research to collect supporting information from a practical perspective that would assist in answering the main research question in the final phase (see Figure 5 and section 1.4.3 for elaboration). Lastly, this research has both social and scientific relevance's, that are elaborated in *section 1.5.1*

Market Analysis

The first phase of the research is to carry out a market analysis to understand the structure and composition of the Dutch housing market, and further the developments in the various factors that influence it. The underlining goal being to answer the first sub-question *"What is the current situation of the Dutch housing market, in terms of developments, investments and policies; why, where and by who is there such a high demand for mid-segment rental housing?"* This is done by structuring the sections of the chapter to align with different parts of the question. *Sections 2.1 and 2.2* answer the first half of the question by bringing to light the *structure* of the Dutch housing market and elaborating on its *current situation*. The latter half of the question being answered through *section 2.3* where the focus shifts from the housing market in general to the *mid-segment rental market.*

The Dutch housing market is broadly divided into two segments, owner occupied homes and rental homes, in total it currently comprises of 7.8 million homes (see Figure 6) (Capital Value, 2020). Within the rental sector we see three segments, social (rent below 734€), mid-segment (rent between 734€ and 1100€) and the free market rent (above 1100€) and on conducting the market analysis it was found that *only 6% of the total housing stock in the Netherlands comprise of mid-segment homes,* and this segment of the market suffers from significant shortage which is currently being addressed (Capital Value, 2020). This chapter further delves in detail regarding the demographic, social, political, and economic developments in the Netherlands that have an

influence on the housing market. Looking at these factors on a national and regional level the chapter follows the categorisation made by Capital Value (2020), splitting the Netherlands into five regions, Metropolitan Areas, Big Cities, Other Randstad Areas, Regional Municipalities and Areas of Demographic decline (see section 2.2.2 for explanation) to have a wholistic understanding of the current situation. As it is important to identify that the development in the factors that affect the housing market can vary based on location, economic conditions of the areas. With no doubt, it can be seen that the most significant pressure is seen within the Metropolitan Areas and Big cities. This pressure is also seen within the mid-segment rental housing market and is currently a wide range of estimated shortage as relevant information is yet to be gathered. This chapter further presents an understanding of the mid-segment rental housing sector by defining the segment, identifying its significance, target groups, demand and regions that require attention. Further, the chapter delves into the expected future of the housing market and the desired developments. Which brings to light that housing shortage is rising but is expected to flatten provided the goals and ambitions of the housing agenda are indeed met, and this to a certain extent implies that there needs to be improvement in the development process.

Theoretical research

The second phase of the research extends towards looking into existing approaches and tools available to improve the process and further building a theoretical framework to analyse the field research to identify what tools or measure suggested in theory could be synthesized with the findings. The underlining goal of this chapter being to answer the second sub-question *"How does the real estate development process work in theory, what are the challenges or barriers to development currently faced in the Netherlands and how can the process be improved?"* this process requires collaboration between multiple actors and stakeholders. Along with these collaborations three primary factors that are essential is land, labour and capital, these factors can also be considered as resources and without which development would not be possible. As mentioned earlier as well this process of real estate development is rather simple, however its complexity only grows when more and more factors such as financial markets, politics, user requirements, etc come into play. To further understand this complex process, many authors have tried to time and again to create models that would assist in understanding the essential components and how they impact one another. The development models were generally made with specific concepts and over the year's attempts have been made to arrive at one complete model that would incorporate all the various concepts. Although, this has only been attempted by various authors and have finally been broadly classified into four main types. They are (i)Equilibrium models; (ii) Intuitional/structural models; (iii) Agency models; and (iv)Event-sequence models (Adams, D. & Tiesdell, S., 2012). These have been discussed in detail in *section 3.1.1.* Other factors that play a vital role in the real estate development process would include development pressure and prospects, development feasibility, ownership control, regulatory consent, physical suitability, market appeal, financial viability, implementation – pre-construction work, construction, and marketing & disposal.

The Netherlands also goes through a cycle of changing social and economic demands that create development pressures that then lead into the process of realising new developments and finally re-analysing demands as the driving factors change or develop over time. This section does intend to throw light upon land development in the Netherlands, as it is an integral component within the process. Further this section draws from the market analysis the current challenges faced while delivering new-build in the Netherlands and subsequently presents the current situation of developing mid-segment homes by elaborating on the barriers seen by this segment. Land development being the key factor to the real estate development process the next sections elaborate on the three models that are currently seen in the Netherlands – Public land development, Land development by public-private partnership and Land readjustment. There is a process in place for improving the framework of the build environment with the different players playing a specific role. This has evolved over the years, structured, and restructured to suit the changing needs of the growing population and its demographics. The main functions that help in the evolution could be listed as planning, optimal land use, innovation in design, construction and management, Financial policies involving both the public and private sector, policy instruments which give a sense of direction to achieve changes required with the everchanging population and its requirements. Finally, in conclusion to this phase a theoretical framework is build that would not only assist

in arriving at interview questions but also forms a basis to analyse the results in a later phase. Comparing the empirical findings to theoretical ones to arrive at making recommendations to improve the development of mid-segment rental homes in the Netherlands.

Methodology

The third phase of the research being to develop the appropriate methodology to conduct empirical research via semi-structured interviews. The research uses a qualitative case study method research to collect the required field information regarding the development process for mid-segment rental homes and the policies that are currently being developed for the same. The research uses a multiple-case study approach as it aims to explore the phenomenon of real estate development set in different market contexts. With the aim of resulting in understanding this process and comparing it within the different contexts. To assist the analysis of the cases the research use examples of recently completed projects as a point of reference along with theoretical finds as presented in the earlier section. The research uses semi-structured interviews as a tool to collect the required information that would assist in answering **sub-questions 3 to 5 (see section 1.4.2)**. Designing two interview protocols, one directed towards the involved **market parties** and one towards the **municipal representatives (see sections 9.1.1 & 9.1.2)**. To be able understand the process from a broader perspective the research would also engage in conducting interviews with senior level management within the organisations of the involved actors. On assessing the posed **research question and goal (see section 1.2 & 1.4)**, it can be concluded that a qualitative research approach would be an appropriate choice. Given that the goal of this research is **to recommend measures/changes, that municipalities and market parties, could possibly make to the existing process and policies of developing mid-segment rental homes in the Netherlands.**

Selecting a case study approach to carry out this research, is based on the fact that such an approach allows the researcher to explore or describe a phenomenon in either a single or multiple contexts with the assistance of varied data sources. A case study approach should be adopted when in the following instances, (i)The study is trying to answer a "How" or "Why" question; (ii)The behaviour of the involved participants cannot be manipulated; (iii)The study aims to cover contextual conditions; (iv)There are unclear boundaries between the phenomenon and context. In regard to this research, all four points hold good, as the main research question is a "how" question, the behaviour of the actors involved in the process cannot be manipulated, the study does aim to explore the development process for mid-priced rental homes set in different market contexts and lastly there is quite some unclarity between the differences in process based on the context they are set in. The next step being to identify the 'Case' or unit of analysis, for this research it is the **market type or context** within which, the phenomenon, **development of mid-priced rental homes takes place**. A multiple-case study design would be required, as there are five different types of market contexts or environments that development occurs in the Netherlands: they are Metropolitan Areas, Big Cities, Other Randstad, Regional Municipalities and Areas of demographic decline. Areas of demographic decline have been omitted from the scope of the research as whilst carrying out the market analysis it was found that these regions currently do not face any shortage of mid-priced rental homes.

After having determined the cases and the phenomenon this research intends to study it was important to select example projects within each case so as to learn from past experiences of professionals in the field. As for the data collection the research will adopt an interview technique as this method of data collection is most suited for qualitative-based studies. The questions being answered on both, a broader perspective of the mid-segment rental housing market and in particular to the example project being discussed; information would be gathered to assist in understanding: (i)The development process; (ii)Challenges faced by the actors within the different stages of development and how they can be overcome; (iii)Policies and regulations that could assist development; and (iv)Expectations the actors involved have of each other. In turn this information would assist in making recommendations for improvement. Finally, this section of the research describes the categorisation of the interview results and how the information gathered would follow into answering the intended sub-questions (see Figure below).
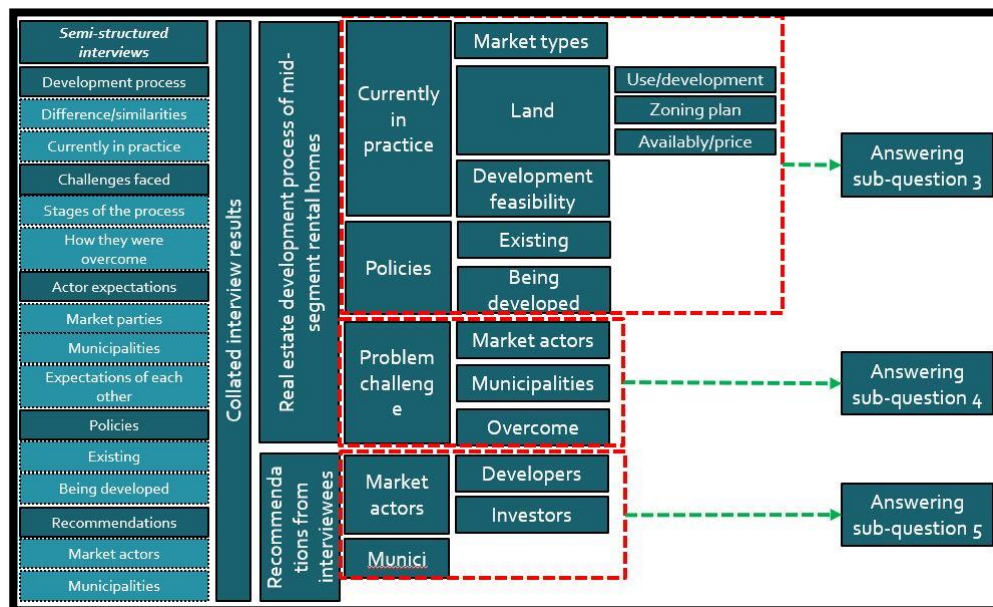
Results

The fourth phase of the research being to present the findings of the interviews conducted by collating the answers of the interviews into the earlier made categorization. Further, answering the sub-questions ***3. What is the development process and policies available for mid-segment rental homes, in practice, within different market types? 4. What are the problems encountered by the different actors, in practice within the process, and how are they overcome? And 5. What is the opinion of actors involved, in practice, to improving the development process of mid-segment rental housing in the Netherlands?*** As also seen the figure above the categorization of the findings are made in order to directly answer these questions. Summarizing the answers to these question would be as follows. It was found from the interviews that there is not any stalk difference in the development process of mid-segment homes when compared to developing for the free market and also no particular difference within the different market types. With one key difference, of the process being comparatively quicker in Other Randstad Areas and Regional Municipalities. This answer is elaborated in ***detail in sections 5.1.1and 5.1.2*** that present in detail what is currently happening in practice in regard to process and policy.

Section 5.1.3 answers sub question 4 relating to the various challenges and problems the involved actors face along the process. This was done by discussing example projects with the interviewees in order to not only understand the problems but also how they were overcome in the past. The problems faced were categorised based on the actors and in most cases the interviewees mentioned that they were overcome solely by extensive negotiations. In regard to the challenges and problems faced it can be summarized that majority of them are within the planning phase of the development process and in regard to arriving at feasible business cases. There was extensive mention of the problems such as scarcity of land, high land prices, high expectations of municipalities, uncertainty in regard to policy developments and rising construction costs (the section elaborates on these problems and also others) by market parties. The challenges faced by the municipalities were predominantly in regard to developing policies that could assist such development, although constantly having to deal with market actors trying to find loopholes in the policies that are made. It was brought to light that the biggest challenge they face is to ensure that the homes being developed for this segment of the housing market are of appropriate size and quality to the demands from the various target groups.

Further, ***section 5.2 answers sub-question 5*** by collating the recommendations made by the interviewees in regard to improving the development process. Which were categorised into recommendations to market actors ***(see section 5.2.1)***, developers and investors and recommendations to municipalities ***(see section 5.2.2)***. Of which the key recommendations to market actors being to shift their focus form developing in Metropolitan Areas and Big Cities to seeking opportunities within the Other Randstad Areas and Regional Municipalities given

that developing in these areas indeed is easier in terms of arriving at feasible business cases. This being the most significant other recommendations were also made, that are elaborated in the section. In regard to the recommendations made to municipalities the most evident being that of allowing room for negotiation in terms of higher than standards expectations of sustainability goals, and of course in regard to lowering land prices.

Finally, the section concludes in synthesizing *(see section 5.3)* the results to the earlier made theoretical framework to identify where along the process recommendations of improvement are necessary. Further, looking into theoretical findings regarding how the real estate development process can be improved. It was identified that recommendations to improving the process is most apparent within the planning phase of the process, more specifically in the negotiation of requirements, municipal goals, land acquisitions and developing policies that could steer and stimulate developments.

Conclusions, Recommendations & Limitations

In the final phase of the research after having presented the findings from the conducted interviews and presenting a synthesis of the findings with the theoretical research and market analysis; this phase of the research presents the final conclusion made and tries to answer the main research question,*" How can the development process of mid-segment rental housing, in the Netherlands, be improved to meet the rising demand in this segment of the housing market?"* As seen in Figure 59 the research resulted in five conclusions after reviewing the findings, establish a well determined process, seeking alternative land development approaches, allowing flexibility during negotiations and regulations, improving actor relationships, and developing policies that would not only regulate this segment but also stimulate market actors to develop mid-segment homes *(see section 6.1 for explanation* of why these conclusions were made). Having made these conclusions that identify what aspects of the development process require improvement, the next section in this chapter tries to answer the main research question. On summarizing which it can be said that the development process could be improved by active participation of the involved actors, seeking alternative land development methods, innovative design, and construction methods and finally by developing policies at a national level *(see section 6.1.1 for elaborated answer)*.

Further aligning to the goal of the research possible measures/changes to improving the supply of mid-segment rental homes will be recommended. These recommendations will be made at two levels at an organisational level *(see section 6.2.1)* and project level *(see section 6.2.2)*. At an organisational, as common recommendations to both municipalities and market parties shift focus towards developing mid-segment homes in the Other Randstad Areas and Regional Municipalities, taking initiative, and seeking re-development opportunities within Metropolitan areas and Big Cities. In particular to municipalities, support one another in terms of building capacity within themselves; municipalities allowing for room to negotiate in regard to the increased sustainability and building requirements; municipalities seeking alternative land development approaches as it is made clear in the interviews that municipalities currently have a scarcity of land; on a policy front it is recommended that municipalities, in line with the rent cap of 20 to 25 years, should incorporate policies that ensure that these homes remain within the mid-segment at the end of this term and finally introducing fast track options for permits where the land-use and zoning plan are in line with the intended development. In regard to the market actors, other than the mentioned common recommendations, it is recommended that they actively seek opportunities rather than wait on public tenders as developing within this segment is a feasible and viable option even through private lands. Further, recommendations at a project level are made, with the emphasis on sharing risks, early involvement of contractors and investors and alternative contracting methods. An elaboration of these made recommendations are found in the section, and in conclusion a brief comparison is made to recommendations from similar studies in order to highlight the recommendations specific to this research.

In conclusion to the research, limitations are presented in lieu of making recommendations towards further research in order to be able to achieve the aim of reducing the shortage of housing in The Netherlands *(see section 6.3)*.

Table of contents

1. Introduction

The first section of this report briefly describes the research themes, which are studying the housing market in the Netherlands and the real estate development process within a particular segment of it. The section then delves into defining the research's aim, and goal and further elaborates on the problem at hand. The chapter concludes by introducing the research questions, that the study intends to answer, the research approach and concepts that would be explored along the way, that would assist in answering the research questions, and finally discussing the social and scientific relevance of this research.

1.1 *Research theme*

This research extends in the direction of two main themes, the housing market in the Netherlands and the real estate development process. The following section gives a brief background of the concepts being explored within these themes. These concepts will be further elaborated upon in later sections of the report (See section *2. Market analysis & 3. Theoretical research*).

1.1.1 *The housing market in the Netherlands*

The shortage of housing is a problem faced by the Netherlands and a problem faced globally. As the world has slowly coped with the global financial crisis's effects, we see another global crisis in the making; the global urban housing affordability crisis (Wetzstein, 2017). Wetzstein (2017), referring to Perry (2015) and Pittini, A (2012) defines this term as the trend of household or housing expenses rising faster than the rise in income of people. This trend is seen worldwide, and in the Netherlands (Nijskens, Lohuis, Hilbers, & Heeringa, 2019). During the global financial crisis, the housing market in many countries, including the Netherlands, came to a standstill. Thus, resulting in a large gap between the demand and supply, which was further intensified by people moving towards bigger cities, rapidly changing the demand on the housing market. Even though construction resumed, the supply rate could not match the rising demand, causing a rise in housing costs and affordability of living in cities. **Error! Reference source not found.** below illustrates the contributing factors to the global housing s ituation, seen in the Netherlands (Nijskens, Lohuis, Hilbers, & Heeringa, 2019).

Figure 1: Timescale of contributing factors to the current housing market picture (ULI 2018)

According to Nijskens, Lohuis, Hilbers, & Heeringa (2019), this global urban housing affordability crisis is caused by various reasons. (i) Investment in real estate, particularly in the residential sector, putting pressure on house prices. (ii) Limited land supply and complexity of delivery, finding suitable land for development in cities can be challenging and develop within the core to prevent urban sprawl housing. It is created through large regeneration projects that include the development of infrastructure and can be very expensive. In turn, making the houses built expensive to buy or rent; (iii) Rising costs, rising demand for housing and scarcity of available land drive the land prices up and in turn development costs. Rising land price on one hand and the overall rise in construction costs on the other, shrinking labour forces, increase in material and resource costs creates a difficult situation to delivering housing; (iv) Inflexible regulations, with the change in demographics and demand for different types housing many cities in the world and Europe do not permit new innovate housing typologies or sometimes altering the regulations to fit the demand can be time-consuming. Resulting in a slower

construction process and reducing the rate of supply. These factors are, without doubt, applicable to the housing market in the Netherlands, causing the shortage or crisis for housing and pressurises not only the market actors but also government and regulating organisations.

In the Netherlands, the housing market dropped drastically during the global financial crisis of 2008 where the house prices fell by 6% in 2009, as GDP contracted by 3.8%. The worst was seen in the year 2013 where the number of dwellings sold annually reduced to almost half of the average of units sold from 2005 to 2007. However, the year 2014 saw a turn in events and a steady rise, the house prices rose almost 34% from 2014 to 2019 (C. Delmendo, 2019) (see Figure 2). This on one hand can be seen as a positive improvement but on the other this rise in house prices has resulted in fall of sales, almost by 9% in one year all over the Netherlands. (see Figure 3). Although 'Rising prices, falling sales' is how the housing market was captioned at the end of 2018, a turn was seen in 2019 where transaction did seem to be back on track, but the shortage continued to grow. However, there are also predictions that this rise in house price will slowly level off by 2020. The main reasons for the rise in house prices are persistently low mortgage rates, rising incomes and the momentum of the market itself (Spiegelaar & Vrieselaar, 2019; C. Delmendo, 2019; ING, 2018). There are also other factors that are contributing towards this increase of house prices, such as shortage of housing and the attraction towards big cities. This rise in house price and shortage of supply is making homes unaffordable to a large group of potential buyers turning them away from the owner-occupied market to other housing options (Bouwinvest, 2019).

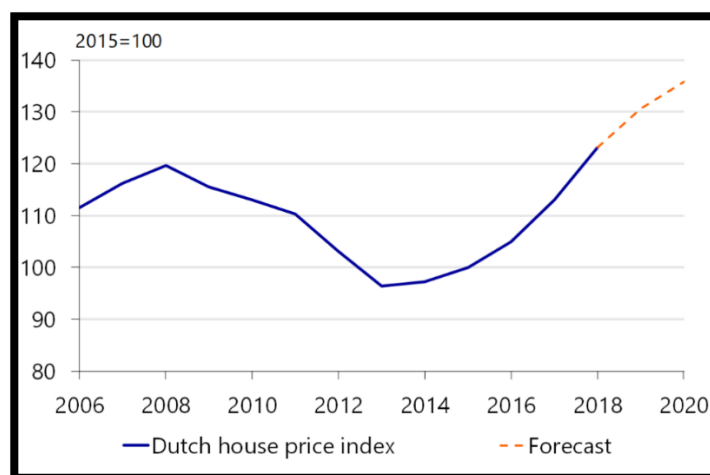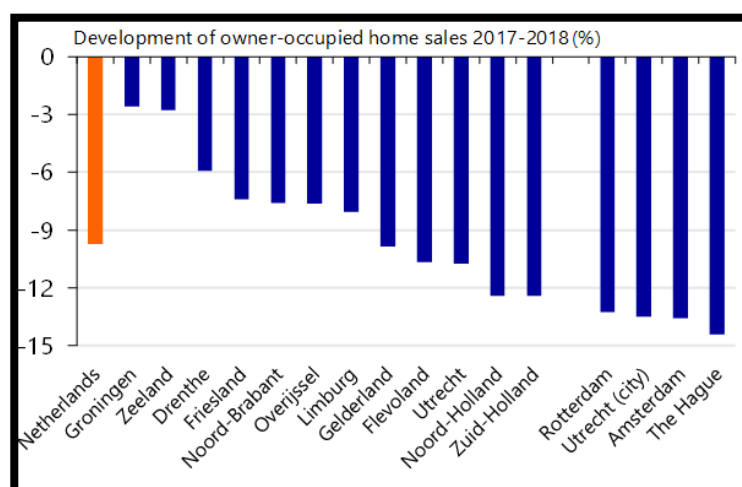*Figure 2: Price rises of housing market (Kadaster, Stastics Netherlands (CBS), RaboResearch)*

Figure 3: Decline in sales (Dutch Land Registry, Statistics Netherlands (CBS), RaboResearch)

The Netherlands is currently facing the highest shortage of housing, in 2018 it was estimated that shortage would peak at approximately 235,000 dwellings by 2021. Unfortunately, this prediction seems to be occurring

earlier, the shortage at the start of 2019 was estimated at 263,000 dwellings. Based on these numbers a significant housing shortage must be considered until 2030 (Capital Value, 2019). This shortage is only expected to rise along with the growth of population and problems within the construction industry (increased costs, depleted labour, and material resources, delayed or prolonged permit issuances and lack of easily available locations). It is predicted that by the year 2030 there will be a shortage of 200,000 dwellings implying that to be able to control or curb this shortage 100,000 to 200,000 more dwellings will have to be built over the coming years (Capital Value, 2019). The impact of this shortage is most seen on senior citizens and starters, with an increase of nearly 60,000 over-65 households and 7,800 young households each year. There is significant demand especially by the seniors however, the demand of the young seems to be stabilizing, due to change in study financing models the young now tend to live at home longer. (Capital Value, 2019). The pressure on the housing market is not going to subside in the near future, especially in the Randstad areas. It is expected that these areas will suffer this shortage for quite some time into the future due to the shortage of new-build homes. The above-mentioned numbers only account for the quantitative shortage present in the housing market as there is also existing stock that do not fit current market requirements and soon will only add to the shortage. Currently the Interior Ministry's National Housing Plan 2018 – 2021 has three key objectives: *(i) Build more homes and build them faster; (ii) Continue to ensure a supply of affordable homes and (iii) Use the existing supply more effectively* (Bouwinvest, 2019). Although housing production is expected to grow where possible there are a lot of factors that could hinder this. Such as shortage of concrete residential construction plans, shortage of labour and material, policy changes towards the rental sector and developments on sustainability goals.

This shortage and difficulty in buying a home tend people to turn towards the rental market for housing options. The Dutch housing stock as of January 2018 comprised of 7.7 million dwellings out of which 42% was of the rental market, of which 70% were owned by housing associations (Statistics Netherlands, 2019). This leaves only a small number of rental properties within the free market. The regulated dwellings are primarily allocated to lower income households and the government sets the rent limits in this segment. As compared to the non-regulated where the suppliers fix the rents. However, in recent policy reformations the threshold to fall under social housing was revised which implies that soon there will be a lot of demand for homes in the private rental market. This could be a severe problem as this segment of the market is not yet ready to supply to such high demands. The mid-segment rental housing sector of the market currently requires attention, both market parties and governmental organisations see the urgent need to improve the supply of this sector (Bouwinvest, 2019). This segment of the housing market consists of affordable homes for households who have income of no more than 41,056 euro (2018 price level up to 2021) annually (Government of Netherlands, 2019). This implies that in the coming years with significant economic growth there will be many households who do not qualify for social or regulated housing (80% of the rental market). As all cannot immediately afford an owner-occupied home due to their personal financial position and increase in house prices still being a trend, a large share will turn towards the mid-segment rental for their housing needs (Government of Netherlands, 2019).

There are currently 469,000 such homes in the Netherlands and there are predictions that in the next ten years there will be a need of 60,000 to 200,000 homes in this sector of the housing market (Government of Netherlands, 2019; Bouwinvest, 2019). This demand is mainly due to the rise in number of single-households, aging population, starters on the housing market and households who need/want to move out of the social sector (see section 2.3.2). The target group who demand for mid-segment rental housing mainly consist of:
- Young professionals
- Households who need to move out of the social sector.
- People looking for flexible housing options – close to work.
- Elderly population
- Knowledge workers

The demand for this kind of housing being experienced the most in Randstad areas, although it does not imply that there is no requirement for such housing in other regions. Along with demand from the consumer end, demand is also seen from municipalities, who along with the desire to create diverse and socially inclusive

neighbourhoods as a measure to prevent gentrification, understand the importance of increasing the supply of mid-segment rental homes. In the coming years it is expected that the mid-segment housing maybe regulated, and this regulation will first affect the major cities as they are facing the shortage the most. Not only are the people facing the high rising house prices but also investors who plan to invest to acquire properties to rent out. Municipalities are working on policies to assist the development in this sector, however for the supply to increase, there needs to be far-reaching cooperation amongst all involved stakeholders. This segment of housing can see a better future if the cooperation is optimised between developers, investors, housing associations and municipalities (Government of Netherlands, 2019; Bouwinvest, 2019).

1.1.2 The real estate development process

Looking through various definitions of the real estate development process, the one that particularly catches attention is that of Miles et al., who in one short statement say, **_"Real estate development is the continual reconfiguration of the built environment to meet society's needs."_** Implying that the process has to deal with not just adding, removing, or renovating buildings but also deals with creating the required support systems that assist the built environment to perform as one united entity. They further describe the process as cyclic in nature as the process begins with a creation and ends at re-creation of spaces based on the new or changed needs of society. This process, from a broad or rather umbrella perspective, have two contributors – private and public participants. The understanding of this process is of essence for both of these participants, although their end goals may vary, they would have to cooperate as quite some of their objectives along the way are interwoven. The private sector with a higher inclination towards maximizing their personal or institutional objectives, most often economic profits, whilst the public sector mainly focus on serving public interests, in terms of improving quality of the built environment with minimal damage to society, the economy and the environment. The process mainly comprises of three factors of production; land, labour and capital that would in turn create the desired product by coordinating these factors (Miles et al., 2015). Time and again the real estate development process has been compared to other production processes, such as the manufacture of automobiles, where a simple iterative process can deliver the desired product. On one hand this comparison can be accepted given that the real estate development process can be broadly classified into eight stages, see figure below (Figure 4)(Miles et al., 2015, Adams, D. & Tiesdell, S., 2013).
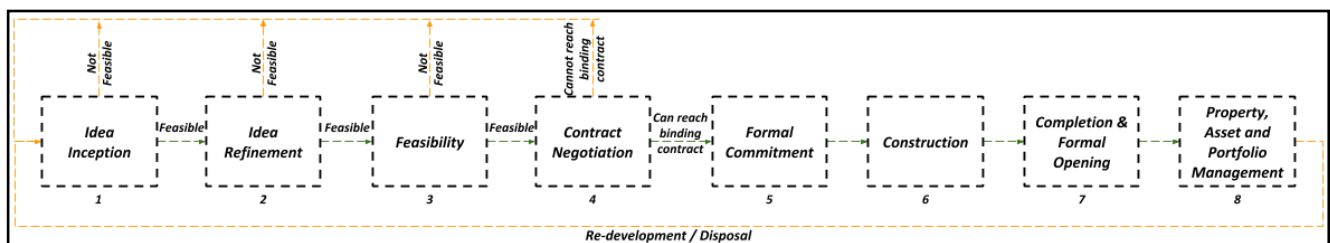

Figure 4: The eight-stage model of real estate development (Miles et al., 2015)

This eight-stage model does make the real estate development process seem rather simple and one can argue that following these eight steps for every project should result in a successful development. Although, on the other hand one must consider the various other contextual factors that have an effect on real estate development. These are factors such as demographic developments, patterns of urban growth, market conditions, economic developments, social requirements, local regulations, designs, land situation, infrastructure, environmental issues, etc. Incorporating these various factors that have the tendency to change over time is one of the driving reasons real estate development turns to a rather complex process. Adding to this complexity would be the number of actors involved along this process, who coming from a varied range of backgrounds are expected to collaborate and work together to achieve both their personal and combined goals (Miles et al., 2015, Adams, D. & Tiesdell, S., 2013). Further only adding to this complexity, Miles et al., (2015) emphasize on a few points that should be considered whilst trying to understand this eight-stage model. First, that this model may depict the process as a straightforward or linear, which in reality is not the case and there is constant repositioning and renegotiation that occur along the process. Implying that the process need not be chronological in nature and the different steps can occur at different points in time and this flow chart only depicts the various steps and assists one to understand the process. Second, that the real estate development process is partly logical and partly intuitive, and that without creativity and drive only following these steps

would not guarantee a successful development. Third, the steps in the process being interdependent it is essential for the actors involved to be completely aware of the implications of each step well in advance, implying that only thinking of the immediate next time is not the right approach, real estate development requires a wholistic approach combined with a step-by-step approach. For example, keeping track of market trends and developments and adjusting development plans accordingly. Fourth, this model of the process only represents an ideal situation and does not consider the capacity, knowledge, or experience of the involved actors, which in practice plays a significant role. As an example, as seen in Miles et al., (2015), luck and intuition do have some role to play within this process and cannot really be included within the eight-stage model given its level of subjectivity. Fifth, as stated earlier as well this process comprises of various actors from with different professional backgrounds, this process is inherently interdisciplinary in nature and trying to incorporate all the various aspects within one model could be rather difficult. Lastly, real estate development is considered a global industry and variations in the process may occur based on where the development is occurring (Miles et al., 2015). In essence, one can say that real estate development is a simple, yet complex process and is dependant only multiple factors and people, and a *"one size fits all"[1]* approach should not be the direction in which real estate development should occur.

This being only a preliminary understanding of the real estate development process, it would be essential to delve further and explore its complexity to understand the drivers and barriers that may occur and the tools available to improve such a complex process (see section 3). It would be redundant to mention that these two themes go hand in hand with each other. The market being the key driver in the process, as based on the demands or needs of the market developments are planned. Looking at the situation of the Dutch housing market and understanding the importance of the complexities within the real estate development process the next section defines the aim and goal of this research.

1.2 *Aim and goal.*

The aim of this research, the bigger picture, is to **increase the supply of mid-segment rental homes and contribute towards reducing the housing shortage in the Netherlands.** This research extends towards a particular segment of the housing market, the mid-segment rental housing as it would be near impossible to solve this pressing issue all at once. Aligning with the aim,

> *the goal of the research is to recommend measures/changes, that municipalities and market parties, could possibly make to improve the supply off mid-segment rental homes in the Netherlands.*

This goal can be achieved by studying and analysing various projects set in different market contexts, in terms of the location, policies, type of investor and target groups within the mid-segment rental housing in the Netherlands. Doing so as housing markets are regionally driven, implying that the process and policies could vary. Analysing the projects to understand the problems faced by the different actors involved and gaining insights from field experts to develop recommendations of what should be done to improve the process in the future. As improving the existing process could improve the supply of mid-segment rental homes and also reduce the pressure on the housing shortage in the Netherlands. The next section briefly elaborates on the problem at hand and concludes with a hypothesis.

1.3 *Problem definition*

Having a preliminary understanding of the current situation of the Dutch residential market. It can be seen that there is a growing shortage and solving this shortage is on the agenda of many public and private organisations. The Dutch government has visions set out aligning to the sustainability goals of the UN and providing housing to all is one of the most important. Achieving this goal would imply that there is a simultaneous growth in the different sectors of the residential market, as focus in just one sector or type would not ensure the goal to realise housing for all segments, in turn making the housing market accessible to all income groups. Currently due to various factors, such as rising house prices, depleting social housing stock, policy reforms, rising rents in

---

[1] *""One size fits all" is a description for a product that would fit in all instances. The term has been extended to mean one style or procedure would fit in all related applications." (Wikipedia contributors, 2020)*

the free sector, increased building regulations (slowing down the issuance of permits), demographic developments and lack of suitable locations this accessibility to the housing market is compromised. The brunt of which is faced majorly by people trying to enter or move up the housing market. Encountering high prices within the owner-occupied market and long waitlist on the social sector, turns people towards the non-regulated rental sector. In turn a large demand for non-regulated rental homes is experienced not only in the cities but almost all over the country, a majority of which is for mid-priced rental homes. With an estimated demand of 60,000 to 200,000 homes the mid-segment rental housing sector is currently under a lot of pressure (Capital Value, 2019 & Capital Value, 2020).

This demand for mid-priced rental homes is mostly seen by starters, migrants, elderly and those moving up the housing ladder as their position to enter the housing market as home buyers is almost impossible in the current situation, as a result, turns them towards the rental market (see section 2.3.2). Due to various factors that limit housing association to deliver new homes pressure on the mid-segment only seems to be rising. Further, as of January 2020, the Dutch government have revised the rent control ceiling on social housing (€737.14 as of 1 January 2020 (Capital Value, 2020), implying that now a large number of homes fall under the social sector. This on one hand can be seen as a positive, as it increases the stock within the social sector, however on the other hand it is reducing the stock of mid-priced homes that are currently in high demand. Especially from households whose income grew enough to fall over the income threshold for social housing, but do not yet have sufficient income to buy or rent within the free market. Thus, it can be seen that the demand for mid-segment rental homes is only going up and there is a pressing need to improve the supply of such homes. Both public and private institutions together need to address this problem, as developers need to be able to create building supply that is feasible and also meets the required standards. Which with the new sustainability goals of the government could be quite challenging. The supply or output catering to this growing demand is very slow due to several reasons, for example the rising cost of labour and material drives up the construction cost making it difficult to realise homes in this segment. Housing associations also help provide to this segment of the housing market but unfortunately are now confronted with the dilemma of distributing their profits towards improving the sustainability of existing stock or adding to the stock by building new homes. On a policy front in the recent years both at a national and regional level the importance and urgent need of development within the mid-segment rental housing has been acknowledged and has become a focus area within both national and regional housing agendas. Although from a preliminary investigation of the policy tools or instruments it can be seen that a majority of them are regulatory in nature. One may argue that regulatory policies assist in controlling realised stock and can do less in terms of encouraging new developments, and currently the market is under pressure due to the limited supply of such homes and more stimulating or capacity building policies should be developed.

From a few informal discussions with different actors, it was found that there are resources available to realise housing within this segment, but unfortunately there seems to be problems in mobilising these resources. It therefore can be *hypothesised that improving the existing development process and policies within the mid-segment rental housing market could in turn improve the supply.* In order to contribute towards solving this problem, achieving the goal of this research and in turn hoping to reduce the pressure on the mid-segment rental housing market the following research questions are posed (see section 1.4).

1.4 Research questions, approach, and conceptual model

1.4.1 Main research question
The main research question that arises is,

> **How can the development process of mid-segment rental housing, in the Netherlands, be improved to meet the rising demand in this segment of the housing market?**

In order to try to answer the main research the following sub questions are brought to light as they help gather the information required.

1.4.2 Sub – Questions

For this research it is important to present an understanding of the Dutch housing market, both on a broad perspective and in particular to the mid-segment rental sector by looking into the development within the market in terms of demographics, policies, investments, demand, and supply **(Sub-question 1)**. Further, it is important to learn from practice what the existing development process and policy tools for this segment of the housing market is and what are the problems encountered by the different actors at the different stages of the process **(Sub-questions 3 & 4)**. Prior to which answering **sub-question 2**, from existing literature, is essential to set a framework for analysis. **Sub-question 5** aims to provide the perspective of the different actors involved in the process, from practice, on how they can contribute to improving the process and what their expectations of the other involved actors are. Finally, with all the information gathered and from answering the sub-questions, in the conclusions section, an attempt to answer the main research question is made.

1. *What is the current situation of the Dutch housing market, in terms of developments, investments and policies; why, where and by who is there such a high demand for mid-segment rental housing?*
2. *How does the real estate development process work in theory, what are the challenges or barriers to development currently faced in the Netherlands and how can the process be improved?*
3. *What is the development process and policies available for mid-segment rental homes, in practice, within different market types?*
4. *What are the problems encountered by the different actors, in practice within the process, and how are they overcome?*
5. *What is the opinion of actors involved, in practice, to improving the development process of mid-segment rental housing in the Netherlands?*

In the table below (see Table 1) related, more specific questions that would assist in answering the sub-questions are presented. These 'smaller' questions are more directive in nature to assist the direction of the information being collected and are not directly answered in this report.

Sub-question	Related questions
1	*What is the composition of the Dutch housing market?* *What kind of developments influence the housing market?* *What are the different market types in the Netherlands and how are they developing?* *What policies are currently being made available for development within the mid-segment rental sector?* *What are the future predictions for the Dutch housing market?*
2	*What are the different stages of the real estate development process and what are the challenges/problems encountered within the process and while developing affordable rental homes?* *How are these challenges/problems overcome?* *How does real estate development take place in the Netherlands, particularly for affordable rental housing?* *How does the real estate development process depend on market conditions/contexts?* *What are the different policy instruments available and how can they be implemented?*
Following sub-questions aim to be answered through information gathered by semi-structured interviews with the actors in practice, that would further assist in answering the main research question	
3	*Understanding the development process from a practical perspective, how it may be different for the mid-segment rental sector?* *Does the government provide with subsidies for development within this segment, if so what kind?* *How does the process differ based on market types?* *How do municipalities intend to create policies for this segment?* *Would stimulating or capacity building policies assist in improving the supply of this segment?*
4	*Learning from practical experiences of completed projects.* *What are the problems encountered at the different stages of development, by the different actors?* *What stage of development was the most challenging?* *How were these problems overcome and how can they be avoided in the future?*
5	*From the opinion of interviewees* *What each actor thinks they could bring to the table to improve the process?* *What are the expectations they have of each other?*

Table 1: Related, guiding questions.

1.4.3 Research Design & Conceptual model

In order to collect and analyse the information that would assist in answering the above-mentioned research questions the study would be designed to carried out in five phases.

I. Market Analysis
II. Theoretical research
III. Case study research method
IV. Results
V. Conclusions

The first two would assist in exploring the required theoretical concepts and understanding the housing market in the Netherlands. The third and fourth being field research to collect supporting information from a practical perspective that would assist in answering the main research question in the final phase. This would be done by using a case study approach to the research, that will be further elaborated on in the Methodology section of the report (see section 4). The figure below illustrates the different phases of the research along with the concepts that would be explored through the course of the study (see Figure 5). Adopting a case study approach is key as the research aims to establish an understanding of the development process within the different housing market contexts in the Netherlands. Analysing the market to establish these different market contexts and building from the theoretical research, would assist in building a point of reference to later analyse the process and policies for the mid-segment rental housing in the Netherlands. The research is expected to result in making recommendations to improve the process and further also making recommendations to policy makers.
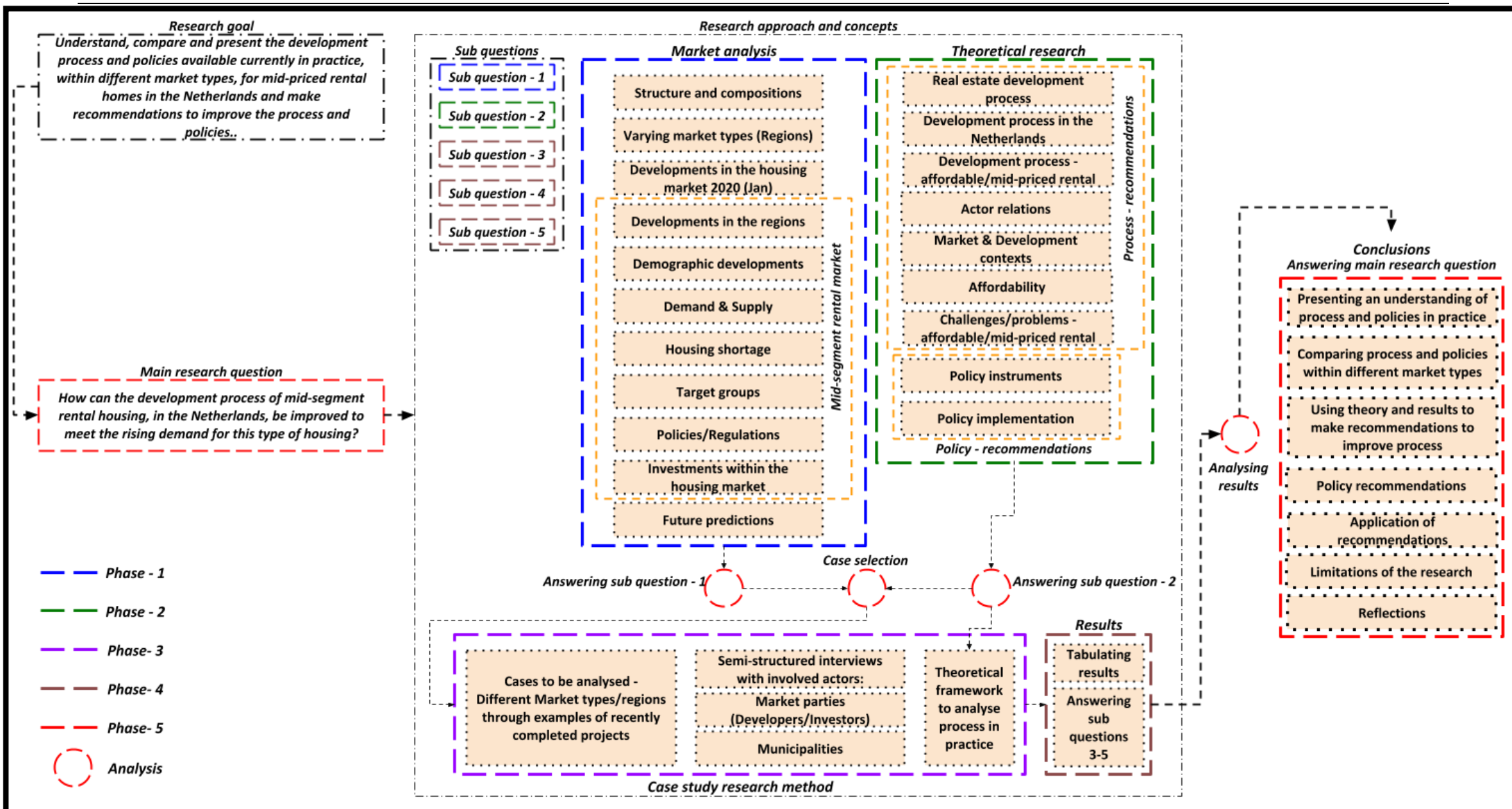
Figure 5:Research design and conceptual model (Own illustration)

1.5 *Relevance of the research*

1.5.1 Social

The Netherlands is currently facing severe shortage of housing, the numbers are only seeming to grow, and predictions are being made that if nothing is done soon this shortage would only increase. Providing housing is one of the most important tasks of any government, controlling the market to make it accessible to all tiers of society is essentially the goal of the government of the Netherlands. With the growth and aging of population housing demands are constantly changing and the market and governments need to be able to cope with this change. In the recent years there has been substantial economic development, however this has not directly translated into improving the quality of life (The Netherlands Institute for Social Research, 2019). In the Netherlands, the demand for affordable housing options in major cities is only going up and for various reasons the market is not being able to deliver. This research extends towards improving the development process of this type of housing. The percentage of the population seeking for housing in this segment is high and they consist mainly of the young and elderly. Carrying out this research could assist in helping this sector of society, as they too need a place to live. Currently there are many people in this segment of society who are struggling with finding a suitable home for themselves as the housing market is not being able to cater at the speed of demand. With the increasing demand of single-person households it becomes challenging for market parties to deliver housing units that are affordable and comply with the other regulations. Lastly, with the new threshold to social housing there is going to be large portion of the society who could benefit from the development of mid-segment rental housing. Identifying the problems within the development process and trying to solve them could attract more project developers to develop in this segment of the housing market could and in turn benefit this major chunk of society (Middle society is almost 85% of the population (The Netherlands Institute for Social Research, 2019)).

1.5.2 Scientific

In the Netherlands extensive research is carried out within the housing market, as there is an alarming rise in shortage of homes seen almost in all parts of the country and currently seen most by the mid-segment rental housing sector. Although there is a lot of research in the direction of understanding why this gap exists in the housing market, who and where such high demands stem from, there seems to be a lack of research that combines it with the real estate development process. Further this research tries to understand the real estate development process within different market types, which is important given that the housing market in the Netherlands varies regionally, especially within the mid-segment rental sector. Conducting research in this direction of analysing the process set in different market contexts would in turn contribute to trying to solve the problem at a micro level. Understanding the process currently in practice by looking at completed projects would assist in making recommendations to avoid similar challenges or difficulties that arose in the past. As seen in literature the real estate development process is dependent on the contexts that they are set in and generalising to the Netherlands would not be possible as there are significant differences seen in different regions (Miles et al., 2015). These factors that drive real estate development are not constant and that makes it important to revisit or rather rethink the processes involved and to do so it is important to review the current practice and identify where changes are needed. Real estate development being iterative in nature itself revisiting the process every now and then would prove to beneficial. This research would not only be beneficial to its readers who seek to gain knowledge but also to the various actors who are part of this process to understand each other's perspective on a problem that is acknowledged by all. In particular to the mid-segment from it can be seen that one of the predominant challenges or problems seen is that this segment being out of the regulated market does not yet have fixed regulations that creates uncertainty and this research also extends towards assisting policy makers in understanding the expectations of the market actors. As final statement this research would be scientifically relevant as although there are developments being made, within the mid-segment rental housing sector, they are not happening at the necessary speed and rethinking the process could result in improving the rate of supply and in turn support the aim of the research to" increase **the supply of mid-segment rental homes and contribute towards reducing the housing shortage in the Netherlands."**

2. Market analysis

Carrying out a detailed market analysis is essential for the research as it helps understand the housing market in the Netherlands. It is important to know the structure and composition of the housing market in the Netherlands to be able to understand the pressures and tensions within it. Exploring the current trends within the market to analyse the demand and supply of the housing market in general and the mid-segment rental market in particular. The analysis further delves into understanding the investments made in the housing market, to be able to get a broad picture of the future position of housing market and the mid-segment rental market in the Netherlands.

<u>Readers guide</u>

*The underlining goal of this chapter being to answer the first sub-question "**What is the current situation of the Dutch housing market, in terms of developments, investments and policies; why, where and by who is there such a high demand for mid-segment rental housing?**" This is done by structuring the sections of the chapter to align with different parts of the question. Sections 2.1 and 2.2 answer the first half of the question by bringing to light the **structure** of the Dutch housing market and elaborating on its **current situation**. Doing so by exploring the various developments (population & household development, housing stock & shortage, affordability, building output and investments) that directly have an impact on the housing market. Further categorising the market into five regions and look at these developments within the different regions, to be able to allow the reader to have a wholistic understanding of the current situation of the housing market. The latter half of the question being answered through section 2.3 where the focus shifts from the housing market in general to the **mid-segment rental market** presenting an understanding of the what the mid-segment market is, its significance and finally determining the existing situation of the demand and supply based on the categorisations. The chapter ends by presenting some future expectations and desired developments for the housing market in The Netherlands.*

2.1 *Structure of the housing market in the Netherlands*

The Dutch housing market is broadly divided into two segments, owner occupied homes and rental homes, in total it currently comprises of 7.8 million homes (see Figure 6) (Capital Value, 2020). Out of these 7.8 million homes the majority lie in the owner-occupied sector, around 58% (approx. 4,488,000 units) with the later 42% (approx. 3,300,000 units) within the rental market (Capital Value, 2020). However, of this 42% a large majority of the stock lies within the portfolios of housing associations, 70% (approx. 2,295,000 units of which 94% are regulated, 5.5% mid-priced and 0.5% expensive). The remaining 30% of the rental sector is shared between investors, around 29% (approx. 1,004,000 units) and the balance 1% (27,000 units) come in the category of 'others', which for example are private owners who buy to rent. Further breaking down the share held my investors into institutional investors (19%, approx. 190,000 units) and private investors (81%, approx. 814,000 units). Further looking into the rental stock and classifying it in terms of price range it can be seen that 76% of the rental market is comprised of regulated rental homes (approx. 2.5 million homes with rents below €720/month), 15% within the mid-priced (approx. 500,000 homes with rents between €720 - €1000/month) and 9% in the expensive rental sector. ***Implying that currently only 6% of the total housing stock in the Netherlands comprise of mid-segment homes,*** and this segment of the market suffers from significant shortage which is currently being addressed (Capital Value, 2020).
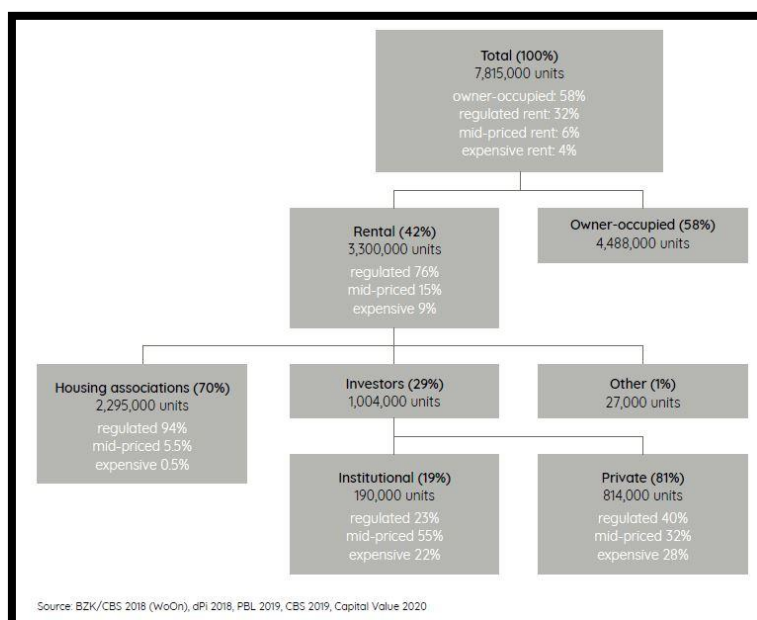

Figure 6: Structure of the Dutch housing market, 2019 (Capital Value, 2020)

Having understood the structure and composition of the various segments of the housing market in the Netherlands, it would also be relevant to understand where the finances to run this market come from. In the Netherlands there are broadly four type of investors present in the residential investment market: (i)Institutional investors; (ii)Private investors; (iii)Healthcare property investors and (iv)International investors. As without understanding where and how the money comes into the market a market analysis would be incomplete. Further these different types of investors are briefly explained and in section 2.2.3 a more in-depth analysis of the residential investment market is presented.

Institutional investors

In the Netherlands there are about ten such investors who mainly consist of insurers and pension fund organisations. These kinds of investors generally are investing with long term goals in mind, i.e., to eventually be able to make pension or insurance payments. They focus primarily on acquiring new-build homes and selling outdated stock, they in some regard are seen as 'traders' within the housing market. Currently these investors along with other international institutional investors hold approx. 190,000 rental homes and are always looking for opportunities to expand their portfolios. In the current situation these investors are trying to let go most of

their regulated rental stock as in 2020 there was a change in the landlord levy[2] and is now is now set to 0.526% of the Valuation of immovable Property Act (WOZ)[3] value of the home (Capital Value, 2020).

Private investors

Private investors are a diverse group of people who invest in the residential market in the Netherlands. They consist of investors whose portfolios range from small residential projects of 25 homes and some with large portfolios between 5000 and 15000 homes. Private investors usually are more locally driven and focus either on a region or sometimes even just a city. Of the total number of rental homes that are owned by investors, private investors own approx. 81% (815,000), of which more than 40% are within the regulated rental market (Capital Value, 2020). Implying further pressure on the demand for mid-segment rental homes. However, over the past years private investors have become more active in the housing market given the availability of capital, lower interest rates, good financing options and the constant hunt for better yields (Capital Value, 2020). Private investors are an integral part of the housing market and with support of the actors involved they could definitely make an impact to improve the situation of the housing market.

Healthcare property investors

The housing market over the last couple of years has seen a rising demand for care homes and thus the emergence of an investment market for this type of housing. It can be seen that two types of investors are interested in this market; ones who want to diversify their portfolios and the other who solely focus on investing in this type of housing. So far in the Netherlands there are about 13 such investors, inclusive of some being international investors (Capital Value, 2020). This type housing is seen to have high demand given the aging population and shift in the housing market based on the growth in elderly households, further in the chapter the demand of such homes is further elaborated as a large portion of this demand falls within the mid-segment rental market.

International investors

The Dutch residential investment market is not only attractive for local investors but also for foreign investors, whose capital comes from outside the Netherlands (combination of institutional and private sources). In 2019 there were 40 such investors present in the market and through the year an addition of 10 more were seen. These international investors are primarily investing in the rental sector of the housing market and currently hold more than 9 billion euros, 60,000 homes, in their portfolios. Their portfolios mainly consist of purchases of existing construction from both private and institutional investors and also purchases from housing associations. However, in the future it is expected that these international investors would also start purchasing new-build projects to expand their portfolios within the Dutch housing market (Capital Value, 2020). With the inflow of foreign capital into the housing market, project developers can increase the number of new-build projects given that these international investors are only looking to acquire more into their portfolios. International investments can play a vital role in improving the supply of rental housing in the Netherlands.

2.2 Current situation of the housing market

Although there has been significant recovery in the Dutch housing market since the global financial crisis there still is a large shortage of housing, particularly seen in the large cities and also throughout the country. The housing market is a regionally driven market, implying that developments within the housing market and the economy are not the same throughout the country and differ within local contexts (Capital Value & ABF (2019)). Following the categorisation used in the report by Capital Value & ABF (2019), to analyse the housing market, the Netherlands is divided into five categories. The basis of forming these categories were the prices and yields,

---

[2] "*If you let more than 50 houses in the social housing sector for a rent on or below the threshold for eligibility for rent allowance, you must pay a landlord levy (*verhuurderheffing, *in Dutch)to the Dutch Tax and Customs Administration. The levy is a percentage of the value of the rented houses.*" (Netherlands Enterprise Agency, RVO, 2019)*

[3] "*Municipalities determine the value of immovable property (WOZ value) each year. If you own any immovable property, for example a house or business premises, you will receive a WOZ decision from your municipality every year giving the WOZ value. This value affects the level of several taxes, including property tax and income tax.*" (Ministerie van Algemene Zaken, 2017)*

population, household growth and density of the municipalities. These can be considered as determining factors of present and future housing demand (Capital Value, 2019). ***The Netherlands is hence divided into the following five categories; (i)Metropolitan; (ii)Big cities; (iii)Other Randstad; (iv)Regional and (v)Areas of demographic decline*** (see

Figure 7, Capital Value, 2019) and further in the chapter development within each of these regions is discussed. Having this analysis of each of these regions is not only important to understand the market in general but it will also assist in determining the situation of the mid-segment rental housing market (Capital Value, 2020).

2.2.1 Development in the housing market

The following section elaborates on the developments in the market and country that are either relevant to the housing situation or have direct influence on it. The section sets the context of the current situation of the housing market, reasons for the rising demand for housing in the Netherlands. First talking about the demographic developments in terms of population and household development and then further elaborating on the condition of house prices and sales. Finally addressing the supply side of the market in terms of the building output and defining the housing shortage in the Netherlands.
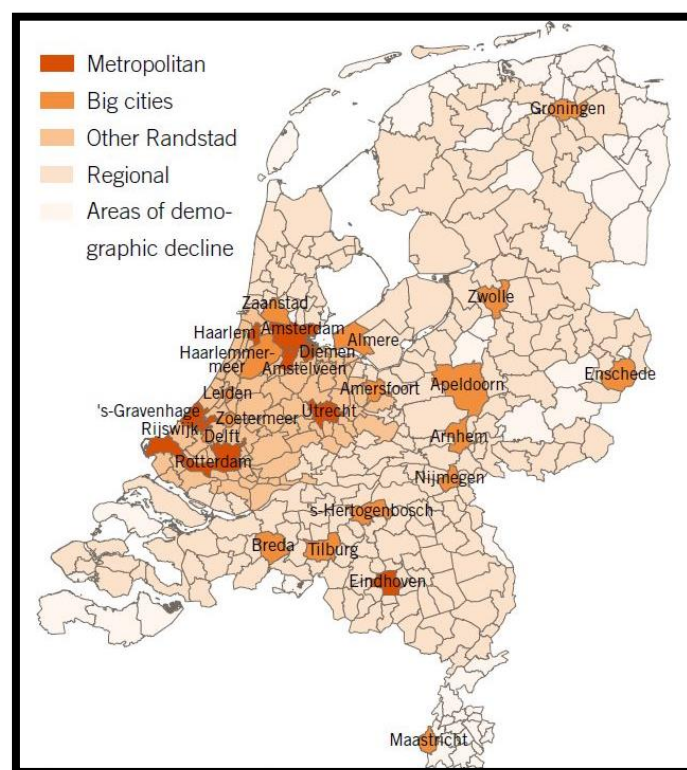

Figure 7: Regional characterisation (Capital Value, 2019)

Population & Household development

In the Netherlands, the population has grown at a higher rate than expected and this growth can be seen in the recent years, over 100,000 inhabitants per year. In 2019 the population in the Netherlands grew by 132,000 bring the total population up to 17,282,000 (Capital Value, 2020). It further was seen that almost three-quarters of this growth can be traced back to migration inflow, as compared to 2016 the number of asylum migrants have halved although there is a steady rise in the number of labour and student migrants. In total an increase of 493,000 inhabitants (98,500 per year) are expected between 2020 and 2024, as mentioned in the Primos forecast (Primos is the population forecast made by ABF research, over the past 30 years and is now considered the standard forecast for the Netherlands (Capital Value, 2020)). This estimate is still on the lower side as compared to other estimates form Statistics Netherlands who published in December 2019 that for the period of 2020 -2024 the expected growth is 614,000 inhabitants (123,000 per year) (Capital Value, 2020). With such

rapid growth in the number of people it is only logical to assume that there would be a proportional impact on the number of households and in turn impacting the housing shortage.

Along with this growth in population there has been a significant change in the number and composition of households over the years. One of the main reasons a rise in the number of households is the ageing population. There is significant growth in the households of younger people moving out and looking for housing options and also a lot of knowledge workers migrating towards the cities. However, this trend is slowly reducing given the conditions of the market being unfavourable (Capital Value, 2019). There is also significant change in the type of households, in the figure below (Figure 8) this change in type of households can be seen from 2010 until 2019. The average size reducing from 2.22 to 2.15 in 2019 (Capital Value, 2020) and if the trend continues there will be higher pressure on the housing market given that more households will be looking for housing options on the market.
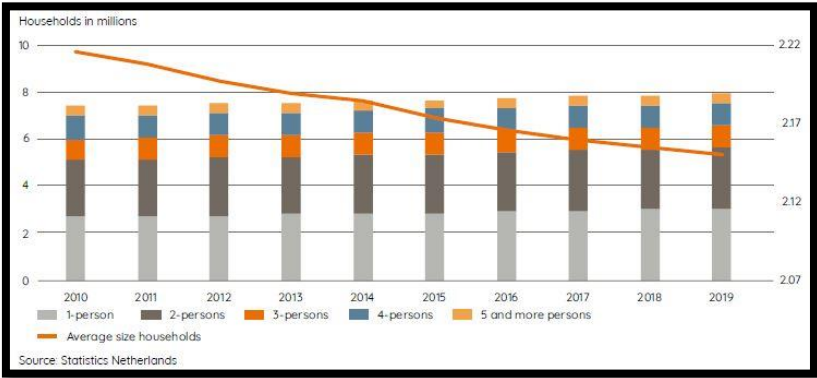

Figure 8: Number of households by type (left axis) & average size (right axis) (Capital Value, 2020)

In particular there will be an estimated increase of 575,000 additional one person households mainly because of aging population. However, the number of two persons and families would stay stable, with the families peaking around 2030 an estimate of 85,000 additional and two person households estimated to have an additional of 90,000 by 2040. The estimated growth for the near future is estimated at 55,000 households per year for the next three years (Amvest, 2019). In the report by Capital Value & ABF (2019) there are slight variations in these predictions, however, are roughly around the same bandwidth. In the figure below (Figure 9) the projections show that there will an increase of 292,000 households over the next five years reaching close to 8,219,000 households. It is estimated that in 2030 the Netherlands will have over 18 million inhabitants and if this growth trend continues there will be significant pressure on the housing demand, estimated to see an increase of 30,000 dwellings over the existing shortage (Capital Value, 2019; Capital Value, 2020).
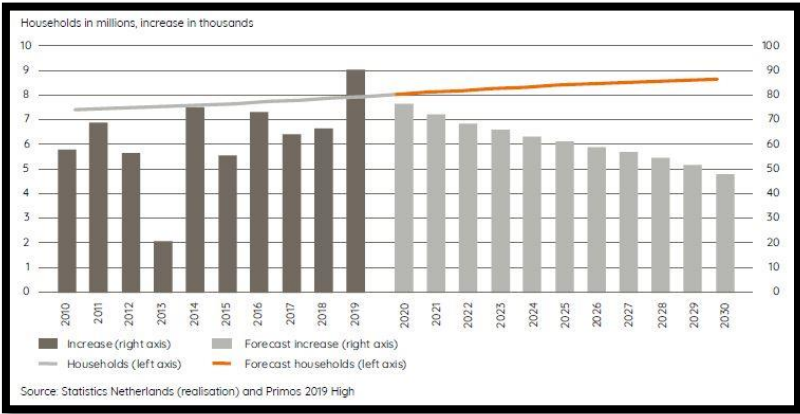

Figure 9: Number of households and increase in number of households (Capital Value, 2020)

In the figure below (Figure 10) it can be seen that over the next four years there is significant change in the household numbers and composition and the strongest growth can be seen in single person households

(growing by 8% to 3,378,000 in 2024). The graph (Figure 10) also indicates the growth in household type by age and shows that there is a trend of individualisation in all age categories, catering to the strong growth in single person households (Capital Value, 2019; Capital Value 2020). Lastly looking at figure below (Figure 11) shows the development in the number of households by COROP[4] region until 2030. On comparing this with the five categories seen in the figure earlier (Figure 8) it can be seen that there is significantly high increase in the number of households in almost all categories, metropolitan – ranging from 7 to 8%, the big cities – ranging from 4 – 7%, other Randstad – ranging from 4 – 8%, regional municipalities – ranging from 4 – 7% and even in areas of demographic decline there is significant growth forecasted ranging from below 0 – 6% (Capital Value, 2019; Capital Value, 2020). Looking at these numbers it can be said that there is only going to be rise in the demand for housing now and in the future as the number of households mostly seem to be growing throughout the Netherlands.
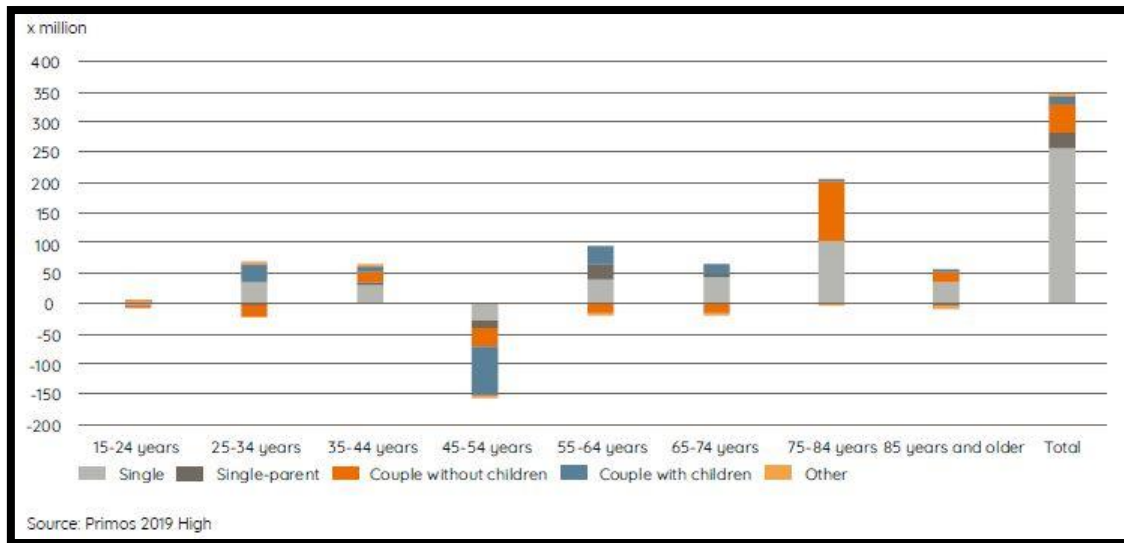
Figure 10: Increase in the number of households by age category and type 2020 - 2024 (Capital Value, 2020)
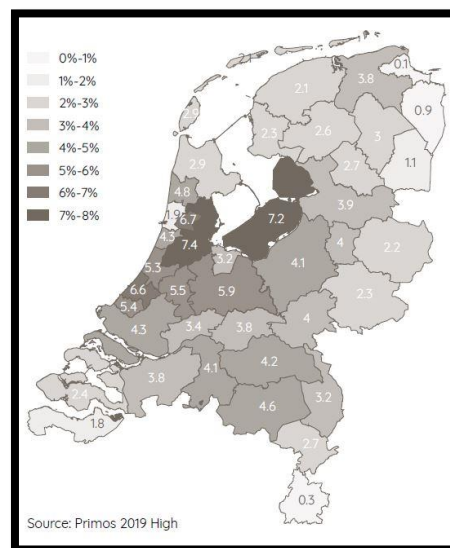
Figure 11: Development in the number of households by COROP region 2020 – 2024 (Capital Value, 2020)

---

[4] "A **COROP region** is a division of the Netherlands for statistical purposes, used by Statistics Netherlands, among others. The Dutch abbreviation stands for **Co**ördinatiecommissie **R**egionaal **O**nderzoeks**p**rogramma, literally the Coordination Commission Regional Research Programme" - Wikipedia contributors, 2020.

Housing stock and shortage

The National Housing Agenda 2018 – 2021 had the goal of increasing the housing stock by 75,000 homes per year between 2018 – 2025 and in the past years the housing stock has steadily risen. In 2018 approx. 73,921 homes were added to the existing stock and 2019 saw better growth of close to 77,000 homes (Capital Value, 2020). This can be seen as a positive improvement within the housing market however, the demand in the market seems to only be rising and soon enough the National government may have to revise their goal of 75,000 homes a year and realign their goals with the rising demands. As seen in the figure below (Figure 12) a large portion of this rise in the housing stock is contributed from new-build output. Alongside the addition of new build output it can also be seen that transformation and property splits contribute towards growing the stock. On the other hand, there are also factors such as demolition, grouping and transforming to other use that diminishes or reduces the stock (Capital Value, 2020). Maintaining a balance between the number of homes added and removed is key in stabilising the growth of the stock and aligning this growth to the market demands would also be essential in trying to achieve a market equilibrium.
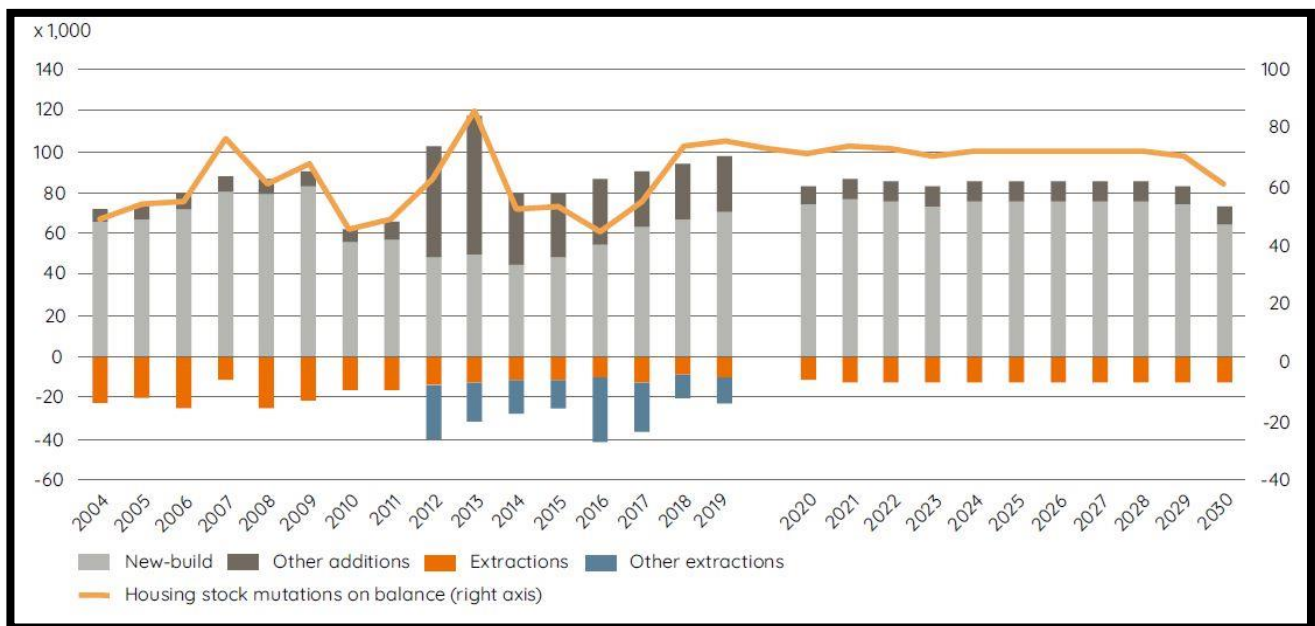

Figure 12: Housing stock mutations, realisations and forecast (Capital Value, 2020)

Although it can be seen that there has been significant improvement in the housing stock the housing shortage only seems to be increasing. This is predominantly because of the low housing production during the global economic crisis in combination with sharp increase of the number of households over the past years. The housing shortage is calculated based on the estimates of quantitative demand and supply of housing at a regional level. Adding up the regional shortage to determine the National housing shortage, however in some regions a surplus of housing is seen, and this surplus is not considered as it cannot compensate with shortage seen in other regions. As seen in the figure below (Figure 13) in 2018 the housing shortage was at 279,000 homes (3.6% of the housing stock) and at the beginning of 2020 this shortage has increased to 315,000 homes (4% of the housing stock) (Capital Value, 2020). This rise in shortage can be connected to the growth in number of households, as seen in earlier figure (Figure 9), there was a sharp rise in the number of households in 2019 which in turn increased the housing shortage in the beginning of 2020. However, this shortage is expected to reduce towards the future (see Figure 13) almost reducing to a little over 2.5% of the housing stock in 2030, implying that in the next ten years there will be significant amounts of homes added to the housing stock.

Figure 13: Housing shortage (Capital Value, 2020)

Affordability

The next key factor that plays a significant role in the Dutch housing market is affordability, as also mentioned in Capital Value (2020), affordability of housing and the housing shortage are two closely related issues. In the Netherlands, the struggle for affordability is broadly seen by two types of people. 'Insiders' and 'outsiders', the insiders are people who are currently living in an affordable home, given their household income, have to then deal with rent increase only and/or maintenance costs or interest if they have mortgages. The people who are known as the 'outsiders' are the ones who need an affordable home urgently but are unable to acquire one either due to not securing a mortgage or long waitlist in the rental segment. Home seekers of affordable housing also have deciding factors such as location and size but predominantly are focused on the price, be it rental or owner occupied (Capital Value, 2020).

As seen in the earlier section that the housing shortage is only increasing and the current rate of supply to the stock being slow the house prices are in turn rising as well. As seen in the figure below (Figure 14) in 2019 the average price of an owner-occupied house was €312,900, which was €19,700 higher than the average sales price in 2018 (6.9% increase in one year). Although this price increase was lesser than what was seen in 2018, which was an increase of 10.3%, it still is a significant increase. As mentioned earlier that it is important to look at the residential market form a broad perspective as the markets differ at regional levels. This can clearly be seen the house prices, for example in Amsterdam the average price is slightly over half a million euros (€507,500) as compared to the average price of €223,000 in Groningen. Further looking at the rise in prices it can be seen that in the last 12 years there has been an increase of 20 – 30% in large parts of the Randstad conurbation (Capital Value, 2020; Capital Value, 2019).
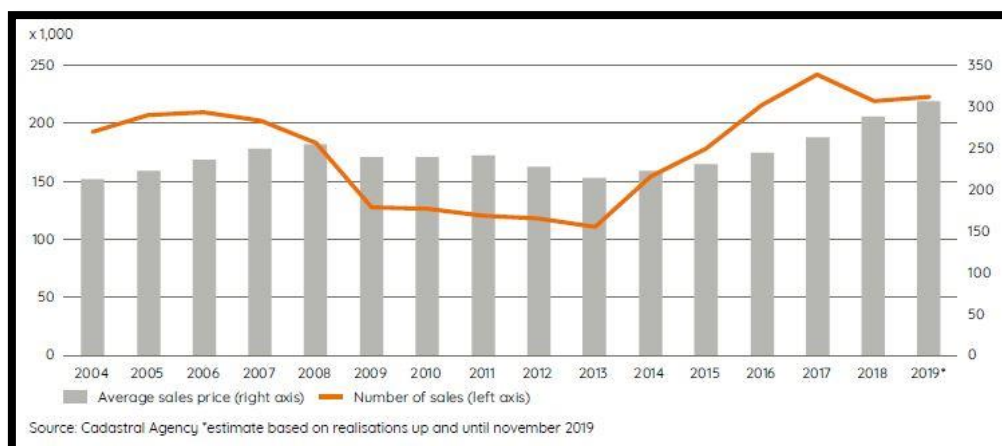

Figure 14: Development of sale prices and number of properties sold (Capital Value, 2020)

Another important factor that affects house prices in interest rates on mortgages. As with lower interest rates purchasing a home becomes more affordable, along with the increasing demand for homes and the market

offering lower interest rates, it is bound for house prices to go up. As with lower interest rates more people are able to buy homes, the availability of lower interest rates also benefits the supply side of the market as they too have access to borrowing at lower interests (Wolfe, 2016). However, in the Netherlands due to the supply rate and existing stock being low the lower interest rates are currently only driving the house prices up. The interest rates in the Netherlands for mortgages to buy a home has only been falling since 2017 and at the end of 2019 the average interest rate for mortgages with variable interests was 1.7% and for fixed interest (Figure 15) periods over 10 years was 2.7% (Capital Value, 2020).
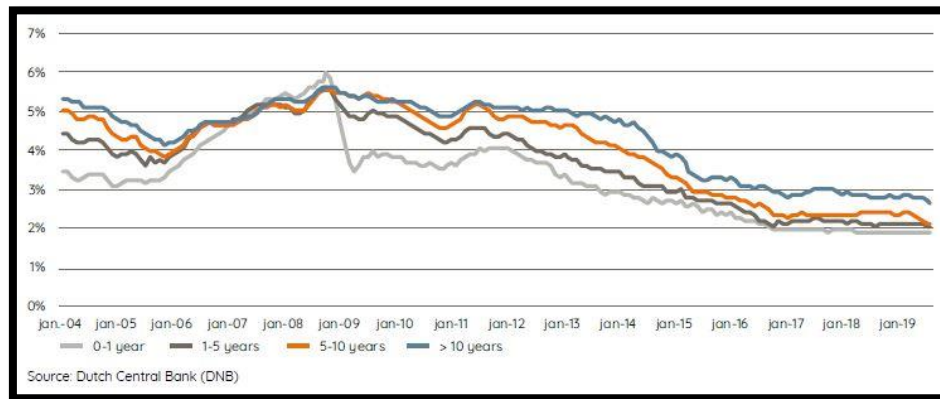

Figure 15: Interest rates for fixed-rate periods (Capital Value, 2020)

This situation of having a combination of rising house prices and falling interest rates only contradict each other as it only makes the market more unaffordable. The Affordability Index[5] has currently deteriorated from 29% to 33% in the Netherlands and buying a home as a first-time buyer is near impossible. Given that the average price of a home is 9 times the average income and the maximum loan granted to home buyers is only 4.5 times their income. This directly implies that a fairly large share of the current stock is not affordable for lower and middle-income earners (Capital Value, 2020). Facing this situation of inaccessibility these lower and middle-income earners turn towards the rental market in search of affordable housing options, which currently is not easy to access either. The shortage of housing has in turn created long waiting lists with low chances of success within the social rental sector of the housing market. This inaccessibility to the social rental sector is creating pressure on the demand for affordable rental homes in the private sector.

Further, due to rising construction costs, increased sustainability requirements and margins remaining the same the average house prices of new-built homes are a lot higher than existing owner-occupied homes that are on the market. Along with these factors pushing the prices up another reason for the new-build homes being expensive is because the output of such homes is generally focused on the higher-end segments. The result of the inaccessibility to the owner-occupied market can directly be seen in the changes or differences in the number of houses sold. The changes in the number of homes sold by buyers age can be seen in the figure below (see Figure 16). A drastic change is seen in the number of homes bought by young households, below the age of 25, a drop of 50% from 2010 to 2019 (18% of the buyers in 2010 to 9% in 2019) (Capital Value, 2020). No doubt this group of buyers is mostly dependant on the support from their parents, this drop in the number of buyers in this age group imply that the house prices are significantly increasing. There are also changes within the other age groups of buyers, buyers between the age of 25 – 34 have reduced from 40% to 35%, this decrease is also the result of the changing demographics, aging and increasing number of households. Other factors such as stricter standards for mortgages, the owner-occupied market being a smaller share of the housing stock in large cities (more desirable locations) and the flexibilization of the labour market has made it close to impossible for first time buyers.

---

[5] *Affordability Index is "calculated as the share of the net housing costs of a home with an average house price and the average annuity mortgage interest, as a share of the average household income." (Capital Value, 2020)*
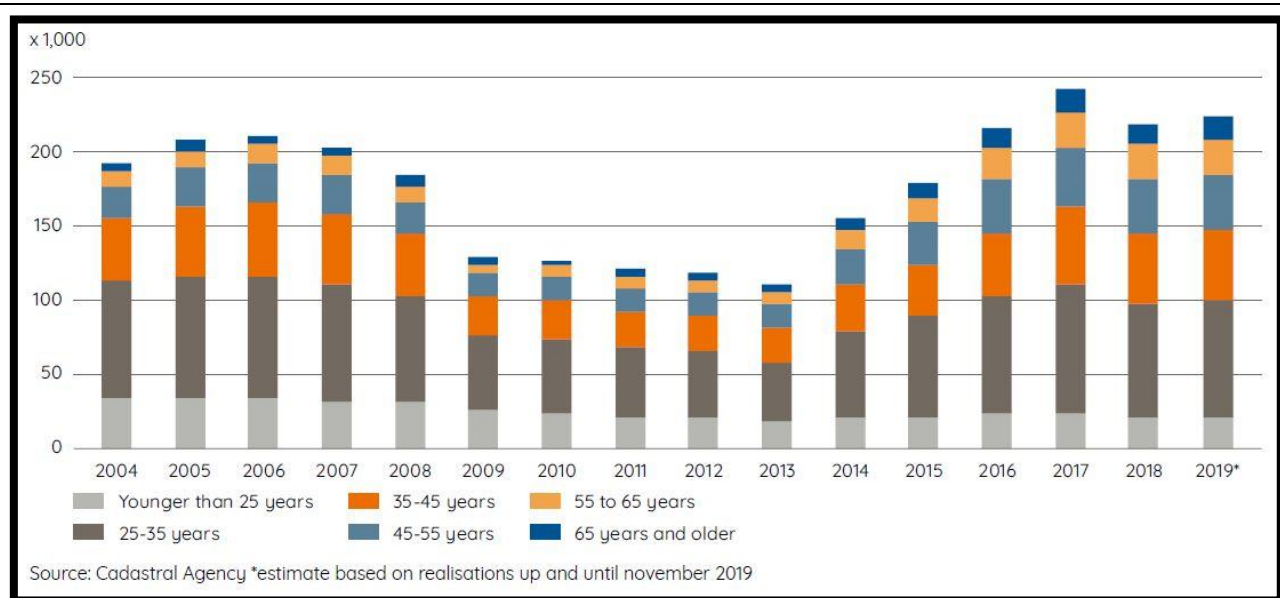
Figure 16: Number of dwellings sold, by buyers age (Capital Value, 2020)

After making an analysis using the housing market model Socrates[6], Capital Value (2020) believe that in the next year based on the housing needs and income the new-build output should consist of 133,000 regulated rental homes, 114,000 affordable owner-occupied homes (selling price < €250,000), 35,000 mid-priced rental homes (rent < €950/month) and 12,000 high end rental homes. These numbers do seem to be unachievable given that in the last year housing associations were able to only deliver 13,000 homes and practically having homes with a selling price below €250,000 is difficult to achieve given the rising construction costs. This deficit again builds the pressure on the demand for mid-priced and expensive rental homes (Capital Value, 2020).

Building output

Although there has been significant expansion of the housing stock in the past years it still is not growing at the desired or expected rate. In 2019 approx. 77,000 homes were added to the housing stock, which was slightly higher as compared to 2018, this growth in the number of homes is composed mainly of new-build homes (approx. 71,000) the remaining being transformations of non-residential buildings into homes (Capital Value, 2020). However, this positive growth of new-build homes sees some threats from the number building permits being issued for residential developments. On comparing the number permits issued in 2018 to that in 2019 a significant reduction can be seen, with an estimated 55,000 halfway through the fourth quarter of 2019. This decline in the number of permits being issued was already present in the first quarter of 2019 (Figure 17). It can be considered that the primary reason for this decline is the changing policies on increasing sustainability. This however can be seen as a slight set back as increasing sustainability of developments have a positive impact on the environment and longevity of the new buildings being added to the housing stock. This drop in permits is expected to grow in the coming years, as the Ministry of the Interior and Kingdom Relations has recently commissioned an increase in the net planning capacity for the period of 2019 – 2024(including) to 567,000 homes (Capital Value, 2020). However, permits being only one of the aspects that cater towards increasing the building output, further in section 3.2.2 the other factors are elaborated on.

---

[6] *"The Socrates model predicts supply and demand of housing for different segments, price ranges and residential environment. On this basis, a consumer-oriented building program is calculated that reflects the market potential." (ABF Research, n.d.)*
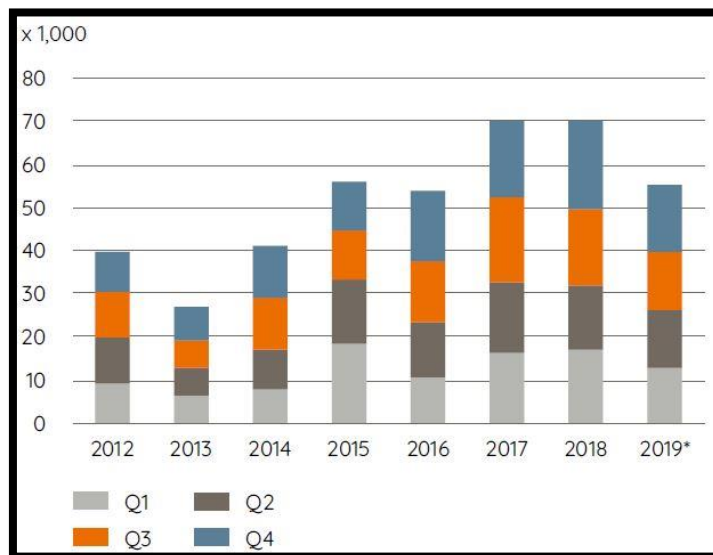
Figure 17: Building permits issued for new properties (Capital Value, 2020)

2.2.2 Development within each region

As mentioned earlier that development within each region will be elaborated, this section of the report aims at presenting the position of the housing market within each category. Presenting a detailed perspective of the demand and supply within each category is essential to understand the market from a broader scale. As the conditions that define the market vary between the different regions. This data further assists in determining in what regions there is high demand for mid-segment rental housing. Determining where there is demand for mid-segment is key to selecting suitable projects to analyse the development process of such projects.

Metropolitan

The metropolitan mainly consists of the five largest cities Amsterdam, Rotterdam, The Hague, Utrecht and Eindhoven and a few neighbouring municipalities that are comparable to the G5 on the basis of house prices and returns. They are characterised as the metropolitan as they have the lowest yield combined with the highest house prices when compared with the remaining of the country (Capital Value, 2019). Metropolitan municipalities house 19.3% of the total households in the Netherlands and this number is increasing faster than the rest of the Netherlands. However, a large portion of these households live in rental homes, given the inaccessibility and low stock of owner-occupied homes within these areas. With 42% living in regulated rental homes and 10% in non-regulated rental homes more than 50% of the households within such municipalities rely on the rental market (see Figure 18) and with number of households aspiring to live within these municipalities increasing at high rate this dependency on the rental market will only increase. Metropolitan municipalities also see a fairly large percentage of the households living in Other Occupied Spaces[7] (OOS) (12% of the households living in the metropolitan areas) (Capital Value, 2020).

---

[7] *Other Occupied Spaces (OOS) – "These are houseboats, caravans, non-independent homes, anti-squat spaces and households. where they are not the main occupant of a home (living in/sharing a home)." (Capital Value, 2020)*
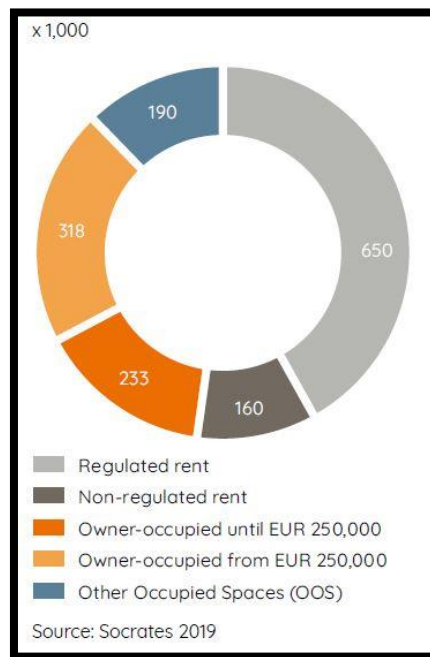
Figure 18: Housing situation of households, Metropolitan municipalities, 2019 (Capital Value, 2020)

The housing shortage in these such municipalities was estimated at 109,000 homes in the first quarter of 2019, which is a staggering 7.6% of the housing stock in these municipalities. In recent statistics regarding the number of housing permits issued within these municipalities it can be seen that from the low point of only 4000 in 2013 there has been significant increase to 13,000 in 2018 (see Figure 19). This growth in number of permits is promising in terms of the housing stock being increased and it can be seen that the municipalities are trying to relieve the pressure on the rental market. As compared to the number of permits issued to builders developing for the market in 2012, which was only 17% is now at 42% as of 2018 (Capital Value, 2020).

Figure 19: Number of building permits issued, Metropolitan municipalities (Capital Value, 2020)

Further these municipalities are expected to grow in households to approx. 1,662,000 by the end of 2024 from the existing number at 1,556,000 in 2020. A growth of approx. 106,000 households of which close to 59% are single person households, that consist mostly of age groups between 25 – 34 and 75 – 84 (see Figure 20). Alongside the development within these two age groups, it can be seen that in general there is a sharp rise expected in the number of households under the age of 45 (Capital Value, 2020). Coming to the demand and supply of housing (see Figure 21), in metropolitan municipalities, a significant gap can be seen in almost all segments of the market. For instances there is a yearly demand of almost 53,000 non-regulated rental homes while the supply falls short by approx. 16,000 homes. Predictions for the housing stock in metropolitan areas suggest that in the next five years an increase of 103,000 homes is expected (addition of 124,000 homes and reduction of approx. 20,000 homes due to demolition, transformations, and stock extractions). These predictions were made based on a scenario where the target group are people moving up the housing market and starters (for details of the scenario see ABF Research (2019). *Socrates 2019).* In this scenario close to half (48%) of the new-build homes would be focused on the rental sector of the housing market. Of which close to around 43,000 homes will be required in the regulated sector and about 16,000 homes within the non-regulated rental per year. The homes within the non-regulated sector are homes that would have to have rents not more than €985 per month, which is mid-segment rental housing. This sector of the market can also be expanded through rent adjustments of relatively low-rent rental homes as many of these homes are expected to be subjected to rent increase and as a result of rent harmonisation, they will fit into the mid-segment category of rental homes. This can be seen as a natural growth within the market as it is also expected that close to around 15,000 rental homes would turn to owner-occupied homes.
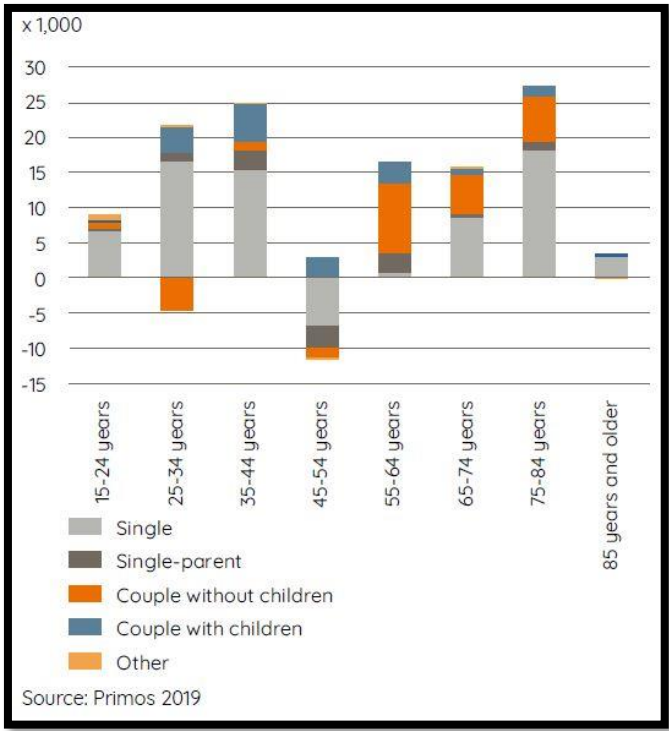

Figure 20: Increase in the number of households by age category and type,
Metropolitan municipalities (2020 - 2024) (Capital Value, 2020)
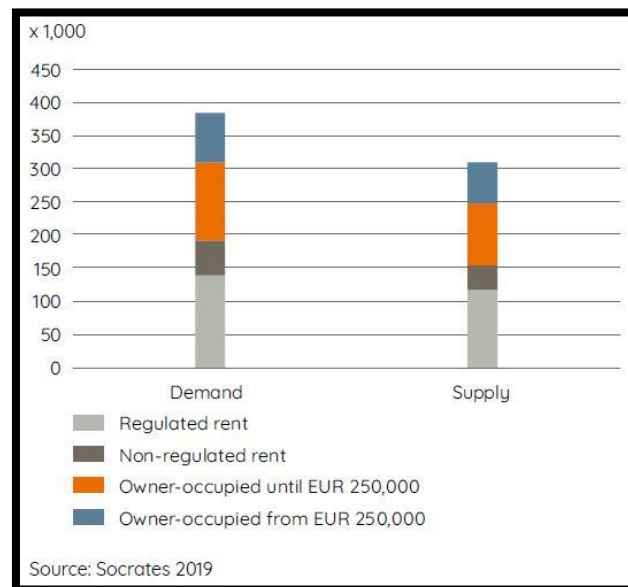
Figure 21: Annual demand and supply in metropolitan municipalities (2020 - 2024) (Capital Value, 2020)

Big cities

Big cities are the ones that fulfil a core function and have a much larger population as compared to their surroundings. These are cities around or in which universities are located and this plays its effect on the housing market within the region (Capital Value, 2019). Example for a big city would be Maastricht, Delft, Groningen, etc (

Figure 7). These municipalities house close to around 16.9% of the Dutch households and also like the metropolitan municipalities they are growing. These municipalities have a similar number of households living in rental homes, approx. 42%, of which 34% live in regulated rental homes and 8% in the non-regulated rental sector (see Figure 22). Given that these municipalities are where large educational institutes are established, an equally large percentage of households (12%) are seen living in an OOS (predominantly students). These municipalities also witness a change in the type of households particularly seen in the older age groups, it is expected that in the next five years there will be an increase of 70,000 households (see Figure 23) of which only 38% are below the age of 45 (Capital Value, 2020).
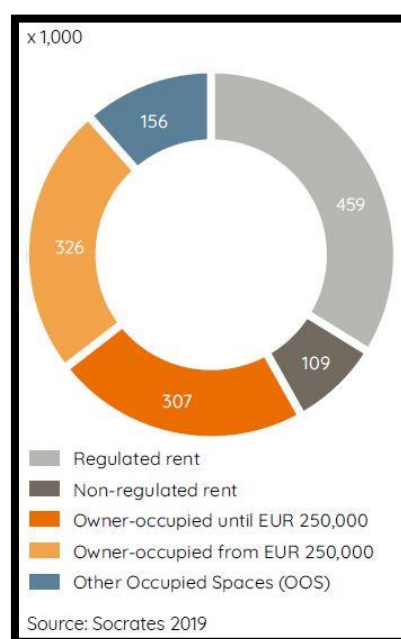
Figure 22: Housing situation of households, Big cities, 2019 (Capital Value, 2020)
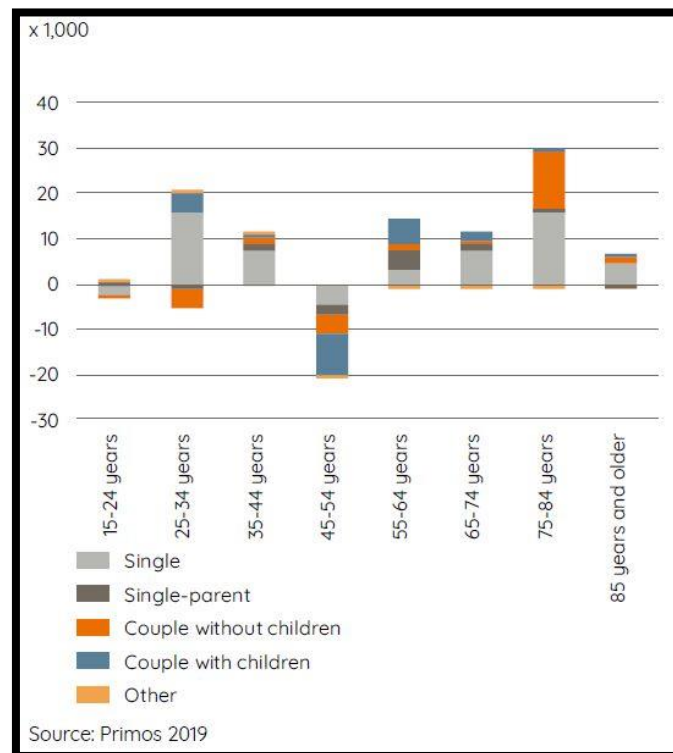
Figure 23: Increase in the number of households by age category and type, Big cities (2020 - 2024) (Capital Value, 2020)

Big cities, like the metropolitan areas also face a considerable pressure with an estimated shortage of 73,000 homes (5.9% of the housing stock in the Big cities). These municipalities are also working hard to increase the supply of housing, this can be seen by the rising number of permits issued. In 2018, there was a significant increase in the number of permits issued (12,000) as compared to only 4,700 in 2013 five years ago (see Figure 24). It can be seen that a fairly large portion of these permits (approx. 32%) issued in 2018 were for builders who are developing in the rental sector of the housing market (Capital Value, 2020). Given that like in the metropolitan areas owner-occupied homes are slowly becoming inaccessible in big cities and pressure is building on the rental market.
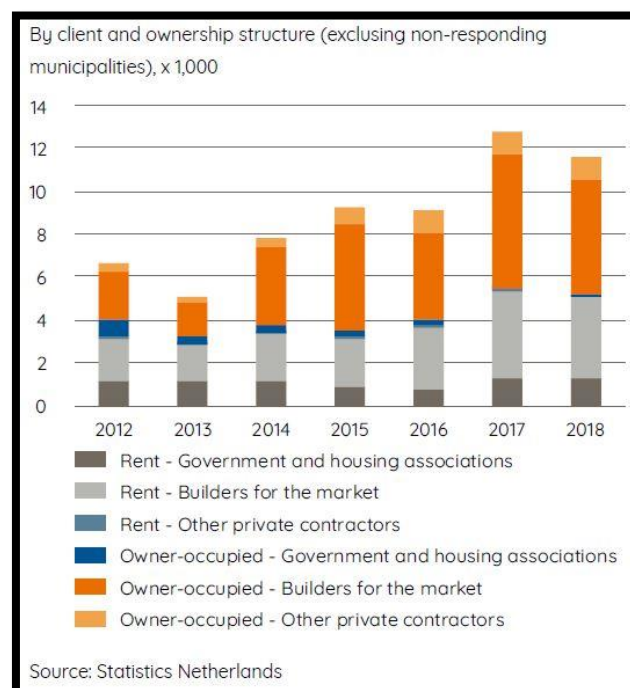
Figure 24: Number of building permits issued for new homes, Big cities (Capital Value, 2020)

Further looking at the demand of these municipalities a significant demand for non-regulated rental homes is present (mismatch of 9,000 homes in the demand and supply). In total there is a demand of close to 240,000 homes in the big cities each year and in the next 10 years these municipalities are expected to see improvement. There would not be absolutely no shortage but there would be a drop in the shortage in terms of the percentage of the stock in the big cities (reduced to 4.8% form the existing 5.9%). Following the previously mentioned scenario of people moving up the housing market, in big cities, 53% of the new-built output within the next five years consists of owner-occupied homes spread over the different price segments. It is expected that majority of the development in the rental sector would be within the non-regulated rental market, particularly in properties that can be rented for not more than €985 per month and development within the regulated rental sector would be target towards rental homes that do not exceed a monthly rent of €520. Lastly, development in the expensive segment of the rental market would mainly consists of homes that enter that segment as a result of rent adjustments (Capital Value, 2020).

Other Randstad

These are cities or regions surrounding the metropolitan areas and big cities, who benefit from the growth in the number households and sprawling demand for housing in the metropolitan areas and big cities. As from these regions four of the five major cities can be easily accessed, in turn creating opportunity for living in close range of the Randstad area. They act as the spill over areas for the larger cities (Capital Value, 2019). This type of municipalities is home to 16.5% of the Dutch households and there has not been a change in that percentage since 1995. As compared to earlier two types a comparatively lower number of households live in rental homes, 36% of the number households present in these municipalities (29% in regulated rental homes and 7% in non-regulated). These municipalities see a larger portion of the households with the owner-occupied market and a very low number (5%) living in an OOS (see Figure 25). In 2019, the housing shortage in such municipalities was estimated at around 38,000 homes (2.8% of the housing stock within this type of municipalities). However, there has been significant amount of development in the number of permits issued since 2013, having issued almost 10,000 permits as compared to 3,600 (Capital Value, 2020). Unlike the other municipalities where permits issued for rental homes were almost equal to the ones issued for owner-occupied homes, developments in this type of municipalities are directed more towards the owner-occupied sector (see Figure 26).
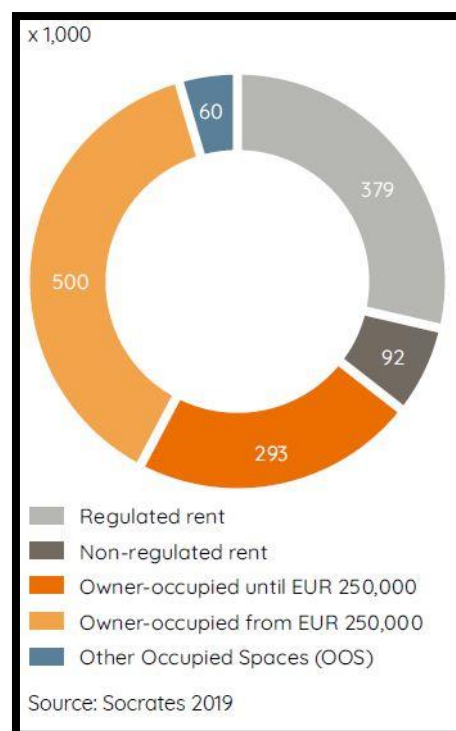

Figure 25: Housing situation of households, Other Randstad municipalities, 2019 (Capital Value, 2020)
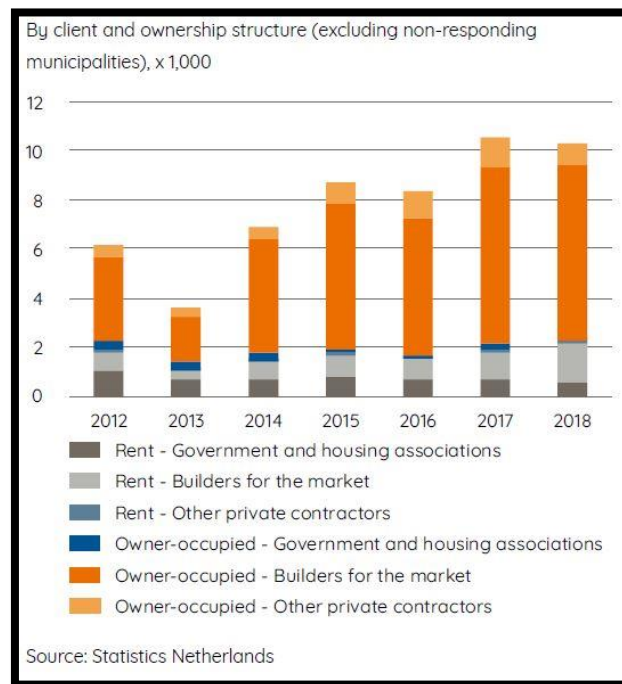
Figure 26: Number of building permits issued for new homes, Other Randstad municipalities (Capital Value, 2020)

Over the next five years this type of municipalities see a sharp growth in the number of households over the age of 75 and single households, an overall addition of 50,000 households is expected (see Figure 27). These municipalities see a comparatively smaller housing shortage with the average annual demand at 157,000 homes and supply at 129,000 homes the shortage presently stands at 2.8% of the housing stock in these municipalities. However, the annual mismatch of the demand and supply of non-regulated rental homes is significantly high, at 15,000 homes. Over the next five years it is estimated that there will be an addition of 58,000 homes to the housing stock of these municipalities with a high demand of 65% of the new-built output by the owner-occupied sector (Capital Value, 2020).
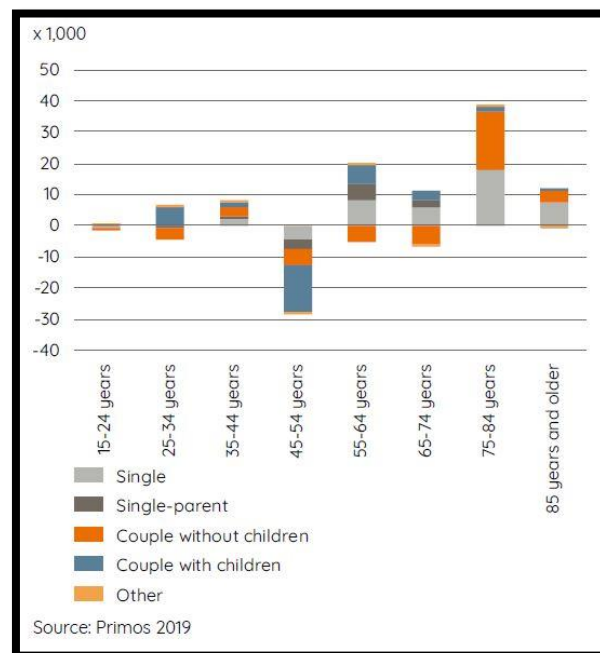
Figure 27: Increase in the number of households by age category and type,
Other Randstad municipalities (2020 - 2024) (Capital Value, 2020)

Regional

These are municipalities that exist outside the Randstad conurbation area and are characterised as slightly to moderately urban. These are smaller municipalities as compared to the municipalities in the other categories. However, there are predictions that there will be significant rise in the number households in these areas and in turn higher demands for housing (Capital Value, 2019). Although these municipalities are out of the Randstad conurbation, majority of the Dutch households reside in Regional municipalities (40.9% of the total households in The Netherlands). Of the number of households residing in these areas 32% live in a rental home (26% in regulated rental homes and 5% in non-regulated), 4% in an OOS and the remaining within the owner-occupied sector of the housing market (Figure 28). These municipalities are currently facing a shortage of 80,000 homes although the number of permits being issued have drastically increased over the last five years, from only 12,000 in 2013 to 30,000 in 2018 (Figure 29). Of which 13% were permits issued to builders developing rental homes for the market (Capital Value, 2020).
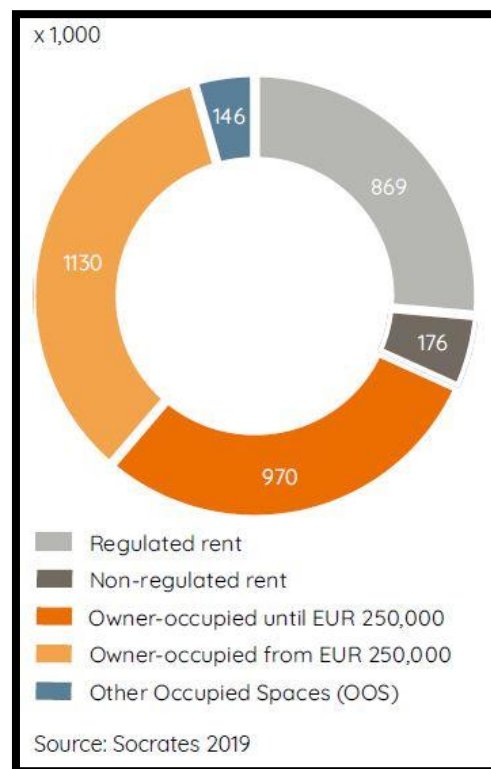
*Figure 28: Housing situation of households, Regional municipalities, 2019 (Capital Value, 2020)*

These municipalities also see a significant growth in the number of households in the next five years, an increase of 119,000. With majority of that increase in the number of single person households, 99,000 in the next five years and as seen in the figure (Figure 30) below these single households are mostly developing in age groups over 55. Further, in these regional municipalities an annual demand of 385,000 homes is estimated as compared to the supply which is at 294,000 homes. These municipalities also see a significant amount demand for non-regulated rental homes, demand currently at annual average of 41,000 homes and the supply falling short at 33,000 homes. In the next five years, 2020 – 2024, an addition of 121,000 homes is expected and future predictions suggest that until 2030 the shortage within such municipalities would reduce to 1.6% of the housing stock within these areas from the current shortage of 2.4%. Following the scenario earlier mentioned the new-built output of owner-occupied homes and rental homes are equal. A total demand of 55,000 rental homes of which 12,000 are within the non-regulated rental market.

By client and ownership structure (excluding non-responding municipalities), x 1,000

Legend:
- Rent - Government and housing associations
- Rent - Builders for the market
- Rent - Other private contractors
- Owner-occupied - Government and housing associations
- Owner-occupied - Builders for the market
- Owner-occupied - Other private contractors

Source: Statistics Netherlands

Figure 29: Number of building permits issued for new homes, Regional municipalities (Capital Value, 2020)

x 1,000

Legend:
- Single
- Single-parent
- Couple without children
- Couple with children
- Other

Source: Primos 2019
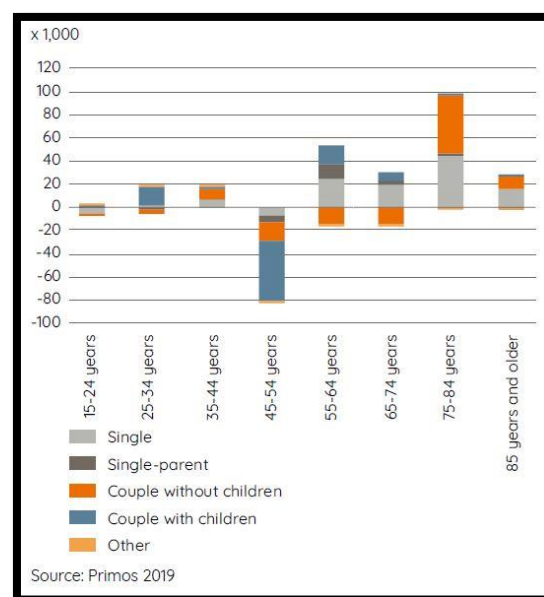
Figure 30: Increase in the number of households by age category and type,

Areas of demographic decline

These are areas that are expected to have a fall in number of households by 2040, hence creating a different situation for the local housing market in these areas. In these municipalities the goal for the housing market is to try and match its supply to the specific target groups who remain within this area. For instances the number of households ay reduce but the demand for elderly homes remains hence it will be the duty of the municipality and the market parties within the area to cater to the demands for a specific user type (Capital Value, 2019). These municipalities have seen a drop from 10.8% of the total households living in such areas in 1995 to 6.4% in 2019. This drop is mainly due to the growth of households in the other type of municipalities, a result of large number of people moving or desiring to move closer to the Randstad conurbation. In this type of municipalities, it can be seen that a large portion of the households live in owner-occupied homes, with only 34% living in rented accommodation (30% in a regulated rental home and 4% in non-regulated). However, the households

living in an owner-occupied home are predominantly home within the inexpensive segment of the market (see Figure 31). There are approx. 318,000 households living in an owner-occupied home in such municipalities and of which 212,000 live in an inexpensive owner-occupied home.

x 1,000

- Regulated rent
- Non-regulated rent
- Owner-occupied until EUR 250,000
- Owner-occupied from EUR 250,000
- Other Occupied Spaces (OOS)

Source: Socrates 2019

Figure 31: Housing situation of households, Areas of demographic decline, 2019 (Capital Value, 2020)

These municipalities unlike the other four types have virtually zero shortage of housing, a shortage of about 7000 homes and some areas also have a surplus of housing. Development in such municipalities is present and can be seen in the figure below (see Figure 32) that shows an increase in the number building permits being issued. With majority of the permits towards the owner-occupied segment, approx. 1,000 of the permits issued are for rental homes. Further it can be seen that of these permits being issued for rental homes a larger portion are for regulated rental homes, implying the demand for non-regulated rental homes is fairly less as compared to the other types of municipalities. These areas are expected to have comparatively lower growth in the number of households in the next five years. With an increase of only 1,300 households of which households over the age of 65 have a large share (see Figure 33). Following the trend of moving towards the Randstad conurbation a sharp decline in the number of households aged between 45 – 54 is seen over the next five years. Age groups up to the age 45 see a slight decrease but is comparatively less than the age group of 45 – 54 (Capital Value, 2020). Following the figure (Figure 33), it can be observed that a large portion of the households moving out of these areas are couples with or without children. As moving towards the Randstad would be beneficial for them, in terms of access to work and urban facilities that a growing family would like to have. These areas seem to have a virtually zero housing shortage, however that is mostly due to changes in the number of households. As with households reducing the demand for housing also reduces and as seen earlier the supply in these regions are no doubt growing. In these regions see an annual demand of 53,000 homes and have a supply of 45,000 homes, in turn a small deficit is witnessed. The non-regulated rental sector in these areas of demographic decline there is an equilibrium in the demand and supply, annual average demand of 5,000 homes and a supply of 5,000. Current predictions for the next five years estimate that the housing stock would grow by 5,800 homes and following the scenario mentioned earlier this supply should be targeted towards the regulated rental sector and the inexpensive owner-occupied market (Capital Value, 2020).
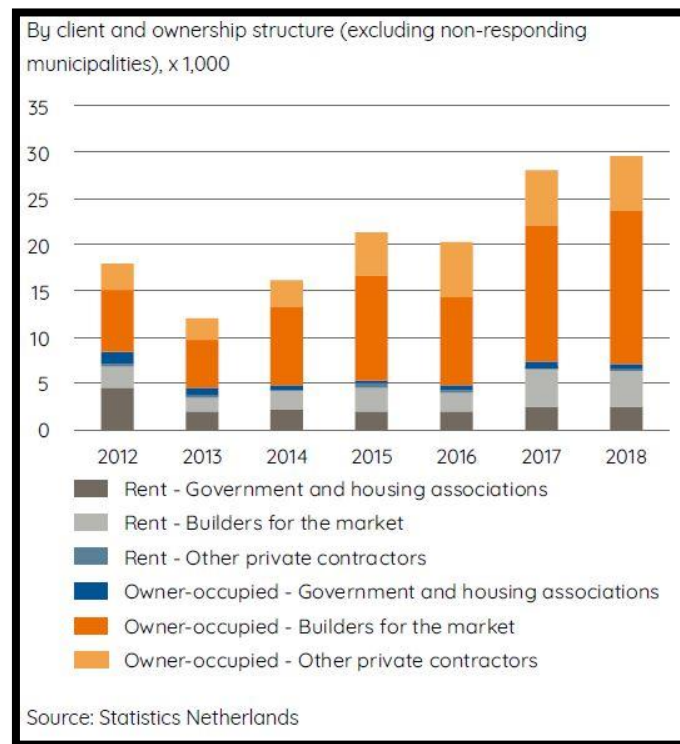
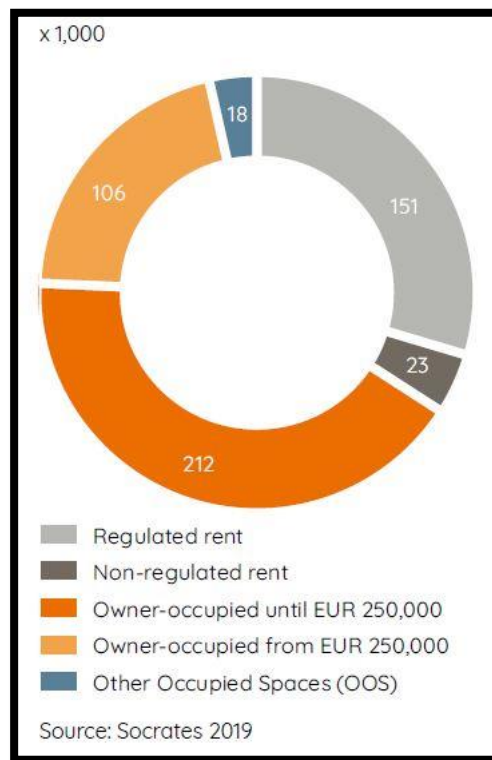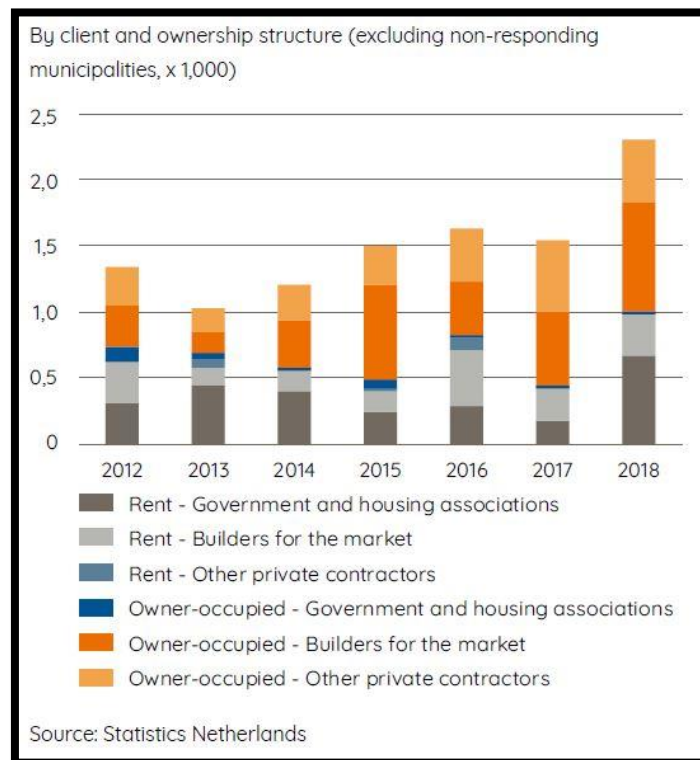*Figure 32: Number of building permits issued for new homes, Areas of demographic decline (Capital Value, 2020)*
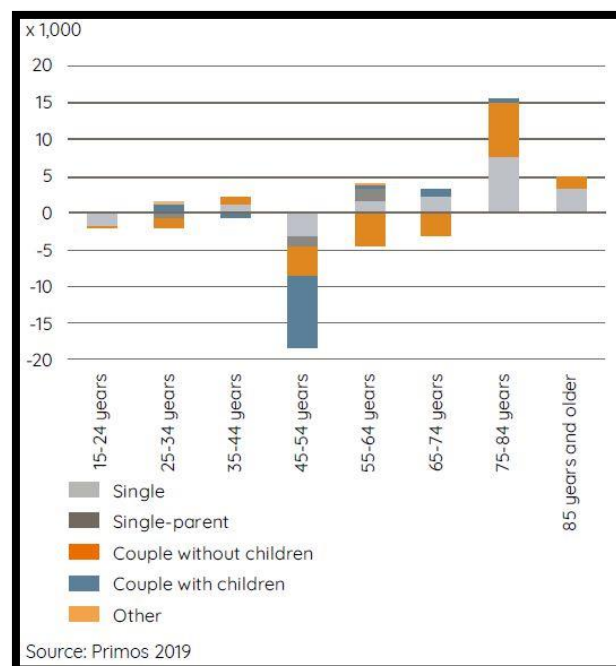
Figure 33: Increase in the number of households by age category and type,
Areas of demographic decline (2020 - 2024) (Capital Value, 2020)

2.2.3 Investment in the residential market

Investment within the Dutch housing market has been steadily growing after the global economic recession of 2008 (see Figure 34). With a total investment of €9.3 billion, 2019 set a new record of 10% higher than the investments made in 2018. It can be said that this continued growth of investments within the Dutch housing market implies that not only has the interest of investors grown again but also appears to be a long-term interest staying stable even at record levels. However, this interest leans more towards the rental housing market given that rental homes are a safe and stable investment for investors. This interest is not only seen from Dutch

investors but also from international investors, due to the low interest rates are seeking an opportunity to enter the Dutch residential investment market. Within the Dutch investors it can also be seen that investing within the residential market is more beneficial than government bonds. Governments bonds no doubt come with lower risks but currently these bonds bear marginal to negative interest rates, in turn making the residential market a more attractive option for investors. As seen earlier as well there is quite the positive forecast of population and household growth in the Netherlands, which brings in the confidence that the residential investment market will remain attractive and beneficial in the coming years (Capital Value, 2020). The current position of the market not only attracts international investors towards contributing to the new-build output but also attracts international financers who support the growth by providing residential mortgages (Capital Value, 2020). In all, currently the Dutch residential market is a lucrative option in terms of investment.
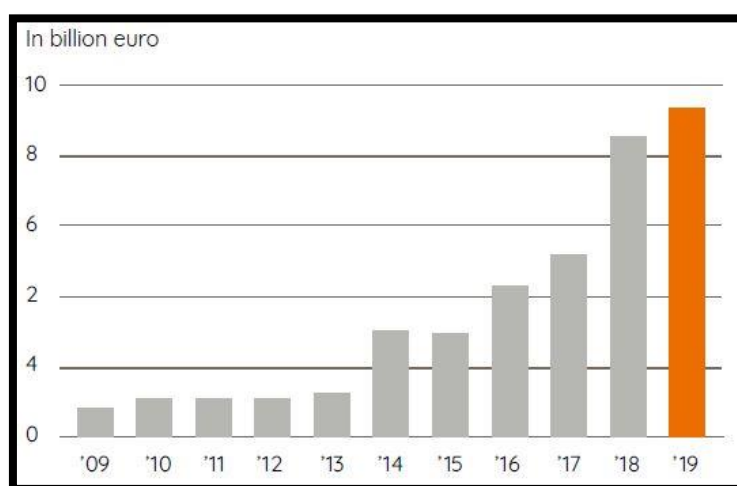
Figure 34: Investment in the Dutch housing market (Capital Value, 2020)

With the residential investment market in the Netherlands at its peak, the competition with market is stiffing given that there are large number of investors willing to invest large volumes whilst the supply side seem to fall short. Of these investments the majority is seen in the Metropolitan areas, close to 39% of the total volume invested in 2019 was within the Metropolitan areas. This included the five biggest cities and directly adjacent municipalities, mostly with interest in high-quality properties that have relatively low yields but on the long-term acceptable yields can be achieved. As compared to 2018 a slight shift can be seen between the interest of investors from Big cities to other Randstad municipalities, this could be a result of these municipalities having more available building plots that are attracting developers to move towards the other Randstad municipalities. In line with the regional municipalities and areas of demographic decline, a slight increase in the volume of investment can be seen within regional municipalities and significant drop within the areas of demographic decline (see Figure 35). As seen earlier that these areas of demographic decline have almost no shortage of housing, in turn explains why investors are shifting more towards the Other Randstad and regional municipalities. This shift in interest can be a result of the metropolitan municipalities and big cities having high price levels. Yields have dropped significantly in the recent years, not only in these core economic areas but also in the other regions as result of the rising house prices in all regions. These lower yields are accepted by investors, given that investing within the housing market comes with low risk and stable returns. Currently the highest possible initial yield is at 6% for new-build projects and can mostly be seen only towards the areas of demographic decline, which as mentioned earlier is one of the regions that have the least interest from investors. These lower yields are also a result of the rising construction costs, which is seen in all regions, in turn there is a high demand for existing structures from investors. As investing in existing structures would make it possible for the investors to expect higher yields, given the costs of new construction can be limited to comparatively smaller amounts. However, acquiring existing buildings is a challenge in the current market situation, as the demand is high the prices of such portfolios are high and in turn results in lower yields than expected. Although the yields within the residential investment market are low (caping at 6% for new-build output and reaching as high as 9% for existing structures – see Figure 36), investors are still making significant

amount of investment in homes given that they still can achieve a reasonable return whilst having to deal with significantly lower risks and having an inflation-proof investment (Capital Value, 2020).
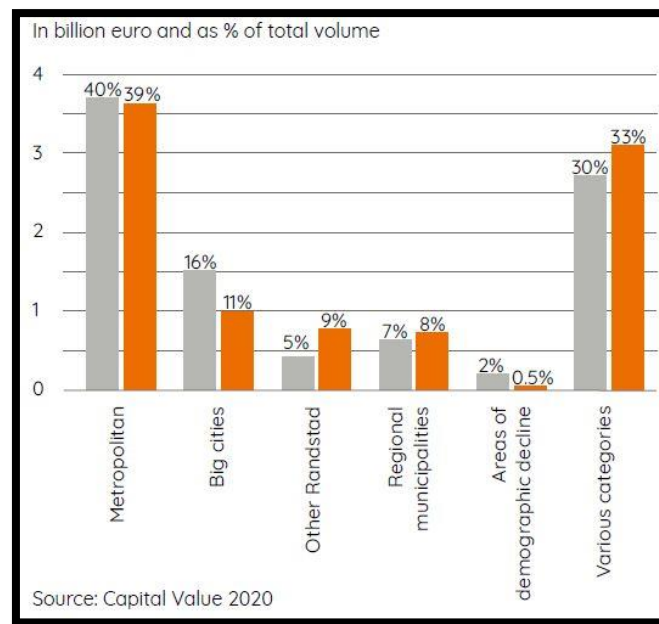
Figure 35: Residential investment volume by region (Capital Value, 2020)

The main reason for the reducing yields on new-build output are the rising construction and land costs. As seen in the figure below (Figure 36) yields for new-build output do not exceed 6% and in regions where the housing market is more tense such as the metropolitan areas and big cities they tend to drop as low as 3.8%. These regions vary a little and have similar bandwidths, metropolitan areas between 3.8% - 5% and big cities between approx. 4.1% - 5.3%. With the highest yields in areas of demographic decline, which can be seen as a result of the higher risks involved in developing in these areas where the shortage and demand are lower. These low yields are a direct result of the rising construction costs and can be seen all over the Netherlands. Along with the rising construction costs affecting the yield, the new-build output also succumbed to pressures form rent regulations and possible rent growth that also have an effect on the yields. Moving towards the market for existing structures a wider range or bandwidth in the yields can be seen. Although these wider bandwidths (approx. between 4.7% - 7.5% in regional municipalities and 5.6% - 9% in areas of demographic decline) are predominantly seen within the regional municipalities and areas of demographic decline. As in these regions, location, target group, population forecast, and type/quality of home are more crucial factors that determine the yields investors are willing to accept. As for the other regions the bandwidth of yields on existing structures compressed over the years given that acquiring existing structures is more attractive to investors. This in turn rises the prices of these exiting structures which has an inverse effect on the yield bandwidths. Investors are currently investing in the housing market as they believe in the coming years higher yields can be achieved, this future expectation is supported by the rising demand for housing in the Netherlands (Capital Value, 2020).
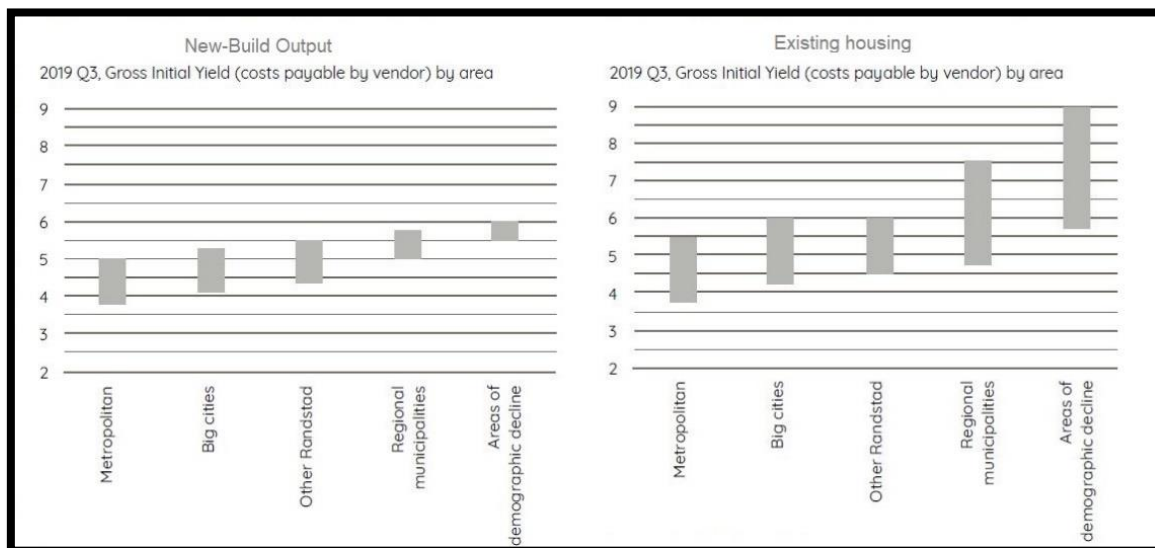
Figure 36: Bandwidth of yields in residential investments (Capital Value, 2020)

Of the total investment volume in 2019, institutional investors, private investors and property fund initiators accounted for 93% of the total volume (see Figure 37). As compared to 2018 the volume of investment from private investors and property fund initiators grew by 8% unlike housing associations, whose investments dropped by 100 million as compared to 2018. This drop in investment clearly implies that housing associations are having problems with replacement investments, in turn hindering the stock of the regulated rental market. In terms of sales, the number of new-build homes sold in 2019 were fewer than that in 2018 due to rising house prices (approx. 17,000 in 2019 as compared to 20,000 in 2018). Although the number of developers as sellers increased in 2019 along with larger investments than the previous year due to rising house prices the sales were lower. A significant drop in sales can also be seen from institutional investors, selling only 22% of the total volume as compared to 33% in 2018 (see Figure 37). As currently most investors prefer to retain their portfolios as due to the lack of new-build output reinvesting the released capital would be difficult. Hence, as mentioned earlier the demand for existing structures went up in 2019 as a result of fewer options within the new-build market. Breaking down the total investment volume according to construction status it can be seen that in 2019 61% of the investments made were within existing structures as compared to 50% in 2018. This spike in ratio is not only because of the lack of supply of new-build homes but also because of the drop of investment within redevelopment and transformations. As the office market recovered the number of transformations dropped and buildings that could be transformed were already done (see Figure 38) (Capital Value, 2020). The residential investment market currently is an attractive market for investors given the growing housing shortage and demographic forecasts, for both Dutch and international investors.
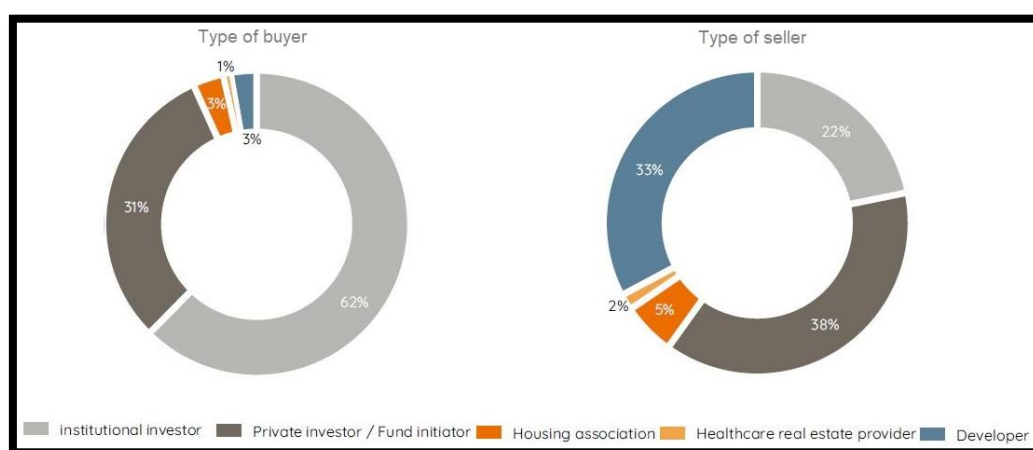
Figure 37: Residential investment volume by type of buyer and seller (Capital Value, 2020)

Inner ring: 2018, outer ring: 2019

3%
5%
10%
36%
35%
50%
61%

Existing homes
New-build
Redevelopment / transformation
Mixed
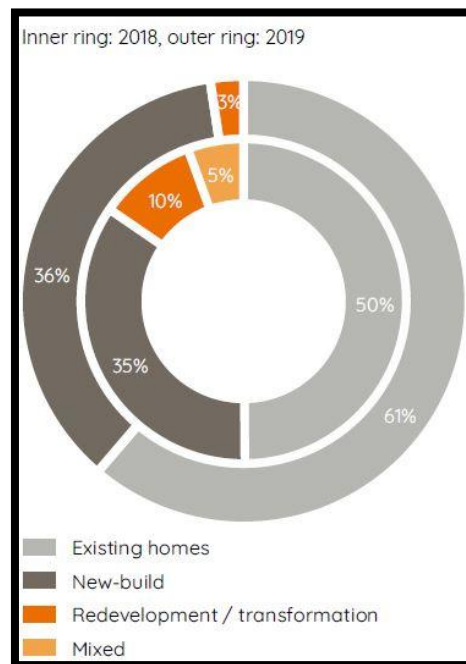
Figure 38: Residential investment volume by construction status (Capital Value, 2020)

In recent years, the residential investment market in the Netherlands has been receiving a growing interest from international investors. Of which a large majority work towards a buy and hold strategy, implying a more long-term investment as they currently see the stability of both the Dutch economy and the demand within the housing market. The Dutch housing market is particularly attractive to international investors whose pension and insurance funds require long-term security with acceptable yields. This kind of long-term security and stable yields are seen more particularly within the rental market and from a survey conducted by Capital Value (2020) close to 96% of the respondents (international investors) mentioned having a preference of investment within the rental market. More specifically the mid-priced rental homes within the Randstad conurbation, given the rising demand for these types of homes and the possibility of reasonable rent increases whilst still maintaining affordability. Further in the survey the respondents were asked about their interests within other housing types and the results can be seen in the figure below (see Figure 39). International investors show a keen interest towards the Randstad conurbation but recently it can be seen that they are also looking for opportunities outside the Randstad conurbation given that there is growing demands for housing even outside the Randstad, where they can achieve higher yields. This growing interest of international investors can be seen as a positive not only for the Dutch economy and housing market but also for the construction industry. As in the same survey the respondents were asked if they would invest in new-build output through forward funding and 92% of the respondents had a positive response. This could be a step towards assisting the new-build output in terms of costs, given that the other hurdle being the lack of construction permits (Capital Value, 2020).

In % of response group

	Yes	No
Mid-priced rent (EUR 720 - 1,000)	96%	4%
Expensive rent (> EUR 1,000)	71%	29%
Regulated rent (< EUR 720)	61%	33%
Student housing	54%	46%
Senior housing and light care homes	38%	63%
Intensive healthcare homes	13%	88%
Other healthcare real estate	8%	92%

Figure 39: Interests of international investors by housing type (Capital Value, 2020)

Further, it has been estimated that a combined capital of €26 billion, amongst institutional, private, international, and healthcare property investors, would be available to invest within the rental sector over the next three years. From a quantitative perspective this amount of investment should be sufficient to reduce the shortage by 100,000 homes a year, although using this available capital depend on various factors. The supply of rental stock being a determining factor, although 2018 and 2019 saw quite some large transactions in terms of invest volumes, they were made within existing structures and that does not directly contribu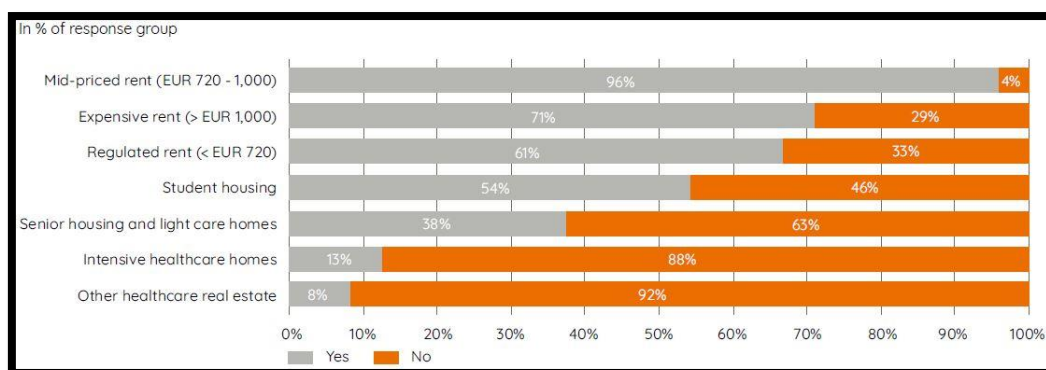te towards reducing the housing shortage. Whilst investing in new-build output would, this can also be achieved by buying existing portfolios of institutional investor and in turn providing them with capital to build new homes from the income of the sales. Although in the current situation investors are retaining their portfolios given the difficulties involved in reinvesting the acquired income into new construction. Further, these decisions of sales and purchases are made based on the economic condition and currently the general condition is at high point although it seems to be stagnating and growing at a very low rate (annual growth of 1.1% is expected over the coming years). According to recent analysis by the Netherlands Bureau for Economic Policy the Dutch GDP has dropped from 2.6% in 2018 to 1.3% in 2020, along with this the increase in the unemployment rates being slightly higher in 2020 show a strong market but with stagnating growth. These factors are currently making investors feel uncertain and hence they are choosing to put a hold on their decisions regarding buying or selling of their portfolios. Another big reason for investors holding back at this point is not having clarity or rather a solution to the nitrogen and PFAS (per- and polyfluoroalkyl substances) restrictions on new-build projects. When asked what regions investors were particularly interested in, a large majority within the respondents of a survey conducted by Capital Value (2020) indicated interest within the Randstad conurbation although lesser interest within the G5 area (see Figure 40). The interest within this area is also from developers and mostly towards building rental homes within these areas (Capital Value, 2020).
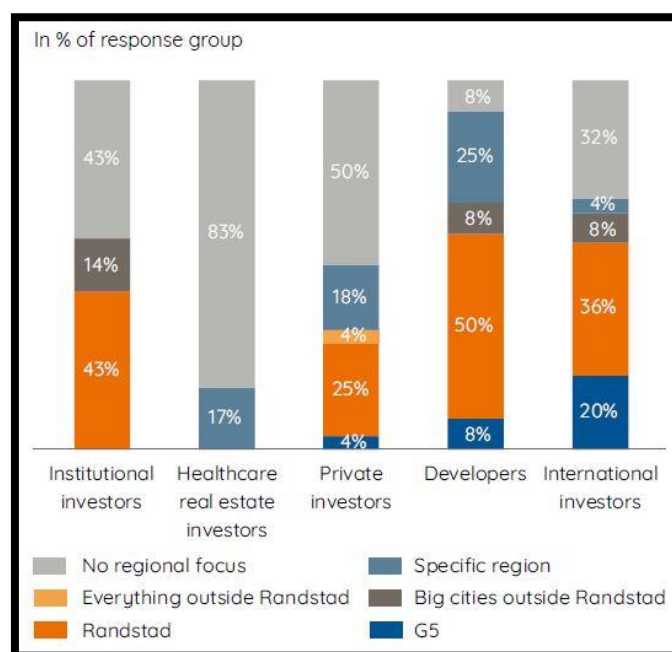
Figure 40: Interest of investors - regions (Capital Value, 2020)

In the same survey conducted by Capital Value (2020) of various investors within the Dutch residential investment market, the following details about the desires and volume of investment available in the market were brought to light. In total, international investors have €12 billion available to invest within the Dutch rental housing market over the coming three years. These international investors are not only interested in acquiring existing portfolios but rather show more interest towards purchasing new-build homes or even investing in development opportunities (see Figure 41). With the capacity to invest larger volumes international investors could easily finance large inner-city projects that are currently seen as too large of an investment by Dutch institutional investors. These investors could also assist the growth of the residential market by acquiring portfolios of Dutch institutional investors allowing them to reinvest on new construction projects. As compared

to the international investors the Dutch institutional investors show a higher interest towards new-build homes (see Figure 41) and currently have €8 billion to invest in rental homes. Dutch institutional investors not only play an important role towards contributing to the new-build output but also in acquiring portfolios within the rental market, with the highest desire to acquire rental homes that are priced between €720 and €1000 (see Figure 42). On a comparatively smaller scale Dutch private investors indicate that the €2 - €3 billion available to invest in rental homes, these investors have a preference towards new-build homes and existing homes that were built after 2010 (see Figure 41). Private investors similarly have a preference towards mid-priced (rents between €720 and €1000) rental homes and non-regulated rental homes (rents above €1000) whilst acquiring existing portfolios (see Figure 42). In the coming years due to the possibility of negative interests being charged on credits the number of private investors is likely to increase. Lastly, healthcare property investors indicated that they have €3.4 billion available to invest within the residential market, although they would be directing these funds towards healthcare real estate developments (Capital Value, 2020). On looking at these numbers and desires of investors to invest in the Dutch housing market it can clearly be seen that the shortage within the Dutch housing market is not because of the lack of funds or number of investors. One could hypothesize that the problem predominantly lies within the panning (policy) side of the development process, which will be further elaborated in the following chapter (Chapter 3).

Figure 41: Preferred construction status upon acquisition (Capital Value, 2020)

Figure 42: Preferred type of home upon acquisition (Capital Value, 2020)

2.3 *Mid-segment rental market*

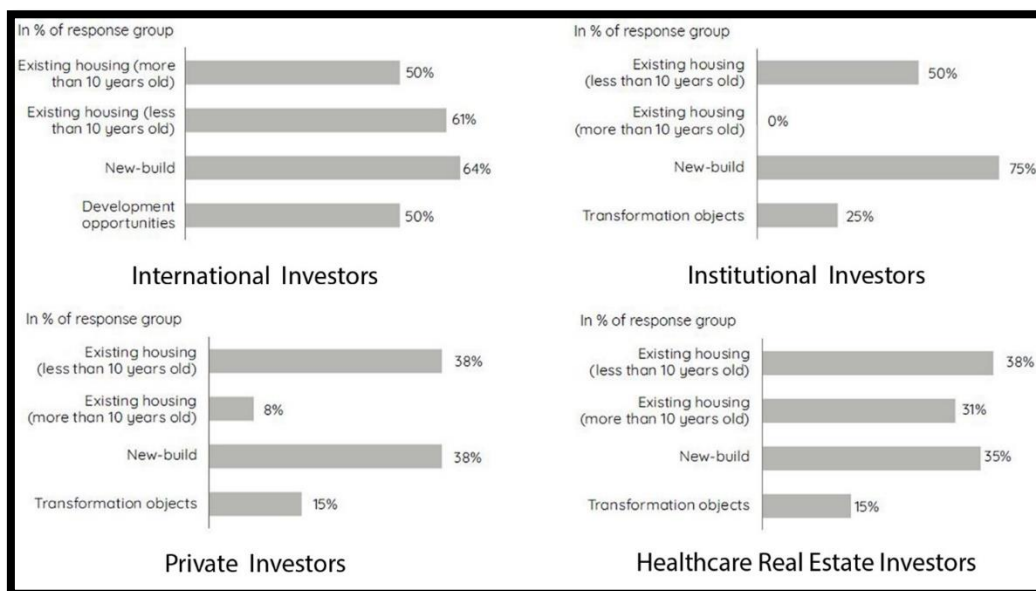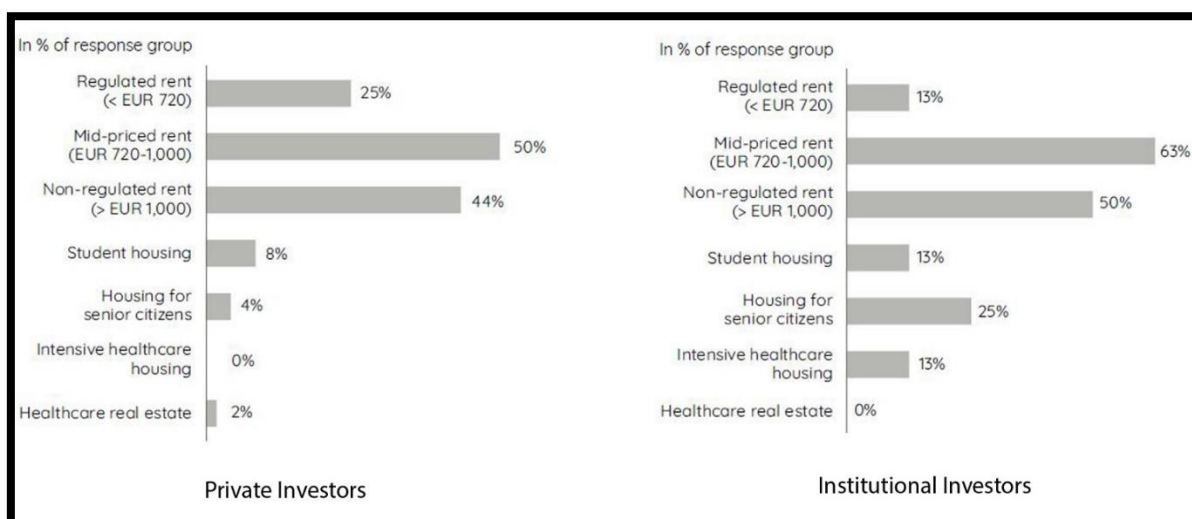After having an overview of the current situation of the housing market in The Netherlands, the next step would be to understand the mid-segment rent market. First by defining and determining what the "mid-segment" is and why its existence is important, further understanding where and by who there is demand for such kind of housing. Finally, this sub-chapter would further delve into identifying the demand for this type of housing based on the previous categorisation of the market and finally presenting the available policies for this segment of the housing market.

2.3.1 *Defining the mid-segment*

One can say that "mid-segment rental housing" falls under the umbrella of affordable rental housing. As sighted by Czischke, D., & van Bortel, G. (2018), Oxley (2012) has defined affordable housing as *"accommodation allocated outside of market mechanisms according to need rather than ability to pay."* This 'ability to pay' is defined by Milligan and Gilmour (2012) as *"housing that is provided at a rent or purchase price that does not exceed a 'designated standard' of affordability."* Further, Czischke, D., & van Bortel, G. (2018) mention that standard of affordability in terms of housing is generally defined by the proportion of income one can spend on housing whilst having sufficient amount left for other basic necessities and living costs. In the Netherlands affordable rental housing is defined (see Figure 43) by the segment of the housing market that offer homes with rents above the social threshold (€737.14 as of 1 January 2020 (Capital Value, 2020) and are still affordable for middle-income households (Czischke, D., & van Bortel, G., 2018). On one hand it is fairly easy to determine the lower-boundary of the mid-segment, given that there is a clear demarcation of the capping of the social sector. Whilst on the other the upper-boundary of the mid-segment depends on local market circumstances. Further one can say that, given the limited number of national/local allocation or eligibility rules for affordable rental housing, the existence of affordable or the mid-segment rental housing is purely based on the local market conditions and policies. Pressure within this segment of the housing market is seen most in larger cities and cities around the Randstad conurbation (Czischke, D., & van Bortel, G., 2018). As seen in the figure (Figure 43) below the upper-boundary of affordable rental housing ranges between €1000 – 1100 this is due to the differences in local markets of different municipalities. Further, in terms of household incomes one can define the mid-segment as households who have an income of €38,035 (maximum income threshold for social housing) up to an income that is 1.5 times the average income (€54,000) (Meulenbeld, T., 2019).

Figure 43: Affordable housing in The Netherlands (adapted from Czischke, D., & van Bortel, G., (2018) and Meulenbeld, T. (2019))

It can be concluded that the definition of the mid-segment rental housing is similar to as of affordable rental housing. Having made this conclusion, the next step would be to understand the significance and target group of this segment of the housing market.

2.3.2 *Significance & target groups of the mid-segment*

According to van Gijzel, R. (2018), there are three primary reasons for the existence and importance of the mid-segment rental housing sector. They are accessibility to cities, a target group that comprise of a large majority of the households and bringing balance within the housing market in the Netherlands. Having a city that comprises of mixed income groups is something a lot of municipalities in the Netherlands try to achieve, with

this goal the mid-segment rental housing becomes a fundamental part of the housing stock. As it offers households to move more often based on their needs and positions and at the same time also providing an access point to new commers. It is believed that with this mixed population a dynamic city can be created which supports the local labour market as well. Creating mid-segment homes within the cities also contributes towards countering spatial segregation, in turn improving the overall quality of neighbourhoods. (van Gijzel, R., 2018).

In the Netherlands there is a large segment of the population trying to access the cities, or rather the mid-segment rental housing market. These are predominantly people who have middle-income who want (or have) to live in a rented house because they cannot look in the social sector for housing and cannot afford an owner-occupied house or free market rent yet. Although, financial reasons are predominant to choosing the mid-segment, flexibility is another reason for some within this target group. As mentioned earlier that the mid-segment is defined differently based on regional contexts, however based on the framework of the Central Rent Collaboration Table homes with a rent between €700 – 1000 are considered as mid-segment rental homes (van Gijzel, R., 2018). In the box (Box 1) below the type of people looking for mid-segment rental homes are listed, this list has been quoted from the report by van Gijzel, R. (2018).

> *"Target groups for the mid-rental segment are:*
> 1. *People who do not want to buy a house and want to remain flexible, for example because of their profession, contract, or stage of life.*
> 2. *People who consciously choose a rental home because they do not want to run any risk in terms of wealth or to be responsible for the maintenance of the home.*
> 3. *Households that are no longer eligible for social housing but cannot (yet) buy because of the purchase price or mortgage requirements.*
> 4. *Starters on the housing market.*
> 5. *Knowledge workers who are temporarily looking for a home in the Netherlands.*
> 6. *Elderly people who want to sell their owner-occupied home in order to free up capital.*
> 7. *Households that still live in a housing corporation but would like to move on to a home that better suits their housing needs."*

Box 1: Target groups (van Gijzel, R., 2018).

The mid-segment rental housing sector definitely contributes to creating a balanced housing market, given that flow and accessibility within the market is important as social, economic, and demographic trends tend to change over time (van Gijzel, R., 2018). Developing housing based on the need of these changing trends is essential and given that realising new stock is time consuming it would be beneficial to create a wider ranged market, in turn increasing the accessibility and flow within the market. This 'flow' in the market, for example, is created by the mid-segment, supporting the flow from social rent to free rent or owner-occupied sector. As mentioned by van Gijzel, R. (2018) the mid-segment acts as a hub for the housing market, as it allows people to not only set up and move up the housing market but always provides a "space" for people to flow back (selling property to free up capital). The existence of the mid-segment essentially is to assists the various types of people/households to find a suitable home based on their income or position in life. Within the social sector a persistent problem that has been identified is that there are some homes being rented by people with higher incomes. Although there has been a reduction in the number of such households there is still a significant number of such households who are trapped without the prospect of moving, due to the lack of supply in the mid-segment. In turn not releasing the stock within the social sector for the intended target group. Improving the supply in the mid-segment would not only support these households but also the ones who are in the long waitlists for social housing (van Gijzel, R., 2018).
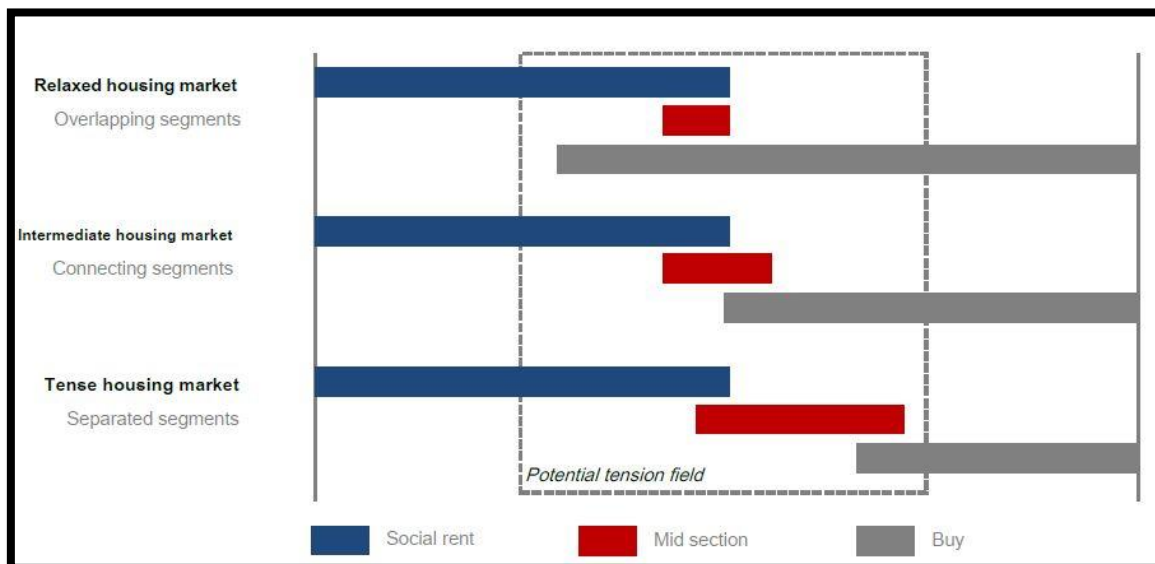
Figure 44: Different types of markets in the middle segment (Meulenbeld, T., 2019)

The mid-segment acts as a bridge between the social and free-market housing, given the regional characteristics of the housing market, different markets (varying ranges of rent and importance of being present) are created within the mid-segment and the importance of its existence varies based on the position of the housing market in general. As seen in the figure above (Figure 44) the housing market could be characterised as relaxed, intermediate, or tense and these conditions also have implications on the mid-segment. For example, in regions that have a tensed market with high demand such as the metropolitans and big cities, a fairly huge gap can be seen between the social rental and owner-occupied market due to the increasing house prices. In turn it falls upon the mid-segment to cater to this gap and provide housing options for a large group of people as compared to regions where the gap between the sectors is smaller. This also explains why the upper limit of the mid-segment varies based on regional market conditions as the demand or gap increase (less available stock) the rent price increases (Meulenbeld, T., 2019). Based on the earlier made categorization (section 2.2.2) of the housing market it can be said that the Metropolitan Areas along with the Big Cities have a rather tensed housing market, Other Randstad and Regional Municipalities would range between intermediate and tensed conditions given their proximity to the Randstad Conurbation and Areas of Demographic decline are the only regions that can be seen to have a fairly relaxed housing market.

2.3.3 Demand and supply

In the Netherlands currently there is a rising demand for mid-priced rental homes, while the supply of such homes is not growing at the same rate. In turn, as mentioned earlier as well, this scarcity of supply rises the house prices and fewer homes remain with the mid-segment price range. This gap in supply and demand can predominantly be witnessed in area with a tense market condition and if no efforts are made to improve this segment the housing shortage would continue to grow and have negative impacts socially and economically. With an estimated requirement of 60,000 – 200,000 homes in the coming ten years, arising from 10 to 13% of the households who wish to move up the housing ladder, it would be essential to improve the supply side of the mid-segment market to cater to them. This wide range of demand originates form the fact that there has not been enough investigation towards understanding the demand of this segment of the housing market. This rising demand according to Van Gijzel, R. (2018) is due to the increasing population, the desire to move towards cities and the increase in single person households. These demographic developments, as seen earlier as well (section 2.2.1), are primary reasons for the housing shortage in the Netherlands and no doubt are crucial factors for the mid-segment as well. As seen in the earlier section there is a wide range of people who fall within the target group who have a demand for mid-priced rental homes. Of which particularly high demands originate from starters, for whom moving to cities is important for aspects such as higher quality of employment, culture, and recreation. This attraction towards cities also stems from the increasing flexibility within the labour market, this flexibility in the labour market and search for higher quality employment directly increase the demand for

mid-priced rental homes. With this trend of flexible work environments setting in larger groups of people are choosing to rent than buy as it gives them more flexibility and ease of moving when required. The majority of which look for a house within the mid-segment of the housing market. Along with these starters a particularly high demand for mid-priced rental homes is seen from elderly people for the following reasons. To be able to free up capital, for their retirement, by selling their existing owner-occupied home and renting a home that is more suitable to their needs. For these elderly people moving towards cities becomes an attractive option as it gives them easy access to facilities that are normally further away from their existing owner-occupied homes (Meulenbeld, T., 2019). Further, aligning this demand to the earlier mentioned categorisation (see section 2.2.1) of the housing market and comparing to the type of market they currently represent, it can be concluded that there is significant amount of demand in all categories except in Areas of demographic decline. The table (Table 2) below presents a rough estimation of the required number of homes within each region. Although no specific estimates are available for Other Randstad and Regional municipalities, based on the current situation of the housing market and target groups that are currently suffering from the housing shortage, it can be said that these regions likewise have fairly high demand for mid-priced rental homes.

Category	Market condition	Demand for non-regulated rental homes	Supply of non-regulated rental homes	Demand within the mid-segment
Metropolitan	Tense	53,000 homes per year	37,000 homes per year	16,000 homes per year
Big cities	Tense	31,000 homes per year	22,000 homes per year	11,000 homes per year
Other Randstad	Tense	79,000 homes per year	64,000 homes per year	No estimate available
Regional Municipalities	Intermediate	41,000 homes per year	33,000 homes per year	No estimate available
Areas of demographic decline	Relaxed	5,000 homes per year	5,000 homes per year	No shortage present

Table 2: Relating market regions to condition and estimated demands for non-regulated rental homes (Own illustration, numbers sourced from Capital Value, 2020)

2.3.4 Policy developments within the mid-segment rental housing market

Currently the development of mid-segment rental homes is considered to be the same as developing for the free market as it is considered to be a part of the free market. Given that social housing sector is clearly defined and any homes with rents above the social cap are considered to be part of the free market. Hence unlike the social sector or the owner-occupied housing market the mid-segment does not have any sort of clear subsidies or benefits or policies in place. As compared to the social sector where both market actors and users receive support from the government through well-structured policies and allowance systems in place. Likewise, in the owner-occupied sector home buyers are supported by low interest rates on mortgages, hence leaving out the middle-income households who cannot yet buy house to face market level rental prices. This at first may sound like there is not anything being done for the mid-segment rental housing market, which is not the case. Over the last few years both market actors as well as the government have been making steps towards improving this segment of the housing market. These steps include setting up of collaboration tables both at a national and regional level, municipalities re-aligning their housing agendas to include more mid-segment rental housing in their plans and visions, market actors making custom agreements with governments – committing to delivering more mid-segment homes and some of the larger municipalities also going a step further and making elaborate action plans to increase the supply of mid-segment homes. Although it can be argued that all these plans and steps being made still come with some amount of uncertainty and require further development, in the following sections a few key points of the steps being made are presented.

Collaboration tables (Van Gijzel, R., 2018)
- Mid-rent Cooperation Table set up to ensure interaction between municipalities and market actors to look for possibilities together.
- Tables set up at both national and regional levels.
- Recommendations or results from these collaboration tables.
  - Municipalities to include specific attention to mid-segment rental homes in their visions.
  - Use the collaboration table as a platform to consult with all parties involved.
  - Special focus teams to identify gaps in existing regulations – temporary solutions in high demand areas.
  - Building a national platform for interested parties to make projects available.
  - Pre-financing for inner city construction – a revolving fund that pre-finances the preparation of inner-city locations for mid-segment rental homes.
  - Redistribution of existing stock – housing association making custom agreements of adding existing larger homes to the mid-segment after having added smaller social homes.
  - Change in the housing act – subjecting mid-segment homes to a permit – affordability permit that allows municipalities and housing providers to allocate the realised homes to right target groups.

Action plans (Gemeente Amsterdam, 2020; Gemeente Utrecht, 2017)
Following the action plan made by the municipality of Amsterdam and Utrecht as examples and in the figure below summarises the measures made by these municipalities as well as in the municipalities of Hague and Rotterdam (see Figure 45). These being mainly examples that are within the Randstad conurbation, from a few preliminary discussions it was brought to light that the other municipalities generally follow-on similar lines with small adjustments based on the projects or demands within their region.

- Contains the measures municipality are going to take to allocate the houses that are being realised, through affordability permits.
- Preference to those moving out of the social housing sector – and basing to affordability permits and waitlist systems.
- Arriving at maximum rents that do not include parking.
- Fixing rent increase to follow indexation +1% depending on the custom agreements made on a project basis.
- Having agreements to the rent increase to a minimum of 20 years and up to 25 years – Amsterdam.
- Establishing control over the size and quality of the homes being built as to avoid developers from making extremely small homes to supply to this segment of the housing market.
- Establishing a 40-40-20 rule in transformation projects (corporations purchase social homes for redevelopment), where a minimum of 40% should be mid-segment homes. Further permits to also have 0-80-20 or even 0-100-0.
- Offering lower land prices for development in this segment and in Amsterdam also further reducing prices if the homes are above 70sqm – as a common approach to developing for this segment tends to go only in the direction of developing single person homes that are 50sqm and the municipalities recognise that there is significant demand for mid-priced rental homes even from multiple-person households.
- Imposing that the homes being realised should be a minimum of 50sqm as if lower they need to be within the social sector – not having this would hinder people from moving out of the social sector as they would be paying mid-priced rents for the same square meters.

Although these steps are promising and are in the right direction to successfully delivering it can be argued that these steps are rather regulative in nature and currently the mid-segment market needs more stimulating steps to be made. Given that these regulative steps are necessary and contribute towards building a more sustainable mid-segment the question that arises after going through the various action plans and custom agreements

being made is that, if these regulative steps would indeed attract more market parties to develop within this segment? (question for field research).

	Amsterdam	Rotterdam	Utrecht	The Hague
Maximum starting rent	€1,000 per month Average €850 per month	€1,000 per month	€950 per month	20 percent of new build must be available for middle rent, of which half must be up to €850 per month and the other half between €850 and €950 per month
Maximum rent increase	Consumer price index (CPI) plus 1 percent	CPI plus 1.25 percent	CPI plus 1 percent	Not defined
Minimum unit size	40 sq m for multi-family homes and 80 sq m for single-family homes	50 sq m in the city centre, 60 sq m in the city districts, 70 sq m in the suburbs	50 sq m for rent just above the free limit and 80 sq m for a rent of €950*	Not defined. More generally, up to 20 percent of the new homes are small houses
Minimum operating period	Not to be sold for 25 years	Not to be sold for 15 years	Not to be sold for 20 years	Not to be sold for 20 years, but with a review after 10 years to see if this measure is still necessary
Who housing is assigned to	Households with a middle income of 1 to 1.5 × modal of approximately €39,000 to €57,000. Priority for households who leave a social rental property.	Pilot providing access to specific professions	Households with a middle income of 1 to 1.5 × modal. Priority for households who leave a social rental property.	To be eligible for intermediate housing, single person households have a maximum income cap of €57,000 and €67,000 for larger households. Rents are not restricted by the municipality but landlords can only ask for rents greater than €950 per month if the household income is in excess of the caps.

Figure 45: Conditions for mid-segment rental housing (Figure 9 in ULI Europe, et al., 2020)

2.4 Conclusion – the Dutch housing market 2020 – 2024

The following section aims to throw light upon the future expectation of the housing market in the next five years (1st January 2020 – 1st January 2024). The information presented in this section is sourced from Chapter 3 of the report by Capital Value (2020), *"Housing and residential investment market in the Netherlands 2020",* who have based these forecasts or expected developments on the Socrates Scenario aimed at the middle target group (for details of the scenario see ABF Research (2019). *Socrates 2019).* In their report Capital Value (2020) first set a baseline situation and discuss a few assumptions before elaborating on the expected developments on the housing market.

2.4.1 Baseline situation and assumptions

As also seen in earlier sections (section 2.2.1) currently the Netherlands, with more than 8 million households and 7.8 million homes, faces a shortage within the housing market (a shortage of 315,000 homes or 4% of the housing stock as of 2020). Looking at the composition and position of the households within the housing market it can be seen that currently the housing market is inaccessible to a large number of households given the rising cost and limited supply. Currently of the total households in the Netherlands 54% live in owner-occupied homes (of which 54% live in homes valued at over €250,000 and remaining in less expensive homes), 39% live in a rented home (of 82% live in regulated rental homes and remaining within the non-regulated sector) and the remain 7% of households live in OOS. In the coming years, the number households are only expected to grow, and the housing shortage is expected to remain if there are not sufficient developments within the supply side of the market. In 2019 quite some measures were proposed, of which some contribute towards improving the

housing situation and some may not. For example, the discount on the landlord levy, increasing the options or rather relaxing the regulations on temporary housing, introducing special flexibly deployable teams to support the spatial planning process and ambitious hosing deals would positively contribute towards reducing the housing shortage. Whilst factors such as a 'panic button[8]' within the rental market, obligations of self-occupancy of owner-occupied homes and tightening of regulations for new-build output can have a negative effect given that they do not encourage the construction of new homes. In order to be able to reduce this growing shortage, it is imperative to find ways to implement the good initiatives that were proposed in 2019 along with accelerating the building output (Capital Value, 2020).

In the following section the desired developments within the housing market are discussed, however it is important to know that these future expectations are based on a few assumptions. Assumptions that are made in line with the Socrates Scenario aimed at people moving up the housing ladder. They key assumptions being the income developments of the people within this target group and the housing production. Households within this target group (in this scenario) tend to see an annual income increase of 0.4% above inflation and the basing the predictions of the building output on the 2019 Primos Firecast High, implying that on average 84,300 homes need to be built each year. Although, basing the future predictions on this would result in only a 0.2% reduction in the housing shortage by 2024 whilst a quicker reduction of the shortage is more desired. Also, in the scenario used to make these predictions the new-build programs are directed predominantly towards people moving up the housing market and starters (including those moving into the Netherlands). Lastly, assumptions were made in lieu of rental policies in terms of rent increases, the possibility of income-dependant rental policies and the number and degree of rent harmonisations that would occur through the years (Capital Value, 2020).

2.4.2 Desired developments

As developments within the housing market can vary or rather be categorized in multiple ways, in their report Capital Value (2020) categories the housing market into four types of homes, to be able to clearly present the desired developments within the housing market. They are inexpensive owner-occupied homes (homes priced up to €250,000), expensive owner-occupied homes (above €250,000), regulated rental homes (rents up to €737 per month) and non-regulated rental homes (rents starting at €737 per month).

Demand and supply

Looking at the demand and supply in the housing market, it is expected that in the coming five years on average 1.3 million households (per year) will be looking for a home within the housing market. The rising demand for homes is a direct result of this development in number of households, of which 48% would be looking within the rental housing market (of which 75% within the regulated rental sector and 25% within the non-regulated rental sector) and the remaining 52% would be looking for an owner-occupied home (of which 51% look for an inexpensive owner-occupied home). Currently in the Netherlands the housing supply totals to a little over one million a year, consisting of a combination of existing supply and new supply (Figure 46). The existing supply comprise of homes that become available within the market for various reasons such as deaths of single households, households relocating outside the country, combining of households and households moving up the housing ladder. The new supply comprises of new-build homes and homes that are a result of transformations or redevelopments. In the coming five years it is expected that a large portion of these one million homes would be from the existing supply and close to 71,000 homes a year will be a part of the new supply (Capital Value, 2020).

---

[8] *"The aim of this 'panic button' was to counteract excessive increases in the average rent (rent of €720 to approx. €1,000 per month) after a change of contract. The Minister proposed maximizing the initial rent via the applicable Housing Regulations in the event of scarcity. In that case, the maximum initial rent would be linked by means of a percentage to the value of the houses in question for the purposes of the Valuation of Immovable Property Act (Wet waardering onroerende zaken, "WOZ"). There was talk of a maximum rent of 6% of the WOZ value (in the event of a tenant change) and only houses with a WOZ value of up to €300,000 would be eligible." - Lexence Advocaten & Notarissen, (2020)*
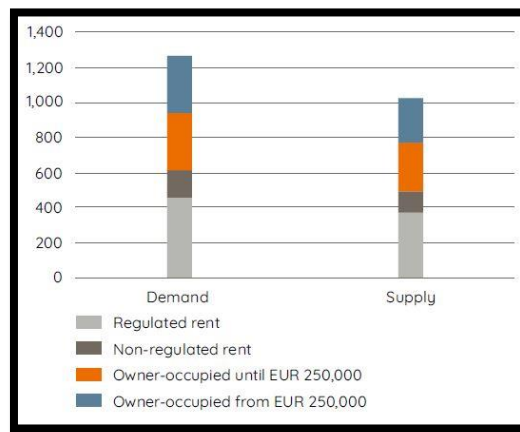
Breaking up the supply in the above-mentioned categories it can be seen that more than half of the supply is directed towards the owner-occupied market (27% inexpensive and 25% expensive owner-occupied homes), the remainder of the supply lying within the rental sector (36% of the supply within the regulated sector and only 12% within the non-regulated). In theory the supply of 1 million homes to 1.3 million home seekers would imply that a large part of these households is able to find a home. Although, from a qualitative perspective there is not enough supply for all home-seekers given that there is not always suitable supply available; type of homes, ownership structure and price do not correspond with the demand. Implying that the supply does not always match the demand, it could be for various reasons, for example the suitability of location, type of home or environment, resulting in discrepancies between the supply and demand. These discrepancies would imply that households would have to eventually settle for what is available instead of living in a home that is suitable for their needs. In the coming five years it is expected that there would close to 409,000 households each year who would face this problem of not having a suitable home and are classified as the residual demand. On the supply side for such households, the residual supply that comprises of housing options that do not directly meet the demand as a result of not being suitable in terms of type or environment or ownership structure and price range amount to 99,000 homes a year over the coming five years. Such homes do not directly contribute towards improving the shortage as they are most commonly seen as a second option and unfortunately a large gap can be seen in the demand and supply of such homes as well (Capital Value, 2020). However, if like 2019 the planned supply is delivered and the market remains attractive to investors the next five years could see improvement and based on current predictions the housing shortage is subjected to reducing to almost as less as 2.5% of the housing stock by 2030 (see Figure 13 and section 2.2.1). It would be essential for all market parties to constantly review their positions as well as assessing the demands as they could vary in time and the primary focus within the supply and demand should not be attaining an equilibrium from a quantitative perspective but should also strive towards catering to the different types of demands (Capital Value, 2020).

Housing stock

The desired stock developments, in the next five years, based on the Socrates Scenario aimed at middle income, the housing stock is expected to expand by 361,000 homes (new build output estimated at 422,000 and approx. 632,000 will be demolished). This expected growth of new-build output also covers the 55,000 rental homes that are expected to be converted to owner-occupied homes in the next five years of which 46,000 are from the regulated sector. Of the new build output a large portion would be within the owner-occupied sector, approx. 242,000 homes and the remaining 180,000 within the rental sector. With an expectation of close to 133,000 regulated homes within the next five years it would be a rather tough task for the housing associations to deliver close to 26,500 new homes per year. These 26,500 homes should be divided amongst various price ranges given that over time and rent increases they are naturally bound to passing onto higher price segments. While the non-regulated rental sector, in this scenario, is expected to see an addition of 41,000 new-build homes in the next five years. Based on the assumptions made within the scenario, 8,000 of these new-build homes would be sold as owner-occupied homes whilst close to 30,000 homes within the regulated rental sector,

due to rent increase, would be rented as non-regulated rental homes. In total the non-regulated rental sector will see an increase of 61,000 homes by the end of 2024. It can be seen that a lot of housing stock is expected to be added to the owner-occupied housing sector, close to 289,000 homes (242,000 new build; 8,000 demolitions and conversion of 55,000 rental homes). However, of these 289,000 homes a fairly large amount (123,000 homes) is desired to have selling price lower than €250,000. Given that in 2019 the average cost of a home was €400,000 it is quite unlikely that these many inexpensive owner-occupied homes (123,000) would be developed. Although some household incomes may grow and they would be able to afford a new home, a large number of households would not and in turn the demand, or rather pressure, would shift to the regulated and mid-priced rental sector (Capital Value, 2020).

Housing shortage

In the coming years, a major housing need is expected as the current shortage in 2020 has already increased to 315,000 homes (4% of the total housing stock) as compared to 263,000 homes (3.4% of the total housing stock) in 2019. This shortage of homes has social and economic effects and brings about social discontent for almost all segments of society. Making it hard for starters to enter the housing market, forcing students to boomerang back to their parents' home, postponement or adjustment of family expansions and also limiting qualified foreign knowledge workers from coming to the Netherlands, limiting moving possibilities. In turn creating large commuting distances for households which then puts pressure on public transport and creates heavy traffic on the roads. Along with these social issues that come with the housing shortage, in their report Capital Value (2020) mention that according to Statistics Netherlands (CBS) 117,000 more inhabitants are expected as compared to the forecast made by 2019 Primos High (ABF research) implying that the housing shortage could be a lot higher than what has been estimated in their report. As seen earlier the number of permits issued in 2019 were low, implying that there will be lower number of deliverables through 2021. Based on the new data gathered on the permits issued in 2019 by Statistics Netherlands predictions are made that the shortage in 2022 could reach up to 380,000 homes as compared to earlier predictions of 360,000 homes. Implying that according to the prediction of Statistics Netherlands approx. 30,000 to 50,000 more homes over the average of 84,300 homes, that was predicted by 2019 Primos High, need to be built per year. This not only illustrates the magnitude of the housing shortage but also the limitations to predictions of it. One can argue that the shortage can be controlled by using temporary or flex homes as a solution; however, that would only be a short-term fix to the problem, and it would still require more planning capacity on the long-term.

Government policies

To ensure a steady growth of the housing supply over the next five years quite some measures have been put into action or have been announced, at both national and regional levels. The Dutch cabinet has decided to accelerate the construction of 65,000 affordable homes by issuing €1billion, averaging to €15,000 per home. Quoting Capital Value (2020), the housing construction incentive is *"a government grant to build affordable homes in 'shortage areas', including financing the required infrastructure, mitigation of the potential consequences of the nitrogen ruling for house construction and ensuring a high-quality living environment.".* This contribution can be seen as a working capital towards implementing the Housing Deals made with the regions of Amsterdam Metropolitan, Southern Randstad, Eindhoven Urban Area, Utrecht and so far, one municipality (Groningen) as well. Along with this financial support the government also wishes to act as a collaborative partner in certain location, which are pre-mentioned within the Housing Deals. This incentive is available to other locations that tend to have a shortage above the national average. In lieu of landlord levy there is an investigation going on, with results expected in March 2021, the severity of the financial position of housing associations. However, at the moment it has been decided that in the State Budget of 2020 that a reduction of 100 million per year for the next ten years. This can be considered a positive development towards the goal of the Lower House of Parliament to abolish the landlord levy all together (Capital Value, 2020). The so called 'panic button' that was proposed in 2018 has been taken off the table and instead like the regulated sector the rent increase for the private sector, per year, is at a maximum of 2.5% plus the correction for inflation. Although, this would only apply to residential lease agreements that for a period of three years and rent increases for reasons such as renovations and/or sustainable measures will remain out of this limitation.

Further, in regard to the rental market in the coming years more transparency about the realization of rental prices will be shared with the private sector. This is done with the hope this may lead to an agreement and can eventually be made a legislation which would be binding to the entire sector. To cope with the current pressures on the housing market, given that temporary housing is a quick solution, the government is in favour of permitting a maximum of three years temporary contracts with the aim of trying to ease the housing market on the short-term. A more long-term initiative made by the government would be the 'buy-up protection'. This 'buy-up protection' would be used to control the sales of medium-priced owner-occupied homes, as these types of homes are very attractive for investors to acquire and rent. The aim being to control the desired form of renting of such properties, by setting aside this buy-up protection for bonafide landlords, i.e., trying to maintain the stock within the various segments of the housing market (Lexence Advocaten & Notarissen, 2020).

Along with the above-mentioned measures other measures were announced in 2020, that include maximization of the Valuation of Immoveable Property Act (WOZ) up to 33% from the earlier proposed 25%, implying that new lettings would have lower starting rents, although no bill has been passed regarding this change (Loyens Loeff, 2019). A differentiation between the SGEI income thresholds of single households and multi-person households, €35,000 and €42,000 respectively (2019 price levels). An improvement to the system of income-dependent rent increases, for higher rents, this would be done by broadening the rent increase steps and for very low rents (below €300) enable quicker or higher increases to adjust the price to quality ratios. These are some of the measures that have been announced in 2020 and further investigation into the following measures were also announced. Higher taxation on investments that are made by the help of debts, the possibility of a maximum loan-to-value for buy-to-let mortgages, new or different taxes on rental income, self-occupancy obligation for existing owner-occupied homes and lastly a differentiation being made in real estate transfer taxes between investors and starters (Capital Value, 2020). These measures are believed to be able to contribute towards lowering the housing shortage although the government is still investigating to be able to formulate policy for these measures. For instance, currently a slight contradiction can be seen between maximizing the loan-to-value for buy-to-let mortgages and self-occupancy obligation, although it mentions the self-occupancy obligation would be directed towards existing homes. It would imply that current homes within the rental sector, that fall under the category of but-to-let owners, would be lost or rather reducing the stock within the rental sector. As mentioned earlier these measures require further investigation and would eventually be made into policies, with the goal of improving the housing situation in the Netherlands.

3. Theoretical research

In order to be able to make recommendations to improving the existing development process for mid-segment rental homes it would be essential to first understand the real estate development process in theory and further delve into the current challenges faced in the Netherlands and in delivering mid-segment homes. Looking into existing approaches and tools available to improve the process and further building a theoretical framework to analyse the field research to identify what tools or measure suggested in theory could be synthesized with the findings. Using the framework and knowledge of the existing barriers relevant interview questions would arise, to in turn identify where along the process are there bottlenecks.

Readers guide

The *underlining goal of this chapter being to answer the second sub-question "**How does the real estate development process work in theory, what are the challenges or barriers to development currently faced in the Netherlands and how can the process be improved?"** This is done by structuring the sections of the chapter to align with different parts of the question. Sections 3.1 answer the first part of the question directed toward a **theoretical understanding of the real estate development process** by presenting a brief on the various models available and following the **event-sequence model** in detail to later build the theoretical framework. Followed by section 3.1.3 that elaborates on the different **land development models** currently seen in the Netherlands and the challenges/barriers to development, that answer the second part of the question. Finally, section 3.3 answers the question as to how the real estate development **process could be improved**. The information in these sections is then collated to form a theoretical framework that assists in assessing the field research identifying where in practice the problems lie and what tools from theory could assist in drawing conclusions, in turn answering the main research question.*

3.1 *Real Estate Development Process*

As defined by (Miles et al., 2015), *"Real estate development is the process of bringing built space to fruition."* A process, like any, the begins with an idea or vision and results in a product. In the case of real estate development that product is the physical space that can be occupied by its consumer, tenants, or owners. To be able to successfully deliver a product at the end of this process collaboration between multiple actors and stakeholders is necessary. Along with these collaborations three primary factors that are essential is land, labour and capital, these factors can also be considered as resources and without which development would not be possible. As mentioned earlier as well this process of real estate development is rather simple, however its complexity only grows when more and more factors such as financial markets, politics, user requirements, etc come into play. Real estate developers being the orchestrator within this process ensures that the required resources and approvals are made available in a timely manner (Miles et al., 2015). Implying that before actual physical development can start long processes including permits, designs, contracts, and finances are planned along with calculated risks. The role of the developer does not end at the physical completion of the building but continues into marketing and ensuring that the development is sold to the consumers. Further, adding to this complex role developers also have to stay up to date with developments such as demographic, market, income, affordability to be able to plan future developments. This process of real estate development has been involving over the years and one can argue that it has reached a point where its complexities require better educated or expertise (Miles et al., 2015). To further understand this complex process many authors have tried to time and again to create models that would assist in understanding the essential components and how they impact one another.

3.1.1 Development models

These models generally were made with specific concepts, for example models that dealt with actor relations or models that dealt with the various events that occur through the process and over the year's attempts have been made to arrive at one complete model that would incorporate all the various concepts. Although, this has only been attempted by various authors and have finally been broadly classified into four main types (see Figure 47). They are (i)Equilibrium models; (ii) Intuitional/structural models; (iii) Agency models; and (iv)Event-sequence models (Adams, D. & Tiesdell, S., 2012). These development models have been briefly explained and looked at within the perspective of developing mid-segment rental homes in the following paragraphs.

Figure 47: Conceptual models of real estate development. (Adapted from Healey, 1991; in: Ratcliffe et al., 2009; p.329.)

Equilibrium model

This model of development is based on the origins of neoclassical economics. It is based on the principal or rather assumption that the real estate development process is demand driven and the supply side is constantly trying to match the demand (Healey, 1991). According to Healey (1991) in this model real estate development is activated by market signals such as land prices and rents. This model of real estate development does have its short comings as it does not consider some important factors such as diverse or changing demands, interests of parties who do not have economic benefits, long term planning within the development process, the different methods used for calculations and complexity of the development process. This model of development is more

applicable for simpler projects that are set in a relatively stable market environment and this model alone does not suffice to meet the requirements within complex markets that consist of multiple stakeholders and actors within the development process (Squires & Heurkens 2016). Given that this model was designed a long time ago it still can be applied in some contexts even today. Looking at mid-segment rental housing segment of the housing market in the Netherlands, applying this model could seem like a viable option at first. Although the current situation seems to be demand driven, there are multiple factors affecting the development in this segment. Hence simply trying to steer the development based on this model would result in overlooking aspects such as the different types of demands form the different target groups within the segment. It also would eliminate one of the key aspects of local policies and regulations within the segment.

Institutional model

This model of real estate development is based on the idea that development should be channelled through institutions that drive the dynamics of the development (Healey, 1991). Adams, D. & Tiesdell, S. (2012) believe that this model is based on the concept of 'transaction costs' and further believe that, to reduce transaction costs intuitions are necessary. Institutions within the development process are seen as the rule setters, setting formal rules for actors to follow (law), establishing social norms that actors are expected to respect and local contexts (Adams, D. & Tiesdell, S., 2012; Daamen, 2010 in Squires & Heurkens 2016). In essence, this model of development has three levels of institutional hierarchy. First, defining the development environment by political, social, economic, and legal rules. Second, the operational rules within the parties involved as there is a large network of institutions acting within the market. Third, over time the interaction within the parties in the development process can shape the property market (Keogh & D'Arcy, 1999; Daamen, 2010; Alexander, 2001 in Squires & Heurkens 2016). Squires & Heurkens (2016) bring to light that these institutional levels influence one another as they set the rules for development and constraint the actors within the process while also being one of the actors. Having a drawback of not operationalising the behaviour of individual actors. In the Netherlands there is a strong presence of the institutional model in the housing market. These institutions play vital role in setting regulations and policies for the various actors to perform in. Especially within the mid-segment rental housing market having these institutions is important as the demand for such housing is high and setting a level playing field for market parties is essential. However, this sometimes can bring about complexity within the development process. In the context of the mid-segment rental housing this complexity can be seen in having different regulations or policies within the different municipalities. It definitely would be difficult to generalise the policies and regulations for this segment of the housing market at a national level as this segment relies on the contexts of the local markets. Unlike the social housing sector where the policies and regulations can be set at a national level to a certain extent as it has been developing over decades and the mid-segment rental market is comparatively a new market that has risen from the pressures within the owner-occupied market and the consistent rise in rents in the private sector.

Agency role-based model

This model of real estate development incorporates a large number of actors with different interests, however connected through a large network to each other and other markets. According to Adams, D. & Tiesdell, S. (2012) these models focus on the actors and their relationships, that are nurtured over many years, determining the outcome of the development. They further argue that distinction between actors and roles is crucial in the development process. Actors are organisations while roles are the parts these organisations play in the development process (Adams, D. & Tiesdell, S., 2012). Quoting Heurkens (2012, p. 57) who defines an actor as *'an organization or representative individual actively involved in development projects',* and the role they play as *'a coherent set of organizational tasks and related management activities carried out by actors involved in development projects.'* These models are based on the interests the different actors have in the development. It becomes crucial that the actors playing the governing roles find a way to balance the markets as private sector actors can sometimes lean towards focusing on their personal goals rather than coherent development process that maintains stability within the market. In lieu of the mid-segment rental this kind of development model can assist in improving the supply side by providing the different actors involved with incentives as they play their role in realising projects that could cater to the demands of this segment. For example, developers tend

to shy away from developing brownfields as they are generally higher in development costs, providing some incentives to them would attract more developers to take on brownfield regeneration projects.

Event-based model

This model of the real estate development process looks at the process as sequence of events that need occur, although not in a chronological order, to deliver developments that align with the market demands. This model having its origins from as far back as 1978 where it was introduced by Barret et al. (1978) as the 'development pipeline' it can be argued that this model does indeed bring to light the various complexities involved (Squires & Heurkens, 2016). Further developing on this model Adams, D. & Tiesdell, S. (2012) modelled the real estate development process into a simpler form and reflect to more recent practice. They designed the process over the concept of a development triangle, of which the three sides being 'development pressure and prospects', 'development feasibility' and 'development implementation'. This kind of model not only assists in understanding the factors that drive real estate development but also bring to light that real estate development is not only about the construction and physical changes that one can see. As mentioned earlier that the various events need not occur in a chronological order, however the critical or essential steps must be completed before moving forward. These steps being ones such as analysing the existing stock prior to forming development concepts and eventually leading to commitments from the actors involved. Although as also mentioned by Squires & Heurkens (2016) due to uncertainties (example there might be delays in land acquisition that would hinder the feasibility stage of the process) within these requirements actual development may still remain unpredictable. Hence such a model assists in understanding these various requirements and their importance in having impact on how real estate development occurs. It therefore can be said that event-based models have the potential to link the *"institutional characteristics if real estate development to the actual emergent process of real estate development by incorporating complex and dynamic factors"* (Squires & Heurkens, 2016).

Hence to analyse the development process for mid-segment rental homes in the Netherlands following the event-based model suggested by Adams, D. & Tiesdell, S. (2012) would prove to be beneficial as it would assist in understanding these complex factors, within this segment, that drive development. In the following section the development triangle (event-sequence model) suggested by Adams, D. & Tiesdell, S. (2012) is explained briefly so as to set the grounds for analysis in the later stages of the research.

3.1.2 The Development Triangle

As seen in the figure (see Figure 48) below the various activities that occur in the real estate development process can be broadly categorized into three main events, that are portrayed as the three sides of the development triangle. As mentioned earlier this model (Figure 48) originates from the model suggested by Barret et al. (1978), where it was originally suggested that development sites would follow the sides of the triangle moving in a chronological order. Whereas Adams, D. & Tiesdell, S. (2012) brough to light that events within the different sides of the triangle could occur simultaneously, given the cyclic nature of the process. They further implicate that this model should be seen from a three-dimensional perspective as a spiral as developments begin and end at the same point. Emerging as sites or buildings that need transformation and return as new stock, implicating that at some point every building would be a potential redevelopment site that re-enters the process and in regard to the process being compared to a three-dimensional spiral this is done because every new development, in a small way reshapes the urban landscape and may produce a new land use patterns (Adams, D. & Tiesdell, S., 2012). This repetitive nature of the real estate development process where in the events along the process may be seen as a constant the factors that drive them as variables it is important to time and again revisit the process and look for possibilities to improve based on the changes in the factors. In the following sections the three sides of the development triangle and their relation to each other is explained.
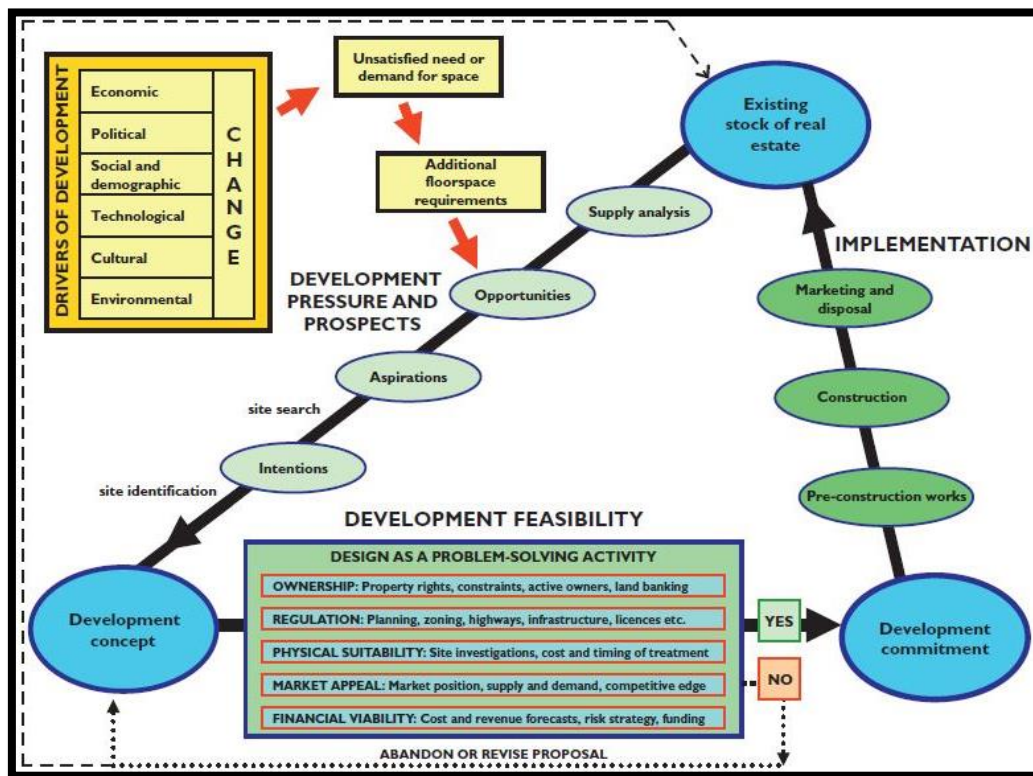
Figure 48: Event based model of the real estate development process (Adams, D. & Tiesdell, S., 2012)

Development pressure and prospects

As seen in the figure above (Figure 48) on the top left corner the factors that drive development are economic, political, social, demographic, technological, cultural, and environmental. These factors directly impact the real estate development process, and, in most situations, they operate in combination with each other. One may argue that economic factors such as growth or decline directly implicate on whether developments occur or not as funding and financing are one of the most important aspects that cater to developments. Political and social factors generally go hand in hand given that governments primary focus is to develop keeping public interest as one of their top priorities. Social and economic factors are seen in combination whilst looking at the income and position of people within the real estate market, whether the planned developments are accessible over the social spectrum. In lieu of demographic changes in recent times the most eminent is aging population, youth, and rising demand for single-person households and this more particularly seen in advanced countries. However, it does not implicate that such developments do not exists in other developing countries. Along with these rather quantifiable factors, cultural drivers can also have a significant impact on development. Especially the perceptions of important development actors as their choices and preferences could activate or hinder development. For example, the choice of actors to focus on prime locations over other secondary locations. Lastly, environmental drivers such as achieving higher sustainability goals by governments and market actors have an impact on the development as presently these factors are being prioritized a lot higher (Adams, D. & Tiesdell, S., 2012).

All these factors eventually determine whether there is a need or demand for additional square meters and on analysing that the existing stock does not match these new requirements development opportunities are brought to light. In turn initiating activity on the first side of the triangle, creating development aspirations that in turn lead to the search of suitable locations, having identified these locations and establishing the intentions of the involved actors, broad development concepts or plans are devised. The first side of the development triangle indeed is a tool that assist planners to make decisions not based on the physical attributes of the sites or locations but considering if these external drivers would indeed give rise to such demands. In the sense of not leading the planners or decisions makers in the direction of adding stock that may not actually be in demand

or only directed towards the immediate demand. After having these analysis and development concepts in place, the process moves onto testing the feasibility of the developed concepts (Adams, D. & Tiesdell, S., 2012).

Development feasibility

Once development concepts have been made the next step along the process, the second side of the development triangle, would be to test whether they are feasible or not. As seen in the figure there are particularly five test that ultimately decide if the development would move froward to the implementation side of the triangle or goes back to revising the concepts initially made. It is important to notice that these tests are aligned parallel to each other, as mentioned earlier that they do not have to occur in a chronological order. Although, it is important that the each of these tests are successfully passed (implying they are of equal importance) as even one being unsuccessful could deem the development unfeasible, resulting in either abandoning or revising the initial concepts. For a real estate developer to ensure that their plans are feasible it would be essential for them to build a substantial professional team to ensure they can successfully mitigate any constraints that come along the way. These teams generally comprise of professionals with backgrounds in design, finance, law, management, and technical expertise (see Box 2). Although, it is not always necessary for developers to build a complete team given it would be expensive to do so, the required professionals are generally hired based on the scale and complexity of the development.

> *1. Design roles*
> - *Architect*
> - *Interior designer*
> - *Landscape architect*
> - *Planning consultant*
> - *Urban designer*
> *2. Financial roles*
> - *Accountant or financial consultant*
> - *Property market analyst or economic consultant*
> - *Valuation surveyor/estate agent*
> *3. Legal role*
> - *Solicitor*
> *4. Managerial role*
> - *Project manager*
> *5. Technical roles*
> - *Civil engineer*
> - *Mechanical and electrical engineer*
> - *Structural engineer*

Box 2: Professional roles in the development process (Box 5.1 in Adams, D. & Tiesdell, S., 2012)

The very first step being, translation of the initial concepts into broad visions to create impressions of what the concepts would develop into and further be developed into workable construction drawings. Viewing this step more as a problem-solving process essentially would allow designers to create multiple options whilst minimising development constraints and maximise its potential. Having these elaborated designs and plans the development is subjected to the five tests, that are briefly explained in the following section.

Ownership control

Land or a site being one of the most essential resources for developments to occur it is important to understand that these sites whether owned maybe by the government or privately generally have some property rights that could hinder development. Adams, D. & Tiesdell, S. (2012) identify five main types of ownership constraints (see Box 3 below that also contains examples of each kind of constraint) that could exist and for the development concept to prove feasible it is essential that if such constraints exist, they must be resolved.

Box 3: Typology of ownership constraints (Box 5.2 in Adams, D. & Tiesdell, S., 2012).

In most situations this hurdle of ownership control is resolved by the transfer of the ownership to the developer who then bears the risks of the development actually going through or not. Although sometimes these risks are also shared by other actors such as municipalities and investors.

Regulatory consent
Real estate development is considered to be a fairly regulated industry, given the requirement of various government and sometimes even public consents that are required. This is generally seen through development permits that are issued by the governments after having scrutinised the development plans against the existing policies, regulations, their goals or visions, safety, and health regulations, etc. This process in countries that operate on a predetermined zoning system is comparatively faster as if the developments comply with the statutory zoning plan consents may be automatically provided. Although, if developments do not comply with existing zoning plans the process of acquiring these permissions maybe result in being time consuming or even not being achieved. In this step of testing feasibility, it would be essential for developers to have already conducted sufficient 'political market research' to be able to predetermine any constraints that may arise on a regulatory front. Planning approvals are indeed one of the most important aspects to developers although in some situations they also have to find ways to mitigate or overcome any opposition from the public. It is in this stage of the process where a designer ensures that the designs not only comply with all regulations but also does not have an impact on the potential or aesthetics of the development. Interacting with the various regulatory bodies to negotiate and make trade-offs so as to maintain design quality and conform to the rules – the effective translation of development concepts into specific proposals that are capable of acquiring these required regulatory consents (Adams, D. & Tiesdell, S., 2012).

Physical suitability
While testing the development plans against the physical suitability of the selected site developers must not only ensure that intended developments can be accommodated but must also conduct the required surveys and investigations that provide with information regarding the physical condition of the site. For example, the soil condition, contamination of any sort, existing drainage systems, etc. These surveys or investigations further would also allow developers to determine the cost that are involved in bring the site to a suitable condition. It would also assist them in determining whether these costs are to be borne by them, and if not, it would be the

right time to identify and resolve any legalities that may come across during this step of the process. Essentially for the development plans to pass this feasibility test developers would have to identify all physical and infrastructural constraints and make well informed plans to resolve them (Adams, D. & Tiesdell, S., 2012). Having the site in a suitable condition before the implementation phase begins can be beneficial as if surveyed well there would not be surprises when the development breaks ground.

Market appeal

As seen in the first side of the development triangle economic, political, social/demographic, technological, cultural, and environmental developments play a significant role in building pressure and prospects for developments to occur. It is important that these factors are also considered in the second side of the triangle as while translating these earlier made development concepts into detailed plans, it needs to be ascertained that these plans comply to the social or market demands. Implying it would be essential for the developer to have conducted sufficient research and have strong evidence that the intended development would be occupied as soon as possible in turn reducing vacancy periods. These researches should also be made with substantial future predictions as these market conditions can change over time and developments are generally spread over 3 to 5 years. Further this proves to be a challenge to also the designers as it would be ideal to allow for some flexibility in design to allow for these variations in the market. Having both qualitative and quantitative dimensions it is important not only to cater to the quantitative appeal of matching the demand with supply but also to ensure that the qualitative aspects such as quality of designs and type of developments. For example, in not only delivering the right number of homes but also the right type, in terms of size and quality (Adams, D. & Tiesdell, S., 2012).

Financial viability

This step of testing the feasibility of the intended development it is expected to link the previous steps together and translate them into a financial appraisal. Testing whether the development would eventually result in achieving the expected revenues as desired by the developers or investors. There would be slight difference depending on the type of development, private sector developments would also take into consideration the intended or expect profits as compared to when building for the public sector where profits are not usually the primary objective. The financial testing is generally done in lieu of the costs that the developer needs to incur as then it is compared with the future expected returns to arrive at whether the development is financially feasible or not. This is most commonly done with the help of discounted cash-flow analysis where developers also account for risks and factor it into their costs, this sometimes varies based on the potential risks that are foreseen. In general developers include a higher buffer when they anticipate more risks and sometimes see it as "high risk equals high rewards". The designers yet again play an important role in this step of the development process as by optimizing the designs to maximise the potential revenue of the development would only assist in further proving the development to be financially viable (example using innovative designs to maximize possible lettable square meter). As developments take on average 3 to 5 years there could be significant changes in economic factors that could prove to having the building vacant. However, to overcome that developers either try to have predetermined occupiers or investors securing their future position and if this is not an option most developments are planned with estimating six months of vacancy. Once the intended developments successfully pass this test, developers seek for funding if not funded by themselves (Adams, D. & Tiesdell, S., 2012). Having successfully proven the development feasible in all steps the process moves forward to the final side of the triangle and actual development on site begins only at this point. Moving forward without having these tests completed is still a possibility but would entail very high risks and could eventually result in drastic failures. Hence, it is very important to prove 'Development feasibility' prior to implementation.

Implementation

Having resolved any ownership constraints, satisfying all regulatory consents, assessing the physical suitability, analysing the market appeal and achieved a financially viable development plan the next step would be to make commitments amongst the various actors to ensure implementation can follow smoothly. This side of the development triangle entails three key components, pre-construction, construction and marketing/disposal and they key activities on this side would be to balance speed, cost, and quality in delivery of the planned

developments through efficient management as if any unexpected constrains re-surface it could create problems or even lead abandonment of the development all together (Adams, D. & Tiesdell, S., 2012).

Pre-construction works.
In this stage of implementation, all the earlier identified physical constraints, such as soil contamination or demolition are executed to prepare the site for the main construction program to begin (Adams, D. & Tiesdell, S., 2012). Although for more complex sites this phase could be rather time consuming and may still bare some uncertainty that may have to be dealt with. For example, on a redevelopment site where demolition of an old structure may reveal unexpected soil conditions that would have to dealt with prior to starting the construction process.

Construction
Depending on the type of developer the construction is either tender out to building contractors or in some cases carried out by the developers themselves. The most common contracting forms being traditional tendering process, where detailed designs and requirements are made by the developers, that are then handed over to building contractors who are capable of participating. Implying that there are different forms of tendering, the most common being an open tender where building contractors can make their bids based on some predetermined qualifications. The choice of the tendering process is generally at the discretion of the developer, for private-development, and in most countries public-sector tenders are open to all. Having established a contract the next step is to ensure that the developments are made in accordance and on time. An alternate approach being design-build contracts, where the developers provide interested parties with performance specifications that set out the quantities and quality that needs to be achieved. After which the interested parties present their designs and make their offers. In most cases it would be the party with the lowest bid who would win and move forward to executing the intended development. At this point actual development is witnessed on site and by timely checks and management the intended development is delivered.

Marketing and disposal
At the very end of the development triangle is when the developers are able to realise their profits, either through sales to its occupiers or simply rented out. It is generally predetermined early on while testing the feasibility whether the developments are going to disposed through sales or rental. As this decision has a significant impact on the calculations that go into developing the financial feasibility (Adams, D. & Tiesdell, S., 2012). There are yet again multiple options that developers can adopt to marketing and disposing the realised development, these are generally specific to the type of development and the intensions set out early on in the process. Some examples being, selling to investors who generally acquire developments in large numbers; selling to individual occupiers where developers market their development directly on the market or utilise the assistance of real estate agencies; retaining developments as investments within their own portfolios to either rent or sell as and when they desire. After which it can be said that a full cycle of the development process has been completed and over time this process would repeat itself after the development has either lived its life and needs redevelopment or there is new demand for different types of developments making the existing ones obsolete. Thus, proving the cyclic nature of real estate development and the need to update and review this process over time as driving factors or aspirations may change.

3.1.3 Actor – market relations
The event-sequence model attempts to understand the order of in the development of real estate and does try to throw light on the role of individuals and organizations. The inanimate drivers like feasibility and implementation are no doubt prominent factors, the social factor of relationship between people cannot be underestimated. These relationships are developed over years and play a vital role in achieving conclusive outcomes. These relations are intrinsically specific to time, place, and the compatibility they share at a given point does play a major role in the successful completion of the project. Where the importance of the human element is significant, it is difficult to map out a people-based model of the complete process as compared to

an event based one. This is because the real estate development process results vary as the categories of the people involved may differ from development to development (Adams, D., & Tiesdell, S., 2012).

Nonetheless, as seen in the figure below (see Figure 49) Adams, D., & Tiesdell, S., (2012) try to name the actors as individuals who play a role and specific development companies, final institutions, or local authorities under organizations. To have a clear understanding of the terminology they further refer to actors as agents, or even as agencies. Roles are the parts that actors portray in the developmental process, being as those of landowner, regulator, occupier, investor, or developer. Figure 49 classifies the roles, not the distinct actors, since any single actor could play double, or triple roles and these different roles may conflict with one another in a project. An actor, for example a local authority could simultaneously act as a landowner, developer, and regulator for the same development. It is important to concentrate on the roles in Figure 49 as it clarifies the generic account of relationships in the development process. One can, for understanding the relations between actor and market, show in the diagrammatic representation the actual individuals and organizations involved and trace how the roles are combined to complete a given project. Also, give clarity to the extent of the role conflict or alliance in the given case and also show the power relations in play between the actors and how the process will play out practically (Adams, D., & Tiesdell, S., 2012).
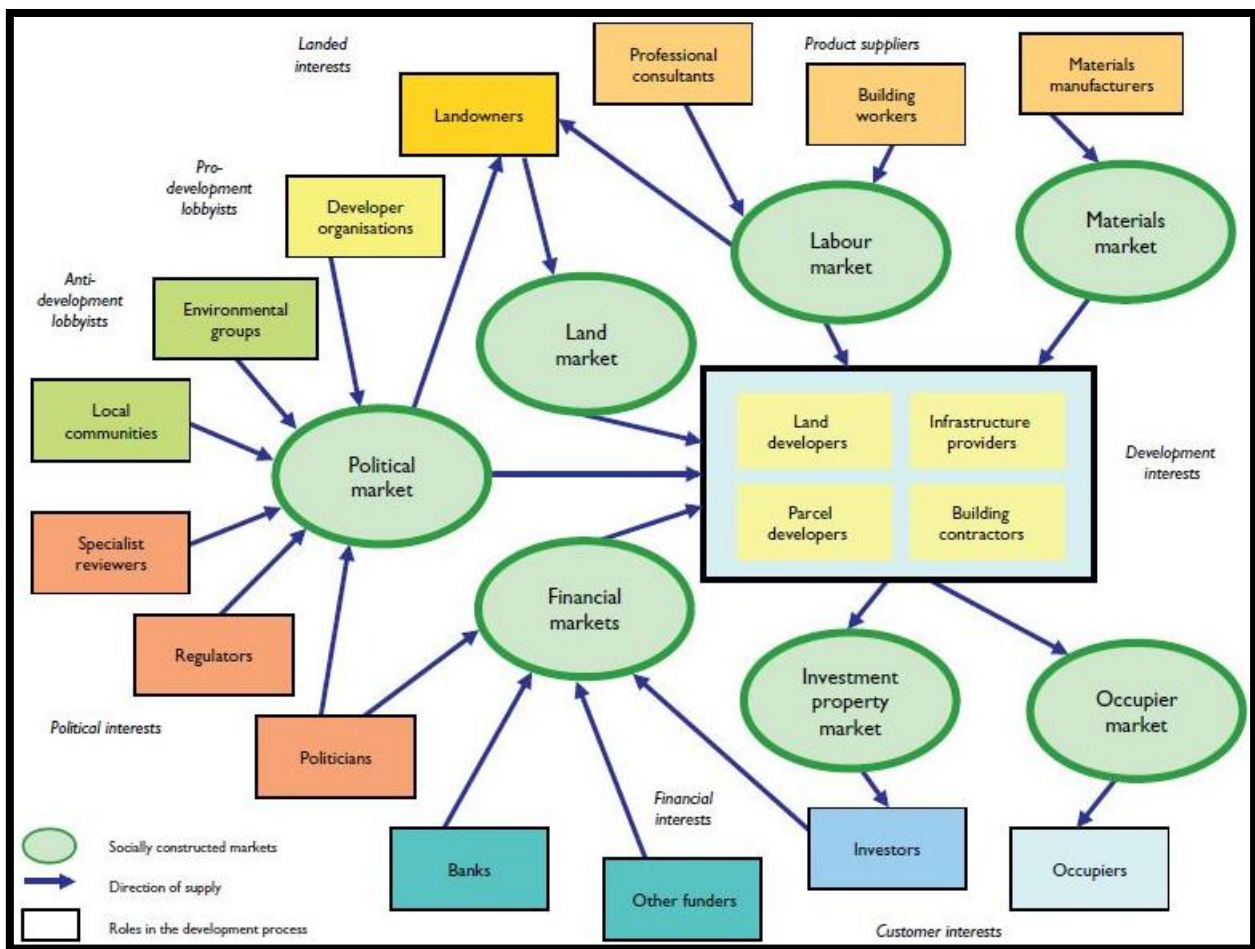
Figure 49: Actor & market relations - a role-based model of the real estate development model (Figure 5.8 in Adams, D., & Tiesdell, S., 2012)

Coordination between the roles/actors is very important for smooth execution of the development and for this it is crucial to create a network of trust in between the seven essential components for real estate development. Five that could be clubbed under what we consider as input markets namely are materials, labour, land, finance, and political support. These are necessary inputs for development. The other two markets are clubbed (as given in Figure 49) under trade outputs of the development, namely completed buildings ready for occupation or investment. These seven markets enable relations with other key actors for necessary mediation and negotiation. The land developer (known as Master Developer) envisages a masterplan which he subdivides into

smaller work parcels which are entrusted to different parcel developers (actors) say an infrastructure supplier, building contractor, etc. Again, these different developmental jobs are not necessarily need different actors. Baring the development interests, the other roles have further seven categories starting with product suppliers (as seen in Figure 49) from whom materials and labour is sourced. Labour would include both workers and consultants. Regulatory consent is sourced from the political market, where developers consider this as very complex and somewhat unpredictable. Elected politicians usually delegate the role of regulator to officials who have the right expertise and can influence the decisions. The political market provides circumstances to consider proposals about regulatory decisions that are to be taken along with local communities and environmental experts. Lastly, all developers depend on financial markets for debt funds and equity capital needed for development (Adams, D., & Tiesdell, S., 2012).

The role-based model gets energised with resources and political decisions flow, often roughly with uncertainty to achieve development interests. The power relations keep changing with changes in the development cycle and all show transient concern. For example, not all actors may be interested in high quality urban design, while developers may see no point in specifications that assure long term value if it affects the sale price drastically. Significantly, high quality increase initial cost that is covered by the developer, but the benefits go to the occupant. In conclusion, it can be reiterated that the actors and their relationships play a vital role for the success of the project.

3.2 *Real estate development process in The Netherlands*

The real estate development process as seen in the previous section is more or less the same in the Netherlands. The Netherlands as well goes through this cycle of changing social and economic demands that create development pressures that then lead into the process of realising new developments and finally re-analysing demands as the driving factors change or develop over time. Although this section does intend to throw light upon land development in the Netherlands, as it is an integral component within the process. Further this section draws from the market analysis the current challenges faced while delivering new-build in the Netherlands and subsequently presents the current situation of developing mid-segment homes by elaborating on the barriers seen by this segment.

3.2.1 *Land development in the Netherlands*

In the Netherlands real estate development largely depends on public land development as most Dutch local governments prefer to play an active role in the process. To be able to steer the developments that occur in the direction of satisfying the public needs or demands. They also prefer this approach as it allows them to generate revenues to be able to cover costs of developing public infrastructure like streets, sewage systems, parks, roadways, etc (Krabben, E., et al., 2011). This process of steering developments or rather translating the plans or visions of the government is generally done through policies and in the Netherlands, it is referred to as spatial development policy (in Dutch ruimtelijke ontwikkelingspolitiek or ontwikkelingsplanologie). Further, in the Netherlands the real estate development process is divided into two parts, one being land development and the other real estate development. The latter being the process where in land is serviced and sub-divided into lots and the former being the construction process and supplying to occupiers. The Netherlands has a long history of adopting an active land development approach and over time has been structured around the growing geographic scale of the country. Although there is extensive involvement in the preparation of the spatial policy the implementation is rather decentralised. The Dutch government operates on three levels, the central government, 12 provincial governments and 502 municipalities with each of these levels playing a role in the spatial planning. The implantation occurring mainly through municipalities as the central and provincial governments limit their active role in land development either for their own use or for infrastructure (Louw, E., et al., 2003). However, this does not imply that the country does not have private land development occurring, it does and in recent times this method of land development is gaining momentum as well. Land development being the key factor to the real estate development process the next sections elaborate on the three models that are currently seen in the Netherlands – ***Public land development, Land development by public-private partnership and Land readjustment***. The other steps or stages of the development process being similar to as

earlier descried this section focuses on how land development works in the Netherlands as the other stages of the development being rather generic or similar to the steps described in the earlier section (see section 3.1.2).

Public land development

This model of land development entails the act of the government acquiring land servicing it and putting it on the market. Implying that majority of the risk being on the government as if the serviced land does not sell it could in turn incur losses to the government. Although there is this eminent risk, this method of land development is seen in the Netherlands and has been around for a long time now. In recent times this approach of the government directly investing in land has reduced as it bares high risks. Whilst acquiring the land is on one hand, on the other is the land-use plan that plays an important role whilst making these parcels of land available to the market. Hence, such an approach to land development is commonly seen on a much larger scale, where the development would in turn direct the land-use plan. Such an approach to creating development opportunities is considered a good option as it would also assist the government in steering the type of developments that are made as they would be able to have predetermined development commitments prior to selling or leasing the land (O'Brien et al., 2020, p. 104409).

Land development by public-private partnership

As already mentioned, that in recent times municipalities have reduced the amount of public land development, this although did not turn the Dutch government towards a passive role in land development. An active land development approach persists in the Netherlands. Municipalities currently continue playing an active role through preparing land-use plans that must be adhered by developers, in turn lowering their transaction and land acquisition costs. A slight shift in the process of developing land, where the role of the municipality is not limited to only providing land but also ensuring development has given rise to such public-private land development. Currently two models of such partnerships exist, one being building claim model where private landowners agree to sell their land to the municipality with the condition that they will in return have the option to buy serviced land. Implying that the municipality have predetermined purchasers available for the sale of existing serviced land, this can be seen as sort of a trade off or barter system. The other being joint ventures model where municipalities and private landowners pool their land together under a company and develop it together. Although in such approaches there is still some amount of risk involved as if the private actors for some reasons are not able to deliver the intended developments the fall is borne by the municipalities as they also have commitments to the people. This type of land development is suitable where the development intentions of both parties align with the stipulated land-use plans with the municipality bearing some risks on the side of approvals and control of the land-use on their hand, allowing the municipality to have an active role without directly facing financial risks (O'Brien et al., 2020, p. 104409).

Land readjustment

This model of land development is comparatively new in the Netherlands and is a voluntary exercise where various parties who have available sites in close proximity that are individually less suitable for substantial development. Combining or pooling their lands together could prove to be beneficial and, in most case, ensure that development occurs as there are more at stake. One may argue that this model saves the municipality costs on acquisition, although it does still involve transaction expenses. This form of land development does come with its drawbacks, having to deal with issues such as first mover or free riders or holdouts (O'Brien et al., 2020, p. 104409). As it is a voluntary exercise such an approach could also be time consuming and generally delays in land development have a significant and direct impact on the overall development process. The role of the government or municipality being more a facilitator would be beneficial as it would allow for the municipality to make custom agreements with the involved parties and include their visions and plans as well. Enabling the municipality to still steer and direct the developments occurring once the land has been developed. At the same time for these private parties having the municipality playing the role of facilitator can be beneficial as there can for instance be parts of land that are either owned by the municipality or the requirement of changes in the existing land-use. This type of land development being rather new to the Netherlands it could be a promising approach to providing more viable and suitable development locations which currently is seen as a pressing issue in most parts of the country.

Land development being an essential step in the development process is not the only concern faced by municipalities or private actors. It being one of the challenges along the process, the next section draws form the market analysis the current or more apparent problems the residential real estate market currently faces in the Netherlands, while making attempts to deliver supply to growing shortage of housing.

3.2.2 Current challenges of delivering new build output.

Although, differences can be seen the development of housing per region the challenges faced by them in terms of realising new stock is similar and can be recognised at a national level. In 2019 it was the first time that the goal set out in the Housing Agenda, 75,000 new homes per year, was achieved. According to Statistics Netherlands (2019) 71,000 new-build homes were delivered in 2019 and adding the number of homes that were created by home splits and transformations the total for the year was 77,000. However, it is important to note that this number does not match up to the number of new households in turn leading to further shortage within the housing market. In response to this growing shortage the central government has taken the initiative and launched an action plan where clear agreements were made on how municipalities would increase production of new homes. This action plan was first drawn up with the metropolitan municipalities and can be seen as housing deals with two primary elements, arriving at a desired number of homes per region and government contribution towards research into these locations (research extending mainly in the direction of methods to speed up production within these regions). One would expect that these housing deals have been focused primarily on the Randstad conurbation, although that is not the case. These deals were made in the first half of 2019 with the regions of Utrecht, Groningen, Eindhoven, Southern Randstad conurbation and Amsterdam. In total a range between 380,000 and 398,000 homes are to be realised between the period of 2020 – 2040 of which a large majority would be within the Randstad (333,000 homes) and of the remaining 47,000 in the regions of Groningen and Eindhoven (20,000 and 27,000 respectively). These housing deals not only focus on the delivery of new-built homes but also include focus on flex housing options and temporary housing. Given the urgency experienced within the market flex housing and temporary housing would enable faster production and in lieu of this the central government has made amendments through the Crisis and Recovery Act allowing municipalities to deviate from current zoning plans and have also increased the time period of temporary homes from 10 years to 15. Along with these amendments the central government has also granted €250,000 to all provinces in the Netherlands to develop temporary homes, with an expectation of 15,000 such homes being delivered each year as compared to the existing 3,000 per year (Capital Value, 2020).
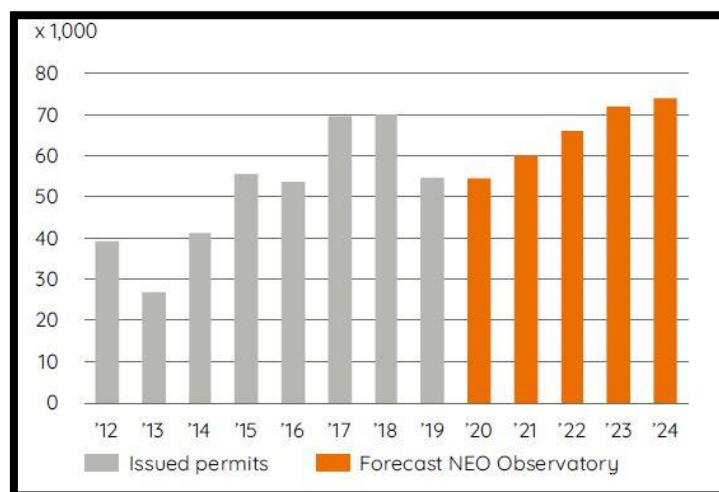
Figure 50: Number of issued building permits and forecast. (Capital Value, 2020)

Despite the central governments initiatives and plans made by the municipalities the housing shortage only seems to be increasing. As mentioned earlier that a significant drop was seen in the number of building permits issued in 2019 as compared to 2018, the main reasons for this drop in number was the nitrogen ruling of the Council of state, capacity of municipalities to grant permits lacking and the scarcity of land. According to a study

conducted by NEO Observatory[9] it would take roughly three to four years for the number reach 2018 levels again (see Figure 50) and they further expect that the goal of issuing 75,000 permits each year, set in the National Housing Agenda, would not be achieved at least for the next five years. Out of the above-mentioned reasons for the drop in permits being issued the lack of capacity of the municipalities and the ruling of the council of State do not have clear solutions. However, the shortage of building plots is expected to reduce in the future given the growth of set plans capacity. In the Netherlands under the PAS[10] "*it was possible to offset the nitrogen emissions with a future reduction in nitrogen emissions. This reduction could come from the activity itself but could also be achieved elsewhere.*" *(Capital Value, 2020).* This according to the Council of State was a violation of the European nature legislation, as a large number of plant and animal species are found in the Dutch Natura 2000 areas and the PAS insufficiently guaranteed their protection. Having made this decision all permits that were issued based under the PAS were revoked and all activity within two kilometres of Natura 2000 areas were suspended. This decision brought a lot of construction projects to a standstill, as this created an additional obstacle for the industry in an already complex situation with the rising demands and pressures to deliver homes. 2019 was already facing a drop in permits due to reducing capacity of municipalities and once the Nitrogen Decree was passed there was almost a halt in the issuing of new building permits. Following this decision, a lot of discussions were started in lieu of reducing nitrogen emission and some solutions were put forward by the Remkes Committee, not only for the construction sector but also for the sectors. The recommendation for the construction sector is as follows,

"The Advisory Board is of the opinion that profits can be made in the construction industry through modular, energy-neutral, circular, and nature-inclusive building and better use of innovative techniques and materials (...) This will have a positive effect on sustainable innovations." (Nitrogen Problems Advisory Board, 2019, p. 29, sighted in Capital Value, 2020)

Implying that for construction to be resumed not only must the construction material be more sustainable but also the techniques utilized in the process. This meant a lot of expense for projects that were already finalized with resources already in place. Although projects and construction sites have resumed operations it can clearly be seen that the Nitrogen Decree along with the recommendations of the Remkes Committee has made significant difference on the housing market. The Nitrogen Decree being one of the bottlenecks for developers in 2019, from a survey conducted by Capital Value (2020) of developers in the Netherlands the following were identified as other bottlenecks; long periods before permits are granted; building costs are rising; insufficient building plots; high land prices; rent regulation and insufficient building capacity (see Figure 51 for result of survey). Of these bottlenecks the most significant ones being the granting of permits and the rising construction costs with 69% and 58%, respectively, of the respondents agreeing (Capital Value, 2020).
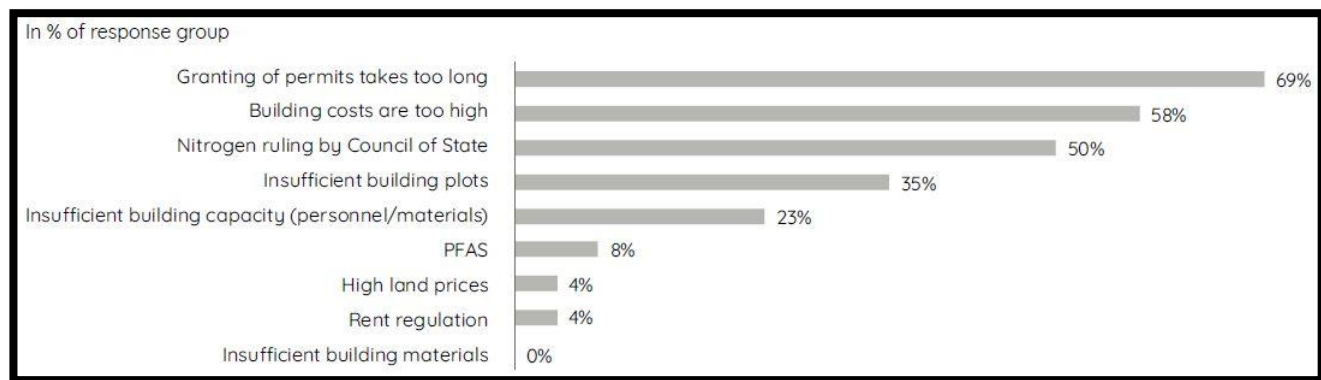
Figure 51: Construction Bottlenecks 2020 (Cpital Value, 2020)

---

[9] "*A research agency commissioned by the central government to find out what the prospects are for housing construction in the coming years*" *(Capital Value, 2020).*

[10] "*The Nitrogen Approach Program (PAS) is a policy framework from 2015 by the Dutch government to protect nature in the nature areas designated by the Netherlands in the European Natura 2000 program. The objective was to reduce nitrogen deposition in the designated nature areas, because nitrogen oxides and ammonia threaten nature.*" *(Wikipedia-bijdragers, 2020)*

The construction sector has been having to deal with rising cost for close to a decade now, rising by 3.3% in 2019 as compared to 2018 it is the ninth consecutive year that the construction costs have been higher than the previous year. These rising costs have indeed been slowing the construction process all together and developers utilise various methods to mitigate or deal with these rising costs. From a survey conducted by Capital Value (2020) it was found that almost 38% of the respondent developers believe that raising the sale prices would help them deal with these rising construction cost (Capital Value, 2020). This on one hand might seem to be the easiest solutions to dealing with the rising construction costs. However, on the other hand it falls back to the situation of the housing market described earlier, rising house prices making the market inaccessible and in turn creating a more tense market condition. In the same survey Capital Value (2020) presented the respondents with other options of coping with the rising construction costs (see Figure 52 below for results) (Capital Value, 2020). From these results it can be said that there are potential solutions to dealing with these rising costs and developers need to find a tailored balance for themselves as there are multiple ways to overcome this obstacle of cost and continue growing the supply side of the housing market.
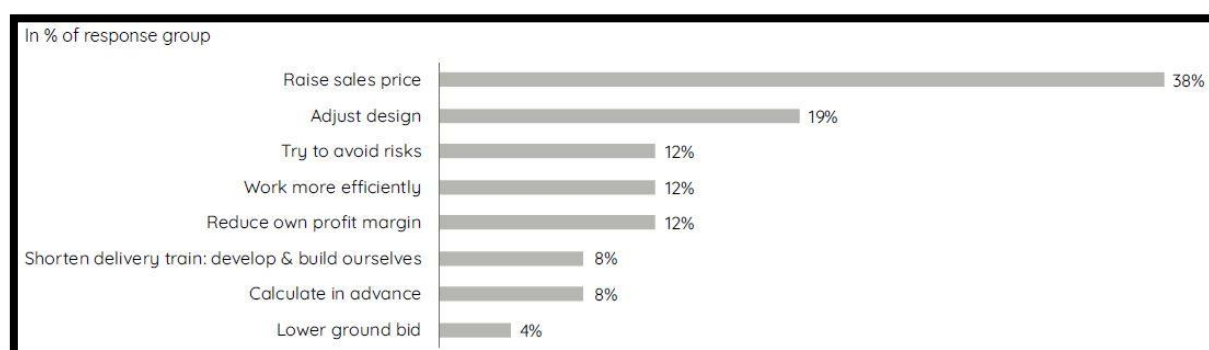
Figure 52: Dealing with rising construction costs (Capital Value, 2020)

The above-mentioned challenges such as issuance of permits, construction costs and the impact of the nitrogen ruling are challenges faced by developers or housing providers in all segments of the housing market. On a more specific viewpoint to delivering mid-segment rental homes in a survey conducted by ULI Europe et al., (2020) the following barriers were identified and ranked (see Table 3). Although the survey being conducted over a global perspective, they refer to the mid-segment as intermediate housing. By definition, intermediate housing and mid-segment housing are one and the same, intermediate housing – known as mid-segment housing in the context of the Netherlands.

Weighted average rank	Barriers preventing delivery of intermediate housing (Mid-segment)
1	Land that is available is priced too highly or being sold in a way that does not enable intermediate housing delivery (for example, tenders decided on the highest price)
2	Lack of alignment between public and private sectors
3	Private-sector stakeholders can make more money from other forms of development
4	Lack of available land for building intermediate units
5	Planning regulations that make intermediate housing unviable, such as density restrictions, lack of guidance for this sub-sector, lack of guidance for mixed use
6	Lack of financial incentives from the public sector to make the schemes viable
7	Lack of understanding about the financing required to deliver intermediate housing
8	Lack of resourcing in local planning authorities to push forward new ideas that will enable intermediate housing
9	Lack of local infrastructure around the land that is available to make it attractive for housing development
10	Building regulations that make intermediate housing unviable
11	Resistance from local residents for new intermediate housing units in their local area (NIMBYism)

Table 3: Barriers preventing delivery of intermediate housing (Figure 6 in ULI Europe et al., 2020)

Further as seen in the report by ULI Europe et al., (2020) the next section provides inputs towards how these barriers maybe overcome, translating the findings, and aligning them to the mid-segment rental housing sector in the Netherlands.

3.3 *Improving the process*

There is a process in place for improving the framework of the build environment with the different players playing a specific role. This has evolved over the years, structured, and restructured to suit the changing needs of the growing population and its demographics. The main functions that help in the evolution could be listed as planning, optimal land use, innovation in design, construction and management, Financial policies involving both the public and private sector, policy instruments which give a sense of direction to achieve changes required with the everchanging population and its requirements.

3.3.1 *Planning*

To enable the housing system to be able to handover maximum number of mid-segment rental homes, the need to have a good plan in place with all the pre-requisites needed for building houses. All advanced economies plan efficiently how the use of goods and services along with land can achieve the goal of building social and mid segment rental housing. Building regulations need to be reviewed and changed regularly to apply the changes needed with change in lifestyles and other new trends. As the urgent need for mid-priced rental homes arises from the shortage of housing, so changes could include providing housing at lower prices, either by building smaller homes or building in not so popular, lesser priced areas with lower land costs and other such means. Government planning systems play two main roles in assessing the need of mid-segment housing in particular location or the percentage of housing with affordability where funding in cash or kind can help to build affordable housing (ULI Europe et al., 2020).

Enforcing provision through local planning requirements and inclusionary zoning

World over countries are including the need to build some affordable houses in new buildings being planned either as low-cost housing, or in areas where the land cost is lesser. The principle works on zoning areas where new construction is going to work on the principle of making home for people with low-to-moderate incomes. The policies include: Deed restrictions on 10 to 30 percent of new houses or apartments to reduce the cost to mid-priced to lower income houses; compulsory or voluntary zoning programs; variations that could include incentives for developers who build mid-priced housing like density bonuses, fast-tracked approvals, and municipal fee waivers (ULI Europe et al., 2020).

Change in cost when providing for mid-segment rental housing.

Inclusionary zoning modifies the price at which land used for development can be purchased – the higher the proportion of mid-priced housing the less the developer is able to pay for the land, therefore, owners do not put their land up for sale with the hope of changes in zoning needs. For this reason, governments that want developers to deliver affordable housing offer incentives like tax relief and others mentioned earlier to offset the low returns linked to mid-priced housing. Clearly what can be obtained by systems of inclusionary zoning is determined significantly by the extent to which the price of land is affected, and more fundamentally, how much zoning land for development or giving individual planning permission increases the price of land as compared to the best alternative use (ULI Europe et al., 2020).

Adapting to changes in travel behaviour

Most cities have regulations on the minimum amount of car parking space required by type of unit being built to ensure enough parking spaces. However, these spaces are taking up valuable land that can be used to build more housing. But we need to consider that these parking regulations kept aside, many urban dwellers have changed in their travel behaviour for various reasons like forgoing owning a car because of improved public transport, car-sharing and cycle-hire schemes, and app-based transport services (such as Uber) as well as an improved urban dimension that make walking more agreeable. For example, in Haarlem in the Netherlands, the current regulations stipulate that for an expensive home, 1.5 parking spaces are needed. For every affordable home, one parking spot is required. For a plot of land that is a typical size for one expensive home, a block of four to six affordable flats could be built, but not when a requirement exists to also provide parking for four to six vehicles instead of 1.5 (ULI Europe et al., 2020).

Increasing density of development

To build and produce more houses and by reducing the mismatch between demand and supply for housing and in effect lower house prices. Earlier research suggested improvements to the environment and social well-being and economic growth with higher returns for real estate investments but nowadays developers who wish to increase the density are faced with vocal disagreement from local communities, as people in the suburban location see it as a threat to the character of the local neighbourhood (ULI Europe et al., 2020).

The points to be kept in mind as planning prerequisites for residential real estate, specifically mid-segment homes are:

- Integration of policies at national, regional, and local body levels to provide hassle free housing for the masses.
- A well-defined system where different land uses can be determined and implementation of regulations to provide large scale housing to bridge the gap of need versus supply.
- Working hand in hand with local bodies to reduce the risk of environmental changes which the new constructions will have on land and resources.
- Work on how the new developmental innovations that can be included for the already settled residents to avoid opposition from them.

3.3.2 Land use

The price and availability of land are crucial to the number of affordable housing to be made.

Land assembly

Cities are continuously developing, but often plots of land are overlooked for various reasons like it may be fragmented and owned by many people or uncertain, or the sites might have lacked the infrastructure needed to make them viable for development. Land assembly often can be a complex and time-consuming. For effective land assembly the following elements need to be in place: funding; sufficient personnel with special skills to work with all the stakeholders. Statutory mechanisms are needed to derive and incentivise voluntary land assembly, with the objective of minimising expected value from landowners. When voluntary methods for land assembly fail, compulsory purchase powers can be used, but that requires local legislations to enable it to happen and guidelines are to be followed to make use of such powers. A strategic plan for land assembly is required with clear designation of land assembly zones, which focus on areas with the strongest growth potential. The local authorities can then exercise compulsory purchase power within their boundaries, while they adhere to a clear set of criteria which have been previously defined. To minimise contemplation of increase in land values as a result of these designations do need legislations that help land values to be fixed at a point in time and give councils the right to postpone planning decisions where applicable (ULI Europe et al., 2020).

Infrastructure projects with Public-sector funding

Providing infrastructure make the sites attractiveness for development. Typically, the public sector funds large-scale infrastructure works for wider societal benefits, which includes opening up sites for development of housing (ULI Europe et al., 2020).

Use of public land for housing.

In some cities, public-sector organisations, like municipalities, hospitals, schools, transport providers and the military, are large landholders and some of this land could be set aside for operational requirements for the future. Given that the cost of land is one of the largest portions of the developmental costs, these public assets which are underused provide opportunity to plan and execute affordable housing (ULI Europe et al., 2020).

To reduce risks with affordable housing developments

Public-sector landowners may offer land at reduced prices to developers with conditions to build mid-priced housing. The agencies involved offer at lower costs require to have political commitment. For example, Amsterdam restricts through contracts on the use of land: Like the land cannot be sold or traded, rent increases are capped, etc., though this reduces the market value and ground rent, it allows the stakeholders to build

homes at cheaper prices than while paying market price for ground rents/purchase. This is a new approach being explored to such sites where 70 percent of the housing will be affordable homes as per the new model (ULI Europe et al., 2020).

Development corporations being used for large-scale delivery.
Development corporations are used to deliver large scale projects which include mixed-use regeneration, transformed urban extensions, and new settlements. These projects have a focused, coordinated approach with the ability to provide consistent delivery by a dedicated organisation with the expertise and leadership of the private sector along with public sector commitment which attracts investment and have the bandwidth to facilitate project delivery at specific sites. Real estate development can take many years from the initial planning stage through to the final building of the homes. The drawback being that these projects take a long time and bring strategic risks like changes in political administration, the economic cycle and housing market volatility. If the subside can be supported say, for example by helping reduce the development risk with use of development corporations, then more affordable homes are possible. Some developers feel that the public sector sometimes did not mitigate the risks or control the economics of the development process nor the costs associated with delays, leaving residential developers exposed to both higher costs and political risk. They believed that bureaucratic delays had to be omitted to ensure the delivery of affordable homes. The plus point here being that the developer can postpone the financing of the purchase price until after all building permits are granted and this gives more time to hone the quality of the development and arrange for financing. At the same time, it is possible to ensure the building quality by keeping a check during the development process. This encourages cooperation between the developer and the city authorities and help in reducing risks, cost, quality, and the time frames of the project (ULI Europe et al., 2020).

Improving trust between stakeholders through greater transparency
The cost of providing affordable housing is impacted by a range of public policies, often that apparently have little to do with housing. These policies affect directly or indirectly the quality of life by expanding community input, lowering carbon emissions, or increasing green space in different ways but these are not always considered. To encourage more collaborative planning and execution between the private and public sectors requires transparency about the way that affordable housing projects are financed and a how understanding the different public policies and its impact on scheme viability. With better transparency, it is easier to build trust between relevant stakeholders and hopefully transform collaborations from being adversarial to more positive and innovative. In Utrecht in the Netherlands, the Stadsakkoord Wonen, or City Housing Agreement, clearly states how the city authorities work with 100 and more different partner organisations, which include those from the private sector, to improve and deliver housing across the city. The City Housing Agreement works in partnership with developers in Utrecht in partnership to increase the speed and quantity of housing production, align with residents needs and to provide creative and useful solutions. To create accessibility to housing for all including vulnerable groups and share insight that interventions are effective indeed. In reply to the agreement, a group of investors, housing corporations, and developers have joined hands to build 7,000 medium-sized rental properties across the wider province of Utrecht and describe this offering in the bid book. This book is an explanation to create transparency on how rents for middle-income households are calculated and the financial implications of certain agreements (ULI Europe et al., 2020).

Factors that enable land use for affordable housing
To briefly summarize the factors: the price and availability of land are crucial to the number of affordable housing to be made; Public sector and the role it plays underpins the lessons that are transferable; Strong constant political leadership, clear description of interest between stakeholders, and a robust statutory process needed to allow land assembly to happen because it needs significant upfront capital funding, and the process is often complex and lengthy. An array of incentives that are needed for public sector to bring forward its lands for development and it must recognize the skill sets required to deliver. Building infrastructure requires sites and large capital expenditure which in turn need government-level grants. Predictable, stable public policy reduces risks for developers and helps speed up delivery. One way to provide this stability would be to remove housing delivery from the political purview and setting up development corporations covering certain areas;

allowing subsidies for affordable housing through cheap public land is widely applicable. the transactions will depend on various factors like local, legal, cultural, and government norms around public land use. Trust can be improved between stakeholders through transparency which allows for collaboration and give opportunities for innovations, forward investing in infrastructure needs to have trust between the stakeholders at all the stage to ensure that the benefits arising are recognized and allocated. Use of development corporations to coordinate and activate public and private sectors and can achieve continuity of delivery of affordable housing through various economic and political cycles (ULI Europe et al., 2020).

3.3.3 Design, construction, and management

The housing construction industry faces many challenges, which include inability to deliver big volumes, an aging, low-skilled workforce, and very little or no investment in research and development. Restricted movement of people across the world is increasing the shortage of skilled labour to build new homes. Housing costs do not only depend on the initial purchase price or rent to be paid but affordability includes the longer-term costs, for when tenants look for suitable homes, they look at the total cost of occupation, including energy costs, waste disposal and other recurring costs, while owner/purchasers need to consider their mortgage payments, service charges (if any), and the average expected cost of maintaining the home in the longer run. Reducing costs through good design and construction systems can make units more affordable for residents, not only initially but throughout their occupational life – but this is possible only if the savings in construction costs are not echoed in higher land prices. Technical innovation is driven by the requirement of higher energy efficiency and with a growing awareness of changes occurring in the climate are being clubbed with increased costs of energy provision, stringent standards related to energy efficiency and sustainability are being set by governments. These standards should be seen in light of total occupancy costs because the savings that accrue are to the tenant rather than the building owner (ULI Europe et al., 2020).

Learnable lessons for design, construction, and management

Innovation in design and construction could provide a new innovative way to deliver affordable housing. In addition to quick delivery, lessons to be learnt need to ensure affordability with sustainability in the long run. Modern methods of construction (MMC[11]) has the capability to transform affordable housing delivery with a whole new way of financing and building. Modern methods need large capital upfront funding, sites with regular features and easy accessibility. Ideas such as 'shell building' from developing countries could be explored for feasibility. Other features like whole-life cost reductions through energy-efficient buildings without increasing the initial building costs and robust mechanisms to ensure equity in allocating sub-market housing. Also, the public sector can play a role in overcoming data protection issues and developing interest in the development phase. Affordability of housing can be achieved for a long duration with well-prepared stipulations and effective equity schemes, including regular checks to ensure that those using affordable housing are still part of the target group (ULI Europe et al., 2020).

3.3.4 Financial

Affordable housing is to be made available at sub-market prices and therefore requires some kind of governmental intervention, some form of regulations, government subsidies, tax breaks, etc., or a combination to make it viable for the developers and investors. So, we will look at examples of ***public and private funding and financing innovations that help in funding and delivering mid-priced housing***.

Public-sector support

Perhaps the most direct approach would be that governments with intervention to make it possible for mid segment housing by providing direct subsidies. Governments offer non-repayable grants to developers of low-cost social housing, but cash subsidy for this segment housing is not common. The governments should otherwise intervene to reduce risks and ensure stable returns by giving loan guarantees, give loans directly at

---

[11] *Modern methods of construction (MMC) is the single term for new technological approaches to construction, including, but not limited to modular buildings (ULI Europe et al., 2020).*

reduced interest rates, or guarantee that units will be purchased on completion of project. Governments can also play a role in grouping the different funding sources and providing public-sector leadership to allow appropriate regulations and opportunity for innovation. Preferential loans are usually given for mid segment housing (ULI Europe et al., 2020).

For example, the European Investment Bank (EIB) and Raiffeisenlandesbank Niederösterreich-Wien AG (RLB NÖ-Wien) have developed a joint fund of €300 million for social and mid segment housing in Austria. Over the next four years the funds will be distributed through RLB NÖ-Wien to housing providers to construct 1,800 mid segment affordable units in Greater Vienna and Lower Austria. These loans are covered by fixed interest rates for up to 28 years and it will enable non-profit housing associations and social and municipal housing developers in eastern Austria to secure the current historically low interest rates for the construction of subsidised housing over almost three decades. The loans are to be used in regions where demand for mid segment housing is particularly high. Subsidised-loan programmes are less powerful and market rates are rather low and very competitive that many well capitalized mid segment housing providers can borrow from the commercial money lenders at attractive interest rates and the inherent bureaucracy can be well avoided. Several countries offer government-backed loan guarantees, which help lenders against defaults and make is easier for lenders to offer lower interest rates. Various models exist and borrowers are free to apply for the loan which works best for them. For example, in Helsinki, two Re-thinking Urban Housing Projects will use a loan with a 20-year guarantee provided by the Finnish government's Housing Finance and Development Centre (ULI Europe et al., 2020).

Another way government can support mid segment housing is through the provision of tax relief on building new affordable homes. The tax incentive in turn reduces the net cost of the houses and this allows the developer or investor to earn better returns which otherwise would not be possible. For example, In France, Ampere Gestion, with the support of CDC Habitat, launched the Fonds de Logement Intermédiaire (FLI; Fund for investment in intermediate/mid segment housing) and its successor FLI2, which usually help in financing forward-fund construction of new mid segment housing, which is allotted for areas of high demand, particularly the Paris region and some coastal zones. 15 major private developers have used these funds to construct new homes under this scheme with a tax incentive of VAT on purchase being made 10 percent rather than 20 percent, and an exemption on property taxes for 20 years (ULI Europe et al., 2020).

Private-sector financing
The role of private sector in financing mid segment housing has been through debt financing usually through bank debt and capital market funding from either public or private bond issuances to fund mid segment housing organisations.

Institutional investment
Institutional investors such as insurance companies and pension do have a long history of investing in commercial property, such as offices and retail, but only recently stepping into the residential sector, driven by the long-term demographic advancement with attractive risk/return profiles of residential real estate. The BPD Woningfonds housing fund has been set up by the Dutch cooperative Rabobank along with its subsidiary property company BPD. This will finance towards providing 15,000 energy-efficient sustainable mid-priced rental homes. The fund will eventually invest around €5 billion, of which Rabobank will invest €1 billion, over the next three years. After which an evaluation will be made to determine if Rabobank will remain the sole investor or whether they will allow external institutional investors co-finance the project (ULI Europe et al., 2020).

Key points to remember in funding and financing.
Innovation in public and private funding and financing are effective to deliver more mid segment housing at scale. The best examples include: Intervention through direct financing; reducing the costs of borrowing through guarantees; tax incentives, cross-subsidisation from market-rate housing; commercial units enabled through mixed use and increased density; If the public sector mandates the proportion of affordable housing to be delivered, it will arrange to reduce land costs; well-proportioned funding where risks and rewards can be shared by the stakeholders; value capture finance offers a system that can provide shared returns between the

public and private sectors which then can be used to help develop non-commercial products including mid segment housing and cultural facilities (ULI Europe et al., 2020).

3.3.5 Policy instruments

Real estate development is rarely wholly controlled by the state, in democratic countries, although a lot of state intervention is seen along the process as it is important that development occurs on wider perspective and not solely for financial gains. As real estate development can significantly make an impact to the areas surrounding it and in turn is key to building successful places. As the state's priority is delivering to its people, they do want to be able to influence or direct developments. To do so on the long run it is important that state find ways to incentivise the outcomes they desire. This is usually done by the assistance of policies to modify the decision environment of the actors involved. An alternative method of doing so is by the State adopting different roles in the development process, as seen in the table below (Table 4), are some examples of the different roles the State could take one (Adams, D., & Tiesdell, S., 2012).

Role	Example
Building contractor	The state may retain a direct labour force to undertake specific types of construction.
Funder	The state may fund development for its own occupation and for occupation by others if considered socially desirable, for example in the case of affordable. housing.
Infrastructure provider	State agencies may provide roads and sewers to service potential development. sites.
Investor	State pension funds may be invested in real estate.
Land developer	State agencies may subdivide large development sites into suitable parcels for sale.
Landowner	The state may market its own landholdings for development by others.
Occupier	Growth in the state bureaucracy can fuel demand for new offices.
Parcel developer	State agencies may construct or commission schools, hospitals, libraries etc.
Politician	Political leaders may introduce policies to stimulate the overall level of development, or development of particular types or in particular location.
Regulator	Development permits may be required from the state before construction can. begin.

Table 4: Potential roles of the State in the development process (Table 6.1 in Adams, D., & Tiesdell, S., 2012)

Although it would not be efficient or possible for the State to always take on these roles and hence establishing good State-market relations would essential and to so it would be essential for the state to possess the right instruments to intervene in the process without being seen as a barrier to market actors. Implying that with the right tools or instruments the state can effectively steer developments whilst market actors are still able to achieve their desired outcomes. Adams, D., & Tiesdell, S., (2012) broadly classify these policy instruments into four categories, shaping, regulatory, stimulus and capacity building instruments. The table below, as seen in Adams, D., & Tiesdell, S., (2012), briefly describes these instruments and explains the common components they contain.

Types of instrument	Common components
Shaping instruments *Shape decision environment of individual development actors by setting broad context for market actions and transactions.*	• Making clear what kinds of developments governments wish to see developed, through publications of plans, strategies, visions, and similar documents. • Restructuring the institutional environment of real estate markets, for example, by making changes to property rights or taxation systems • Delivering strategic market transformation in the sense of radically changing what market actors consider achievable in particular locations
Regulatory instruments *Constrain decision environment of individual development actors by regulating or controlling market actions and transactions.*	• Choice of public regulation by statute or private regulation by contract • Choice between preventative regulation, restricting detrimental action or directive regulation, requiring desirable action.

	• Choice between sequential regulation of different aspects of same activity or integrated regulation of different aspects of same activity • Choice between seeking to manage activity or eradicate activity. • Choice between elective or mandatory enforcement • Choice between regulation based on case-by-case assessment or on meeting common rules or standards
Stimulus instrument *Expand decision environment of individual development actors by facilitating market actions and transactions.*	• Direct state actions to stimulate new development in locations that would otherwise be avoided by market actors, such as reclamation, infrastructure provision, land acquisition and assembly and land disposal. • Price-adjusting instruments impacting on projected costs and revenues in development appraisal, such as development grants, tax incentives and project bonuses. • Risk-reducing instruments seeking to overcome negative risk perceptions in particular areas by ensuring accurate market information, policy certainty and stability, demonstration projects and environmental improvements, and holistic place management. • Capital-raising instruments to provide or facilitate access to development finance, including loan guarantees, revolving loan funds and public-private development partnerships
Capacity building instruments *Enable development actors to operate more effectively within their decision environments and so facilitate the operation of other policy instruments.*	• Market-shaping cultures, mindsets, and ideas – looking afresh at cultural perspectives or ways of thinking. • Market-rooted networks enhancing relations across the development spectrum. • Market-rich information and knowledge about how place quality can be influenced through market and development processes. • Market-relevant skills and capabilities – developing human capital and enhancing the skills and abilities of key individuals and organisations

Table 5: Classification of policy instruments (Table 6.2 in Adams, D. & Tiesdell, S., 2012)

3.4 *Conclusions – Building a theoretical framework.*

Having reviewed the real estate development process in theory, understanding how land development is currently practiced in the Netherlands, reviewing the challenges and barriers that are currently being faced by the developing actors and the tools available to improve the process. The next step would be to build a theoretical framework to analyse to not only analyse the results but to also identify what concepts need to be explored through the field research. The key concepts that would be explored through the field research being the challenges faced by the various actors along the development process. In the theoretical finds it can be seen that there are various kinds of constraints that could occur whilst testing the intended developments feasibility. These however are on a broader perspective and give rise to questions as to how these challenges are overcome while developing for the mid-segment rental market in the Netherlands. For instance, in lieu of the mid-segment rental housing market, the previous chapter presents the developments within these driving factors and establishes that there is not only an immediate need for mid-priced rental homes but also predicts that this demand would be eminent in the long term. It can clearly be seen in the market analysis that there is significant shortage in the existing stock and that these driving factors are developing in the direction of this demand growing. This along the suggested event-sequence model by Adams, D. & Tiesdell, S., (2012) would in turn drive aspirations and generate opportunities to developing for this segment. Although, looking back at the market analysis it can be seen that the rate of supply is not currently up to the mark and has been predicted that this gap could continue to grow. In turn this implies that at some point along the development triangle there are constraints that are not currently being overcome. Although this is not the case for every development as the supply is not zero. Implying that there are market actors and municipalities who are managing to overcome these challenges and delivering to the demand. Hence it brings about the need to raise questions that stem along the different events along the development triangle to identify common problems currently being faced and how they are being overcome. For example, the constraints associated with land development or ownership

questions will be presented during the field research to understand in detail what these constraints are in particular to the mid-segment, and further using the theoretical findings of this constraints are generally overcome and from learning from the experiences of the respondent appropriate recommendations could be made. This being one example the figure below further illustrates how this framework would assist.

Real estate development process	Development triangle – event sequence model	Development pressures and prospects	Drivers	Supply analysis	Market analysis	Further categorization of results
				Opportunities		
				Aspirations		
				Intensions		
		Development feasibility	Development concept	Land development	Field research – Feeding into interview questions	
				Ownership control		
				Regulations		
				Physical suitability		
				Market Appeal		
		Implementation	Development commitment	Pre-construction		
				Construction		
				Marketing and disposal		
	Actor – market relations			Relationships		
				Expectations		
				Supporting - markets		
				Communication		
				Collaborations		
	Barriers			Land price/availability		
				Other market opportunities		
				Planning regulations		
				Lack of infrastructure		
				Building regulations		
	Improving the process			Planning		
				Land use		
				Design/Const/Mangm		
				Financial		
				Policy instruments		

Figure 53: Theoretical framework (Own illustration)

4. Methodology

In this section of the report the research method adopted is described and justified. This research uses a qualitative case study method research to collect the required field information regarding the development process for mid-segment rental homes and the policies that ae currently being developed for the same. The research uses a multiple-case study approach as it aims to explore the phenomenon of real estate development set in different market contexts. With the aim of resulting in understanding this process and comparing it within the different contexts. To assist the analysis of the cases the research use examples of recently completed projects as a point of reference along with theoretical finds as presented in the earlier section. The research would use semi-structured interviews as a tool to collect the required information that would assist in answering sub-questions 3 to 5. Designing two interview protocols, one directed towards the involved market parties and one towards the municipal representatives. To be able understand the process from a broader perspective the research would also engage in conducting interviews with senior level management within the organisations of the involved actors. The results of these interviews would be tabulated in the following results section, structuring the collected information to assist in answering the main research question.

4.1 *Selecting the appropriate research method*

Whilst carrying out scientific research, one of the most important aspects is the method that would be adopted to collect and analyse the required data to be able to answer the posed research questions. For which over the years multiple approaches have been designed and used. Although the designed approaches and methods are often customized to the needs of the research there are on a broad perspective three umbrella methods that researchers can follow. They are qualitative, quantitative, and mixed methods and the choice is usually guided by the research questions, objectives, existing knowledge, available time, paradigm of the research and philosophical underpinnings of the researcher (Opoku, A., et al., 2016). It has been argued by many that no method has an advantage over the other and that choice of research method predominantly depends on the nature of the research question and that would in turn decide the method that needs to be adopted for data collection and analysis. As the primary objective of the research method is to collect and analyse data in a structured manner, with the appropriate tools it is not only important for the researcher to select the appropriate method but also select the right samples, as they would be representing a larger population. As a researcher will not be able to interact with the entire population the use of sampling techniques is optimal to be able to generalise the result of the research. The most common methods for data collection, predominantly for social science studies, are questionnaires, interviews, and participant observations. Questionnaires assist researchers from a quantitative front whilst interviews and participant observations are rather qualitative in nature, especially used in situations where the research is concerned with the understanding the opinions, feelings, perceptions, and experiences of a particular phenomenon of the research samples (Opoku, A., et al., 2016).

On assessing the posed research question and goal (see section 1.2 & 1.4), it can be concluded that a qualitative research approach would be an appropriate choice. Given that the goal of this research is ***to recommend measures/changes, that municipalities and market parties, could possibly make to the existing process and policies of developing mid-segment rental homes in the Netherlands.*** Implies that a deeper understanding of the phenomenon of developing within the mid-segment rental housing sector would assist in make recommendations to improve it. To do so it would be imperative to learn from experiences of individuals who have been a part of this process in practice. As a qualitative research method helps one answer questions that cannot be answered through quantitative data. It has been proven time and again that qualitative research methods are beneficial when the research is trying to add more detail to existing knowledge of a phenomenon, that generally complex in nature. Which the case of this research both these statements hold good, as the development process within the mid-segment rental housing sector is fairly complex, subjective, and contextual in nature. Complex from the perspective of having multiple actors involved, market pressures such as rising demand, costs, sustainable requirements and quite some uncertainty on a policy front. Subjective, in the sense of there being different kinds of developers who approach this kind of development differently from one another and contextual as developing within the housing market is locally driven and can differ between regions.

Moving forward it would be essential to throw light on the importance of population and sampling within a research. As mentioned by Opoku, A., et al., (2016), *"The main motivation for every researcher conducting research is to draw sufficient information for a meaningful analysis to be carried out so that the best conclusion can be arrived at"* and to be able gather this required information the researcher would need to be thorough with the population being investigated. Subsequently selecting the right samples to get the right information to make well informed recommendation and conclusions. The population being the total number of individuals that fit within the scope of the research and the samples being subsets of this population who are chosen to represent the views of the population (Opoku, A., et al., 2016).

In case of this research the populations being investigated would be real estate developers, investors, and municipalities in the Netherlands. Since the research focuses on a particular segment of the housing market the subsets or samples are as follows. Developers who focus mainly on developments within this segment, the investors they are associated with and municipal representatives within the region of the developer's operations. These samples are appropriate on the lines that developing for the mid-segment can technically be

done by any project developer with the right investments and resources. Focusing on developers whose main objective is to deliver mid-segment homes would be ideal, as learning from those whose expertise lie within this segment would assist in making the right recommendations of improvement that could be adopted by the larger population. Having decided on a qualitative approach and establishing the research population the following sections elaborates on the use of a case study method to carry out this qualitative research. Using a case study approach to understand the development process of the mid-segment rental housing market, within different market contexts in the Netherlands.

4.2 *Case study method*

Selecting a case study approach to carry out this research, is based on the fact that such an approach allows the researcher to explore or describe a phenomenon in either a single or multiple context with the assistance of varied data sources. Further, enabling the researcher to explore individuals or organisations, relationships processes or programs, allowing for the phenomenon to be explored and understood from various perspectives (Baxter, P., & Jack, S., 2008). According to Yin (2003) a case study approach should be adopted when in the following instances, (i)The study is trying to answer a "How" or "Why" question; (ii)The behaviour of the involved participants cannot be manipulated; (iii)The study aims to cover contextual conditions; (iv)There are unclear boundaries between the phenomenon and context. In regard to this research, all four points hold good, as the main research question is a "how" question, the behaviour of the actors involved in the process cannot be manipulated, the study does aim to explore the development process for mid-priced rental homes set in different market contexts and lastly there is quite some unclarity between the differences in process based on the context they are set in.

4.2.1 *Criteria for case selection*

The next step being to identify the 'Case' or unit of analysis, for this research it is the **market type or context** within which, the phenomenon, **development of mid-priced rental homes takes place**. Aligning to the goal of the research to be able to make recommendations on the scale of the Netherlands it would be imperative to understand the process within the different market types, given that the housing market is a locally driven market. For this reason, a multiple-case study design would be required, as there are five different types of market contexts or environments that development occurs in the Netherlands. As also defined earlier in the report (see section 2.2.2), they are Metropolitan Areas, Big Cities, Other Randstad, Regional Municipalities and Areas of demographic decline (also see section 2.2.2 for explanation of each market type). To be gather the required information the research will utilise examples of completed projects within each type of market context and explore the development process. Similarly, on a policy front as policies for this segment of the housing market are regionally made based on the market contexts the policies currently in practice will be explored. In essence,

Phenomenon being explored	Cases
Development process and policies in place for the mid-segment rental housing sector in the Netherlands.	*Metropolitan Areas*
	Big Cities
	Other Randstad
	Regional Municipalities.

Table 6:Phenomenon and cases (own illustration)

Although, as seen in the table above, Areas of demographic decline have been omitted from the scope of the research as whilst carrying out the market analysis it was found that these regions currently do not face any shortage of mid-priced rental homes. This categorization was made by following the categorization made by Capital Value (2020). As the goal of the research is to make recommendations that can be generalised to the Netherlands it would be important to categorise the market in this manner as the housing market varies regionally. As seen in the earlier section of the report as well, social, and economic developments vary based on the type of market. Having already defined these categories in section 2.2.2 the next step would be select relevant projects that were completed or are currently being developed. Further, on analysing the developments within these regions.

4.2.2 Example projects and interviewees

After having determined the cases and the phenomenon this research intends to study it was important to select example projects within each case so as to learn from past experiences of professionals in the field. Using these examples as a point of reference to understand the process of development within the different market types. To be able to determine if the process is different or similar based on the market types the projects are set in. Setting up semi-structured interviews with the project developers, investors, and municipalities to gain insight of the existing process from the perspective of the three primary actors in the process. These interviews will be conducted in two phases, first with market parties to understand the process form their perspective, the challenges they faced, their opinion on improving the process and finally cumulating questions or suggestions to build on the interviews with the municipalities. As it is important to understand the problem from the perspective of both market parties and municipalities to be able to derive conclusions and present recommendations after having heard both sides of the problem.

Cases - Market Type	*Project Name*	*Year*	*Location*	*Project developer*	*Investor*
Metropolitan Areas	Branie - Amstelstroomlaan	2019	Amsterdam	Boelens de Gruyter	CBRE Global investors
				BAM Wonen - Contractor	
	De-Buurt	2020	Utrecht	AM	Syntrus Achmea & Stienstra
Big Cities	Malburgen	2016	Arnhem	Sustay	ASR
Other Randstad	Van Reeshof	2017	Nieuwegein	Sustay	ASR
Regional Municipalities	Bergkwartier	2018	Zeewolde	Sustay	ASR
	Sint-Jakobsschelp	2018	Bergen op Zoom	Sustay	MN Services N. V

Table 7: Example projects within the cases (own illustration)

In the table above (Table 7) the example projects have been presented and the relevant organisations where interviews would be necessary have been established. One may argue that only analysing one or two examples might limit the results, although this would not be the case as the focus is not on the particular projects but on the market type they are set within. These examples were selected based on the year of completion as this research extends towards analysing the current process and making recommendations to improving it, hence projects completed in the last 3 years were selected. As seen in the figure below (Figure 54) the projects selected are spread over the Netherlands and to a certain extent the results can be generalised based on market types.
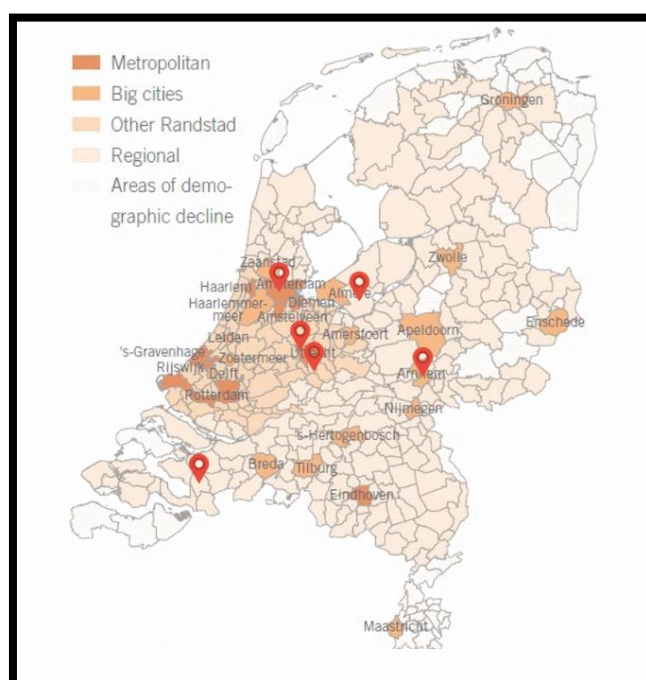

Figure 54: Example projects

This would imply that in total a minimum of twelve interviews would be conducted, one interview of each actor within the cases. Although an attempt to have more than this minimum requirement will be made, given that this a qualitative research increasing the number of perspectives would only assist in arriving at more generalisable results and conclusions.

Cases - Market Type	Developers	Municipalities	Investor
Metropolitan Areas	Boelens de Gruyter	Amsterdam	CBRE Global investors
	AM	Utrecht	Syntrus Achmea & Stienstra
Big Cities	Sustay	Arnhem	ASR
Other Randstad	Sustay	Nieuwegein	ASR
Regional Municipalities	Sustay	Zeewolde	ASR
	Sustay	Bergen op Zoom	MN Services N. V

Table 8: Interviewees from

To set a point of reference before describing the semi-structured interviews the following table (see Table 9) briefly describes each example. Specifying the details of the project, so as to say the story behind each of these examples. These examples cases being a point of reference to develop an understanding of the process within the market type it is set in.

Case	Project	Type	Initiated	Number of units	Target group	Avg rent	Avg sqm	Policies/subsidies
Metropolitan Areas	Branie	New build	Public tender by the municipality – developing at old industrial areas	70 all within the mid-segment	Middle-income households.	950€	70	Land price was well negotiated. Fixing the rent increase to CPI+1% for. Tender was won by the highest bidder.
	De-Buurt	New build	Public tender by municipality – the plot being bought in 2006 – finally on the market in 2016 – 2017 was start of building – to be bought by institutional investor	343 – over 3 buildings – not all in the mid-segment (100)	Middle-income house holds	Between 900 and 1000€	40 to 120	Restrictions on rental price and not in square meters. Although at the end of 2017 there was changes as there was an addition of minimum sqm requirement. Tender was won by highest bidder although there was also weightage for quality in terms home sizes.
Big Cities	Malburgen	Transformation	Initiated from previous contact – Bought from social housing corporation – bought.	36 – all within the mid-segment	Middle income households – targeting families.	Between 900 and 1000€	110	No real restrictions as there were not any developments in regulations so far.
Other Randstad	Van Reeshof	New build	Project started in 2014 – Developer approached the municipality. Building started only in 2016 being completed in 2017	40 all within the mid-segment	Middle-income households. With a preference to elderly.	800 to 900€ (price in 2017)	80 with a few bigger bet	Municipality owned the land and could have potentially made a lot more revenue. Reflected support through discount in land price. Signing a custom agreement to have these homes for 20years at mid-priced.

	Bergkwartier	New build	Municipality was approached by the developer.	22 – all within the mid-segment	Middle income households – targeting families – multiperson households.	Between 900 and 1000€	110	Restrictions on maintaining within the segment for 15 years.
Regional Municipalities		Tendering with the municipality – through the contractor		36 – all within the mid-segment	Middle income households – single and 2 person households	Between 900 and 1000€	80	

Table 9: Details of example projects (Own illustration)

4.2.3 Semi-structured interviews

As for the data collection the research will adopt an interview technique, as mentioned by Bryman (2001) this method of data collection is most suited for qualitative-based studies. As this technique allows for close interaction between the researcher and the interviewee, learning from their experiences and opinions to be able to synthesis and compare findings amongst all interviewees. More particularly this research will be using semi-structured interviews to collect data given that it is mainly qualitative in nature, uses a purposive sampling and allows for flexibility (Opoku, A., et al., 2016). The interview questions have been categorised into four themes, Development Process; Policies for the mid-segment; Expectations of other involved actors; and Future of the housing market. The questions stemming out of the earlier sections of Market analysis and Theoretical research (see Figure 55). As through the theoretical research the areas or stages of the development process where problems could arise were identified and through these interview questions it can be later compared back to as what theoretical findings could assist in improving the process. The Market Analysis assisting in bring questions out regarding the interactions between the actors to understand the perspective of each market actor of the problem at hand. The questions being answered on both, a broader perspective of the mid-segment rental housing market and to the example project being discussed; information would be gathered to assist in understanding: ***(i)The development process; (ii)Challenges faced by the actors within the different stages of development and how they can be overcome; (iii)Policies and regulations that could assist development; and (iv)Expectations the actors involved have of each other.*** In turn this information would assist in making recommendations for improvement on both a process and policy front. The protocols with the exact questions asked can be found in the Appendix (Appendix A - Interview protocols).
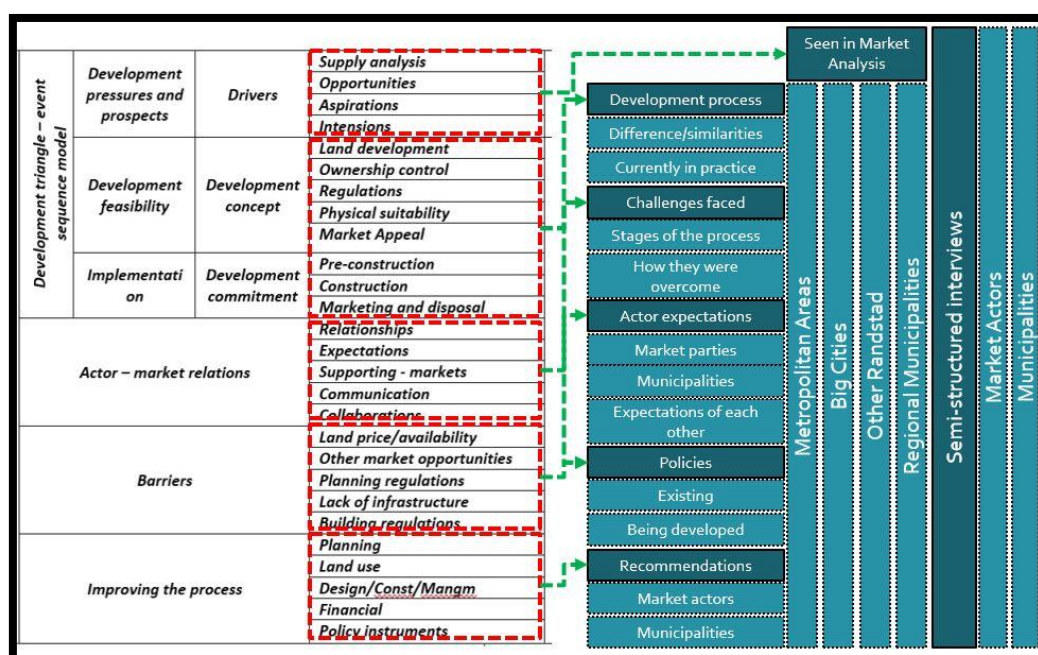
Figure 55: Interview questions - through the theoretical framework and market analysis (Own illustration)

4.2.4 Data processing

After having carried out the semi-structured interviews with the respondents the next step would be to process the findings and present them in the results section of this report. For which the interviews would be transcribed and tabulated (Figure 56) to have an overview of the answers of the respondent. These answers would be tabulated under certain categories that stem from the earlier made theoretical framework. The research intends to carry out a cross-case analysis to identify the differences and similarities in the development process of mid-segment rental homes in the Netherlands. Doing so would assist in being able to draw conclusions that could be applied at a national scale. Analysing the data collected would essentially provide insight into the process currently in practice, identifying the points along the process where there are challenges or problems. However, this tabulated information or so as to say the raw data is not presented in the results section, the results section first presents an overview of the findings by collating what has been said in the interviews – describing the process in practice and is synthesised following the theoretical framework aligning to answer sub-questions 3 to 5. Finally, reviewing this synthesis the final conclusions to the research are made, where an attempt to answering the main research question is made. In turn achieving the goal of the research **to recommend measures/changes, that municipalities and market parties, could possibly make to improve the supply off mid-segment rental homes in the Netherlands**

| | | | | | Protocol | | | | | | | | | | | | | | | |
| Interview results | | | | | 3.1 Project description | 3.2 Development process | | | | | 3.3 Policies within the mid-segment | | | | | 3.4 Actor expectations | | 3.5 Future of the housing market | | |
Case	Location	Interviewee	Role	Project	Q1	Q1	Q3	Q4	Q5	Q7	1	2	3	5	6	1	2 repeat of 3.3 - 5	General	Mid-segment rental	Corona implications
Metropolitan Areas	Amsterdam	Rogier Rombouts	PD	Branie																
		Hans Spruit	C																	
		CBRE	I																	
		AMS	M																	
	Utrecht	Harko Kloeze	PD																	
			I																	
			M																	
Big cities	Arnhem	Don Van Holten	PD																	
			I																	
			M																	
Oher Randstad	Nieuwegein	Kevwe Scot	PD																	
		Chris Van Harten	I																	
			M																	
Regional Municipalities	Zeewolde	Don Van Holten	PD																	
			I																	
			M																	
	Bergen op Zoom	Don Van Holten	PD																	
			I																	
			M																	

Figure 56: Impression of tabulated interview findings (Own illustration)

Categorization of results

To present the findings of the interviews carried out the following categories are identified by further building on the earlier made theoretical framework. The findings will be categorized under two main categories: *(i)Real estate development process; and (ii)Recommendations from interviewees.* These being the umbrella categories whilst processing the transcribed interviews. The findings will be elaborated in the direction of understanding what is currently seen in practice and the problems or challenges that are faced by the different actors under the category of the real estate development process. Further, as policies are a part of the development process, the policy measures that are currently seen in practice will be brought to light alongside the opinions of the respondents on the same. Finally, under the second umbrella category the recommendations of the respondents, to improving the process, will be tabulated as recommendations to market actors and recommendations to municipalities. Once the findings of the interviews are presented under the above-mentioned categorization, in conclusion to results section, the findings will be analysed based on the theoretical framework that has been built. Prior to which as seen in the figure (see Figure 57) below categorising the interview findings as such would first assist in answering sub-questions 3, 4 and 5. Further, synthesising these answers with the theoretical framework earlier built would assist in identifying what aspects along the development process need to be improved.
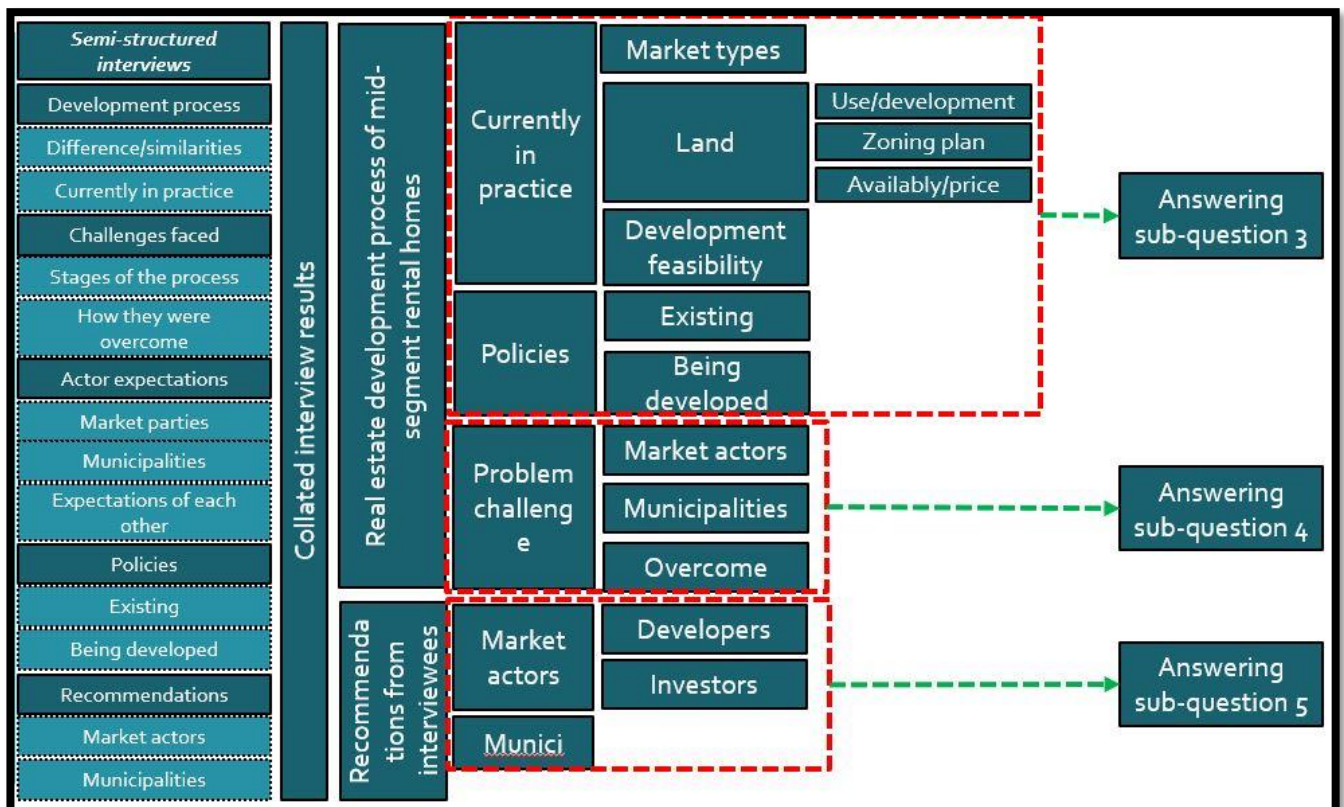
Figure 57: Categorization of results - leading to answering sub-question 3, 4, and 5 (Own illustration)

5. Results

After having collected and collated the required data from the interviews carried out, in this section the findings are presented. Categorizing the results into two main categories, ***Real estate development process*** *and* ***Recommendations from interviewees*** *and finally presenting a synthesis of the findings with the theoretical framework.*

<u>Readers guide</u>

In the following sections the goal being to answer sub questions 3 to 5. This is done through the sub-sections under the main categories. Sections 5.1.1, 5.1.2 directed to answering sub-question 3; section 5.1.3 in turn answers sub-question 4; and finally section 5.2 answers sub-question 5.

5.1 Real estate development process

In the following section a description of what is currently happening in practice is presented, the underlining goal of the section being to answer sub questions 3 & 4. Sections 5.1.1 and 5.1.2 answers sub question 3, **"What is the development process and policies available for mid-segment rental homes, in practice, within different market types?"** This done by analysing the answers to the questions asked in the first and third sections of the interview protocols under the theme of Development process and Policies and section 5.1.3 answers sub question 4, **"What are the problems encountered by the different actors, in practice within the process, and how are they overcome?"** This done by analysing the answers to the questions asked in the second section of the interview protocols under the theme of Challenges and problems (see Appendix A - Interview protocols)

5.1.1 Currently in practice

Having gone through the different market types and the development process, based on them it was understood from the interviewees that there are not stark differences in the process, and it was kind of similar for all market types. That development within this segment is seen as developing for the free market and there is not any real difference as one would see clear differences in the process of developing social homes. The only difference that was identified was the time or duration of the planning phase. In the Metropolitan areas and big cities as more politics was involved the time taken to sort out differences in comparison to cities in the Randstad and Regional areas. Large scale projects have a lot more people during the planning phase and therefore more delays are there. As many projects in already dense areas are redevelopment or transformation projects and involve other stakeholders – such as neighbourhood communities and existing tenants in sites identified for redevelopment the planning stage takes more time. As compared to the Other Randstad and regional municipalities where the developments occur slightly faster given that there are fewer stakeholders to deal with and developments are not within already dense areas. Given the size of the municipalities being smaller in smaller cities, the power is vested with fewer people who are the decision makers and hence decisions are taken faster. Therefore, interviewees were of the opinion that developing for the mid segment is comparatively easier in smaller municipalities as planning and negotiations happen quicker and that reaching the implementation phase of the process is quicker.

Further, the interviewees opined two approaches; one, where the land is owned by the municipality and second, being privately owned land. Like any other development in the free market when the land is owned by the municipality there is a public tender where parties are invited to participate, and the municipality negotiates with project developers what their aspirations and goals are with set regulations. When the land/site is privately owned the process is slightly different given that the only way municipalities have an influence is through the zoning plan, land-use and break up of different types of housing.

Though the viability and smooth execution of the project depends on the relationship development between the actors, their comments about deadlocks in legal battles, comments in interviews, etc., could be identified that there is a certain amount of disconnection in the actors as they seem to have the same or similar opinions but seem to see each other as an obstruction. Implying that due to lack of communication between the involved actors is one of the reasons a drastic shortage is seen in the development of mid-segment rental homes. This lack of communication was also identified in other similar research projects. It was also a result in the research conducted by Ferreira Veiga Barros, A. L. (2020, June), whose research extended in a similar direction although with a higher focus on the role of institutional investors. Although, from the results presented by Ferreira Veiga Barros, A. L. (2020, June) this lack of communication is more predominant between municipalities and market actors in combination. This was also identified in the interviews carried out in this research. As from the interviewees, market parties, both research indicate towards that they face the or rather encounter opposition from the municipalities, although while interviewing municipalities it was found that this is not the case and municipalities are indeed making significant efforts to improving the development of mid segment homes.

All the actors were of the same opinion that in terms of land acquisition, from the interviews it was found that developers also seemed to believe that land acquisition is better when from the municipality. It was found that municipalities are trying to identify land and make available for the market. The interviewees also mentioned

that developers also did look for opportunities themselves, as seen in one of the interviews where the developers approached the municipality with development plans showing that they were willing to negotiate on the percentage of mid segment housing if they could lower the social housing percentage. The developer believed if all this was sorted out during the planning stage, it was feasible to build more apartments to enable them to make some profits at least with design innovations and permissions to build to the fullest extent. Or build smaller apartments for youth in sizes of 40, 50, 60 square meter sizes to achieve better rentals.

In terms of development feasibility, from the interviews it was found that developers are keen on improving the supply of this segment through innovation designs and developing feasible business cases where everyone makes their numbers in a relatively short duration of time. The process does not differ from developing in the free market but for the ability and freedom to fix rentals with the current rates with inflation with the ability to use quality materials and not think of lowering the costs constantly.

5.1.2 Policies within the mid-segment

As mentioned earlier this section intends to answer a part of sub-question 3, presenting the opinions of the interviewees in line with the policies currently available within the mid-segment rental housing market not only form the interviews with municipal representatives but also from the interviews with the market actors. Collating the answers to the questions asked in the policy section of the interview protocol (see Appendix A - Interview protocols). First, presenting the opinions of the interviewees on the existing policies and further the opinions of what kind of policies should be developed for this segment of the housing market.

Existing policies

As seen in section 2.3.4 policies for the mid-segment are currently being developed at a regional level, implying that the policies could differ between municipalities. In view of that the interviewees were asked about their opinions of the policies that were present within the example project that was discussed. The initial opinion of the research being that the current policies seem too regulative in nature and are directed more towards regulating the existing stock as well as new developments. This opinion was widely agreed upon by the interviewees, although there were some who believed such an approach is highly required. As it would be important to maintain the stock of the homes that are currently within this segment and the ones being added to it within the mid-range rental prices. On the other hand, it was also brought to light from one of the interviewees that doing so could in the future cause a sudden rise in rental prices. This was opinion was in line with the current policy of having a cap on rent increase at CPI +1%, locked in for 15 to 25 years. The interviewee explained that doing so implied that when this stock is released, there would be a very sharp increase in the rental price as in that amount of time the rest of the free-market rents would have gone up significantly. The concern being that at the point in time if large amounts of such homes come out of this rental cap there could be a significant drop in the stock of mid-segment rental homes, implying that the current problem could occur again.

Further, from some of the interviews conducted with market actors it was found that they are of the opinion that currently there is still unclarity on a policy front from the municipalities and in all the discussed example projects there were predominantly regulative policies in place and no or very limited stimulating or capacity building policies. Only within two example projects was it mentioned that the municipality did support the development by significantly reducing the land prices. Although, on having a similar discussion with municipal representatives it was brought to light that the example projects having been initiated a few years ago when there was not still clarity from the municipalities themselves and now presently over the last 2 years significant developments have been made terms of policies for the mid-segment. This was seen in the form of detailed action plans that were made by a few municipalities within the Metropolitan areas. From, interviews with municipal representatives it was brought to light that municipalities are constantly working towards developing policies that would in turn steer development towards increasing the supply within the mid-segment. For example, currently in the municipality of Amsterdam developments within the mid-segment are supported by providing lower land prices and a change to a 40-40-20 approach has been adopted. Where a minimum of 40% of every development where the land is provided by the municipality should be mid-segment rental homes and

further discounts on land price would be granted for development of larger homes within this segment. Continuing the example of the municipality of Amsterdam, the interviewee also mentioned that the municipality also focuses towards ensuring size and quality of homes through the existing policies. Although from multiple interviews with market actors these regulations on size and quality resulted in developers not being able to arrive at feasible business cases.

Yet again there was a mixed opinion amongst the interviewees regarding the existing policies being made at a regional level. As some believed that as the mid-segment is currently in such high demand and requires serious attention there should be policies developed at a national level that are transferable to a regional level. This was also the opinion of the interviewees from the municipalities, they did agree that there is regional difference in the market conditions that justifies making regional policies in line with the regional market conditions, although they are of the opinion that the national government could support the regional governments with well-defined frameworks that could be adopted at a regional level.

Although the most apparent policy related issue that was brought to light, from the interviews with municipal representatives, was that if the municipalities go in the direction of overregulating the mid-segment it could result in having a negative impact given that, also mentioned by all interviewees, the mid-segment rental housing market is without doubt part of the free market and over regulating could cause market actors to shy away. This was not only mentioned by the interviewees from the municipalities but also from the market actors as they mentioned that in the past when municipalities have tried to regulate the midsegment they often encounter or face challenges from market actors who try to find loopholes within the made policies. For example, the interviewees from the municipality of Amsterdam mentioned that this was predominantly seen regarding the size of the homes being developed for midsegment rental housing. Further, given that the midsegment it is part of the free-market municipalities have limited control and unlike building in the social sector the midsegment requires extensive involvement off market actors. hence municipalities need to be able to find the right balance between regulative and stimulative policies. The following section presents some of the considerations, the interviewees suggest, that should be made while further developing policies for this segment of the housing market.

Policies being developed.
After having discussed the existing policies with the interviewees, they were asked what their opinion was on policies being developed and their suggestions to what should be incorporated while doing so. From the interviews with the market actors the most common suggestion that was found that the policies need to be directed towards stimulating the market by providing subsidies or lowering land prices. Although, in the interviews with municipal representatives, mentioned by all, that there are already lower land prices for developments within the mid-segment. On mentioning this to one of the municipal interviewees, it was mentioned that this argument about land prices is something that has been going on for a long time and it is something that is part of the game. There were mixed opinions about developing policies to attract market parties as some interviewees are of the opinion that there are sufficient parties already willing to develop within this segment and that municipalities should focus towards ensuring that the stock being added to this segment is of good quality and size.

5.1.3 Problems/challenges faced.
After reviewing the answers of the interviewees in the second section of the interview protocol discussing the problems or challenges faced in the development process can be categorized under the problems faced by the market actors and the municipalities. The following sections present the key problems and challenges that were identified by the interviewees:

Market actors
The most common challenge that was mentioned in the interviews with market actors was of achieving feasible business cases. The reason predominantly being of the municipality's expectations of market level land prices in combination with higher than mandatory sustainability requirements. This was a concern for both project developers as well as investors, although as it finally is the responsibility of the developer to arrive at a feasible

business case this finding was stressed upon more in the interviews with project developers. They also mentioned that arriving at a feasible business case is not impossible but requires a lot of negotiation with the investors and municipalities as their requirements do not always line up. Further, it was mentioned that these extended negotiation periods come with the risk of the intended development being shelved or completely abandoned and this could be a possible reason for smaller developers to shy away from developing with the mid-segment. It was also mentioned that in most cases the highest bidder receives the contract for a project that is put on the market by the municipalities. Both developers and investors felt that there should be a kind of a balance between the bid price of the land and the numbers of units proposed, so that it could be a win-win situation and the greater number of units could be built for the mid-segment. These challenges were in turn mentioned to the interviewees from municipalities and they were of the opinion that these challenges mentioned by market actors are rather complaints that have been there for a long time and that municipalities are indeed lowering land prices and developing policies that clarify their goals and visions in terms of requirements and criteria of awarding bids.

Quoting one of the interviewees in that regard, *"The problems faced due to regulation are very serious, due to regulations on noise levels; on circularity and energy consumption; sustainability measures and at the same time to comply with the regulations that are in place. Due to this there is an expected price increase in construction costs up to nearly 25%, so what you see is that to actually make a profit as a developer on social housing and mid segment is quite difficult as Governments are looking for the highest bidder for their lands."*

It can be clearly seen that the rigidity of municipalities are fairly hard challenge to overcome. This being the biggest challenge and is seen more within the Metropolitan Areas and Big Cities given that these areas also come along with political influences or agendas and have quite some market actors who are trying to access inner city developments. Lastly, it was mentioned that along with these feasibility related challenges comes the long waits on issuance of required permits to move forward along the process. Market actors are of the opinion that in areas where the intended development lines with the land-use and zoning plan municipalities could possibly consider fast tracking the permitting process. In conclusion it can be said that the biggest challenge faced by the market actors would be a lack of transparency and collaboration with the municipalities and this in turn creates reluctancy to develop mid-segment rental homes.

Municipalities
On looking at the challenges from the perspective of the municipalities it can be seen that there is indeed a lack of communication amongst the actors involved. As it was mentioned in the interviews that municipalities currently face the challenge of having to deal with market actors constantly making attempts to look for loopholes within the mentioned requirements or policies, hence making the municipalities come across as rigid. The municipal interviewees further mentioned that with the change in approach to land development, and municipalities not acquiring new lands creates less opportunity for them to put out tenders on the market. The challenge of providing or allocating the available land resources, given that they have rather limited supply of land. In regard to the types of homes being built within the mid-segment the municipalities argue that market actors tend to deliver homes of lower quality and size. This is a challenge for the municipalities as in most cases it is the aspiration of the municipalities to deliver not just the number of homes but also to align with demands of the target groups. It was mentioned in the interview with the municipality of Amsterdam that if left completely to market actors there would be rather small units that are unfit for the target group of middle-income households, who currently are in dire need for housing options given their combined income does not allow them to access the social sector and the owner-occupied sector is out of their reach. Another challenge that was identified through the interviews was in regard to developing policies for this segment, given that the mid-segment is part of the free-market municipalities are challenged with the amount they can regulate or stimulate developments through policies. As over regulating could result in market actors shying away and over stimulating could create opportunities for market actors to take advantage. As an example, the municipality of Amsterdam initially focused towards stimulating the market to develop mid-segment homes and the result was of having rather small homes that are barely suitable to even single person households (approx. around 40 to 50 sqm). In regard to different market types, it was identified that municipalities also face the challenge of

determining the precise extent to the amount of mid-segment homes required and believe that they could benefit from some direction or support from the national government in regard to arriving to long-term policies. As currently the policies are regionally made, and this sometimes brings along uncertainty given that policies differ based on regions. It was mentioned in all interviews that a nationally recognised policy document could indeed support them, of course with room to tailor the policies to their region. In regard to land prices, it was mentioned by the interviews that municipalities do face the challenge of reducing prices as it would not be possible for the municipality function id the prices are lowered to a point where they incur losses. As through land development and land sales municipalities generate income to support other infrastructure developments that are essential to creating a successful place. Another challenge mentioned in the interviews was that of the internal alignment of visions and goals across the various departments of the municipalities and this is stronger within the Metropolitan Areas and Big Cities given the extensive political influence in these areas. On the other hand, it was mentioned that in the other supporting areas given the smaller size of the municipalities arriving at common visions and goals is simpler. This was also identified in the interviews with market actors that indeed the process is far smoother and simpler within the Other Randstad Areas and Regional Municipalities. In conclusion it can be said that the municipalities indeed face challenges while developing for the mid-segment although the challenges seem to arise mostly from the market actors viewing the municipality as an opposer and not as a promoter.

How they were overcome

The previous section describes the problems that are faced along the process and these are problems that occur predominantly at an organisational level. Whereas while conducting the interviews, the questions relating to overcoming challenges and problems were mostly discussed regarding the example projects. Hence the results below speak more on a project level.

That these problems were seen in projects that were completed and hence it can be concluded that overcoming these challenges is possible. On presenting the question of how the faced challenges or problems were overcome while developing the example projects. All interviewees mentioned that since most of the problems or challenges arose during the planning phase of the development they were overcome through extensive negotiations with involved parties. Although, it was mentioned that sometimes these negotiations could go on for years before the actual development could begin. It was seen that in all cases there were not any problems or challenges during the implementation phase. Some interviewees mentioned that even the problems or challenges that arose were not really problems but merely each actor trying to maximise on their goals and visions, and this would be the case for any sort of development.

In lieu of managing to arrive at feasible business cases for the example projects, the project developers interviewed mentioned that the did have to spend time and effort to optimize the designs to be able get maximum output from the site within the restrictions they had to work with. Another example mentioned by an interviewee was that while developing on privately owned land, as they were in good terms with the landowner, they could go ahead with making development plans only by signing promissory agreements upon an agreed land price that would be transferred a few weeks prior to implementation. It was further mentioned that such an approach allows for developers to reduce expenses of holding the development site vacant. In conclusion from all interviews, it was found that biggest challenge was arriving at a financially feasible case which for developers and investors can be considered an everyday problem, hence by negotiating and finding the right balance developments within the mid segment can be made financially feasible.

5.2 *Recommendations from interviewees*

The following section aims to answer sub-question 5, "***What is the opinion of actors involved, in practice, to improve the development process of mid-segment rental housing in the Netherlands?***" This is done by analysing the answers to the conclusive questions asked in the first and third sections, and the fourth section of the interview protocols under the theme of Development process, Policies, and actor expectations (see Appendix A - Interview protocols). As in the interview protocol at the end of each section the interviewees were asked what their opinion was on how the process could be improved. On reviewing the transcribed interviews,

the recommendations made were categorized into recommendations made to market actors and recommendations made to municipalities.

5.2.1 Market actors

After having collated the interviewee recommendations the following are key points mentioned by almost all interviewees as their opinion as to what market actors can do to improve the process. The following sections elaborate recommendations made to the market actors by consolidating the recommendations made by all interviewees.

Developers

From the interviews conducted the following recommendations to project developers were made by the interviewees, including project developers themselves. The first or most occurrent being that of project developers should look for opportunities to develop within this segment regardless of it being a regulation or waiting on public tenders to be announced. As currently there are only a few such developers who actively focus on this segment of the housing market given that there is predetermined notion that planning such projects consume a lot of time and resources. It was found in two interviews with project developers who utilized innovative design and construction techniques to arrive at lower construction costs and this was also recommended not only by them but also from other interviewees. It was further recommended that early contractor involvement could also result in improving the feasibility and constructability for projects within the mid-segment. Regarding the different market types or areas, most interviewees believed larger institutional developers should focus on inner-city developments given their larger capacity to take on lower yields. This although is currently being done, two interviewees from such developers mentioned that they had goals to deliver on a larger scale. Within Metropolitan Areas and Big cities, the general recommendation was for project developers to seek and focus on delivering transformation projects. Transforming brownfields or redeveloping areas that were previously industrial. This is currently being done for example in Amsterdam North where the municipality is extensively supporting and encouraging development within the mid-segment. From an interview with a building contractor, it was identified that in some instance's developers invite them to bid even before having clear titles to ownership of the land. Doing so brings risk on to the bids made as if, at a later stage the start of construction is delayed the earlier made calculations could be incorrect. In turn causing delays to deliver the project, it was recommended that these clear legal titles should be acquire before placing the project on the market. Lastly, as the current situation of the housing market is seen as tense with high demand for such homes it was recommended by the interviewees that as a short-term solution developers should focus towards developing in Other Randstad areas and Regional municipalities. As developments in these areas occur quicker and they should in turn be able to reduce some pressure off the Metropolitan areas and Big Cities.

Investors

On tabulating the recommendations made to investors by the interviews, it was found that these were limited given that there were only a few interviews with investors. Although the other interviewees did make some recommendations to investors and to follow up on the recommendations for investors the results of the interviews carried out in a parallel study that focused on the role of investors within the development of mid-segment rental homes were reviewed and included in this section of the results. This parallel research was of Ferreira Veiga Barros, A. L. (2020, June), who made recommendations to investors and in particular to institutional investors. The recommendations made by the interviewees of this research are as follow. Investor currently come into the development process at a rather later stage and this was seen as a disadvantage for developers who are trying to develop within this segment. As initial funds and requirement of capital is essential during the planning phase and also while acquiring land. Hance, it was recommended that investors could possibly get involved earlier in the process and also consider supporting developers through forward funding. A similar recommendation is also seen by Ferreira Veiga Barros, A. L. (2020, June). Further, it was recommended that investors could also look at the possibility of supporting municipalities by investing in land development and in turn creating potential sites that the municipality could put onto the market. Also, investors who may adopt this approach could create opportunities directly on to the market by shifting their focus from investing in acquiring housing units to creating potential development sites. Creating these sites for development would

in turn allow the investors to have more control over the development program. As this was seen as a drawback, mentioned by Ferreira Veiga Barros, A. L. (2020, June), that investors have comparatively low control over the development program given that they come into the process only at a later stage. Similar to the recommendation made to developers to seek opportunities within Other Randstad Areas and Regional municipalities interviews were of the opinion that investors should do the same. Although, not only seeking opportunities to acquire units but also support smaller developers within these areas by forward funding. In regard to program of requirements it was recommended by Ferreira Veiga Barros, A. L. (2020, June), that investors should build more specific programs that are tailored to the mid-segment instead of using generic programs that are designed for 'housing' in general. As an example, Ferreira Veiga Barros, A. L. (2020, June), mentions that size of the dwellings is one aspect that investors should work on as currently from the interviews carried out in that research it was found that investors are of the preference to develop smaller units, which does not usually align with the goals of the municipality and the requirements of the target groups such as middle-income families. Further, Ferreira Veiga Barros, A. L. (2020, June) also discusses the importance of investors to diversify their portfolios and not focus on investing only towards the higher end mid-segment units as doing so might increase their yields but reduces the affordability of the segment. As concluding recommendations investors should also tailor a public statement of their intentions and sell the dwellings to after the holding period on the condition of it remaining within the mid-segment, in turn not only increasing the supply of such homes but also ensuring that these homes remain within this segment as seen in the market analysis that the demand for mid-segment rental homes is only going to increase in the coming years (Ferreira Veiga Barros, A. L., (2020).

5.2.2 Municipalities

After having collated the interviewee recommendations the following are key points mentioned by almost all interviewees as their opinion as to what municipalities can do to improve the process.

- Lower land prices and/or have transparency – whilst arriving at land costs, sharing with the involved market parties as to how they have reduced the price.
- Municipality allows flexibility in design and higher sustainability goals – achieving the minimum requirements and not enforcing additional goals – higher goals of sustainability being added later if there is still budget available.
- Using more stimulating or capacity building policies instead of focusing too much towards regulating, creating both financial and non-financial (E.g., development rights) incentives for market actors.
- Making clear plans and visions, aligning the internal goals of the various departments as it was mentioned by market actors that in some cases the municipalities tend to deviate or change their goals/requirements at later stages, implying the necessity to re-negotiate and in turn causing delays.
- Municipalities should have strong control directly under the responsible councillor who could make decisions that are transcendent of all other sub-areas such as urban planning, architecture, traffic, environment, green, etc.
- Make mid-segment housing obligatory and a priority in every land use plan but keeping mind that projects should still be financially feasible.
- Considering the option of fast-tracking permits where the land-use and zooming plans are in accordance with the indented development.

5.3 Synthesis

On synthesising the results described in the previous section, with the theoretical framework it was identified that along the existing process is predominantly faced by challenges along the second side, development feasibility, of the triangle. Implying that development feasibility is where the current actors in practice are having problems. More particularly these problems relate to land development, ownership control, regulations, physical suitability, and financial viability. As for the role-based model it was identified that the areas that currently require attention are the expectations the actors have of each other, the supporting markets, communication, and collaboration. As for the barriers that were earlier presented the interview results bring to

light that of the ones found in theory, specific attention would be required towards making recommendations to land price and availability, planning regulations, building regulations, and developing infrastructure (Figure 58).
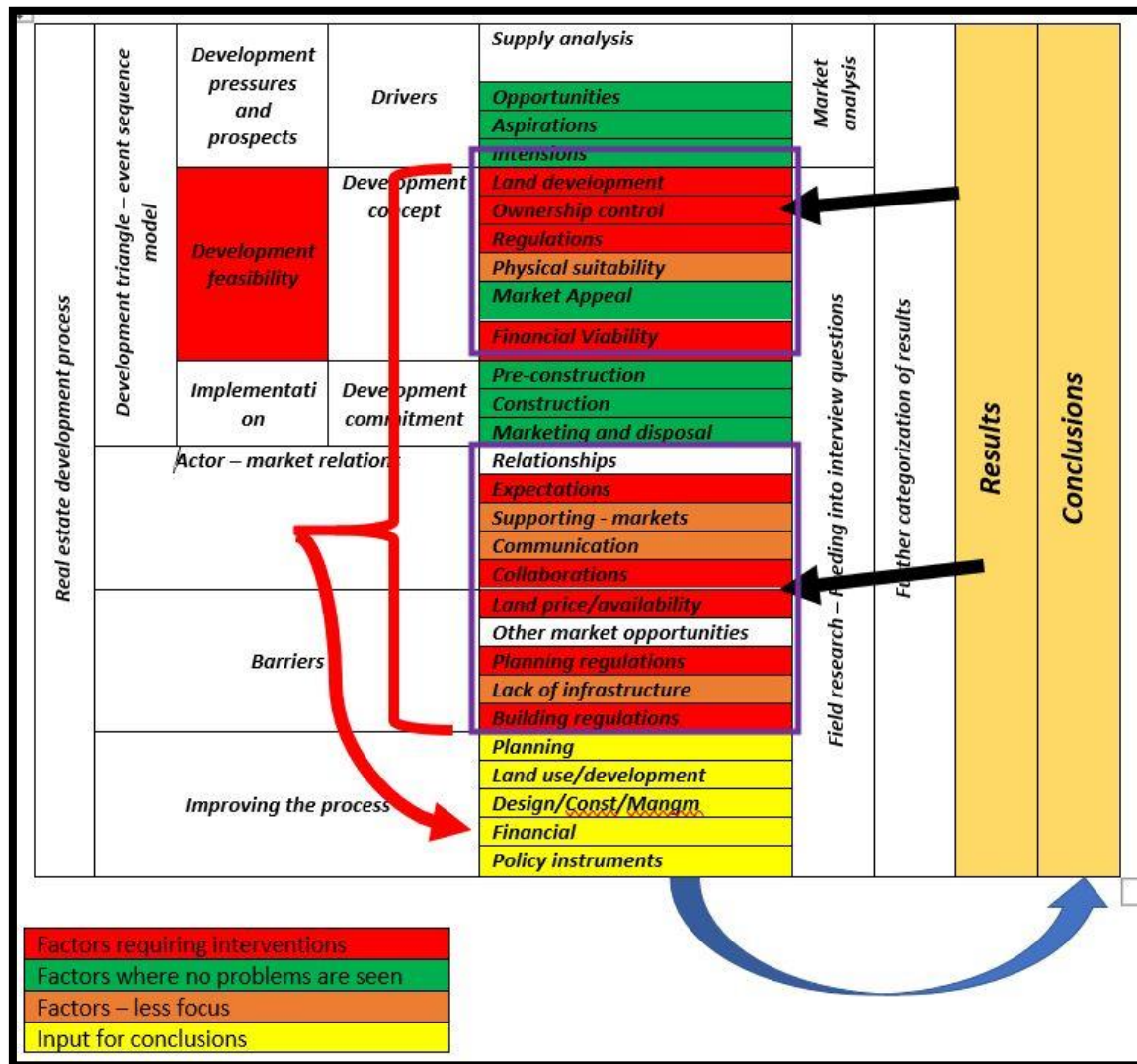

Figure 58: Synthesising results to theoretical framework (Own illustration)

As for the other sides of the development triangle, namely the development pressures and implementation through the interviews carried out it was identified that these steps along the process are not problem areas and that arriving at development feasibility was. As for the supply analysis, opportunities, aspirations, and intensions both the market analysis as well as the field research indicate that there is high demand for such housing, both market parties as well as municipalities aspire and intend to develop for this segment of the housing market. Although, in the first side of the development triangle there is the step of site identification which is a considerable issue especially seen within metropolitan areas and big cities. To which from the interviews it was suggested that developing mid-segment homes in these areas should be done through transformation projects. On comparing the research results with theoretical findings, it is evident that recommendations need to be made regarding improving the process by the assistance of the tools presented in the theoretical research being planning, land-use/development, design/construction/management, financial and policy instruments. These tools have been explained in section 3.3 and in the final section of the report while making conclusions to this research, recommendations would be developed utilizing these identified tools.

6. Conclusion, Recommendations & Limitations

*In the final section of the report, after having presented the findings from the conducted interviews and presenting a synthesis of the findings with the theoretical research and market analysis; this chapter of the report presents the final conclusions of the research. By trying to answer the main research question,**" How can the development process of mid-segment rental housing, in the Netherlands, be improved to meet the rising demand in this segment of the housing market?"** Further aligning to the goal of the research possible measures/changes to improving the supply of mid-segment rental homes will be recommended. These recommendations will be made at two levels at an organisational level and project level. Finally, the chapter will bring to light the limitations to this research and make recommendations to future research in the direction of mid-segment rental housing in the Netherlands.*

6.1 *Conclusions*

In conclusion to this research, a small revisit to the situation of the housing market, it was made evident through the extensive market analysis that there is a growing shortage of housing in the Netherlands and this shortage is particularly witnessed amongst the youth, elderly and people moving up the housing ladder. These being the key target groups for mid-segment rental housing directly implies that the demand for mid-segment rental homes is very high. The primary reason being rising house and rent prices all over the country, most significantly seen within Metropolitan Areas and Big Cities, causing inaccessibility to the owner-occupied sector and high market rents. Given that these target groups have middle-incomes the social housing sector is not an option and even if it were the waitlist to get a social house is extremely long (sometimes over 10 years). Further, from the market analysis it can be concluded that there are resources, in terms of investments, available to develop mid-segment homes but due to the lack of land and uncertainty on the policy front mobilising these funds is something that needs to be done. Lastly, as defined in section 1.3 that the problem is quite evidently within the process of developing for this segment and further making a hypothesis that ***improving the existing development process and policies within the mid-segment rental housing market could in turn improve the supply.*** Having made this hypothesis, carrying out the required field research, processing the results, learning from theory what measures can improve the development process and considering the recommendations made by the interviewees. The following section tries to answer the main research question, ***"How can the development process of mid-segment rental housing, in the Netherlands, be improved to meet the rising demand in this segment of the housing market?"*** Answering this question would in turn result is positively proving the hypothesis made. Finally, as the goal of this research was to ***recommend measures/changes, that municipalities and market parties, could possibly make to improve the supply off mid-segment rental homes in the Netherlands,*** following the answer to main research question recommendations to the involved actors are made at two levels at an organisational level and at a project level.

Prior to answer the main research question, the following conclusions were made based on the results of the carried-out interviews and reviewing the conclusions made by other similar studies. As seen in the figure below (see Figure 59) after reviewing the findings of the field research it can be concluded that indeed improving the development process could improve the supply of mid-segment rental homes. To do so five conclusions were arrived at, establish a well determined process, seeking alternative land development approaches, allowing flexibility during negotiations and regulations, improving actor relationships, and developing policies that would not only regulate this segment but also stimulate market actors to develop mid-segment homes. From the interviews carried out in this research it was clearly found that along the development process the involved parties face difficulties and challenges in the planning phases of the projects. Although, comparing the different market types it was found that these challenges are predominantly seen in Metropolitan areas and Big Cities and that development is rather smooth within the smaller municipalities. Indicating that the conclusion made regarding improving actor relations should be of high priority as one can see from the interviews conducted that there seems to a significant gap in communicating goals, especially when it is evident that all actors indeed want to develop more mid-segment rental homes. Further, in lieu of making the conclusions of allowing flexibility in regulations and negotiations it was clearly found that there is a significant amount of rigidity in the planning phases of the projects that were discussed during the interviews. In almost all the projects the planning phase was over one year and was mentioned that in some cases the interviews have seen these negotiations extend up to four or five years. As all actors are working towards the goal of delivering more mid-segment rental homes there should indeed be some room for flexibility within the building regulations, allowing developers to negotiate and in turn arrive at feasible business cases. As a final conclusion there is a lot of hesitance while developing mid-segment homes and the actors involved, to a certain extent, are waiting on each other to take initiative and overcoming this would be to build trust amongst each other along with establishing a clearly defined development process for this segment, acknowledging that the mid-segment rental housing should not simply be considered a part of the free-market and requires a dedicated process. In the next section based on the made conclusions an attempt is made to answer the main question, how can the existing process be improved?
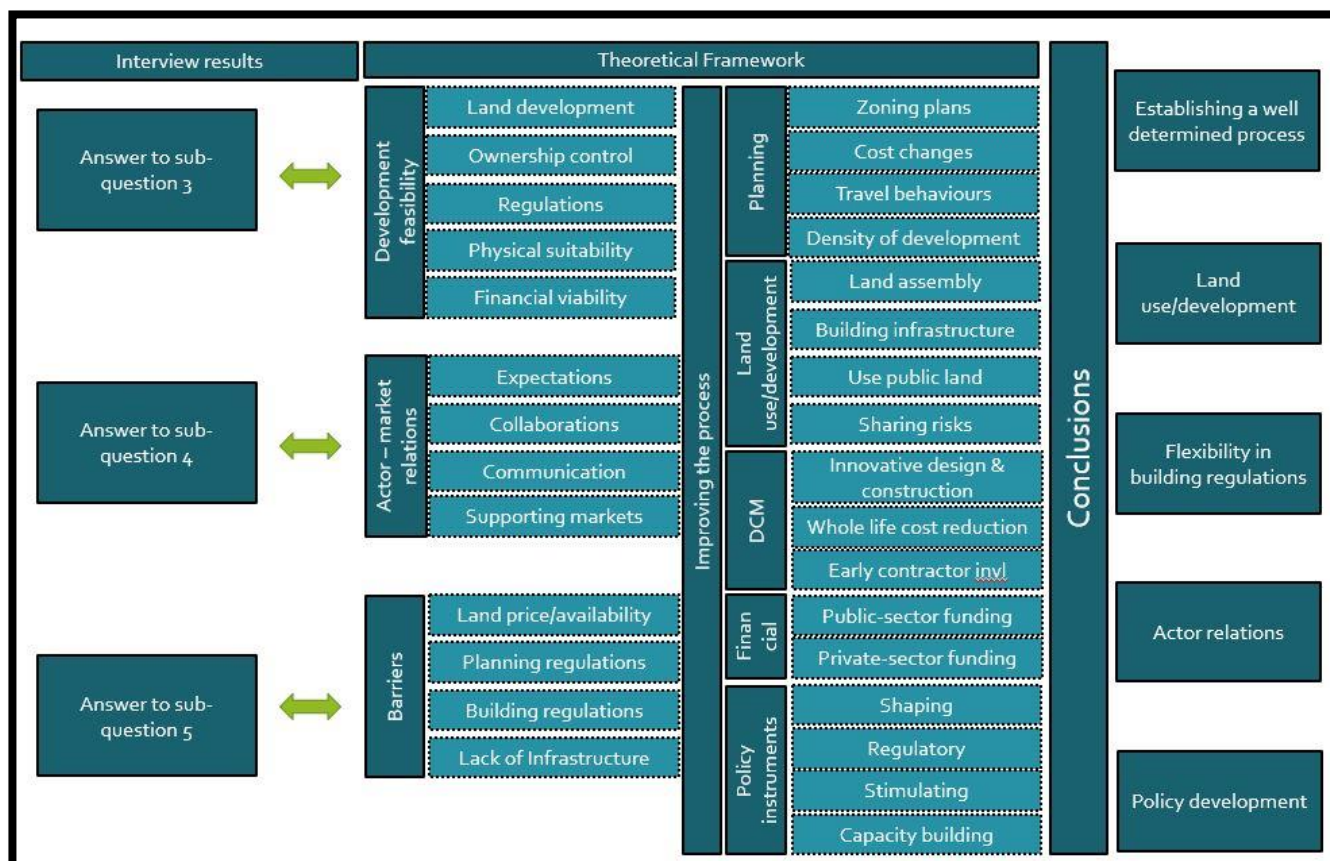
Figure 59: Arriving at conclusions (Own illustration)

6.1.1 Answering the main research question

Following the conclusions made and looking back at the theoretical findings on improving the development process the first step to improving the existing process would be to rethink the planning phase. This would imply that municipalities would have to develop their visions and goals and try to not overlap multiple goals as this was indicated also in the interviews that due to an overlap in municipal goals hinder or slow down the planning phase of such developments. For example, imposing very high sustainability requirements on to developments, aspiring to achieve higher standards than the minimum requirements. Further, as seen in section 3.3 as well that enforcing provision through local planning requirements would indeed improve the supply of mid-segment rental homes. For example, identifying building sites, reserving them for mid-segment developments and altering the cost of land to attract developers. Clearly defining the requirements and ambitions for the development and avoiding alterations at later point along the process. This was clearly seen as a challenge in one of the example projects that were discussed in the interview with the project developer.

Further, an approach to improving the planning phase could be both market actors and municipalities shift their focus from developing within the Metropolitan Areas and Big Cities towards the comparatively smaller Other Randstad areas and Regional municipalities. Sharing this effort by municipalities focusing on improving the infrastructure and connectivity with these smaller or rather supporting areas. Whilst market actors seek opportunities to develop in these regions. Lifting the pressure of the larger cities as seen in the interviews and the market analysis these inner-city areas currently face the highest pressure in terms of demand. Reducing this pressure could in turn reduce or slowly stabilise the rising house and rental prices. As seen in the interviews developing within these areas were also rather quicker in terms of the planning phase. It was mentioned in one the interviews that within smaller municipalities decisions and negotiations were made far quicker and easier. Along with that these areas also assist in arriving at feasible business cases given that the land prices in these areas are lower than that of in larger, inner-city developments. Although, one may argue that this may not directly reduce the desire to move towards larger cities. This could be overcome by increasing the density of

inner-city developments and consider options of developing high rises and identifying brownfield sites to transform as these areas would still have significant demand for mid-segment rental homes.

The next step towards improving the development process would be to build the capacity of municipalities. As it was found from the interviews that currently the municipalities not only suffer from a shortage of personal but also resources. This something that should be considered at a national level where the national government looks for opportunities and ways to increase the capacity of the regional governments to increase the speed of delivering mid-segment homes. This could mean enabling them with resources to be able to source the required personal and land within the regional governments. Also developing policies at a national level could in turn create a system that can be adopted throughout the country as currently policies for mid-segment rental homes are regionally made and this could lead to developers focusing in areas either where the policies made suit them or use this as a loophole to their benefit and deliver lower standard mid-segment homes in areas where policies are unclear and require development. The national government does recognise the urgent need of mid-segment rental homes and have indeed made initiatives towards form collaborative tables to discuss and bring interested parties together. Along with these initiatives policy developed at a national level could directly support the increase in supply, this was also mentioned by multiple interviewees that with common policies and a particular process in place approved by the national government would indeed improve the development within the mid-segment rental market. Although, it is also argued that given the regional characteristics of the housing market and the mid-segment being a part of the free market doing so could take time and may not be the best option. In that case municipalities should focus on developing policies that are suited to their areas, after collecting relevant data in terms of demand and local market conditions. Focusing on developing not only regulative policies but also stimulative or capacity building policies and reducing the rigidity that they currently fall into.

Moving forward the next aspect along the development process that requires attention would be of land development. As seen in section 3.3.2 as well that land assembly is crucial to delivering potential development sites. To improve this there should be active participation from both municipalities and market actors towards assembling or acquiring land. One option as recommended also by (ULI Europe et al., 2020), is land assembly through public-private partnerships, where investors could possibly support municipalities with required investments to acquire and service the land. As price and availability of land are crucial factors to delivering mid-segment rental homes and requires significant upfront capital funding (see section 3.3.2). Another approach could be that of developing infrastructure around areas that have sufficient land available but are currently unattractive given their inaccessibility. This would be an alternative approach for municipalities as by providing infrastructure would in turn create attractive locations. As mentioned earlier this could be done within Other Randstad Areas and Regional Municipalities given that there are regions within these areas that have land available but are not attractive enough given their inaccessibility. Lastly, following the recommendations made in ULI Europe et al., (2020), improving land assembly and land use through utilisation of public land for development, reducing the risks involved by providing lower and prices, and developing corporations for large-scale delivery (see section 3.3.2 for elaboration) could assist in improving the delivery of mid-segment homes.

Another important factor to consider while trying to improve the development process is the funding and financing. Given that mid-segment rental housing falls under the umbrella of affordable housing it is important to bring to light that such developments do not usually bring in market level returns. Implying that the funding and financing of such projects need to be adjusted in order to have at least acceptable returns. As seen in section 3.3.4 there are broadly three approaches: public financing, private financing, and institutional investments (see section 3.3.4 for further elaboration of these three approaches, section also provides examples of how these approaches to financing could indeed improve the delivery of mid-segment homes). To further improve the development process, it would also be essential for municipalities to improve their existing policies and also consider taking on other roles along the process, given the high demand for mid-segment rental homes municipalities would have to take more initiative. As seen in Table 4 municipalities have the option to take on various roles along the process and not only that of a regulator. As also mentioned in section 3.3.5 that if municipalities are not willing to take on different roles, they should invest time and resources in building state-

market relations that would assist them on a long term and not be seen as a barrier to the market actors involved along the process. In regard to developing policies, as mentioned earlier as well currently municipalities seem to be developing rather regulative policies and should also consider other policy instruments that would enable them to ensure development within the mid-segment (see Table 5 for elaboration and examples of other policy instruments available). Particularly shaping and stimulating policies are currently required and forming these policies at a national level could indeed improve the process as it would reduce the uncertainty or unclarity present when policies are regionally made.

Finally, through this research it was found that in order to improve to the development of mid-segment homes and to improve the process a key factor is information and risk sharing. As from the interviews it was found that in the planning phase of such projects extensive negotiations had to be made to arrive at feasible business cases. On analysing the answers of the interviewees, regarding the extensive negotiations it was seen that in multiple cases there seemed to be a lack of communication and transparency amongst the actors involved. In order to have a sustainable development process it would be essential if both market actors and municipalities would be transparent and build trust amongst one another to establish long term relationships. As any other type of development, developing mid-segment rental homes also bare risks and these risk are predominantly seen in regard to acquiring land, given the extensive negotiations that occur baring these initial land costs are a considerably large risk. By establishing trust and long-term relationships market actors and municipalities should consider sharing these risks of initial investments along with other risks that are involved in developing affordable homes. Sharing risks would create a safe environment for all actors as currently it seems to be as though each one is banking on the other to take initiative given that the risks involved are most likely going to fall upon the one who makes the first step.

6.2 *Recommendations*

Having discussed these various aspects that contribute towards improving the development process, in this section, aligning to the goal of the research to recommendations to the actors involved are made at two levels (see Figure 60): at an organisational level and at the project level. The section also collates and compares the recommendations made by other similar research, in particular to studies by ULI Europe et al., (2020) and Ferreira Veiga Barros, A. L. (2020, June). Highlighting the similarities between the recommendations made in this research and emphasizing on the distinguishable ones. The reason for making recommendations at these two levels would be that from the interviews conducted and conclusions made it is evident that recommendations are needed not in particular to each actor but recommendations to them as a collective. Given that it is also evident that there is no one particular actor who is responsible for the hurdles along the development process. They function together and currently, on analysing the results of the interviews, it can be seen that there is predominantly a lack of initiative from the actors involved and they are in some manner waiting on each other to take the first step towards improving the supply of mid-segment rental homes in the Netherlands.

Although it was earlier mentioned that the recommendations would be made as a collective, within the categories of recommendations at an organisational and project level, there would be recommendations made to particular actors under these categories. In lieu of the different market types that were early mentioned, recommendations are made in context to how these different areas could indeed support each other and function in collaboration with one another. As from the interviews it was made evident that the development process for mid-segment rental housing is the same as developing for the free market and there are not any stalk differences within these market types. The problems and challenges faced within these five market types were more less the same and were all seen in the planning phase of the process. With similar approaches of extensive negotiations that resulted in overcoming the challenges faced. The challenges predominantly being of quality to price ratios, high land prices, higher than standard requirements in terms of sustainability and design requirements and the challenge of arriving at feasible business cases given the rigidity from the actors involved during the negotiations. Lastly, this categorization of recommendations at an organisation and project level would assist in making attempts to improve the overall organisation of such developments to ensure a smooth process on broad perspective and at a project level to be able ensure development feasibility and

smooth negotiations to reduce the time spent in the planning phase, in turn increasing the rate of supply as projects would reach the implementation side of the development triangle quicker.
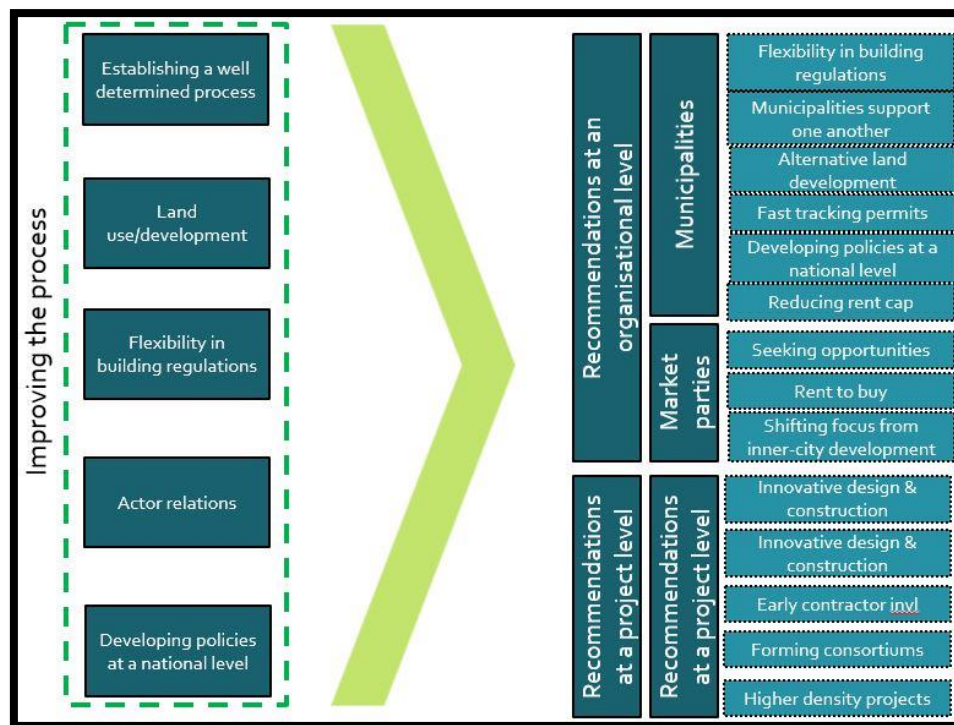

Figure 60: Arriving at recommendations (Own illustration)

6.2.1At an organisational level

After having answered the main research question as to how the development process could be improved the next step is to make recommendations aligning to the goal of the research. At an organisational level, the following recommendations are made to both municipalities and market actors. The common recommendations being that of focusing towards developing mid-segment homes in the Other Randstad Areas and Regional Municipalities. This recommendation is made on the basis of the findings from the conducted interviews and from the conclusion of improving land development. This recommendation is made for the following reasons, scarcity of land within the Metropolitan Areas and Big Cities, higher political influences that could have a negative impact on development, easing the pressure on the cities could in turn have a positive impact on the rising house prices, availability of land in these supporting areas and lastly lower land prices as compared to Metropolitan Areas. This recommendation is for both market actors and municipalities as for market parties to indeed shift their focus municipalities would have to improve the infrastructure in connecting this support areas to create attractive development locations within the Other Randstad Areas and Regional municipalities. Another common recommendation would be that of taking initiative to developing within this segment as it was earlier also concluded that currently it seems to be as though the involved actors are waiting on each other to take initiative. This in regard to market actors would imply that they actively seek for opportunities to acquire land with the intention to develop mid-segment homes. It can be argued that acquiring private land could be challenging in terms of land price as private landowners would expect market level prices. This could be overcome by developers and investors working together to arrive at feasible business cases that are also attractive to the landowners. As a last common recommendation for developments within Metropolitan Areas and Big Cities, both municipalities and market parties should actively seek re-development opportunities rather than seeking vacant land within these areas. As though land-use planning municipalities could assist in providing the required changes to the use of the sites being redeveloped. This indeed would consume time as making alteration to the land-use plan takes time although there are options to provide temporary permits that allow development as in the near future the land-use would align to the development.

The following recommendations are made in particular to municipalities, as to how they could support the development of mid-segment rental homes:

First, would be that municipalities should support one another in terms of building capacity within themselves. This recommendation stems predominantly from the concern mentioned in the interviews of municipalities, who mentioned that smaller municipalities indeed face a lack of capacity to process policies and implement them. As an example, to apply this recommendation, smaller municipalities that are in close range of the Metropolitan Areas and Big Cities could indeed collaborate with the larger municipality to develop policies that can be implemented and also receive support from these larger municipalities in terms of promoting developments in these areas. Adding to their goals to develop the required connectivity and infrastructure, in turn directing market actors towards these smaller supporting municipalities.

Second, would be that of municipalities allowing for room to negotiate in regard to the increased sustainability and building requirements. This would imply transparency between the involved actors, in regard to cost calculations and collaborations in terms of arriving at shared or common goals.

Third, would be of municipalities seeking alternative land development approaches as it is made clear in the interviews that municipalities currently have a scarcity of land. This could be done through municipalities collaborating with investors, where municipalities identify potential locations and acquire them with the assistance of investors who are interested in developing mid-segment homes. Reducing the cost risks associated with land acquisition on municipalities and easing the difficulties faced in regard of ownership titles that market actors in some cases have difficulties.

Fourth, on a policy front it is recommended that municipalities, in line with the rent cap of 20 to 25 years, should incorporate policies that ensure that these homes remain within the mid-segment at the end of this term. The policy could include that at the end of this 25-year period these homes are sold on the condition of them continuing to be within the mid-segment. Evaluating them at that point in time, as in the future there would be a possibility of the range of mid-segment rental prices changing. Further on a policy front it is recommended that policies should also be made at a national level, for example policies that would attract market parties to develop mid-segment homes and receive incentives from the national government. Another example could be of developing base requirements and ambitions that municipalities adhere to with scope to make minor adjustments in regard to their market condition. The national policy could specify the various target groups and align them with suitable home sizes, implying that if the regional municipality has a requirement of single person households, they follow the requirements mentioned within these national policy documents. Publicly sharing these policies made at a national level would indeed reduce the uncertainty and unclarity on a policy front. As a final example of national policies, the national government could also support the municipalities financially if their regional goals are to create opportunities for mid-segment homes. This support could be to support infrastructure developments within these smaller municipalities.

As a final recommendation to municipalities, introducing fast track options for permits where the land-use and zoning plan are in line with the intended development. This would be a good method to increase the rate of supply as it was evident from the interviews that a lot of time is lost in acquiring the required permits. In order to be able to fast track the permits the municipalities could already identify potential development sites and derive specifications that have to be met in order to have a fast-track permit. Doing so would then allow for developers to acquire permits sooner if they comply with the requirements and if not, they are allowed to negotiate – implying they forfeit the possibility of a fast-tracked permit.

Recommendations to market actors on an organisational level would be, other than those that are mentioned as common recommendations would be to actively seek opportunities not only withing the Metropolitan Areas and Big Cities but also within the smaller municipalities. As market actors through their private networks could possibly find available lands and present them to municipalities. This was indeed seen in one of the interviews where the project developer approached the municipality with a potential site that needed support from the municipality in terms of acquisition and also to determine the goals of the municipality for that area. In regard

to making recommendations to investors it would indeed improve the process if investors would be more willing to forward funding projects instead of only coming in at a later phase of the development. As a final recommendation market parties could indeed look at developing rent to buy options for such homes as doing so would reduce the burden on investors at a later stage where they want to sell the homes. Also, this approach could assist in recovering costs faster by allowing the tenants the option to pay certain amounts of down payments, in some regard this would imply the creation affordable owner-occupied homes which would in turn reduce the rising demand for rental homes as people would see this as an attractive option. No doubt there will still be demand for mid-segment homes given the other target groups such as flex workers would still seek for housing options with the mid-segment rental market.

As a final umbrella recommendation at an organisational level, both market actors and municipalities should make steps towards building trust amongst each other and in turn would reduce the apparent reluctancy of taking initiative. Recognising the eminent need for mid-segment rental homes and work in collaboration, no doubt there already have been steps made by various organisations to support this sort of collaboration in the form of collaboration tables to enable discussions, but little is done in context of taking the first step. There are rather few project developers and investors whose focus is the mid-segment and creating this transparent and risk sharing environment could indeed attract more market parties to develop such homes.

6.2.2 At a project level

On a project level to be able to deliver more feasible business cases, as also mentioned in the interviews, utilising innovative design solutions could create more efficient use of space and in turn increasing the return on investment. This can be achieved through providing a platform where both municipalities and market actors could invest in developing and researching innovative solutions. Innovation could also be in the direction of using alternative construction methods and materials that could reduce costs and also construction time. An example could be using prefabricated construction methods that could cover up for the time lost in the negotiation phase. As it was clearly identified through this research that the planning phase of such projects is where a lot time is consumed, and it can be argued that reducing this negotiation period is subjective as compare to utilising alternative construction methods that are rather objective in regard to reducing the duration of construction. Further, forming consortiums for durations of the intended development could assist in sharing risks amongst the involved parties, reducing the burden that is currently seen on developers. The municipalities sharing the risks associated with land development would indeed reduce the time spent in negotiating land prices. As a consortium the goals and visions of the involved actors are determined and aligned with more certainty as making changes later would imply a loss to the consortium. To a certain extent doing so would allow smooth flow during the process as the actors involved share the risks and also sharing the risks allows for more room to arrive at feasible business cases given that risk factor is shared. Another recommendation would be to have early contractor involvement and looking at alternative contracting options rather than sticking to the traditional methods. This was also recommended by one interviewee, mentioning that contractors are able to work out construction costs better when they are involved earlier in the process. Likewise, it was also mentioned in the research of Ferreira Veiga Barros, A. L. (2020, June) that even investors should get involved earlier in the process and should develop specific lists of requirements in line to mid-segment homes. As currently they tend to follow a predetermined standard set of requirements listed for housing projects. In regard to inner city developments municipalities could possibly allow for developments of higher density due to lack of available land, allowing for flexibility in building regulations. As a final recommendation on to support such developments the national government could consider providing subsidies on building material for projects where the program consist of 100% mid-segment rental homes. As in most cases developers include certain percentages of free market rental homes so as to achieve their desired returns, with such support they would be able to achieve feasible business cases quicker.

6.2.3 Comparing to existing recommendations

The recommendations made in the previous section do indeed overlap with recommendations of other similar studies. In particular when compared to those of ULI Europe (2020) and Ferreira Veiga Barros, A. L. (2020, June), doing so as these are two recent studies in a similar direction of improving the supply of mid-segment homes.

Although the recommendations made by ULI Europe (2020) are on rather broad perspective given that their research extends to covering Europe and delivering "intermediate housing" which translates to the mid-segment in context of the Netherlands. As seen in the figure below (Figure 61) ULI Europe (2020) make recommendations at the different points along the process and although there are similarities to the recommendations made by this research it can be seen that these recommendations are on a broader scale.
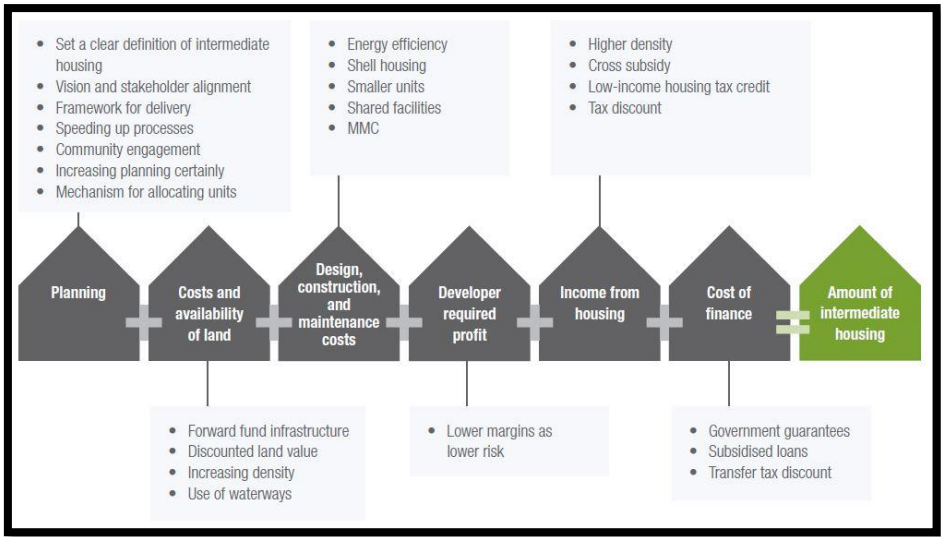

Figure 61:Key intervention points for increasing the supply of intermediate housing (ULI, Europe, 2020)

Further, looking at the recommendations made by Ferreira Veiga Barros, A. L. (2020, June) (see Figure 62) are more specific to mid-segment rental housing in the Netherlands. There are indeed similarities within the three researches and the recommendations that are of difference or comparatively new are, municipalities supporting one another, recommendations to develop national policies to act as a guiding document to development of mid-segment homes in the Netherlands and the formation of consortiums in order to share risks involved. Further, the research of Ferreira Veiga Barros, A. L. (2020, June) makes in depth recommendations to institutional investors so as to how they could support in improving the development process. As compared to this research that makes recommendation more in line with measures that municipalities and market actors (developers and investors) can adopt in order to improve the rate of supply, at an organisational level and project level.

Figure 62:Recommendations made by Ferreira Veiga Barros, A. L. (2020, June)

6.3 *Limitations*

While carrying out research it is eminent that there would be limitations to the research, and that is without doubt the case in this research as well. Although these limitations are not seen as negatives but instead as possibilities to point future researchers in directions to further build towards the aim of the research. In this case contribute towards reducing the housing shortage in the Netherlands. Of the few limitations encountered while carrying out this research the most evident being the research extends on broad perspective and currently there needs to be more specific research that dives deep into a particular aspect. The others being the limitations on the number of interviews conduct as with a larger respondent group the findings and recommendations could be better generalised. For example, instead of having investigated one project within each market type a wider number of projects (different types) could have been explored within each market type. Another being the research tends to flow predominantly from the perspective of project developers and municipalities and limited from the angle of investors. Lastly, after having concluded this research it was found that maybe following the direction of improving the process further research could be in the direction of,

- Designing financial models/platforms that assist both municipalities and market actors to determine feasibility – creating transparency.
- Operational research in the direction of optimizing the design requirements for mid-segment homes.
- Research of alternative construction material and methods to lower building costs.
- Research of alternative land development approaches that could assist in creating more development sites.
- Research in the direction of policy development at a national level – creating a system that can adopted throughout the Netherlands.

Following research in these direction would in turn aim at solving the problems that are broadly identified within this research. These only being examples of future possible research, on broader perspective it can be said that research in the direction of improving development feasibility and policy development would assist in improving the supply of mid-segment rental homes as these two aspects were found to be of crucial importance.

7. Reflection

It has been a long journey from India to TU Delft to pursue my master track MBE and master program of MSc in Architecture, Urbanism and Building Sciences. I applied to this course as I felt it was tailor made for me as my interest in planning housing on a large scale was a major part of my course. So, my topic – Development process of mid segment rental homes in Major housing management systems though researched and written about the Netherlands market scenario will lend knowledge to universal housing problems world over.

The extensive research done by me did throw up challenges in particular with the methodology used, but I tried to overcome them with suggestions from my mentors, **r**eading up material already written about this topic and the issues faced by the actors involved in mid segment rental homes gave a lot of insight into the problem and I could analyse the problem and how the shortage is growing at an alarming rate. I tried at understanding the process currently in practice by looking at completed projects that would assist in making recommendations to avoid similar challenges or difficulties that arose in the past. I also noticed that factors that drive real estate development are not constant and that makes it important to revisit or rather rethink the processes involved and to do so it was important to review the current practices and identify where changes were needed.

My research was aimed at being beneficial not only to its readers who seek to gain knowledge but also to the various actors who are part of this process to understand each other's perspective on a problem that is acknowledged by all. In particular to the mid-segment, from it can be seen that one of the predominant challenges or problems seen is that this segment being out of the regulated market does not yet have fixed regulations that creates uncertainty and this research also extends towards assisting policy makers in understanding the expectations of the market actors. My arduous journey through the entire process has been exciting, informative, and painstaking at times. The data collected by me was extensive and reading and assimilating the knowledge was quite a challenge and I must say my reading skills have improved drastically though there have been times when I was reading in circles without understanding the data accurately. It has overall really been a challenging experience as a whole – first collecting data, then analysing it and finally understanding its implications.

In regard to the relationship between the graduation project and the wider social, professional, and scientific framework. I believe that this research indeed forms a basis to identify the pressing social issues of affordability within the housing market and on a scientific front as mentioned earlier it provides not only recommendations to improve the process but also a presentation of the problems at hand and how they are currently being overcome. As learning from past experiences always assist in improving future decisions. From the results of the interviews conducted various recommendations stemmed out and indeed if these recommendations in combination with the recommendations made by this research are applied there could be some improvement in the delivery of mid-segment homes. The highlighting recommendation of this research being that of actors involved along the process should support one another, this can be done through forming consortiums and sharing the risks involved. Applying this recommendation would be a possibility, although it would require further development and detailing in terms of the specifications of the contracts that need to be in place to form such consortiums. Further, the findings of this research, along with the made recommendations would indeed provide a framework or basis to develop policies for the mid-segment, recognising that this segment cannot just be left as a part of the free market and requires specific attention. This attention does exist currently although predominantly at a conversational level and now requires some intervening, implying that the involved actors should take initiative, a good example would be of the company Sustay who actively seek opportunities to develop within the mid-segment and not only in locations offered by municipalities but also seeking locations privately.

Following the example of Sustay more project developers should take this initiative whilst also understanding the benefits of focusing within Other Randstad Areas and Regional Municipalities. A shift from inner city developments to developing within these supporting areas, this shift could in turn also be supported by municipalities by them focusing on developing the required infrastructure within these support areas. In conclusion there is potential utilization of the results presented in this research, given that the research attempts to cover the perspective of all actors and collates them to present an understanding of what is happening in practice and what can be done to improve it. Lastly, the made recommendations to improve the

development process are indeed specific towards the mid-segment but can also be applied to other forms of affordable housing developments.

Reflecting on the process of carrying out the research at times, the spread of the pandemic (COVID-19 19) the ensuing lockdowns, the necessity to keep oneself safe and healthy, the stress and tension of being alone here, the inability to care for my family back home did play on my psychic and worked against me in my progress towards completion of my master thesis. Conducting the interviews on zoom and not personally did have its limitations and drawbacks. Furthermore, at times it was difficult to be able to get players/actors from the municipality to participate in my interviews, I have worked backwards by asking for references from other interviewees to get them on board, so that I have the government official's viewpoint to make my research more comprehensive and get a complete viewpoint of the same. There were a few issues during the whole process of data collection, assimilation and drawing out results from it, but none were ethical in nature. I have followed all ethical norms like, I took due permission from all the actors involved before I recorded their replies to my interview questions, I did inform all my interviewees that the audio recordings will be archived in the TU Delft records in my thesis manuscript. I also allowed the interviewees refuse to answer any questions in case they found the questions uncomfortable to answer. I believe that there were no moral issues that played a role during the conduction of the interviews and the values of honesty and integrity were maintained at all times. At all times we gave importance to the professional code of ethics and deontology. I repeat, overall, my experiences with working on this master thesis has been an exhilarating and exciting journey with challenges at times overwhelming in nature but I have worked through them to the best of my ability and achieved results which I believe will help some in the analysis of developing the mid segment rental homes in the Netherlands. I do hope that my conclusions will throw some light on the solutions which could be looked at to solve this issue to a certain extent and following the recommendations of future research as seen in the limitations section would without doubt assist in achieving the aim that was set out for this research – ***To reduce the housing shortage in the Netherlands.***

I would like to take the opportunity to thank the reader as I do agree that it is a rather extensive report and would have consumed a fair amount of time to read. I hope it was an informative, comprehensible, and enjoyable read.

8. References

1. ABF Research. (2019). *Primos 2019: Prognose van bevolking, huishoudens en woningbehoefte 2018-2050*. Geraadpleegd van https://www.abfresearch.nl/publicaties/rapportage-primos-2019/
2. ABF Research. (2019). *Socrates 2019*. Geraadpleegd van https://www.abfresearch.nl/publicaties/rapportage-socrates-2019/
3. ABF Research. (z.d.). *Socrates - Woningmarktprognose.* Geraadpleegd van https://www.abfresearch.nl/producten/prognoses/socrates-woningmarktprognose/
4. Adams, D., & Tiesdell, S. (2012). *Shaping Places: Urban Planning, Design and Development*. Geraadpleegd van https://scholar.google.com/scholar_lookup?title=Shaping%20Places%3A%20Urban%20Planning%2C%20Design%20and%20Development&publication_year=2013&author=D.%20Adams&author=S.%20Tiesdell
5. Amvest. (2019). *Amvest Residential core fund Annual report 2018*. Geraadpleegd van https://www.amvest.nl/wp-content/uploads/2019/06/150.00.015-Amvest-Residential-Core-Fund-jaarverslag-2018-DEF.pdf
6. Barrett, S., Stewart, M., Underwood, J., 1978. The Land Market and theDevelopment Process, Occasional Paper 2, School of Advanced Urban Studies.University of Bristol.
7. Baxter, P., & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, *13*(4), 544-559. Retrieved from https://nsuworks.nova.edu/tqr/vol13/iss4/2
8. Bouwinvest. (2019). *The playing field for real estate investors in the Netherlands*. Accessed fromhttps://www.bouwinvest.com/media/3991/bouwinvest_trends-and-developments-dutch-real-estate-market-2019-2021.pdf
9. Bulloch, B., & Sullivan, J. (2010). Information - The Key to the Real Estate Development process. *Cornell Real Estate Review, 8*, 78–87. Geraadpleegd van https://scholarship.sha.cornell.edu/cgi/viewcontent.cgi?article=1045&context=crer
10. C. Delmendo, L. (2019, 15 July). *Dutch house price boom continues!* Accessed on 24 October 2019, fromhttps://www.globalpropertyguide.com/Europe/Netherlands/Price-History
11. Capital Value, & ABF Research. (2019). *Housing and residential investment market in the Netherlands 2019*. Accessed fromhttps://www.capitalvalue.nl/documents/9_Onderzoek/2019_Housing_and_Residential_Investmentmarket_theNetherlands_summary.pdf
12. Capital Value, & ABF Research. (2019). *Housing and residential investment market in the Netherlands 2019*. Accessed fromhttps://www.capitalvalue.nl/documents/9_Onderzoek/2019_Housing_and_Residential_Investmentmarket_theNetherlands_summary.pdf
13. Capital Value. (2020). *Housing and residential investment market in the Netherlands 2020*. Netherlands: Capital Value B.V.
14. Czischke, D. (2014). Social housing and European community competition law. In Social housing in Europe (pp. 333–346). Oxford: Wiley Blackwell.
15. Czischke, D., & van Bortel, G. (2018). An exploration of concepts and polices on 'affordable housing' in England, Italy, Poland, and The Netherlands. *Journal of Housing and the Built Environment*. https://doi.org/10.1007/s10901-018-9598-1
16. E. Heurkens (2012) Private Sector-led Urban Development Projects: Management, Partnerships and Effects in the Netherlands and the UK, A+BE Series, 4, Delft University of Technology, Delft (2012), pp. 1-480
17. Ferreira Veiga Barros, A. L. (2020, June). Approaches for Institutional Investors in the Netherlands to increase the middle rent segment stock. https://repository.tudelft.nl/islandora/object/uuid:0c1a83e6-370b-4cc4-ada6-d5ab9979c0b7
18. Gemeente Amsterdam. (2020, June). GEMEENTEBLAD.
19. Gemeente Utrecht. (2017, December). Actieplan Middenhuur Actualisatie 2017.

20. Government of Netherlands. (2019). *The demand for mid-priced rental homes | Investeren in de woningmarkt*. Accessed on 29 oktober 2019, from https://www.investingindutchhousing.nl/knowledge-base/the-mid-priced-rental-sector-in-the-netherlands/the-demand-for-mid-priced-rental

21. Government of the Netherlands. (2016, 26 september). *The rental market | Investeren in de woningmarkt*. Accessed on 25 oktober 2019, from https://www.investingindutchhousing.nl/node/1082

22. Healey, P. (1991). Models of the development process: A review. *Journal of Property Research*, *8*(3), 219–238. https://doi.org/10.1080/09599919108724039

23. Housing Europe. (2017). The state of housing in the EU 2017. Brussels: Housing Europe.

24. ING. (2018). *Dutch Economy Chart Book*. Accessed fromhttps://www.dutchsecuritisation.nl/sites/default/files/documents/ING-Dutch-Economy-Chart-Book-Q4-2018_tcm162-157071.pdf

25. Lexence Advocaten & Notarissen. (2020). *Measures for the Dutch residential real estate market*. Lexence. https://lexence.com/en/article/minister-announces-measures-for-the-dutch-residential-real-estate-market/

26. Louw, E & Van der Krabben, Erwin & Priemus, Hugo. (2003). Spatial Development Policy: Changing Roles for Local and Regional Authorities in the Netherlands. Land Use Policy. 20. 357-366. 10.1016/S0264-8377(03)00059-0. https://www.researchgate.net/publication/248257269_Spatial_Development_Policy_Changing_Roles_for_Local_and_Regional_Authorities_in_the_Netherlands

27. Loyens Loeff. (2019). *Measures for more affordable mid-market rented housing | Loyens & Loeff*. Loyensloeff. https://www.loyensloeff.com/nl/en/news/news-articles/more-government-measures-announced-for-more-affordable-and-accessible-mid-market-rented-housing-n15302/

28. Miles, M. E., Netherton, L. M., & Schmitz, A. (2015). Real Estate Development (5th ed.). Urban Land Institute.

29. Milligan, V. & Gilmour, T. (2012). Affordable Housing Strategies. International Encyclopedia of Housing and Home (pp. 58–64). Elsevier Ltd.

30. Ministerie van Algemene Zaken. (2017, 22 november). *Valuation of immovable property*. Geraadpleegd van https://www.government.nl/topics/valuation-of-immovable-property

31. Netherlands Enterprise Agency, RVO. (2019, 16 december). *Landlord levy*. Geraadpleegd van https://business.gov.nl/regulation/landlord-levy/

32. Nijskens, R., Lohuis, M., Hilbers, P., & Heeringa, W. (2019). *Hot Property: The Housing Market in Major Cities*. https://doi.org/10.1007/978-3-030-11674-3

33. O'Brien, P., Lord, A., & Dembski, S. (2020). How do planners manage risk in alternative land development models? An institutional analysis of land development in the Netherlands. Land Use Policy, 91, 104409. https://doi.org/10.1016/j.landusepol.2019.104409

34. Opoku, Alex & Ahmed, Vian & Akotia, Julius. (2016). Choosing an appropriate research methodology and method. Accessed September 2020 from https://www.researchgate.net/publication/299593898_Choosing_an_appropriate_research_methodology_and_method

35. Oxley (2012). Supply-Side Subsidies for Affordable Rental Housing. Elsevier Encyclopaedia of Housing and Home.

36. Perry, J. (2015). *There is a global housing crisis and politicians must do more to tackle it*. Geraadpleegd op 16 januari 2020, van https://www.theguardian.com/global-development-professionals-network/2015/jun/10/from-beds-in-sheds-to-super-slums-theres-a-global-housing-crisis-and-politicians-must-do-more-to-tackle-it

37. Pittini, A (2012) Housing Affordability in the EU: Current Situation and Recent Trends. Policy Report.

38. Ratcliffe, J., Stubbs, M., & Keeping, M. (2009). *Urban Planning and Real Estate Development*. Geraadpleegd van https://scholar.google.com/scholar_lookup?title=Urban%20Planning%20and%20Real%20Estate%20D

evelopment&publication_year=2009&author=J.%20Ratcliffe&author=M.%20Stubbs&author=M.%20Keeping

39. Spiegelaar, L., & Vrieselaar, N. (2019, 21 februari). *Dutch Housing Market Quarterly - Rabobank*. Accessed on 24 oktober 2019, fromhttps://economics.rabobank.com/publications/2019/february/dutch-housing-market-quarterly/

40. Squires, G., & Heurkens, E. (2016). Methods and models for international comparative approaches to real estate development. *Land Use Policy*, *50*, 573–581. https://doi.org/10.1016/j.landusepol.2015.10.005

41. Statistics Netherlands. (2019, 6 augustus). *Trends in the Netherlands 2019*. Accessed on 28 oktober 2019, fromhttps://longreads.cbs.nl/trends19-eng/

42. Su Ling, C. and Almeida, S. J., 2016. Demystifying the Affordable Housing Issue in Malaysia. Accessed from: http://www.bnm.gov.my/files/publication/ar/en/2016/cp04_002_box.pdf (link as 16 Jan 2020).

43. The Netherlands Institute for Social Research. (2019 september). *Sociaal en Cultureel Planbureau - De sociale staat fromNederland*. Accessed on 28 oktober 2019, fromhttps://digitaal.scp.nl/ssn2019/

44. ULI Europe, Theseira, M., Scanlon, K., & Whitehead, C. (2020, February). Promoting housing affordability Best practices to deliver intermediate housing at scale. https://www.bouwinvest.nl/media/4597/uli-promoting-housing-affordability-report-february-2020-final.pdf

45. ULI. (2018). European housing affordability. London: Urban Land Institute.

46. UN-HABITAT, 2011. Affordable Land and Housing in Asia.

47. Urban Agenda for the EU: Pact of Amsterdam. (2016). http://ec.europa.eu/regional_policy/sources/policy/themes/urban-development/agenda/pact-of-amsterdam.pdf. Accessed 16 Jan 2020.

48. Urwin, P., Gould, M., & Faggio, G. (2016). Estimating the value of discounted rental accommodation for London's 'squeezed' key workers. London: Dolphin Living.

49. Van der Krabben, Erwin & Ploegmakers, Huub & Samsura, Ary. (2011). The Netherlands: the public development of land. https://www.researchgate.net/publication/282653626_The_Netherlands_the_public_development_of_land

50. Wetzstein, S. (2017). The global urban housing affordability crisis. *Urban Studies*, *54*(14), 3159–3177. https://doi.org/10.1177/0042098017711649

51. Wikipedia contributors. (2020, 19 april). *COROP*. Geraadpleegd van https://en.wikipedia.org/wiki/COROP

52. Wikipedia contributors. (2020, June 13). One size fit all. Wikipedia. https://en.wikipedia.org/wiki/One_size_fits_all#:%7E:text=%22One%20size%20fits%20all%22%20is,Not%20everyone%20fits%20the%20mold%20%22.

53. Wikipedia-bijdragers. (2020, February 29). Programma Aanpak Stikstof. Wikipedia. https://nl.wikipedia.org/wiki/Programma_Aanpak_Stikstof#cite_note-1

54. Wolfe, M. (2016, 7 oktober). *How Interest Rates Affect the Housing Industry*. Geraadpleegd van https://homeguides.sfgate.com/interest-rates-affect-housing-industry-7687.html

55. World Economic Forum. (2018). *Making Affordable Housing A Reality in Cities*. Geraadpleegd van http://www3.weforum.org/docs/WEF_Making_Affordable_Housing_A_Reality_In_Cities_report.pdf

9. Appendix

9.1 *Appendix A - Interview protocols*

In this appendix you will find attached the interview protocols used to carry out the semi-structured interviews. For this study two such protocols were designed, one being directed towards the market parties involved in the process (project developers and investors) and other tailored towards government or municipal representatives. The later in line with understanding the development process in practice, within different market types, through examples of completed projects and the former to understand the current policies in place for developing within the mid-segment rental housing market.

9.1.1 *Interview protocol – Market parties*

Cover letter (NOT INCLUDED IN PROTOCOL)

Dear Sir/Madam,

I would first like to thank you for taking the time of your schedule to participate in this interview session. I follow the master track of 'Management in the Built Environment' which is a two-year full-time master track that engages with the managerial dimensions and processes within the field of architecture, construction, and real estate development. This research project is the final phase of my master studies and I am conducting this interview to get a professional perspective on the development process within the mid-segment rental housing, as theoretical findings come with their limitations. Presenting an understanding of the process from a practical perspective would benefit future researchers and policy makers.

In order for you to be able to prepare for the interview I have prepared an interview protocol (attached to this email) that contains a brief about the research project and the questions I intend to ask during the interview. I would like to mention that this research is in lieu of the market conditions before the corona crisis came into effect. I understand that in the present situation the housing market is under a lot of question due to the corona crisis. This could be a topic of discussion towards the end of the interview session, given that it is important to make the research as recent as possible. Further, I request you to try and base your answers on experiences from "PROJECT NAME", an example for "MARKET TYPE", we intend to discuss. Lastly, in regard to the project being discussed, I kindly request you to, if possible, provide me with documents you think would be of relevance (E.g., Project briefs, Feasibility reports, etc.).

As it is important to conduct this interview in a professional and appropriate manner, I would like to know if you prefer to have a consent form in place. If so, I would draft one and send it to you prior to the interview, and after your perusal of the same we could sign it.

The interview would be structured to take no longer than one hour of your time. I am looking forward to hearing your answers and having an open discussion at the end of the interview, where in I would be more than delighted to answer any questions regarding this research or further discuss the future of the mid-segment rental housing market in the Netherlands.

Kind regards,

Ameesh Meghal Karekar

Table of Contents

1. Introduction

1.1 *The research in brief*

Currently in the Netherlands the mid-priced rental homes have been a hot topic of discussion for many within the housing market. The Netherlands continues to suffer from a housing shortage of 4%, implying a deficit of approx. 315,000 homes and, based on various market predictions it is expected to grow in the coming years if the supply continues to fall short. This shortage is a direct result of the increasing number of households, a growing population, and a desire to move towards cities. Predominantly experienced by households who are either entering or moving up the housing market (social to free market housing). This rising demand is in turn driving up the house and rental prices not only in the big cities but also nationally. A comparatively large portion of this shortage is experienced by the mid-segment rental housing sector. Given that it is looked upon for housing options when confronted by the rising prices within the owner-occupied and non-regulated rental sectors. Along with the households entering and moving up the housing market, this segment also faces a demand from elderly households that want to sell their existing homes to free up capital. Unfortunately, being the smallest segment, with limited policies in place, a large gap is seen between the demand and supply. An estimated 60,000 – 200,000 such homes will be needed over the coming ten years.

The aim of this research is to contribute towards reducing the housing shortage in the Netherlands by focusing on the mid-segment rental housing sector. Market research suggest that there is investment available and there are project developers ready to take on new-built projects. However, the supply is still falling short due to uncertainties on a policy front, lack of suitable locations, rising construction costs, costs of increasing sustainability requirements (delay in permits) and below market level rent increase expectations. It can be hypothesised that the problem lies mainly within the planning and feasibility phase of the development process and channelizing the available resources, hence the following main research question,

"How can the development process of mid-segment rental housing, in the Netherlands, be improved to meet the rising demand within this segment of the housing market?"

To answer this question, it would be imperative to first understand the process of realising projects within this segment of the housing market. As the housing market varies regionally, five different market types, categorized on the basis of prices and yields, demographic developments, and density of the municipalities, would be investigated (Capital Value, 2020). They are Metropolitan Areas (the five main cities Amsterdam, Utrecht, Rotterdam, The Hague, and Eindhoven), Big Cities (Ex. Arnhem, Nijmegen, Groningen) Other Randstad (Ex. Delft, Nieuwegien, Bunnik, etc. - cities or regions surrounding the metropolitan areas and big cities), Regional Municipalities (Smaller municipalities for e.g., Bergen op Zoom) and Areas of demographic decline. This research extends towards understanding and comparing the development process and policies within these different market types through examples of completed projects from each of these regions (except Areas of demographic decline). This categorization would enable the research to generalize the recommendations and results on a broader perspective, trying to cover the Netherlands.

1.2 *Structure of the interview*

The following interview is designed to last approx. 1hr 15mins and aims to gather information that would assist in answering the main research question. The interview questions have been categorised into four themes, Development Process; Policies for the mid-segment; Expectations of other involved actors; and Future of the housing market. The questions being answered on both, a broader perspective of the mid-segment rental housing market and in particular to the example project being discussed; information would be gathered to assist in understanding: (i)The development process; (ii)Challenges faced by the actors within the different stages of development and how they can be overcome; (iii)Policies and regulations that could assist development; and (iv)Expectations the actors involved have of each other. In turn this information would assist in making recommendations for improvement on both a process and policy front. The interview ends with an open discussion on the implications of the corona crisis on the housing market and any other topic that might be recommended by the interviewee.

2. Interviewee & Project information

Interviewee information	
Actor	
Name	
**Company	Position**	/
Experience (Years)	
**Email	Phone**	/
Project information	
Project name	
Type of project (Size - m² | Target group)	/
Number of homes	
Average rent	
**Location	Market Type**	/
Developer	
**Investor	Type**	/
Municipality	
**Year of completion	Duration**	/
Documents received	

3. Interview questions

3.1 *Project (Section may be skipped for investors)*

1. Could you briefly describe the project, "PROJECT NAME", in terms of its development process?
    a. Probe – How was this project conceptualised or initiated and by who (also include details of the land ownership and acquisition)?
    b. Probe – What was the target group and how was it determined?
    c. Probe – How long before the project reached the implementation phase and what policies, or regulations played a significant role in realising this project?
    d. Probe – The type of investor involved in the project and their initial goals (duration of retaining project in their portfolio)?
    e. Probe – Type of project in terms of new-build/transformation?

_____
_____
_____
_____
_____
_____

3.2 *Development process*

The first part of the interview being directed towards the development process within the mid-segment rental housing, I would like to ask you the following questions: looking at the process from a broader perspective and in particular to the case category and example being discussed.

1. From my understanding the development process for the mid-segment rental housing is no different from any kind development within the non-regulated rental sectors, however my knowledge is limited to a theoretical or rather novice understanding. What in your opinion, in practice is different in the development process for this particular segment of the housing market?
    a. Probe – Could you maybe highlight the key differences?
    b. Probe – In what phase of the development process are the most differences seen?
    c. Case – In regard to "CASE CATEGORY" is there any difference in the process as compared to the other regions, if so, could you specify and elaborate.

_____
_____
_____
_____
_____
_____

2. The Netherlands is globally recognised for its social housing where the government takes on an active role (acting as a developer) in the development process to maintain supply of social homes. Do you think that a similar approach towards mid-segment rental homes would cater to increasing the supply?
    a. Probe – Could you elaborate on the reasoning behind your answer?
    b. Probe – Would this this simply seem like an extension of the social-sector?
    c. Would this reduce the interest of private/international/institutional investors towards?

_____
_____
_____
_____

_____
_____
_____

3. What according to you are the major challenges/problems faced whilst developing in the mid-segment rental housing sector within "MARKET TYPE"?
    a. Probe – What stage of the development process faces the most challenges?
    b. Probe – Could you highlight the challenges/problems encountered at the different stages of development; planning, feasibility, realisation, and disposal that were encountered in "PROJECT NAME"?

_____
_____
_____
_____
_____
_____

4. How were these challenges/problems that occurred during the realisation of "PROJECT NAME" overcome?
    a. Probe – Did they have any time or cost implications?
    b. Probe – Were they anticipated challenges/problems or a complete surprise?

_____
_____
_____
_____

Stage	Challenge/Problem	How was it overcome	Future recommendations to avoid
Planning			
Feasibility			
Realisation			
Disposal			

Table 10: Challenges/Problems & Overcoming them

5. In terms of development feasibility, what were the determining factors while making a feasibility study for "PROJECT NAME"?
    a. Probe – What kind of land acquisition is preferred?
    b. Probe – How were the problems of rising construction costs, regulations and sustainability requirements dealt with?
    c. Probe – What is the general or ideal ROI for projects in "MARKET TYPE"?
    d. Probe – For "MARKET TYPE" what would be considered an ideal project life, how long would it take to meet the required return on investment?

_____
_____
_____
_____

6. (Skip for developers) On an investment front, how do investors evaluate their choices of acquiring existing stock, new-build projects, or forward funding for new-build projects?
    a. Probe – Could you highlight the difference based on the different market types (Following the earlier made categorization)?

_____
_____
_____
_____
_____
_____

7. In your opinion how can the development process be improved to be able to deliver new-build projects at a faster rate, given the rising housing shortage in the Netherlands and in the mid-segment rental housing market?
    a. Probe – What would be your conclusive statement?

_____
_____
_____
_____
_____

Development process in terms of	Recommendation
Communication	
Feasibility and costs	
Collaboration	
Resource management	
Stimulating policies	
Capacity building policies	

3.3 *Policies for the mid-segment*

This section of the interview aims to discuss and understand the existing policies for developing in the mid-segment rental housing sector, from a national and regional perspective. Additionally, in regard to the policies that were in place during the development of the project being discussed as the projects are completed projects and the policies for this segment of the housing market are still being developed. Although the existing policies seem to be directed towards managing and controlling the stock and very little in regard to new development. For example, in Amsterdam (which falls in the category of Metropolitan Areas), the action plan for more middle rent 2017 – 2025 mainly talks about allocation of new mid-segment homes to either flowthroughs from the social sector or middle-income households. I understand that regulating the mid-segment through allocation is important given that demand for such homes seems to be rising at an alarming rate as compared to the supply, although I seem to find very little about policies that focus towards directly encouraging new-build projects.

1. What is your opinion towards the development of these regulating policies?
   a. Probe – Are they directly supporting the addition of new stock? If so, how?

_____
_____
_____
_____
_____
_____

2. What kind of policy instruments do you think would encourage market-parties to invest and develop more within the mid-segment?
   a. Probe – What kind of subsidies are currently in place?
   b. Probe – Would just subsidies on land prices or tax benefits attract developer/investors? Given that these subsidies would not come into effect for privately owned land.

_____
_____
_____
_____
_____
_____

3. In regard to the project being discussed what kind of policies were in place for developers/investors while realising the project and how did they assist or oppose the development process?
   a. Probe – How did the municipality support this project?
   b. Probe – Was there any subsidies given to the developers/contractors/investors who were a part of this project? If so kindly elaborate.

_____
_____
_____
_____
_____
_____

4. In lieu of the tightening sustainable development regulations and rising construction costs, I understand that developing mid-segment rental homes can be difficult given that the costs of conforming to these requirements are comparatively high. After bearing those costs it is only normal for investors and developers to try to recover them through rental income. In your opinion how can these costs be recovered, whilst maintaining mid-priced or below market level rental prices?
    a. Probe – Some municipalities have policies in place for the mid-segment that stimulate a fixed period of time those homes need to be made available to the mid-segment (E.g., In Amsterdam it is a period of 25years with only inflation+1%-following rent increases).

_____
_____
_____
_____
_____
_____

5. What in your opinion can the government/municipalities do to attract more new-build developments in this segment of the housing market?
    a. Probe – Do you think that more stimulating or capacity building policies would be beneficial?

_____
_____
_____
_____

Type of policy	Recommendation
Stimulating	
Capacity building	
Other (Specify) _____	

6. I will be having a more detailed interview session with municipal representatives regarding the policies being developed for the mid-segment rental housing sector and would like to know if you have any questions that I could ask during those interviews?
    a. Probe – At national and regional level.

_____
_____
_____
_____
_____
_____

3.4 *Expectations of other involved actors*

The real estate development process as defined by many authors is a complex organisational system consisting of various actors whose actions have implications not only on the market or people but also on each-other. Hence it would unusual if these actors did not have expectations of each-other.

1. For you as a developer/investor to be able to operate/deliver projects within the mid-segment what expectations do you have of other market actors such as contractors/developers/investors/designers?
   a. Probe – In regard to increasing the rate and number of the supply, of this segment of the housing market?

_____
_____
_____
_____
_____
_____

Actor	*Expectations*
Developers	
Investors	
Contractors	
Other (specify) -	

Table 11: Expectations of actors involved.

2. As a market actor what are your expectations of the government/municipalities, both in general and in particular to the mid-segment?
   a. Probe – Do you feel that they are doing enough to support market parties? (briefly explain your answer)
   b. Probe – What kind of subsidies or benefits would you expect?
   c. Probe – Are they expecting too much from the private sector?
   d. Probe – In your opinion how can they speedup their processes?

_____
_____
_____
_____
_____
_____

3.5 *Future of the housing market.*

The final section of the interview is directed towards the opinion of the interviewee in regard to the future of the housing market, both in general and in particular to the mid-segment. Although, answer the following questions with an assumption of the corona crisis not being a factor. Given that the scope of this research was established prior to the crisis.

1. As seen in a few market reports, the housing shortage is going to continue to exist over the coming years. However, predictions are being made that at some point in the future (based on data regarding the number of planned developments) it is going to reduce. What is your opinion on these predictions of the housing shortage reducing?
    a. Probe – Do you think that these planned developments would be realised in time?
    b. Probe – Are the development costs only going to rise or would there be a plateauing point?
    c. Probe – In terms of affordability of this future market.

_____
_____
_____
_____
_____
_____

2. In lieu of the mid-segment rental sector, what do you think the future of this segment of the market is? (In terms of availability and stock remaining with this segment)
    a. Probe – At some point the stock of the mid-segment is going to grow or transform into expensive rental homes.

_____
_____
_____
_____
_____

3. Some market reports mention that the mid-segment is currently growing at the cost of other segments of the housing market. For, example and increasing number of cheaper owner-occupied homes are being bought to be rented in the mid-segment. Do you think this could have a negative effect on the other segments and would in turn create a new problem I the future?
    a. Probe – Would it be possible for this growth to have such a large effect?

_____
_____
_____
_____
_____

4. On hypothetical sense, if in the future the mid-segment housing market attains an equilibrium in terms of demand and supply, what do you think would happen?
    a. Probe – In terms of vacancy rates.
    b. Probe – Would house and rent prices reduce?

_____
_____
_____
_____
_____

4. Open discussion

4.1 *Implications of the 'Corona-crisis' 2020 on the housing market*

1. In regard to the housing market in the Netherlands, and in particular to the mid-segment rental housing market. Briefly discuss your opinion on the effects of the corona crisis in lieu of – House prices | Investments | Construction Costs | Resources | Delivery time | Policies.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

4.2 *Other topics*

Topics recommended by the interviewee.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

5. Consent form (UPON REQUEST)

Please tick the appropriate boxes	Yes	No
Taking part in the interview		
I have read and understood the interview information dated __/__/____, or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.	☐	☐
I consent voluntarily to be a participant in this interview and understand that I can refuse to answer questions and I can withdraw from the interview at any time, without having to give a reason.	☐	☐
I understand that taking part in the interview involves being asked several questions about my background and opinion from working experiences. I also understand that the conversation during the interview will be recorded in audio to facilitate the process of the research. I am informed that the interview and audio-record are confidential and will only be used for academic purposes.	☐	☐
Use of the information in the interview		
I understand that the information I provide will be used for the research of "***Rethinking the development process of mid-segment rental housing in the Netherlands.***" Further understand that the research is part of MSc4 Graduation Laboratory: Management in the Built Environment (AR4R010), master thesis of **Ameesh Meghal Karekar** at TU Delft and the interview is conducted for academic purposes only.	☐	☐
I understand that personal information collected about me that can identify me, such as my name, my organisation, my profession background, and information of my client, will not be shared beyond the study team.	☐	☐
I agree that my information can be quoted in research outputs.	☐	☐
I agree that my real name can be used for quotes.	☐	☐
Future use and reuse of the information by others		
I give permission for the audio-record information that I provide for this research, may be archived in TU Delft database so it can be used for future research and learning.	☐	☐
Signatures		

Name of participant	***Signature***	***Date & Place***

I have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands what they are freely consenting.

Ameesh Meghal Karekar　　　　　　＿＿＿＿＿＿＿＿＿＿＿　　　　　＿＿＿＿＿＿＿＿＿＿

Researcher	***Signature***	***Date & Place***

Study contact details for further information:

Ameesh Meghal Karekar　　　　　　E-mail: |Ph:

Table of Contents

1. Introduction

1.1 *The research in brief*

Currently in the Netherlands the mid-priced rental homes have been a hot topic of discussion for many within the housing market. The Netherlands continues to suffer from a housing shortage of 4%, implying a deficit of approx. 315,000 homes and, based on various market predictions it is expected to grow in the coming years if the supply continues to fall short. This shortage is a direct result of the increasing number of households, a growing population, and a desire to move towards cities. Predominantly experienced by households who are either entering or moving up the housing market (social to free market housing). This rising demand is in turn driving up the house and rental prices not only in the big cities but also nationally. A comparatively large portion of this shortage is experienced by the mid-segment rental housing sector. Given that it is looked upon for housing options when confronted by the rising prices within the owner-occupied and non-regulated rental sectors. Along with the households entering and moving up the housing market, this segment also faces a demand from elderly households that want to sell their existing homes to free up capital. Unfortunately, being the smallest segment, with limited policies in place, a large gap is seen between the demand and supply. An estimated 60,000 – 200,000 such homes will be needed over the coming ten years.

The aim of this research is to contribute towards reducing the housing shortage in the Netherlands by focusing on the mid-segment rental housing sector. Market research suggest that there is investment available and there are project developers ready to take on new-built projects. However, the supply is still falling short due to uncertainties on a policy front, lack of suitable locations, rising construction costs, costs of increasing sustainability requirements (delay in permits) and below market level rent increase expectations. It can be hypothesised that the problem lies mainly within the planning and feasibility phase of the development process and channelizing the available resources, hence the following main research question,

"How can the development process of mid-segment rental housing, in the Netherlands, be improved to meet the rising demand within this segment of the housing market?"

To answer this question, it would be imperative to first understand the process of realising projects within this segment of the housing market. As the housing market varies regionally, five different market types, categorized on the basis of prices and yields, demographic developments, and density of the municipalities, would be investigated (Capital Value, 2020). They are Metropolitan Areas (the five main cities Amsterdam, Utrecht, Rotterdam, The Hague, and Eindhoven), Big Cities (Ex. Arnhem, Nijmegen, Groningen) Other Randstad (Ex. Delft, Nieuwegien, Bunnik, etc. - cities or regions surrounding the metropolitan areas and big cities), Regional Municipalities (Smaller municipalities for e.g., Bergen op Zoom) and Areas of demographic decline. This research extends towards understanding and comparing the development process and policies within these different market types through examples of completed projects from each of these regions (except Areas of demographic decline). This categorization would enable the research to generalize the recommendations and results on a broader perspective, trying to cover the Netherlands.

1.2 *Structure of the interview*

The following interview is designed to last approx. 1hr 15mins and aims to gather information that would assist in answering the main research question. The interview questions have been categorised into four themes, Development Process; Policies for the mid-segment; Expectations of other involved actors; and Future of the housing market. The questions being answered on both, a broader perspective of the mid-segment rental housing market and in particular to the example project being discussed; information would be gathered to assist in understanding: (i)The development process; (ii)Challenges faced by the actors within the different stages of development and how they can be overcome; (iii)Policies and regulations that could assist development; and (iv)Expectations the actors involved have of each other. In turn this information would assist in making recommendations for improvement on both a process and policy front.

2. Interviewee & municipality information

Interviewee information		
Actor	Municipality	
Name		
Municipality | Position		
Email | Phone		
Municipality information		
Existing policies/action plan		
Demand for mid-segment rental | Target groups		
Location | Market Type		
Municipality		

3. Interview questions

3.1 Development process

The first part of the interview being directed towards the development process within the mid-segment rental housing, I would like to ask you the following questions: looking at the process from a broader perspective and in particular to the case category and example being discussed.

2. What, in your opinion, is different in the development process for mid-segment rental homes as compared to social or other free sector homes?
   a. Probe – Do municipalities approach these types of developments differently? If so how and if not, why?

_____
_____
_____

3. What according to you can municipalities do to improve the development process?
   a. Probe – To speed up the process and in turn the rate of supply?
   b. Probe – To attract more market actors to develop within this segment?

_____
_____
_____

4. In your opinion how can the development process be improved to be able to deliver new-build projects at a faster rate, given the rising housing shortage in the Netherlands and in the mid-segment rental housing market?
   a. Probe – What would be your conclusive statement?

Development process in terms of	Recommendation
Communication	
Feasibility and costs	
Collaboration	
Resource management	
Stimulating policies	
Capacity building policies	

3.2 Challenges

8. What according to you are the major challenges/problems faced by municipalities whilst developing in the mid-segment rental housing sector within "MARKET TYPE"?
   a. Probe – What stage of the development process faces the most challenges?

_____
_____
_____

9. How are these challenges/problems usually overcome?
   a. Probe – Can the municipalities offer subsidies to market parties? If so what kind?
   b. Probe – Subsidies when the land is not from the municipality / how can municipalities support development of privately owned land.

_____
_____
_____
_____

Stage	Challenge/Problem	How was it overcome	Future recommendations to avoid
Planning			
Feasibility			
Realisation			
Disposal			

Table 12: Challenges/Problems & Overcoming them

3.3 *Policies for the mid-segment*

This section of the interview aims to discuss and understand the existing policies for developing in the mid-segment rental housing sector, from a national and regional perspective. Existing policies seem to direct towards managing and controlling the stock and very little in regard to supporting or stimulating new development.

7. What is your opinion towards the development of these regulating policies?
    a. Probe – Are they directly supporting the addition of new stock? If so, how?

_____
_____
_____

8. What kind of policy instruments do you think would encourage market-parties to invest and develop more within the mid-segment?
    a. Probe – Are there any such stimulating or capacity building policies in place? If so, what are they and if not why?

_____
_____
_____

9. In regard to the "MUNICIPALITY" being discussed what kind of policies are in place for developers/investors while realising the project and how did they assist or oppose the development process?
    a. Probe – How does the municipality support such projects?
    b. Probe – Was there any subsidies given to the developers/contractors/investors who work on such project? If so kindly elaborate.

_____
_____
_____

10. After having a few interviews with market actors, I learned that the problem they predominantly face is arriving at a feasible business case as municipalities still go by highest bid in tendering processes. Would it possible for municipalities to offer lower land prices based on location to assist developers in delivering mid-segment rental homes?
    a. Probe – Given that in some locations the rents of such homes are below market level rents.
    b. Probe – Allowing some amount of flexibility in the negotiation phase regarding building regulations. As from the interviews I learned that project developers also find it hard to deliver feasible business cases due to the number of regulations that come into place.

_____
_____
_____
_____

11. Would municipalities be willing to take on a more active role, rather than only playing a regulative one?
   a. Probe – Forming consortiums with market parties and maybe taking on some of the risks associated with zoning plans or building permits?

_____
_____
_____

3.4 *Expectations of other involved actors*

The real estate development process as defined by many authors is a complex organisational system consisting of various actors whose actions have implications not only on the market or people but also on each-other. Hence it would unusual if these actors did not have expectations of each-other.

3. What kind of expectations do municipalities have from market parties?
   a. Probe – In regard to increasing the rate and number of the supply, of this segment of the housing market?

Actor	Expectations
Developers	
Investors	

Table 13: Expectations of actors involved.

4. Given that the policies are currently locally made, would you have expectations from the national government to make policies at a national level?
   a. Probe – How can the National government assist regional governments?

_____
_____
_____

3.5 *Future of the housing market.*

5. As seen in a few market reports, the housing shortage is going to continue to exist over the coming years. However, predictions are being made that at some point in the future (based on data regarding the number of planned developments) it is going to reduce. ***What is your opinion on these predictions of the housing shortage reducing?***
   a. Probe – Do you think that these planned developments would be realised in time?
   b. Probe – Are the development costs only going to rise or would there be a plateauing point?
   c. Probe – In terms of affordability of this future market.

_____
_____
_____

6. How can municipalities ensure a steady supply of affordable rental homes given that there are currently only rough estimates being made of the growth in demand?
   a. Probe – At some point the stock of the mid-segment is going to grow or transform into expensive rental homes.

_____
_____
_____

4. Consent form (UPON REQUEST)

Please tick the appropriate boxes	Yes	No
Taking part in the interview		
I have read and understood the interview information dated __/__/____, or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.	☐	☐
I consent voluntarily to be a participant in this interview and understand that I can refuse to answer questions and I can withdraw from the interview at any time, without having to give a reason.	☐	☐
I understand that taking part in the interview involves being asked several questions about my background and opinion from working experiences. I also understand that the conversation during the interview will be recorded in audio to facilitate the process of the research. I am informed that the interview and audio-record are confidential and will only be used for academic purposes.	☐	☐
Use of the information in the interview		
I understand that the information I provide will be used for the research of "***Rethinking the development process of mid-segment rental housing in the Netherlands."*** Further understand that the research is part of MSc4 Graduation Laboratory: Management in the Built Environment (AR4R010), master thesis of **Ameesh Meghal Karekar** at TU Delft and the interview is conducted for academic purposes only.	☐	☐
I understand that personal information collected about me that can identify me, such as my name, my organisation, my profession background, and information of my client, will not be shared beyond the study team.	☐	☐
I agree that my information can be quoted in research outputs.	☐	☐
I agree that my real name can be used for quotes.	☐	☐
Future use and reuse of the information by others		
I give permission for the audio-record information that I provide for this research, may be archived in TU Delft database so it can be used for future research and learning.	☐	☐
Signatures		
Name of participant *Signature* *Date & Place*		
I have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands what they are freely consenting. Ameesh Meghal Karekar _____ _____		
Researcher *Signature* *Date & Place*		
Study contact details for further information:		
Ameesh Meghal Karekar E-mail: |Ph:		

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before
P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	**Ameesh Meghal Karekar**
Student number	4797523
Telephone number	
Private e-mail address	

Studio		
Name / Theme	Housing management: Development within the mid-segment rental housing market	
Main mentor	Dr. P.J. Boelhouwer	
Second mentor	Dr. I. Nase	
Argumentation of choice of the studio	[Argumentation of choice of the studio]	

Graduation project	
Title of the graduation project	**Attracting project developers to the mid-segment rental housing market.**
Aim & Goal	The aim of this research, or the bigger picture, is to contribute towards improving the housing shortage in the Netherlands. This research extends towards a particular segment of the housing market, the mid-segment rental housing. In turn contributing to the aim of reducing the shortage of housing in the Netherlands. As it would be near impossible to solve this pressing issue all at once. Aligning with the aim, the goal of the research is to attract more project developers in the Netherlands to consider developing projects in the mid-segment rental market. This goal can be achieved by presenting a detailed case study analysis of various successful projects, in the mid-segment rental housing in the Netherlands. Analysing projects that are set in different contexts and environments will give a wholistic idea of the various possibilities for development within the mid-segment rental housing market.
Location:	The Netherlands
The posed problem,	Having a preliminary understanding of the current situation of the Dutch residential market. It can be seen that there is a growing shortage and solving this shortage is on the agenda of many public and private organisations. The Dutch government has visions set out aligning to the sustainability goals of the UN and providing housing to all is one of the most important. Achieving this goal would imply that there is a simultaneous growth in the different sectors of the residential market, as focus in just one sector or type would not ensure the goal to realise housing for all segments, in turn making the housing market accessible to all income groups. Which brings us to

	the rental market, this sector of the housing market also sees a high and quickly growing demand for around 60,000 to 200,000 new non-regulated affordable rental homes (Capital Value & ABF Research, 2019). This demand for rental homes is mostly seen by starters and the elderly, as their position to enter the housing market as home buyers is not possible, turning them towards the rental market. As of January 2019, the Dutch government have revised the rent control ceiling on social housing which in turn drives more people to turn towards the mid-segment rental market. As they are now above the liberalization threshold but still do not have a high enough income to rent from the private sector or buy homes due to the rise in housing prices. Thus, the demand for mid-segment rental homes is only going up and there is a pressing need to improve this segment of the housing market. Both public and private institutions together need to address this problem, as developers need to be able to create building supply that is feasible and also meets the required standards. Which with the new sustainability goals of the government could be quite challenging. The supply or output for this demand is very slow due to several reasons, of which the most pressing is the rising cost of labour and material as this drives up the construction cost making it difficult to realise homes in this segment. Housing associations also help provide to this segment of the housing market but unfortunately are now confronted with the dilemma of distributing their profits towards improving the sustainability of existing stock or adding to the stock by building. Overall, the midsegment rental housing is high in demand and requires attention from municipalities, investors, developers, and housing associations, in other words there is a problem which needs to be addressed. This research extends towards attracting project developers in the Netherlands to contribute to the mid-segment rental housing sector by providing them with examples of how development in this segment are feasible, profitable, and achievable in terms of meeting required standards of sustainability. Analysing multiple cases that are set in different contexts of location, scale, local and national regulations, and type of dwellings based on the different target groups. Providing insight that this type of development is not only lucrative in the big cities but also in the smaller municipalities. To do so the following research question must be answered from literature and field research.
Research questions	### 9.1.1 Main research question After carrying out preliminary research, setting the goal and defining the problem at hand the main research question that arises is, ***How are project developers in the Netherlands delivering successful projects within the mid-segment rental housing market?*** To be able to answer this main research question the following concepts will be explored through sub-questions (i)Real estate development process; (ii)The housing market in the Netherlands; (iii)Affordability and (iv)Measuring project success. ### 9.1.2 Sub – Questions *The housing market in the Netherlands* I. What is the structure of the housing market in the Netherlands?

	II. What are the types of dwellings and the demand for them?
	III. What is the current situation of the housing market in the Netherlands?
	  a. The demand and supply.
	  b. Development within the housing market.
	  c. Development per region.
	  d. The national housing agenda.
	IV. Why is there such a high demand for mid-segment rental housing?
	  a. What are the target groups for this segment of the housing market?
	  b. What are the policies or regulations for this segment of the housing market?
	V. What is the role of investors?
	  a. Investment in the housing market.
	  b. Investment per region.
	  c. Investing in the mid-segment rental housing market.
	
	Real estate development process
	  I. How does the real estate development cycle work?
	  II. What are the different development models available and how do they influence development within the mid-segment rental housing market?
	
	Affordability
	  I. What is affordability and affordable housing?
	  II. Affordable housing in the Netherlands?
	  III. What are the challenges of affordable housing?
	
	Measuring project success
	  I. What are the factors that determine the success of a project?
	    a. For investors.
	    b. For developers.
	    c. For government parties.
	  II. What is project success in terms of affordability?

Literature study.	The literature review focusses on trying to answer the sub-question of the research. Exploring the concepts that eventually set the context of the research and determine the criteria for selecting cases that would later be analysed. First, conducting a market analysis to understand the structure of the housing market in the Netherlands, the current situation of the market, the demand and supply within the housing market and in particular the demand and supply of the mid-segment rental housing market. Having set the context of the situation of the housing market, further analysis of investments within the market is presented alongside the policies and regulations. The market analysis addresses the housing market in general with more focus towards the mid-segment rental housing market. Second, would be to present an understanding of the real estate development process within the housing market in the Netherlands. Thirdly, exploring the concept of affordability and affordable housing, given that the mid-segment rental market stems from the concept of providing affordable housing options to mid-income households. Lastly, the factors that determine a successful project are explored to set grounds to evaluate the selected cases, in lieu of the goal to show project developers in the Netherlands that developing in the mid-segment rental housing market is a feasible and profitable option.

Process

Method description

To be able to successfully answer the main research question (1.4.1.) a multiple case study approach will be adopted. However, it would first be essential to answer the sub-questions from literature to set the context and define the population of the research. The literature study will extend to exploring the concepts of affordability, measuring project success, the real estate development process, various development models and a market analysis that depicts the situation of the housing market in the Netherlands (developments and investment within the market). Given that the residential market in the Netherlands is set in multiple contexts; based on location, type of dwelling, different target groups and types of projects (renovation/new construction) it is essential that cases are selected from each of these contexts to present a wholistic understanding of how development in the mid-segment rental housing market is feasible within each of the contexts. To eventually be able to illustrate to project developers that this segment of the housing market needs attention and is possible to realize in each context. In the following chapter (Ch 3) the methodology and criteria for selecting cases will be explained in detail. Having analysed the cases, the research would end in presenting the findings of the different cases showing how each case was successful within its context to the different stakeholders. This hopefully will attract more project developers to this segment of the housing market.

Reflection

What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A, U, BT, LA, MBE), and your master programme (MSc AUBS)?

Development within the housing market in the Netherlands, being the broader topic of my research, it connects to my master track of MBE on the level of understanding the housing market in the Netherlands, the development process, and the various models within it, exploring the concept of affordability and affordable housing and analysing cases on the basis of project success factors. These concepts broadly come under the branch of housing management systems and policies which is a key aspect in the built environment.

9.1.3 Social relevance

The Netherlands is currently facing severe shortage of housing, the numbers are only seeming to grow, and predictions are being made that if nothing is done soon this shortage would only increase. Providing housing is one of the most important tasks of any government, controlling the market to make it accessible to all tiers of society is essentially the goal of the government of the Netherlands. With the growth and aging of population housing demands are constantly changing and the market and governments need to be able to cope with this change. In the recent years there has been substantial economic development, however this has not directly translated into improving the quality of life (The Netherlands Institute for Social Research, 2019). In the Netherlands, the demand for affordable housing options in major cities is only going up and for various reasons the market is not being able to deliver. This research extends towards finding a solution to solving the shortage of this type of housing. The percentage of the population seeking for housing in this segment is high and they consist mainly of the young and elderly. Carrying out this research could assist in helping this sector of society, as they too need a place to live. Currently there are many people in this segment of society who are struggling with finding a suitable home for themselves as the housing market is not being able to cater at the speed of demand. With the increasing demand of single-person households it becomes challenging for market parties to deliver housing units that are affordable and comply with the other regulations. Lastly, with the new threshold to social housing there is going to be large portion of the society who could benefit from the development of mid-segment rental housing. By attracting more project developers to develop in this segment of the housing market could benefit this major chunk of

society (Middle society is almost 85% of the population (The Netherlands Institute for Social Research, 2019)).

9.1.4 Scientific relevance

Affordability is a concept that has been explored by many scholars over time. The mid-segment rental housing market takes it origin from the concepts of affordability; however, development strategies have not been tailored for this specific segment of the housing market in the Netherlands. There are a lot of examples in literature, guiding tools for affordable development, affordability is one aspect of mid-segment rental housing and there are other factors that govern the development of this segment. No doubt that there are already developers and investors already realising this type of housing, but it is not happening at the rate it should (keeping up to the demand). The goal of the research being to attract more project developers in the Netherlands to develop within this segment of the housing market by presenting to them how it is successfully being done by some project developers. There is a significant lag in the supply of such housing and analysing multiple cases set in different contexts could provide insight on how lucrative this segment of the market can be for project developers, investors, municipalities, and people.

9.2 Personal motivation

It has always been my aim to work as or with a project developer, however I was not sure about what type of projects interest me more. After having been in the Netherlands for over a year and following the master track of Management in the Built Environment I have realised that studies in the direction of housing development, systems, policies, and management is what I would like to pursue. Over the past year I have read about and looked into the Dutch housing market for various courses that I followed and each time I learned something new my interest towards this sector of the built environment grew. Housing market, project development and affordability being my key variables I started exploring for graduation topics and opportunities. During the presentation of Prof. Dr. P.J. Boelhouwer the opportunity to work along with a company, Sustay, was brought to light. They are project developers in Utrecht who are currently focussing on mid segment rental housing and were looking for students interested to carry out research in this field. This being the perfect blend of topics for me I got in touch with Prof. Dr. P.J. Boelhouwer and in turn with Sustay to further discuss the research topic and how I can align my research to the requirements of the company. One of the biggest questions being why aren't more project developers in the Netherlands taking on projects in this segment of the market? However, my research does not extend towards answering this question, it will be in the direction to show other project developers how development in this segment could be a good option for them to pursue.

Planning towards P4