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Alternatives for first-time buyers

A study on the barriers and enablers of alternative purchase instruments to increase the accessibility of first-time buyers to the Dutch housing market.

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Author

Name: D.W.T. (Deanne) Muisers

Student Number: 4653955

Educational institution

University: Delft University of Technology

Faculty: Architecture and the Built Environment

Master: Architecture, Urbanism and Building Sciences

Track: Management in the Built Environment

Supervisors

First mentor: Ir. E.H.M. (Ellen) Geurts

Second mentor: Dr. H.M.H. (Harry) van der Heijden

Delegate of the
Board of Examiners: Ir. C.M. (Cecile) Calis

Graduation Company: Brink

Preface

Dear reader,

This thesis is the result of my graduation research for the master track Management in the Built Environment at the Faculty of Architecture and the Built Environment at Delft University of Technology. This research studied the barriers and enablers of alternative purchase instruments in the Netherlands with regard to the accessibility of first-time buyers to the housing market, and recommended alterations to the studied purchase instruments based on these identified enablers and barriers.

I have always had special interest in Real Estate Management, especially in housing as it is a basic need. At the same time, the current housing crisis in the Netherlands has heavily influenced the choice of topic for this thesis. This study has only increased my fascination for this subject, supporting my motivation during the process.

I want to express my gratitude towards my mentors, Ir. Ellen Geurts and Dr. Harry van der Heijden for guiding and supporting me during the process of writing my thesis. Secondly, I want to thank Joost van der Werf, my mentor at Brink for providing me with different perspectives towards this topic during my research. Thirdly, I want to thank the interviewees for taking the time to provide me with the necessary information to be able to conduct this research.

Lastly, I want to thank the people in my personal circle for their support during the last year. It has been an interesting process during which I learned a lot. I am looking forward to applying the knowledge I gained from this study in practice in the future.

I hope you enjoy reading this master thesis!

Deanne Muisers

Delft, June 2023

Abstract

The Netherlands has been in a serious housing crisis for the past few years. The current housing shortage is estimated at 315.000 units and house prices have increased significantly. Especially first-time buyers experience a decrease in accessibility to the Dutch owner-occupied housing market, and their position on the housing market deteriorates. The government has implemented several regulations in attempt to increase this accessibility, and organizations have introduced alternative purchase instruments that are designed to increase the accessibility of first-time buyers to the market. Despite all these efforts, access to the housing market remains a serious challenge for first-time buyers.

The accessibility of first-time buyers to the owner-occupied housing market is highly relevant to the functioning of the housing market as whole, since it stimulates the housing market flow. Additionally, the inaccessibility to the owner-occupied market results in households not being able to build equity through homeownership, stimulating a prosperity gap. Although studies have researched the position of first-time buyers on the housing market, as well as provided a comparison between several alternative purchase instruments, there is a lack of research on how these instruments enhance the accessibility of first-time buyers to the housing market and which factors form a barrier in this enhancement. Therefore, this research identifies the factors limiting the access of first-time buyers to the housing market, and establishes through a comparative study the enablers and barriers of four alternative purchase instruments in the Netherlands with regard to enhancing the increase in the accessibility. The identified barriers are transformed into suggestions for alterations of the alternative purchase instruments to increase the impact they have on enhancing the accessibility of first-time buyers to the market. Literature study on first-time buyers, their limitations, and alternative purchase instruments in the Netherlands was complemented with interviews, providing several perspectives on the alternative purchase instruments. The main limitation of first-time buyers in acquiring homeownership is their limited financing capacity. The group of first-time buyers with an income between €40.000 and €60.000 (equal to 1 – 1,5 modal income) experience the greatest limitations since their income is too high to be eligible for social rent, but too low to get access to enough financial resources to purchase a property on the owner-occupied housing market. The analysis of the empirical data shows that on the small scale that the instruments are currently deployed in, they are successful in increasing the accessibility of first-time buyers to the housing market since they lower the necessary funding capacity. However, the deployment capacity of the instruments is being influenced by external factors, limiting the ability to increase the deployment capacity of the instruments and therefore the impact on the increase of accessibility of first-time buyers. By making a purchase instrument individual bound instead of property bound, the deployment capacity is no longer dependent on the supply side of the housing market. This also lowers the desire to apply an instrument to the same property for multiple households, allowing households to pay off the instrument's rights and acquire the bare property rights. Finally, the division of financial benefits should be in equilibrium, meaning that the financial benefits should be high enough on the supplier's side for the instrument to be viable, but also on the user's side since financing capacity is the main problem these instruments try to tackle.

Keywords: first-time buyers, accessibility, Dutch owner-occupied housing market, alternative purchase instruments, housing finance

Summary

The Netherlands is known as a country in which the housing supply poorly follows the housing demand. However, this mismatch between the supply and demand of housing has become more extreme for the past few years, resulting in into a serious housing crisis. The housing shortage contributes to limited accessibility of the owner-occupied housing market for first-time buyers, which impacts the housing market as a whole. First-time buyers often leave a (social) rental property, and usually enter the market at the base of the property ladder, stimulating both the transaction quantity and the flow of the housing market. The limited access therefore forms a barrier to the housing market flow. The government has implemented several policies to increase the accessibility of first-time buyers to the market, like the starter loan, the starter exemption for transfer tax, and the recently announced fund for affordable owner-occupied housing. Non-governmental entities have also introduced instruments to the market to make the purchase of a property more affordable, known as alternative purchase instruments. Despite the above-mentioned efforts by both governmental entities and market parties to increase the accessibility of first-time buyers to the Dutch housing market, access to the owner-occupied housing market remains a challenge for first-time buyers.

This study compares four different alternative purchase instruments: KoopGarant, KoopStart, Slimmer Kopen, and Duokoop. The purpose of this comparison is to establish the barriers and enablers from both the user's (first-time buyer) perspective and the supplier's perspective with regard to enhancing the accessibility of first-time buyers to the Dutch housing market.

Literature research was used to characterize the first-time buyers on the Dutch housing market that experience the most limitations in accessing the housing market, and to identify which limitations they experience. Semi-structural interviews were conducted with experts, the suppliers of the instruments, and the external intervening factors to gather the necessary knowledge on the instruments. The instruments were then compared to each other and to the characteristics and limitations of the first-time buyers to determine the barricading factors within each instrument.

Literature showed that the first-time buyers with an income between €40.000 and €60.000 (1 – 1,5 modal income) experience the most limitations in accessing the owner-occupied housing market. The financing capacity of this group is their main limitation as this income does not allow them access to the social rental sector. On the other hand, it does not allow them access to a mortgage sufficient to purchase a property on the owner-occupied housing market.

With the use of interviews, the necessary information was gathered to make a comparison of the instruments, and compare them to the characteristics of first-time buyers and their identified limitations. The main goal of all instruments is the same. By lowering the purchase price of the property under the market value, by either providing a discount or leasing the ground, the properties are made more affordable since less financial resources are needed for the purchase. The comparisons of the instruments established the following findings:

(1) External factors limit the deployment capacity. Therefore, the impact that the instruments can have is limited. KoopGarant, KoopStart, and Slimmer Kopen are alle dependent on the amount of properties available and are therefore property bound. The current housing shortage therefore limits the deployment capacity of these instruments. Duokoop is individual bound, meaning it can be applied to any property within the NHG criteria. However, the deployment capacity of Duokoop is limited by the financial capacity of the fund financing the instrument. The instruments are successful on the relatively small scale they are deployed in right now. However, the external factors limit the

possibility to deploy the studied instruments on a bigger scale, preventing them from making a bigger impact on the accessibility of first-time buyers to the Dutch housing market.

(2) If the level of deployment would not be so limited and would be bound to an individual instead of the property, the desire to be able to repeatedly use an instrument on the same property would be minimized. However, the current situation in which the deployment of alternative purchase instruments is limited, forces the instrument to either focus on repeatedly providing a chance to first-time buyers to access the housing market and not give them the opportunity to acquire the bare property rights as well, or only stimulate the accessibility of the housing market with the first purchase of the property but provide the opportunity to acquire the bare property rights. So this barrier of having to choose between the two factors is a result of the previously discussed barrier, the limited deployment capacity.

(3) Since the financing capacity of first-time buyers was identified as the main limitation, and the finances from the supplier's side of the instruments also form a barrier in enhancing the accessibility to the housing market, the financial input and output of the instruments were compared from both the user's and the supplier's side. It was concluded that in a rising market, KoopStart is financially the most beneficial for first-time buyers which is mainly due to the 1 : 1 value development division and the absence of canon payments to make. In contrast, Duokoop is financially seen the least beneficial in this scenario because of the monthly canon payments. In a falling market, KoopGarant and Slimmer Kopen are the most beneficial from the first-time buyer's financial perspective, since the supplier of the instrument takes a larger share of the value loss.

From the supplier's perspective, Duokoop is financially the most beneficial in a rising market and in a falling market, which is mainly due to the monthly canon payments to be received. KoopStart is in a rising market the least beneficial financially seen, since it carries the lowest share in value development and there are no canon payments to be received. In a falling market, KoopGarant and Slimmer Kopen are most risky financially seen, since they contain the largest share of value loss for the supplier of the instrument.

Comparing the instruments with regard to the financial obligations of both parties and the financial benefits to gain, it can be concluded that the higher the financial benefit for the supplier, the higher the financial obligation for the buyer and vice versa. Additionally, the higher the potential increase in value, the higher the risk of potential loss. The lower the potential increase in value, the lower the risk of potential loss. This is applicable to both the first-time buyer's side and the supplier's side.

This study is exposed to a variety of limitations. Theoretical limitations within this study were that the housing market is constantly evolving and so is the available literature, housing policy and regulations on this subject. Therefore, the literature review might not be up to date anymore. Additionally, slightly different criteria were applied to define the group first-time buyers in the reviewed literature. Lastly, insufficient data was available on the position of first-time buyers in neighboring countries to make a comparison to the Netherlands. Limitations with regard to the scope of the research were that only access to housing finance was taken into account, no other factors of accessibility were taken into account. Additionally, only four purchase instruments were compared, while the Netherlands knows many more. A limitation in the methodology was that the variety in the method of data gathering. Empirical data was gathered from the perspective of the supplier of the instrument, experts on this field of knowledge and the external intervening factors. However, the data on the users of the instruments, the first-time buyers was gathered through literature review.

The results of this study give insight in the barriers and enablers of the studied alternative purchase instruments. These insights were used to formulate the following recommendations for practice. The deployment capacity could be increased to make a bigger impact by making the instrument individual bound instead of property bound. Secondly, the users of the instrument should be given the

opportunity to acquire the bare property rights. And lastly, an equilibrium should be found with regard to the distribution of the financial benefits of the instrument.

These recommendations could be applied to the National fund for affordable owner-occupied housing. The fund would then purchase part of the property to make it more affordable for the first-time buyers. That part of the property would be leased to the first-time buyers, for which the leasehold would be paid off. When the property is sold again, the fund participates in a share of the value development equal to the percentage of the property they originally bought. Earnings made by the fund should be reinvested into the fund to make sure the financial capacity of the fund is sufficient in the future. Finally, the first-time buyers have the right to acquire the bare property rights by purchasing the instrument's right.

Abbreviations and translations

National Mortgage Guarantee	Nationale Hypotheek Garantie	
Starter exemption transfer tax	Startersvrijstelling overdrachtsbelasting	
Starter loan	Starterslening	
Modal income	Modaal inkomen	
National fund for affordable owner-occupied housing	Nationaal fonds betaalbare koopwoningen	NHG
Loan-to-Income ratio	Loan-to-Income ratio	LTI ratio
Loan-to-Value ratio	Loan-to-Value ratio	LTV ratio

Table of contents

<i>Preface</i>	3
<i>Abstract</i>	4
<i>Summary</i>	5
<i>Abbreviations and translations</i>	8
<i>1. Introduction</i>	11
1.1 Research context	11
1.2 Problem statement	11
1.3 Research goals and objectives	13
1.4 Research questions	13
1.5 Relevance	14
1.6 Dissemination and audience	15
<i>2. Research methodology</i>	16
2.1 Research design	16
2.2 Literature Research	18
2.3 Empirical research	18
2.3.1 Semi-structured interviews	18
2.4 Data collection	20
2.4.1 Sampling methods	20
2.5 Data analysis	20
2.6 Data plan	21
2.7 Ethical considerations	22
<i>3. Literature outcomes</i>	23
3.1 The Dutch housing market	23
3.1.1 Housing stock	24
3.1.2 Homeownership versus tenancy	25
3.1.3. Housing crisis	26
3.2 Housing finance in the Netherlands	27
3.2.1 Mortgage norms	28
3.2.2 Risk	29
3.2.3 Mortgage interest deductibility	29
3.2.4 Equity	30
3.3 Accessibility	30

3.4 First-time buyers	31
3.4.1 Definition	31
3.4.2 Characteristics	31
3.4.3 Limitations	34
3.4.4 Neighboring countries	37
3.4.6 Interventions	39
4. Empirical outcomes	41
4.1 Analysis	41
4.1.1 KoopGarant	41
4.1.2 KoopStart	46
4.1.3 Slimmer Kopen	51
4.1.4 Duokoop	57
4.1.5 Comparison of the instruments	62
4.2 Findings	66
4.2.1 Deployment capacity	68
4.2.2 Durability	70
4.2.3 Finances and risk	70
5. Discussion	74
5.1 Limitations	74
6. Conclusion and recommendations	76
6.1 Conclusion	76
6.1.1 First-time buyers	76
6.1.2 Alternative purchase instruments	76
6.2 Recommendations for practice	78
6.3 Recommendations for future research	79
Literature	80
Appendix I – Informed consent form	91
Appendix II - Interview protocol category A	93
Appendix III – Interview protocol category B	95
Appendix IV – Interview protocol category C	97

1. Introduction

1.1 Research context

The Netherlands is known as a country in which the housing supply poorly follows the housing demand (Groot et al., 2022). However, this mismatch between the supply and demand of housing has become more extreme for the past few years, resulting in into a serious housing crisis. According to Boelhouwer et al. (2022), the current housing market issues can be divided into the following three categories:

(1) The unavailability of housing for especially middle-income first-time buyers. The housing shortage, which is currently estimated at 315.000 units (Ministry of the Interior and Kingdom Relations, 2022a), is caused by two different factors: the rate of population growth in the Netherlands and the decrease in new housing construction (Boelhouwer et al., 2022). In addition to the housing shortage, the increased house purchase prices and the strict income criteria within the social rental sector have added to the limitations of first-time buyers as well.

(2) The housing costs within the rental sector. Since 2015, housing associations need to focus on low income households, meaning that market parties are responsible for the supply of housing to the middle and high income households (Boelhouwer et al., 2022). Households with an income just above the income criterium for social rent, have a substantially lower disposable income after the payment of housing costs in comparison to households that are eligible for social rent.

(3) The differences in equity caused by homeownership. The increase in the market value of properties has caused significant differences in equity between homeowners and renters (Boelhouwer et al., 2022). The value of the properties of homeowners have increased, while renters are being confronted with higher rent rates and more limitations in trying to access the owner-occupied housing market.

These three aspects are also interrelated to each other (Boelhouwer et al., 2022). The housing shortage contributes to the inaccessibility of the owner-occupied housing market for first-time buyers, redirecting them to the rental market. The housing costs in the rental market increase partly due to the housing shortage. This increase in housing costs together with the increase in the value of the properties results in wealth inequality between renters and buyers.

1.2 Problem statement

As established in the research context, part of the current housing crisis is the decrease of the accessibility of first-time buyers to the owner-occupied housing market, as their position on the Dutch housing market deteriorates (Boelhouwer & Schiffer, 2019; Boelhouwer & Van der Heijden, 2022). The combination of the tightened mortgage requirements, the housing shortage, and the increasing property prices have limited the affordability and the financial capacity of especially first-time buyers (Boelhouwer & Schiffer, 2019; Boumeester, 2022). This is also visible both absolutely and relatively when comparing the number of transactions made by first-time buyers to the number of transactions made by transferring homeowners. As depicted in figure 1, the number of transactions made by transferring homeowners has increased significantly compared to the number of transactions made by first-time buyers.

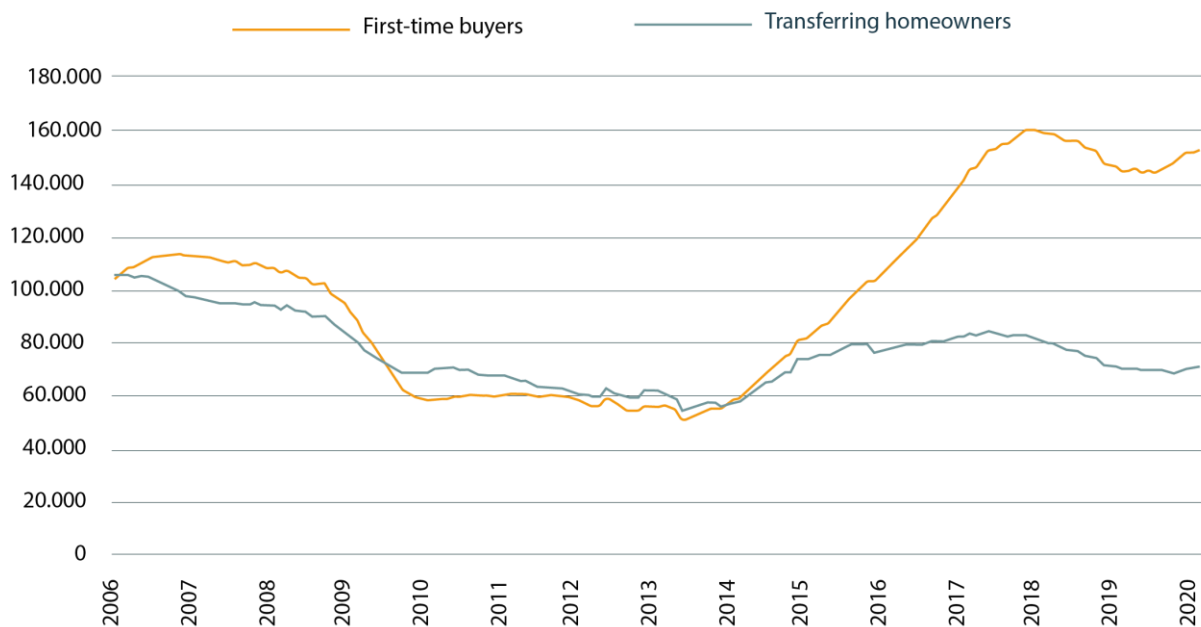


Figure 1. The number of transactions made by first-time buyers and transferring homeowners on the owner-occupied housing market between 2006 and 2020 (adjusted from Ministry of the Interior and Kingdom Relations, 2020a).

The share of transactions made by transferring homeowners has increased from 30% in 2009 to 36% in 2020, while the share of transactions made by first-time buyers has decreased from 32% in 2009 to 20% in 2020 (Ministry of the Interior and Kingdom Relations, 2021a).

The limited access of first-time buyers to the owner-occupied housing market impacts the housing market as a whole. First-time buyers often leave a (social) rental property, and usually enter the market at the base of the property ladder, stimulating both the transaction quantity and the flow of the housing market (Boon & Koning, 2021). The limited access therefore forms a barrier to the housing market flow.

The deterioration of the position of first-time buyers on the Dutch housing market has not gone unnoticed. Over the past few years, the government has implemented several policies to increase the accessibility of first-time buyers to the Dutch owner-occupied housing market (Ministry of the Interior and Kingdom Relations, 2021b). Already existing policies are the starter loan which first-time buyers can get on top off their mortgage to compensate the difference between the price of the property and the maximum mortgage allowed by the bank (Stimuleringsfonds Volkshuisvesting, n.d. -a). Secondly, the government has implemented a one-time-only exemption for first-time buyers on transfer tax for the purchase of their first property (Ministry of the Interior and Kingdom Relations, 2020a). This should improve the position of first-time buyers on the owner-occupied housing market compared to investors who have to pay 10,4% transfer tax on the purchase of properties (Ministry of Finance, 2023). Lastly, the government has announced the objective of setting up the national fund for affordable owner-occupied housing. Additionally to these policies, the housing market know a variety of alternative house purchase instrument which have been introduced by organizations and housing associations to make the purchase of a property more affordable under certain conditions. These different types of purchase instruments such as KoopGarant, KoopStart, Slimmer Kopen, and Duokoop, allow properties to be sold with a discount, or allow the land of the property to be leased.

First-time buyers often qualify for these different types of purchase instruments, dependent on several factors such as household income and property value (Dol et al., 2012).

Despite the above-mentioned efforts by both governmental entities and market parties to increase the accessibility of first-time buyers to the Dutch housing market, access to the owner-occupied housing market remains a challenge for first-time buyers (Boumeester, 2022).

1.3 Research goals and objectives

This research analyzes the characteristics and limitations of first-time buyers to acquire homeownership in the Netherlands. The aim of this study is to compare four alternative purchase instruments based on the characteristics and limitations of first-time buyers, and identify the enablers and barriers of each instrument from the perspective of both the user, the first-time buyer in this case, and the supplier. The four instruments compared in this study are: KoopGarant, KoopStart, Slimmer Kopen, and Duokoop. The comparison functions to obtain the necessary data to achieve the main goal of this study, which is to provide insights into the factors that limit alternative purchase instruments in increasing the accessibility of first-time buyers to the Dutch housing market. Eventually, this study will provide insight into how these instruments can be altered in a way to increase the accessibility of first-time buyers to the market, or which factors should be present in a newly developed instrument.

Market interventions to increase the accessibility of first-time buyers will either take a long time to be implemented because of the extreme low supply elasticity in the Netherlands, or will have to be implemented by the government. Alterations to alternative purchase instruments to increase the accessibility of first-time buyers could be a relative short-term solution. Additionally, the government is working on a National fund for affordable homeownership. The intention is to combine this fund with the use of an alternative purchase instrument. This study could provide insight into which limiting factors of alternative purchase instruments should be avoided in the implementation of an instrument to the National fund.

1.4 Research questions

Since the problem statement has introduced the topic of this research, this section will introduce the formulated research question for this study. The main research question is then divided into sub questions.

The main research question of this thesis is as following: **“How could alternative purchase instruments be adjusted to increase the accessibility of first-time buyers to the Dutch housing market?”**

To research this main question, the following sub question will be explored in this thesis:

1. What are the characteristics of first-time buyers in the Netherlands?

As described in the problem statement, first-time buyers are the target group of this research. To be able to research the factors that limit the accessibility for first-time buyers to the Dutch housing market, it needs to be explicit what is considered by first-time buyers, and what distinguishes them from other parties on the demand side of the housing market. The characteristics of this group determine possible advantages they currently experience as well as influence the limitations that they experience on the Dutch owner-occupied housing market. Additionally, the position of the Dutch first-time buyers is being compared to the position of first-time buyers in neighboring countries. This

can determine whether the Dutch definition and characteristics of first-time buyers might be a contributing factor to the limited accessibility.

2. What limits the accessibility of first-time buyers to the Dutch housing market?

The limitations that first-time buyers experience on the Dutch owner-occupied housing market need to be identified to be able to understand which factors limit that accessibility in general, but also with regard to the alternative purchase instruments. Additionally, these limitations will determine the focus points when analyzing the barriers and enablers of the alternative purchase instruments.

3. How do the alternative purchase instruments enable the accessibility of first-time buyers to the Dutch housing market?

To be able to assess the impact that alternative purchase instruments have on the accessibility of first-time buyers, the enablers of the instruments need to be established.

4. Which factors of the purchase instruments form a barrier in increasing the accessibility of first-time buyers to the Dutch housing market?

To be able to formulate the limitations of alternative purchase instruments, the barriers of the instruments with regard to enhancing the accessibility of first-time buyers to the market need to be established.

5. How could the barriers of the alternative purchase instruments be adjusted to enhance the accessibility of first-time buyers to the Dutch housing market?

To be able to answer the main question on how the alternative purchase instruments should be adjusted to enhance the accessibility of first-time buyers to the housing market, it is a necessity to determine which adjustments should be made to overcome the identified barriers.

1.5 Relevance

Societal relevance

First-time buyers are experiencing more and more difficulties on the Dutch housing market. The housing shortage and increasing house prices make an owner-occupied house less and less accessible (Conijn & Van Son, 2021). However, the accessibility of first-time buyers to the housing market is of great importance to the functioning of the housing market (Boon & Koning, 2021). Even though this could also be accomplished by entering the rental market, entering the owner-occupied market has several beneficial effects. An owner-occupied property gives households the opportunity to build equity capital (Boelhouver & Schiffer, 2019). This built up equity could eventually be involved in the arrangement of one's pension and care, which is of great societal and economic significance. The accessibility of first-time buyers increases the housing market flow. Access to the owner-occupied housing market frequently results in the availability of (regulated) rental homes. Because of the current lack of movement on the housing market, the accessibility rate to the Dutch housing market has decreased by thirty percent (Dijkhof et al., 2022). In addition, access to the owner-occupied housing market provides a prosperity advantage to young households, which is taken away with limited movement on the housing market (Boon & Koning, 2021). The owner-occupied housing market being inaccessible limits the saving possibilities for these households because of the increasing rent, which makes the housing market even less accessible, creating an prosperity gap (Dijkhof et al., 2022). This research seeks for a way to understand the limitations of first-time buyers and the factors that limit the impact of the four studied alternative purchase instruments on the

accessibility of first-time buyers, focusing on the supply side of the purchase instruments. Additionally, the goal is to formulate recommendations with regard to adjustments of the studied purchase instruments to enhance the accessibility of first-time buyers to the housing market.

Academic relevance

Several studies have researched the current and changing position of first-time buyers on the Dutch housing market. Some have studied how the application of alternative purchase instruments could have the potential to change this position of the first-time buyers, other have studied which instruments should be implemented by municipalities to reach certain housing objectives. However, minimal research has been conducted on the barriers and enablers that this variety of alternative purchase instruments carry with them. With empirical data gathered from the supplying side of the instruments, the barriers and enablers of these alternative purchase instruments were identified. This could stimulate further research on the improvement of existing or development of new alternative purchase instruments that have more impact in increasing the accessibility of first-time buyers to the Dutch housing market.

1.6 Dissemination and audience

The intended audience for this research includes those interested in alternative housing purchase instruments in the Netherlands and the accessibility of first-time buyers to the Dutch owner-occupied housing market. This study could be valuable to organizations that manage or develop alternative housing purchase instruments, the ministry of the Interior and Kingdom Relations and then especially the Housing and Spatial Planning department, and academics and students with special interest in this topic, as this study contains a comparison of the four studied instruments based on empirical data gathered directly from the supplying side of the instruments.

2. Research methodology

This chapter discusses the research methodology that was used to conduct this research, by elaborating on the design of this research, the type of data collection, and the method used to analyze the collected data.

2.1 Research design

First, the context of the discussed problem in this thesis was established by literature research. Secondly, literature research was conducted as a preparation for the empirical research of this study (see figure 2). The data collected by the empirical research and literature research was combined in the analysis, resulting in the findings of this study. These were used to form the conclusions and recommendation to this study.

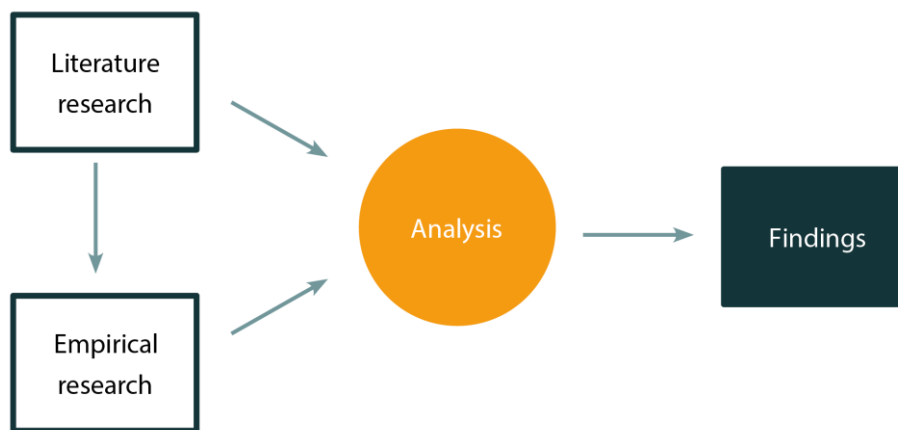


Figure 2. The research design of this study (own figure).

Figure 3 depicts the relations between the sub questions of this research. For sub question one, the first-time buyers in the Netherlands were characterized, determining whether this group is homogenous or varied. These results were used to determine which factors should be considered when identifying the limitations that first-time buyers experience in accessing the owner-occupying housing market for sub question 2. The identified limitations formed the focus points when comparing the different purchase instruments in sub questions 3 and 4, identifying the enablers and barriers of the studied instruments. Based on these barriers and enablers, improvements to the studied instruments were formulated, providing an answer to sub question 5.

This study is a qualitative research which analyzed a variety of four different purchase instruments that are operable in the Netherlands. The four selected instruments were found to be the most relevant with regard to the main goal of this study. The main criterium for selecting specifically these four instruments, were the accessibility of the instruments itself as the chosen four are not limited to a certain location, can be used by a large group of first-time buyers and are managed by substantially large and experienced organizations. Secondly, the instruments have been applied in the Netherlands for some time already, and have been altered several times to improve its functioning. Additionally, these instruments have been the subject of a variety of previous studies. The knowledge originating from these studies allowed for a more in-depth analysis of the instruments resulting in the provision of new insights into this area of research, as this study could build on the already existing knowledge.

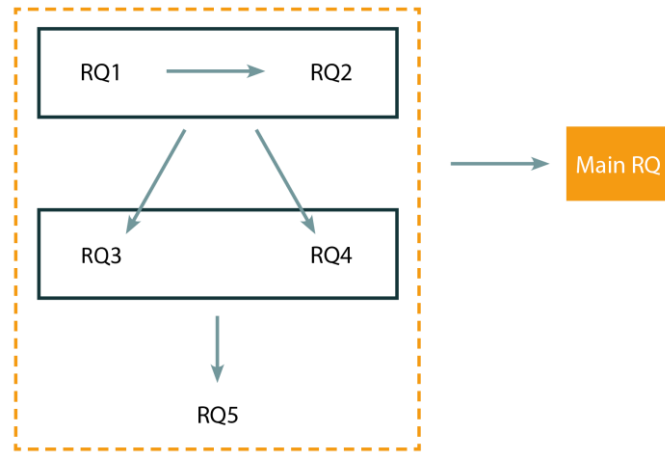


Figure 3. The relations between the formulated sub research questions of this study (own figure).

The research methodology as illustrated in figure 4, presents the different research methods and techniques that were applied to be able to take on all the sub questions formulated in chapter 1, as well as the output objective per sub question. The main output objective of this research was the provision of recommendations on how to alter the instrument’s factors that currently form a barrier in enhancing the accessibility of first-time buyers to the Dutch housing market.

	Type of Research	Data collection method	Output
RQ1	Descriptive Research	Literature Review	Characterization of first-time buyers
RQ2	Descriptive Research	Literature Review Document Analysis	Limitations accessibility first-time buyers
RQ3	Descriptive Research Empirical Research	Document Analysis Semi-structured Interviews	Enablers of the purchase instruments in the Netherlands
RQ4	Descriptive Research Empirical Research	Document Analysis Semi-structured Interviews	Barriers of the purchase instruments in the Netherlands
RQ5	Comparative Research	Semi-structured interviews	Recommendations on alterations to improve the impact of the purchase instruments

Figure 4. The research methodology of this study (own figure).

2.2 Literature Research

Several literature studies and document analyses were essential to gain the necessary knowledge on the context of the topic of this study and in preparation for the empirical research. The academic literary sources for the literature research were retrieved with the use of Google Scholar and Scopus. In addition to academic literature, grey literature was used as well. Grey literature is known as non-peer reviewed literature produced by the government, academics, businesses and the industry for which publishing literature is not the primary activity (Auger, 1998). However, the producers of grey literature are experts on the field they produce literature about. Therefore, grey literature was of high relevance for this study.

First of all, a literature review provided the necessary background information to this research. Information on the housing market in the Netherlands and Dutch housing finance are essential to the context of this study.

Then, descriptive research was conducted to define and describe the characteristics of first-time buyers in the Netherlands. Several studies were already conducted on the characteristics of Dutch first-time buyers (Boon & Koning, 2021; Van Hoeven & Nordman, 2021; Plegt, 2021; Blijie et al., 2021; Aerts, 2022). Therefore, solely descriptive research of existing literature was used to characterize this focus group and address the first sub question:

1. What are the characteristics of first-time buyers in the Netherlands?

Secondly, the goal was to establish the limitations that these first-time buyers experience with regard to accessing the Dutch housing market. Both document analysis and literature research were conducted, as scientific articles, published reports, policy documents, and banking regulations were analyzed. Based on the characteristics found in sub question one, special attention was given to the aspects that affect first-time buyers with the analysis of above-mentioned documents and papers. This data was used to address the second sub question:

2. What limits the accessibility of first-time buyers to the Dutch housing market?

As a preparation for the empirical research of this study, available documents and studies on alternative purchase instruments were analyzed, including published reports, policy documents, and information brochures on the four instruments. This provided the required knowledge on the basics of the structure and functioning of the instruments to be able to prepare the empirical research.

2.3 Empirical research

Empirical research was conducted to continue this study after the necessary knowledge on the Dutch housing market, first-time buyers, their limitations with regard to accessing the housing market, and basic knowledge on the studied instruments retrieved from literary sources was established.

2.3.1 Semi-structured interviews

The empirical research of this study existed of the conduction of semi-structured interviews. The interviews were semi-structured to stimulate the development of discussion and extra input within each interview. The preference of these interviews went to face-to-face interviews. However, due to time management, some interviews were conducted online. The goal of the empirical research was to collect enough data on the functioning of the instruments to set up a complete overview of the barriers and enablers of each of the purchase instruments regarding the ability to increase the

accessibility of first-time buyers to the market. In addition, the goal was to gain an understanding from the different perspectives that are connected to each of the purchase instruments.

As depicted in figure 5, the interviews were divided into three different categories based on the type of interviewee:

(A) First of all, experts and researchers on this field of study were interviewed. Since this group of interviewees conducts research on this topic, they could provide an overview of the different instruments active on the housing market and a more general knowledge on the impact of the instruments. Therefore, this was the first group to be interviewed.

(B) Secondly, the providers of the four studied instruments were interviewed. These interviews provided more in-depth information on the structure of the different instruments.

(C) Lastly, the group of intervening external factors were interviewed. This provided a different perspective towards the necessities of an instrument to function well on the Dutch property market.

Both the interview protocols for the three different types of interviews and the informed consent form can be found in appendix I – IV.

	Name	Organisation	Date	Subject
A. Experts	E. van der Leij & J. van der Werf	Brink	January 12, 2023	The demand for a different purchase instrument.
	K. Dol	RIGO	March 31, 2023	The inaccessibility of first-time buyers and alternative purchase instruments.
	A. Dul	stec groep	April 3, 2023	Alternative purchase instruments from the municipality's perspective.
B. Suppliers	O. Koenders & Y Padiwita - Kurver	DNGB	March 20, 2023	Duokoop
	C. Hanemaaijer	Stichting OpMaat	April 4, 2023	KoopGarant and KoopStart
	N. Verhoef	Trudo	April 5, 2023	Slimmer Kopen
	O. Koenders	DNGB	April 26, 2023	Follow-up interview Duokoop
C. External intervening factors	M. Sippekamp	NHG	May 2, 2023	The importance of NHG to alternative purchase instruments.
	R. Luigjes	SVn	May 9, 2023	The starter loan to increase the financial capacity of first-time buyers, in combination with alternative purchase instruments.

Figure 5. Overview of the conducted interviews (own figure).

The questions of the interviews with the suppliers of the instruments were divided into a four-category structure. This ensured that the instrument was looked at from different perspectives.

(1) The product. The questions for part I of the research were designed to go into more detail on the structure and functioning of the product.

(2) The user. Part II stimulated a closer look at how the instruments enhance the accessibility of especially first-time buyers to the Dutch housing market, identifying the enablers and barriers from the user's perspective.

(3) The supplier. Part III of the interview expanded on the enablers and barriers of the instruments from the supplier's perspective.

(4) The external intervening factors. The last batch of questions elaborated on the external factors that intervene with the functioning and success of the instrument.

The comparative analysis of the four instruments later on in the research to identify the barriers and enablers of each instrument from different perspectives was performed along the same structure as the interviews.

2.4 Data collection

This study applied both primary and secondary data. The descriptive research in this study made use of solely secondary data. The literary sources used in the literature research and document analysis are considered secondary data as they were previously published. The literature research provides the essential context to the problem of this study, as well as to the empirical research. The empirical research in this study applied primary data as the data gathered with the interviews is first-hand information retrieved directly from the source of information. The interviews were specially designed to gain the necessary data for this study. However, data gathered in part II of the second category of interviews in which a closer look was stimulated at the instrument's from a first-time buyer's perspective, was retrieved second hand as it was obtained through the interviews with the providers of the instruments and not directly from the first-time buyers themselves.

2.4.1 Sampling methods

For the selection of interviewees, purpose sampling was applied as the individuals participating in the semi-structured interviews were selected very specifically, based on the role they had with regard to alternative purchase instruments.

2.5 Data analysis

The characteristics of first-time buyers identified in sub question one, were compared to the characteristics of the Dutch housing market in sub question two to determine the limitations in access of first-time buyers. These limitations acted as a foundation for the analyses of the instruments later on in this study.

The data retrieved by the empirical research on the characteristics of the alternative purchase instruments was compared to the foundation set by the literature research of this study. This comparison allowed for the identification of the barriers and enablers of the four studied alternative purchase instruments. The barriers and enablers were identified along the following structure, similar to the structures of the interviews:

(1) Product

The instrument was first analyzed with regard to how it works and its setup. It was fundamental to gain a full understanding of the basics of each instrument regarding its operation and financing to be able to determine which factors of the instrument both positively and negatively influence accessibility of first-time buyers to the housing market.

(2) User

Secondly, the instruments were analyzed from the user's perspective, in this case the first-time buyers in the Netherlands. To be able to analyze the performance of the instruments with respect to enhancing the accessibility of first-time buyers to the Dutch housing market, the barricading and enabling factors of each instrument had to be established. Therefore, the results of the part I of the analysis structure (1) *Product* were compared to the characteristics and limitations of first-time buyers experiencing the most limitations while accessing the housing market, which were established in chapter 3 of this study. Both the aspects of instruments that match and mismatch with the characteristics of the first-time buyers to enhance their accessibility to the market could be identified.

(3) Supplier

Consequently, the product was analyzed from the supplier's perspective, in this case the providers of the instruments. In addition to being suitable for the set target group of this study, the alternative purchase instruments need to be provided in order to have the potential to enable the accessibility to the housing market. Therefore, the instruments were also analyzed from the perspective of the providers, as any barriers from their perspective could prevent the instruments from being deployed, forming an indirect barrier to the first-time buyers.

(4) External intervening factors

Lastly, the external factors intervening with the functioning of the instruments were established. It was essential to gain full understanding of the context that these instruments are situated in, as the external factors, for example the NHG, can heavily influence the effect of the purchase instruments with regard to enhancing the accessibility of first-time buyers to the Dutch owner-occupied housing market.

After the individual analysis of the four instruments, a comparative analysis amongst the instruments was performed. The comparative analysis was based on the categories described above, focusing on the different enablers and barriers from both the user's and supplier's perspective. This provided insight into which specific characteristics of an instrument enable the accessibility of first-time buyers to the housing market and which characteristics form a barrier.

2.6 Data plan

This study followed the FAIR Data Principles to ensure that the data gathered and used for this thesis is findable, accessible, interoperable, and reusable for the long-term (Wilkinson et al., 2016). Data collection in this study existed of the conduction of interviews, literature review, and document analysis. The interviews were transcribed to be able to manage the data and compare discussions risen from certain questions asked. Information used from the interviews in this research was evaluated and approved by the interviewees themselves before publishing. The data management plan was approved by the data management steward of the TU Delft. Eventually, this thesis will be uploaded to the TU Delft education repository.

2.7 Ethical considerations

The goal of this research was to evaluate the barriers of enablers of alternative purchase instruments with regard to enhancing the accessibility of first-time buyers to the Dutch housing market. However, ethical considerations were leading in this research to ensure transparency and accountability, and the minimalization of harm and distress towards the research participants. Important was that the research process, including the data collection and use, was clear to all participants. Additionally, privacy and confidentiality regarding the data collection process from participants was of high importance as well.

3. Literature outcomes

This chapter provides the necessary context to the discussed problem, and will elaborate on the significant concepts related to this problem. Therefore, the Dutch housing market is discussed first as it sets the context in which the inaccessibility of first-time buyers takes place. Secondly, the existing knowledge on first-time buyers in the Netherlands and neighboring countries is gathered. Then, the limitations that first-time buyers experience in trying to access the owner-occupied market are established. Lastly, an introduction retrieved from literary sources is provided on how governmental bodies and other parties have introduced instruments that focus on enhancing the accessibility of first-time buyers to the housing market.

3.1 The Dutch housing market

The housing market plays a significant role in the economy (Malpezzi, 1999; Vandevyvere & Zenthöfer, 2012), especially in the capital market (Malpezzi, 1999). A shift in house prices can significantly affect the national economy (Van Ewijk & Ter Rele, 2008). In return, the housing market is sensitive to changes in the global economy (Islam & Asami, 2009). Figure 6 shows how both the capital markets, situated in the “financial world” and the local user markets, situated in the “real world”, determine the property value (Ling & Archer, 2017). The property markets is at an intersection of interests of on one side the investors on the capital markets, and on the other side the supplying and demanding parties on the local user market (Muller et al., 2020). The local user markets is influenced by both the government and the supply and demand in the real world. Housing is a basic need (Mulroy & Ewalt, 1996) and even though the housing market is part of the property market, it sometimes behaves different than the property market. A primary source of housing finance are the capital markets (International Finance Corporation, 2019). Improved access to the capital market enhances the facilitation of a greater volume of affordable mortgages.

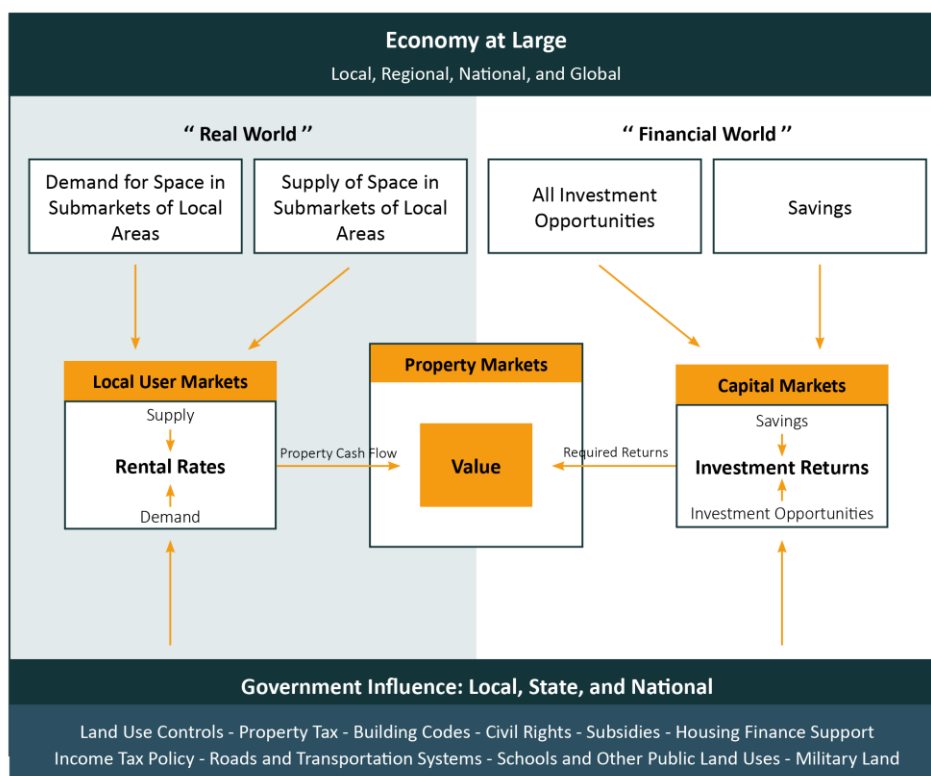


Figure 6. The influence of the local user markets and the capital markets on the value of property (adjusted from Ling & Archer, 2017).

The government influences the local user markets by regulating the social rental sector for example (Haffner, 2020). Similarly, the capital markets are influenced by regulations and legislation at several governmental levels, as well as by the availability of investment opportunities and savings in the financial world.

The Dutch housing market has a long history of governmental involvement, aiming to provide housing to the lower-income households and to stimulate homeownership (Mulder et al., 2015; Vandevyvere & Zenthöfer, 2012). To this day, several policies are in place to support the social rental and the owner-occupied housing segment. This has heavily impacted the ratio between the three segments on the Dutch housing market: the social rental segment, the private rental segment, and the owner-occupied segment.

3.1.1 Housing stock

Compared to the rest of Europe, the Dutch housing market has the largest share of social housing (Vandevyvere & Zenthöfer, 2012). In 2021, the Dutch housing stock existed out of 7.696.000 properties of which 33,62% allocated to the social rental sector (Centraal Bureau voor de Statistiek, 2022a). The social housing sector in the majority of the other western European countries only occupied 16 – 18 % of the housing stock (De Jong & Van der Moolen, 2014). As 57,39% of the Dutch housing stock classifies as owner-occupied properties (Centraal Bureau voor de Statistiek, 2022a), the Dutch housing market is dominated by the owner-occupied sector, followed by the social rental sector. A significantly low percentage is dedicated to the relatively small private rental sector.

Promotion homeownership

Since the 1950s, the Dutch government has stimulated the demand for owner-occupied properties with the implementation of several policies in favor of homeowners (Elsinga & Hoekstra, 2004; Teye et al., 2017). Homeownership is stimulated by multiple tax benefits such as the mortgage interest deductibility and the non-taxation of capital gains arising from the sale of owner-occupied homes during times of rising property prices (Vandevyvere & Zenthöfer, 2012; Rouwendal, 2007). Additionally, the Dutch government set up the National Mortgage Guarantee in 1956, insuring the risk of homeowners and lowering the credit risk for banks stemming from mortgage loans (Vandevyvere & Zenthöfer, 2012). These encouragements have made the purchase of a property less risky and financially more attractive than renting one, affecting the demand side of the owner-occupied housing market.

The Dutch housing market has some neoliberal characteristics, the promotion of homeownership is one of them (Woltring, 2021). Neoliberalism promotes competition within the market and independency from the state. Which is also visible in the withdrawal of the Dutch government in the social rental sector (Könings, 2016).

Social rental sector

The substantial Dutch social rental sector is a result of continuous governmental intervention, starting with the 1901 Housing Act (Vandevyvere & Zenthöfer, 2012). With the aim to provide affordable housing to low-income households, housing associations were integrated into the Dutch housing policy, placing them under governmental supervision as well as them being subsidized. Since the 1995, Dutch housing associations have become financially independent (Buitelaar et al., 2009). However, low income tenants are still being supported by the Dutch government through the rent allowance allocated to social housing (Boelhouwer & Hoekstra, 2009). The accessibility to the social rental sector is limited since only low-income households qualify for rent allowance. This policy, in contrast to the policies for homeowners, is more focused on the support of a specific target group than on stimulating a specific sector on the housing market.

Private rental sector

The policies favoring homeownership and the interference of the government with the social housing sector and provision of rent allowance, has resulted in a very small private rental sector only representing 9% of the Dutch housing stock (Centraal Bureau voor de Statistiek, 2022a). A rental property on the private rental sector has always been relatively financially unattractive because of the subsidized owner-occupied and social rental sector (Ministry of Finance, 2016). However, the limited accessibility to the social rental sector because of the strict income criteria has increased the demand on the private rental sector. Even though the share of private rental properties on the Dutch housing market has increased during the past decade (Centraal Bureau voor de Statistiek, 2022a), the predominant share of owner-occupied properties and social rental properties still limits the ability of the private rental sector to function as a buffer to the owner-occupied and social rental segment (Vandevyvere & Zenthöfer, 2012).

3.1.2 Homeownership versus tenancy

The fact that both the owner-occupied sector and social rental sector are being supported by the government, does not mean the support is tenure-neutral (Boelhouwer & Hoekstra, 2009). For high-income households it is financially more attractive to purchase a property because of the mortgage interest deduction on the taxable income. For low-income households it is more attractive to rent a property on the social housing market because the rent allowance significantly lowers the monthly housing costs. The relatively low rent in the regulated rental sector and the high property prices on the owner-occupied market make it difficult for low-income tenants to enter the owner-occupied housing market (Boelhouwer & Hoekstra, 2009). Therefore, the governmental support not being tenure-neutral has created a significant gap between the two types of tenure.

In the Netherlands, there seems to be the belief that it is more beneficial to purchase a property if you can afford it, than to rent one (Elsinga et al., 2007). One of the main reasons for this belief are the financial benefits. From an investment perspective, homeownership in the Netherlands is seen as a means to build equity (Boelhouwer, 2002; Haffner, 2008; Elsinga et al., 2007).

Literature often makes the distinction between *insiders* and *outsiders* on the housing market (Arundel & Lennartz, 2020; Boelhouwer & Schiffer, 2019; Kadi, 2015; Nordvik, 2006; Shao & White, 2021). Within this distinction, insiders refers to homeowners with a stable housing situation, while renters with uncertain rental contracts are referred to as outsiders to the owner-occupied housing market (Arundel & Lennartz, 2020). More general, insiders refers to individuals in favorable positions and outsiders refers to individuals in a more unfavorable position.

Household equity outside of equity retrieved through homeownership has barely grown during the last decade (Aerts, 2022). Contrasting, within the total equity of all Dutch households, the share of excess value on owner-occupied properties has increased to 60% during the past seven years. Thus, the importance of housing has significantly grown in a households increase in equity.

The combination of the ability to grow equity and several other benefits of an owner-occupied property outweigh the disadvantages of homeownership to the majority of households (Boelhouwer & Schiffer, 2019). Homeownership provides independence, freedom to adjust the property, and more frequently a higher quality in housing. All these factors make homeownership more popular to a majority of the Dutch population than the option of a rental property.

However, homeownership also comes with certain risks. In general, literature identifies two main categories of risks associated to homeownership (Teye et al., 2017).

1. Payment risk: whether home-owners are able to pay the monthly mortgage expenses;
2. Property price risk: dealing with the volatility of the house price developments;

The LTI (Loan-to-income) ratio is applied by mortgage providers to determine the maximum mortgage, which minimizes the payment risk. The mortgage amount, and thus the monthly mortgage expenses, are dependent on the household's income. The LTV (Loan-to-value) ratio is applied by mortgage providers to determine the maximum mortgage, which minimizes the property price risk. As there is always a chance that the value of the property decreases, which is a risk that renters do not have. The ratio between the value of the property and the value of the mortgage partly insure the mortgage providers against the volatility of the house price developments. Additionally, both types of risks are insured to some extent by the national mortgage guarantee (NHG) in the Netherlands. These mortgage aspects are all implemented to minimize the risk of the mortgage provider that they have with the provision of mortgages.

3.1.3. Housing crisis

The current housing shortage in the Netherlands is estimated at 315.000 units, and is expected to grow to a shortage of 326.000 by 2024 (Ministry of the Interior and Kingdom Relations, 2022a). As depicted in figure 7, the mortgage interest rate has decreased from 5% in 2012 to 1% in 2022 (De Hypotheker, 2022). The low interest rate made it possible for households to get a higher mortgage with the same monthly mortgage costs in comparison to when the interest rate was higher (De Nederlandsche Bank, 2020).

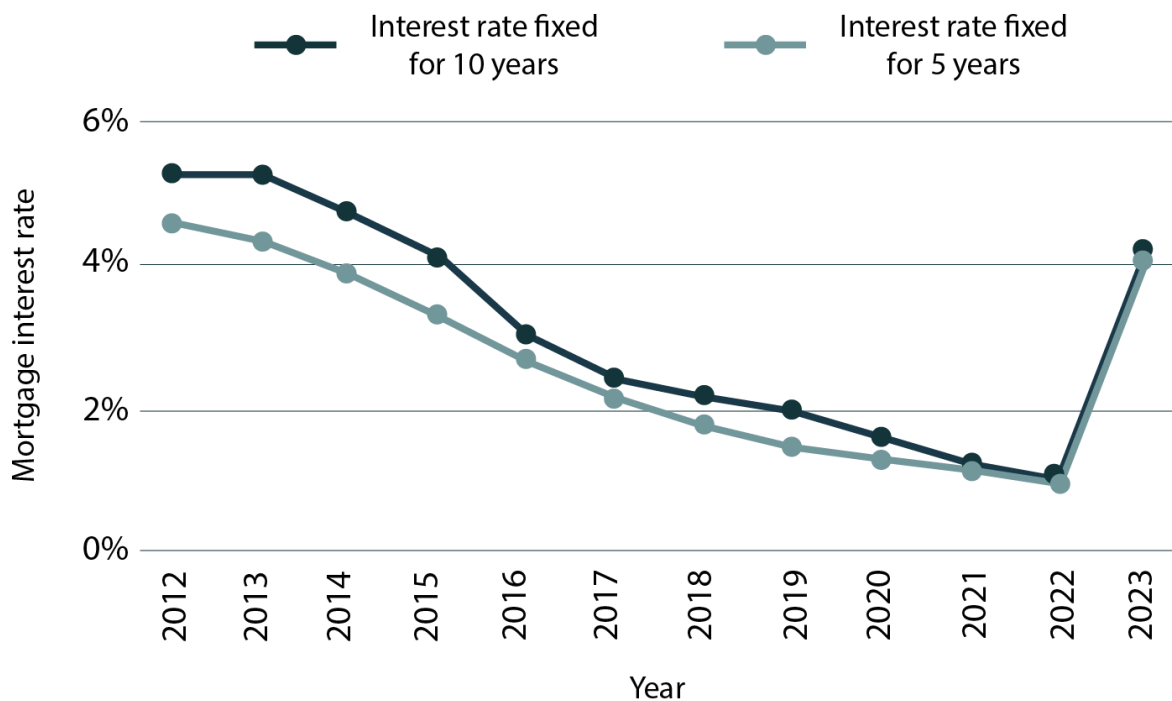


Figure 7. The Dutch mortgage interest rate since 2012 (adjusted from The Hypotheker, 2022).

The combination of the housing shortage and the relatively cheap financing of an owner-occupied house is strongly related to the significant increase in Dutch house prices during the past few years (De Nederlandsche Bank, 2020). As depicted in figure 8, the house prices have increased since 2013.

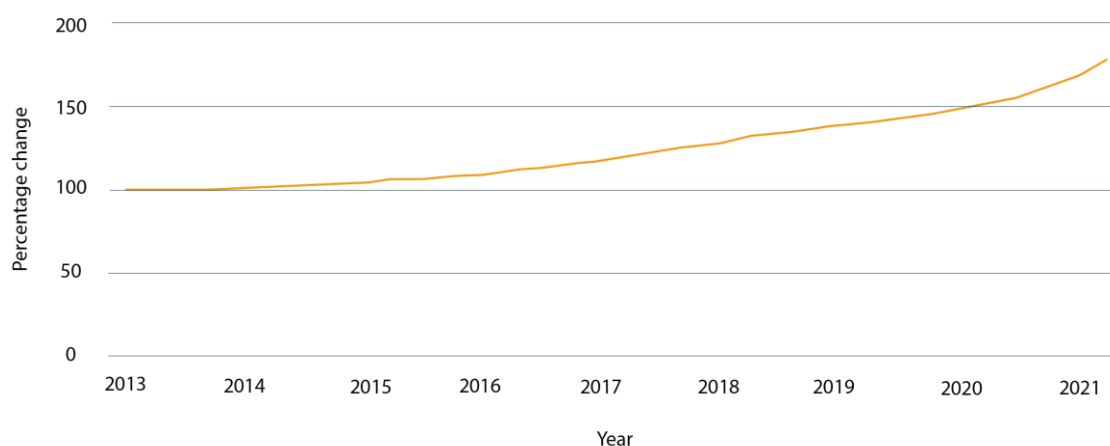


Figure 8. The house price development in the Netherlands during since 2013 (adjusted from Langenberg & Jonkers, 2022).

Even though house prices have increased since 2013, the lending norms have only become more strict since 2013 as a response to the financial crisis, to lower the risk towards the financial stability of the banks and the equity of households (Elbourne et al., 2020; Van Veldhuizen et al., 2015). Both the LTV ratio and the LTI ratio have been lowered (Van Veldhuizen et al., 2015). This response has reduced the financial capacity of all households on the owner-occupied housing market, while the property prices have only increased.

During the past 15 years, several events have influenced the construction of housing. The financial crisis, the COVID-19 crisis, and the war in Ukraine all delayed the addition to and development of the housing supply (Van der Heijden & Boelhouwer, 2018; Paling, 2020; Ministry of the Interior and Kingdom Relations, 2020b). Additionally, the size of households is relatively smaller, increasing the number of Dutch households (Centraal Bureau voor de Statistiek, 2022b). This has increased the pressure on the supply side of the Dutch housing market. The housing supply elasticity in the Netherlands is considered significantly low, also in comparison to the rest of Europe (Boelhouwer, 2001; Swank et al., 2003; Vermeulen & Rouwendal, 2007). The housing supply poorly responds to the alterations in housing demand (Boelhouwer & Hoekstra, 2009). The strong demand in the Dutch housing market does not lead to an investment to the increase in supply, but results in an increase in house prices and greater shortages, undermining the access to the housing market (Boelhouwer et al., 2006; Cavalleri et al., 2019). Additionally, households spend a higher percentage of their income on housing costs in countries with a low housing supply elasticity than in countries where the supply is more elastic (Cavalleri et al., 2019). And in contrast to the decreased supply rate, the rate of growth of demand has increased.

3.2 Housing finance in the Netherlands

This section explains the aspects that influence the housing finance options in the Netherlands. In 2021, 57% of the Dutch households owned an owner-occupied house, of which 84% was financed with the use of a mortgage (Centraal Bureau voor de Statistiek, 2023). The majority of these mortgages is being provided by banks (Vandevyvere & Zenthöfer, 2012). They provide mortgages to homeowners using the property as collateral (Syntrus Achmea Real Estate & Finance, 2020). The two most common types of mortgages are the interest-only mortgage and the annuity mortgage. The interest-only mortgage defers loan redemption until maturity (Vandevyvere & Zenthöfer, 2012). However, the interest paid on interest-only mortgages is not deductible from the taxable income

since 2013 anymore, decreasing its popularity (Vereniging Eigen Huis, 2023). In addition to mortgages, households that own equity can use it to (partially) finance the purchase of a property.

3.2.1 Mortgage norms

In the Netherlands, the maximum mortgage is determined based on the LTV ratio, the LTI ratio (which is legally adjusted on a yearly basis), the chosen fixed-interest period, the mortgage interest rate, and a household's other financial obligations (Elbourne et al., 2020). Different, often more strict, requirements are in place for flex workers and people with a temporary labor contract (Vereniging Eigen Huis, 2022).

During the financial crisis in 2008 – 2009, many property values decreased significantly. As a result, approximately 1 million Dutch households had an outstanding mortgage which was higher than the value of the property they owned (Van Veldhuizen et al., 2017). To safeguard the financial stability of the banks and the equity risk of Dutch households, the government decreased the maximum allowed LTV ratio to 100% (Van Veldhuizen et al., 2015). Since the high pressure on the supply of the housing market, purchase prices of property have been higher than the market value, resulting in the need of own equity to be able to purchase property.

Nibud sets a yearly “woonquote” which is the percentage of a household's income that may be spent on housing expenses (De Hypotheker, 2023). The “woonquote” is used by mortgage providers to determine the maximum available mortgage based on income, also known as the LTI ratio. The “woonquote” is dependent on the level of income and the mortgage interest rate. A higher income and a higher mortgage interest rate result into a higher “woonquote”. The “woonquote” for a yearly gross income between €30.000,- and €54.000,- (modal income in 2023 is €40.000) is 24,5% in 2023 (De Hypotheker, 2023). Since 2023, the second income within a household is fully taken into account with the determination of the maximum mortgage amount (Ministry of the Interior and Kingdom Relations, 2022b). Considering the second income was only taken into account for 90%, this adjustment forms a relaxation on the more restrictive lending norms introduced after the financial crisis. This increases the funding capacity of two-income households. Regarding the influence of a student loan, only the actual monthly costs of the student loan will be taken into account for the determination of the maximum mortgage from the beginning of 2024. Additionally, the energy usage will be considered as well as the monthly costs are heavily dependent on this.

Looking at the LTV and LTI ratio, mortgage providers have to base the maximum mortgage on the most restrictive condition (Van Hoeven & Nordman, 2021).

Compared to other European countries, the Netherlands has had lenient mortgage norms. The average LTV in the Netherlands is significantly high (European Systemic Risk Board, 2020). In 2019, the average LTV across European countries was 81%. However, this was mainly driven by the high LTV ratios in France, the Netherlands and Germany (European Central Bank, 2020). As depicted in figure 9, the average LTV ratio in the Netherlands was 86%, the second highest percentage in Europe. However, in contrast to the rest of the European countries, the Netherlands has the NHG which lowers the risk for the mortgage providers.

The unique Dutch system providing the opportunity for Dutch households to fully deduct the paid mortgage interest on the income tax has majorly contributed to this high LTV percentage. However, the Netherlands does have an average LTI ratio compared to other European countries (European Central Bank, 2020).

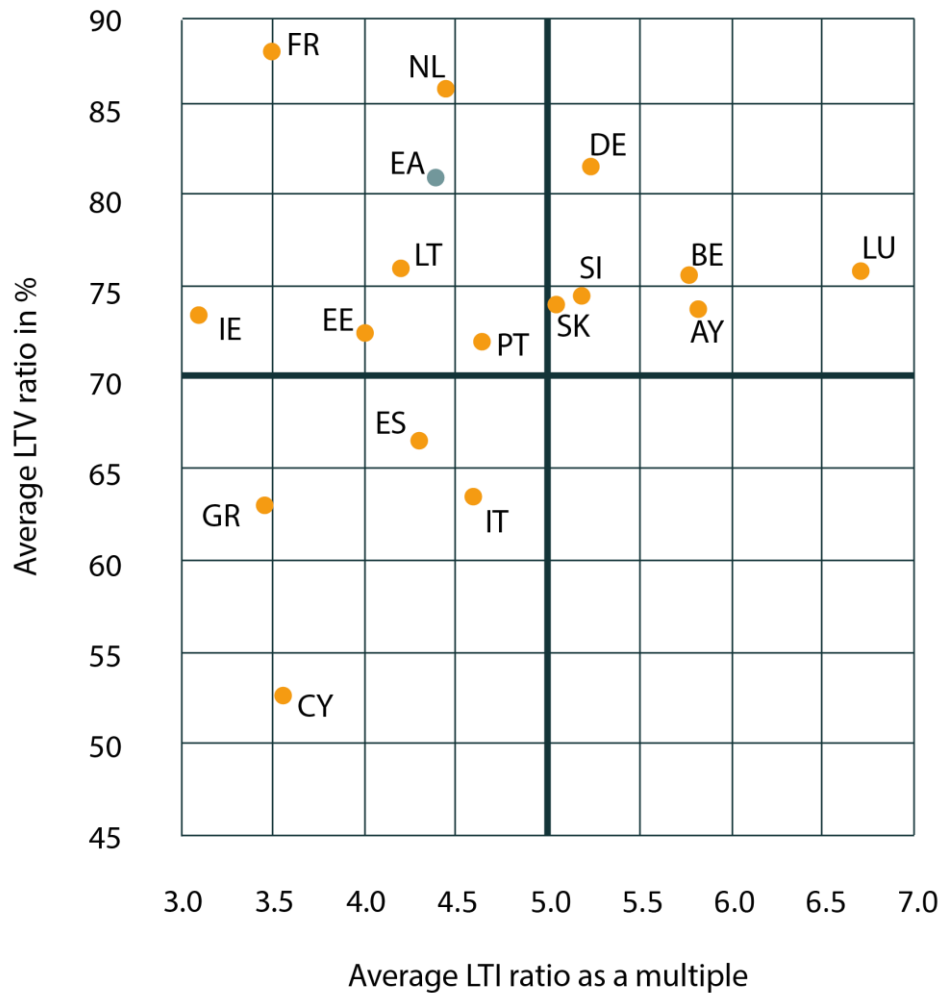


Figure 9. Average LTV and LTI ratio across countries in 2018 (adjusted from Rousová et al., 2020).

3.2.2 Risk

The lower maximum LTV decreases the risk for both the bank and Dutch households, as the property value is less likely to decrease below the outstanding mortgage. In addition, with the implementation of the NHG by the government in the early 1950s, the risk of taking out a mortgage was partially transferred from the household and the mortgage provider to the government (Priemus & Elsinga, 2007). The NHG is an insurance for households with a mortgage that complies with the requirements of the NHG, protecting them against the risk of not being able to pay for the mortgage anymore in the events of unemployment, health circumstances, and divorce (Vandevyvere & Zenthöfer, 2012). In return, they pay a one-time-only insurance premium which is 0,6% of the total mortgage amount (Nationale Hypotheek Garantie, 2023a). In the 2023, the maximum mortgage amount to be eligible for the NHG is set at €405.000,-. For properties that are being improved in terms of sustainability, the maximum mortgage amount is set at €429.300,-. In addition to the insurance, the NHG also includes a mortgage interest discount with a maximum of 0,6% per year.

3.2.3 Mortgage interest deductibility

In the Netherlands, homeowners can fully deduct the mortgage interest payments on their primary residence from their taxable income for a maximum of 30 years (Vandevyvere & Zenthöfer, 2012). With the relatively high marginal income tax rates, the interest deductibility is especially beneficial to high-income households. The interest on mortgages for the purchase, improvement and extension of

the property are all considered eligible for deduction (Belastingdienst, 2023). The costs for taking out the mortgage and the NHG insurance premium can also be deducted. The costs made in case of ground lease are also eligible for deduction from the taxable income. The maximum mortgage interest deductibility for 2023 is 36,93% (Ministry of General Affairs, 2023). An interest-only mortgage gave the potential to fully benefit from the mortgage interest deductibility (Vandevyvere & Zenthöfer, 2012). Nowadays, the benefits of an interest-only mortgage are slowly being reduced, and an interest-only mortgage is only possible on 50% of the market value of the property and can be complemented with a different type of mortgage (Vereniging Eigen Huis, 2023). Additionally, interest-only mortgages taken out after 1 January 2013 are not eligible for mortgage interest deductibility anymore as one of the requirements is that the mortgage has to be redeemed during the maturity of the mortgage.

3.2.4 Equity

During the past years, parents had the one-time opportunity to give each child up to €100.000,- tax free, to spend on the purchase of a property, also known as the 'jubelton' (Belastingdienst, 2022). The requirements for this tax free gift are that the receiver is younger than 40 years old, and the gift had to be spent on the purchase or improvement of a house, or the redemption of the mortgage of a property. However, the amount of the tax free gift was lowered to € 28.947,- in 2023, and it will be repealed by the start of 2024 (Belastingdienst, 2022). The goal of the repeal is to improve the housing market and lower the inequality of first-time buyers based on the intergenerational division of equity, as first-time buyers with wealthy parents gain a greater advantage from the tax exemption than other first-time buyers.

3.3 Accessibility

The accessibility of first-time buyers to the housing market is vital for the overall health of the market (Neuteboom & Brounen, 2011). Accessibility is associated with several other factors directly related to the housing market, but also forms a barrier itself. Accessibility can be a physical aspect in which housing meets specific needs of a household or the accessibility to qualitative housing. On the other hand, there is the financial accessibility to housing, which is usually used to determine housing access. This includes a household's financial resources and the availability of supply (Smith, 2012), and is therefore directly linked to the accessibility to housing finance (Warnock & Warnock, 2008). This is the affordability, which is often determined by comparing the cost of the available supply to a household's financial resources, for which income is commonly used as a referent. The traditional approach to determine the affordability of housing has been the expenditure-to-income approach (Heylen & Haffner, 2013). A 30% benchmark has been used in combination with this approach, in which the percentage of income spent on housing costs was set at a threshold of 30%. This is also visible with the application of the LTI when calculating the maximum allowed mortgage amount, as it uses a maximum part of income spent on mortgage expenses

The purchasing capacity of households is one of the determining factors of accessibility to the housing market (Neuteboom & Brounen, 2011). This can be classified as "short-term" affordability, considering the expenses attributed to finance the access to a property (Haffner & Heylen, 2011). On the other hand there is long-term affordability, considering the expenses associated with housing consumption. The combination of these two types of affordability provide the necessary information on the financial accessibility to the housing market and the financial capacity to pay for housing in the long term.

Additional to the affordability, availability is a fundamental aspect as well since enough and adequate supply is essential for a housing market to be accessible (Mulliner & Maliene, 2013). Besides the

physical availability of qualitative housing, the availability of different types of tenure and the availability of financial products such as mortgages are crucial as well.

All these aspects are interrelated to each other and together form the access to housing to affordable housing (Mulliner & Maliene, 2013). The affordability, partially determined by cost of housing, and the availability of both housing and the financial products together form the supply side of the housing stock, while the accessibility generally impacts the demand side (Jana et al., 2016). Regardless of the availability, households generally compromise between the affordability of a property and the accessibility to qualitative housing as these two aspects are in conflict.

3.4 First-time buyers

As explained in the introduction of this thesis, the accessibility of first-time buyers to the owner-occupied housing market is of both societal and economic relevance. First-time buyers usually enter the owner-occupied housing market at the base of the property ladder (Chamberlin, 2009). This allows the continuation of the rate of transactions and the flow of the housing market itself. Therefore, the accessibility of first-time buyers impacts the housing market as a whole. Now that an understanding of accessibility has been established, a definition for and the characteristics of first-time buyers can be identified, since these influence their accessibility to the housing market. Subsequently, the factors limiting their accessibility will be elaborated on.

3.4.1 Definition

First-time buyers can be divided into the following two groups based on their previous housing situation: (1) the direct entrants to the owner-occupied housing market, and (2) the former tenants. The direct entrants are households that move from a dependent housing situation directly onto the owner-occupied housing market (Blijie et al., 2021). Former tenants, which make up for 65% of the first-time buyers, are households that move from a rental property onto the owner-occupied housing market (Boon & Koning, 2021). According to the Kadaster, First-time buyers could also be divided into the following three categories: single first-time buyers, partnered first-time buyers, and combined first-time buyers (Plegt, 2021). Single first-time buyers purchase their first property by themselves. Partnered first-time buyers are two first-time buyers purchasing their first property together. Combined first-time buyers exist of one first-time buyer and one existing home-owner that purchase a property together. The importance of distinguishing these groups is lies with the fact that they have different characteristics. These differences, such as the diversity in disposable income are of great significance when it comes to the attempt to access the owner-occupied housing market.

The first type of categorization focuses on the previous housing situation, determining whether a household is added to the housing market or transferred from the rental market to the owner-occupied market. This type of categorization determines whether a rental property becomes available or not with the entrance of first-time buyers to the owner-occupied housing market. The second type of categorization focuses more on the size of the household and therefore the necessary size of the dwelling, as well as the available financing resources, since a two-income households is often eligible for a higher mortgage than a one-income households because of a higher household income.

3.4.2 Characteristics

Looking at the successful first-time buyers, 60% of the first-time buyers in the Netherlands is between 25 and 34 years old according to the EIB, (Boon & Koning, 2021). However, the age of the first-time buyers ranges from 17 up until 75+ years old. Table 1 shows the average age of the different types of first-time buyers categorized by the Kadaster and the average purchase price of the first bought property between 2015 and 2020. In this period, 36% of the first-time buyers were single first-time

buyers, 42% were partnered first-time buyers, and 23% were combined first-time buyers (Plegt, 2021).

Single first-time buyers 36%	Partnered first-time buyers 42%	Combined first-time buyers 23%
31 years old	29 & 32 years old	36 & 39 years old

Table 1. Average age of the different types of first-time buyers between 2015 and 2020 (Plegt, 2021)

The increase in single-person households, also known as the individualization of households, has become more significant during the past two decades (Aerts, 2022). This has both influenced the quantitative demand for housing but has also changed the typology of the demand. Resulting in a higher demand grow than supply grow, and a mismatch between the supply and demand. As explained previously, this decreases the availability of housing for this group of households, and thus the accessibility. The current demand for owner-occupied housing by first-time buyers is four times higher than the actual transactions realized by first-time buyers. As a result, former tenants are often forced to postpone their transition to the owner-occupied housing market, and direct entrants are more often forced to enter the rental market before entering the owner-occupied market. Even though the group of singles has increased the most within the prospective first-time buyers, the share of actual single first-time buyers has decreased during the past decade (Plegt, 2021). The house prices have increased and as partnered first-time buyers have more available funds, they were more successful in purchasing a first property (figure 10).

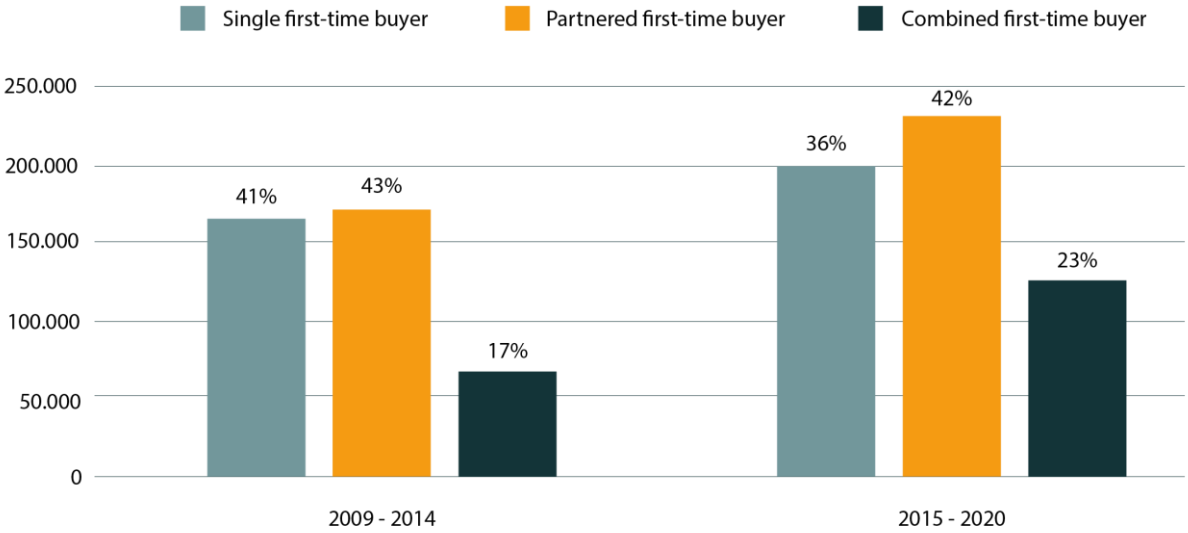


Figure 10. The development of the amount and share of different types of first-time buyers and the average transaction value between the periods of 2009 – 2014 and 2015 -2020 (adjusted from Plegt, 2021).

As depicted in figure 11, the share of young first -time buyers (younger than 27 years old), has decreased for all three types of first-time buyers, while the share of older first-time buyers (35+ years old) has increased for all three categories (Plegt, 2021). Looking at these age categories (younger than 27 years old, 27 – 34 years old, and 35+), it is also noticeable that the older a first-time buyer is, the higher the purchase price of the property.

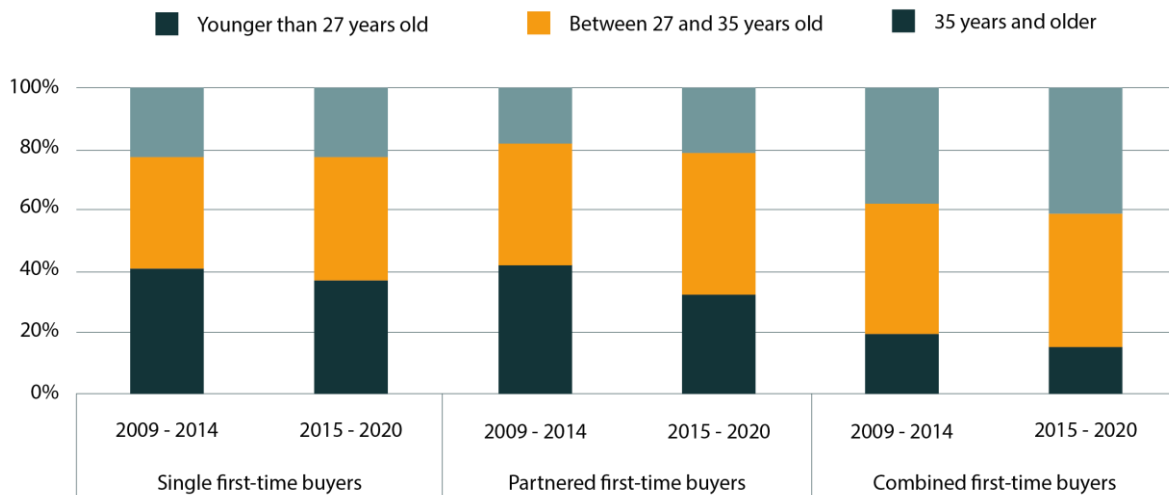


Figure 11. The development of age level within the three different types of first-time buyers between the periods of 2009 – 2014 and 2015 -2020 (adjusted from Plegt, 2021).

Income and purchasing power

During the past 5 years, the maximum mortgage capacity has increased because of the historically low mortgage interest rates (Hans & Plegt, 2022). However, this is not proportion with the average house price increase. The house prices have increased more extremely than the financing capacity of households, decreasing the accessibility.

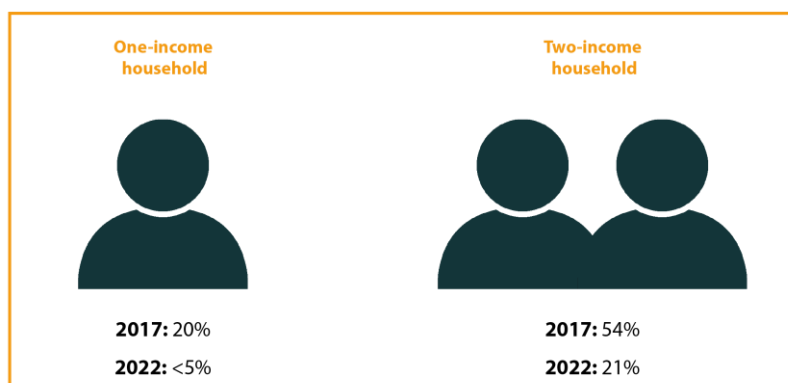


Figure 12: The share of sold properties that a one-income household (modal income) and a two-income household (1,5 x modal income) could have purchased based on the income financing capacity (own figure, based on Hans & Plegt, 2022)

As depicted in figure 12, a one-income household with a modal household income could purchase 20% of the sold properties based on the income financing capacity in 2017 (Hans & Plegt, 2022). In 2022, this share decreased to less than 5% of the sold properties being available. With regard to a two-income households with a 1,5 times modal income, 54% of the properties sold in 2017 could be purchased based on the financing capacity. This percentage decreased to a mere 21% in 2022. This shows that the purchase power has extremely decreased during the past five years.

Financing

Of the 125.000 yearly first-time buyers, 95% (partially) finance their first property with the use of a mortgage (Boon & Koning, 2021). This does not mean that 5% of the first-time buyers finance their property fully on their own. (Tax free) donations from family members, also known as intergenerational equity, including the “jubelton” should not be forgotten. However, the LTV ratio for households up to 35 years old is still around 100%. Within the segment meeting the NHG requirements, only 60% of the first-time buyers used the NHG for their mortgage application (Aerts, 2022).

Debt

During the past years, the percentage of first-time buyers with debt other than a mortgage has increased (Van Hoeven & Nordman, 2021). In 2018, 43% of the first-time buyers had a student loan debt. More and more first-time buyers have a student loan debt, and the average amount of student loan debt is an increasing factor as well. Students, who are the future first-time buyers, take out a student loan more often and of increasing value because of the new student loan system (Pouwels-Urlings, 2019).

3.4.3 Limitations

In the past, it has always been that first-time buyers had a hard time to access the housing market (Boelhouwer & Schiffer, 2019). Once a household owns a property, and is an insider to the owner-occupied housing market, it is easier to enhance its position on the housing market. Homeowners profit from the rising house prices and are able to build up some capital through mortgage repayments. In contrast, the outsiders to the owner-occupied housing market cannot enjoy these benefits. To strengthen the position of first-time buyers on the housing market, the government has provided one-time incentives such as the starter loan, social owner-occupied housing, and relative low land-costs. However, since 2015 the accessibility of the housing market has decreased in general (Groot, 2023). This is because property prices have increased at a higher rate than the financing capacity of a household has (Hans & Plegt, 2022). Homeowners, the insiders to the housing market, can compensate this with the increase in the value of their property, while the outsiders to the housing market cannot.

Policy

The housing policy changes that found place during the past 10 years as a result of the financial crisis, have impacted especially the financial capacity of households. Even though these policy changes apply to everyone, they have especially impacted the accessibility of first-time buyers to the Dutch housing market (Boelhouwer & Schiffer, 2019). The regulations on whether a household qualifies for the social sector are very absolute. When a household's income exceeds the set limit to qualify, there is no other option than to either rent or buy in the private sector. However, the income of many, especially young, first-time buyers is not sufficient to be able to purchase a property on the private market. And in case of renting a property on the private rental market, there is often not much income left to be able to save up some money to purchase a property one day because of the high rental prices. In 2018, more than 2 million households were stuck in this situation according to the WoOn 2018 database (Lijzenga et al., 2019).

Interest-only mortgage

As a result of the financial crisis, the government has tightened the access to mortgage products, lowering the lending capacity of households (Aalbers, 2012). In the past, households could get an interest-only mortgage to cover the complete purchase amount of the property, while keeping their monthly living expenses low (Boelhouwer & Schiffer, 2019). The result of this was an high average of outstanding mortgage per household, pressuring the financial stability of banks. However, since 2013 this is often only possible for 50% of the value of a property, and the interest paid on this type of

mortgage is not deductible from the taxable income anymore (Vereniging Eigen Huis, 2023). This decreased the financing capacity of households even though there was not a decrease in income.

Student Loan

With the implementation of the new student loan system in 2015, there has been an increase in both the average amount of student loan debt and the number of people with a student loan debt (Van Hoesen & Nordman, 2021). The people that studied between 2015 and 2023 did not receive study allowance but had to get a loan from the government. This generation already forms a high percentage of the first-time buyers. The older generation did receive study allowance from the governments and has built up a much lower student loan debt (Boelhouwer & Schiffer, 2019). As a significant part of the (potential, future) first-time buyers already have a debt, the available mortgage amount for these households is lowered.

Income

95% of the first-time buyers finance their first property with the use of a mortgage (Boon & Koning, 2021). First-time buyers between 18 and 34 years old finance the property on average for 97% with a mortgage, and very rarely with the use of own savings. However, looking at the market, almost 50% of the first-time buyers (especially the younger ones) received support from parents in financing their first property (Boelhouwer, 2018). The older group of first-time buyers possess more money and use their own savings for the purchase of a first property more often.

The LTI requirements have become more strict during the past few years (Boelhouwer & Schiffer, 2015a and 2015b). Since 2015, the necessary income to purchase an average starter home has increased stronger than the actual income of these households (Groot, 2023). Even though the majority of the first-time buyer's income strongly increases shortly after the purchase of their first property, the mortgage capacity is being determined only looking at the level of income at the time of the mortgage application. Because of this *one size fits all* system, especially the younger first-time buyers experience relatively high restrictions regarding the income norm influencing the maximum mortgage capacity. Partnered and combined first-time buyers often experience a more strongly development in income than single first-time buyers (Aerts, 2022).

The function of the LTI ratio is to protect buyers against unaffordable living expenses (Groot, 2023). However, this requirement often acts as a barrier for first-time buyers to enter the owner-occupied housing market. This barrier often results in first-time buyers who are unable to succeed on the owner-occupied housing market, to end up renting a property with higher living expenses than when they were to purchase a property (Groot, 2023). In 2012, 20% of the potential first-time buyers could not succeed to purchase a property because of the LTI ratio. The expectation is that this percentage has only increased during the past few years. This expectation is based on the fact that the house prices have increased more strongly than the income of households. Therefore, the lending capacity will be limited by the LTI value.

According to Stichting OpMaat (2023a), households with an income between the €45.000 and €65.000 have barely the chance to find a owner-occupied property which they can finance. The modal income in the Netherlands has been set at €40.000 in 2023 (NIBUD, 2023). The maximum income to be eligible for a social rental property is set at €44.035 in 2023 (Ministry of the Interior and Kingdom Relations, 2023a). So there is only a small gap between the modal income and access to the social rental sector. As visualized in figure 13, the maximum borrowing capacity with a modal income for both a one-income and two-income household is far from sufficient for the purchase of a property.

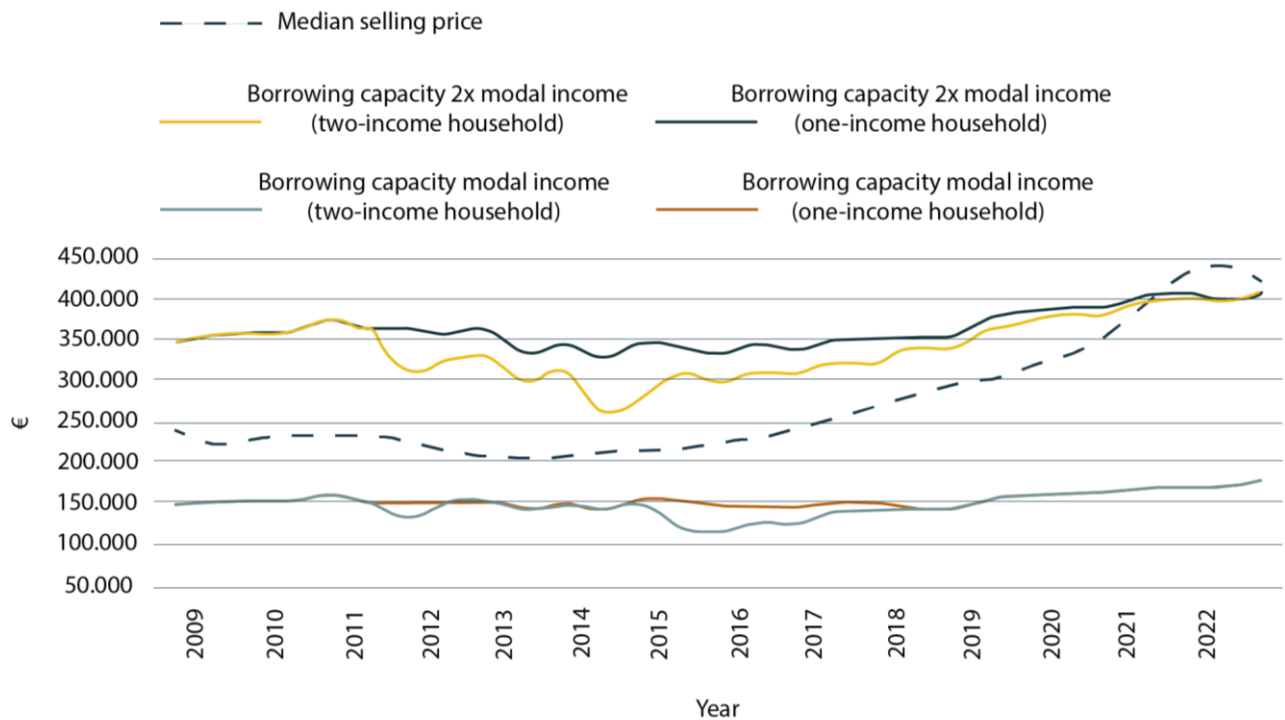


Figure 13. The average maximum borrowing capacity with a modal and 2x modal income, for a one-income and two-income household, compared to the median selling price (adjusted from Boumeester, 2022).

Loan to Value

Also the ratio between the property value and the available mortgage amount has become more strict during the past decade (Boelhouwer & Schiffer, 2015a and 2015b). As the LTV ratio has been decreased to 100%, households cannot get a mortgage higher than the value of the property (Boon & Koning, 2021). Because of this, remaining costs need to be financed using equity. These remaining costs exist of the mortgage advisor, the realtor, the taxation, the notary, the bank guarantee, the NHG fee, and in some cases the transfer tax. Meaning that first-time buyers have to save up own money before being able to purchase a property. These stricter norms are less of an obstacle for existing home-owners than for first-time buyers. Existing home-owners often possess surplus value on their property which they could deploy (Boelhouwer & Schiffer, 2019). Within the group of potential first-time buyers younger than 35 (households that aim to purchase their first property within a year with a high enough income to do so), more than 60% does not have the funds to finance the remaining costs listed above. Because of the high rental house expenses, the 65% of first-time buyers living in a rental property before purchasing a property can hardly save against inflation to finance the remaining costs (Boon & Koning, 2021; Wisman & De Vries, 2020). In addition, the LTV ratio of 100% makes the purchase of a renovation house also less affordable for first-time buyers, as the costs to fix up the property need to be financed by themselves. This limits the possibilities of first-time buyers on the market as renovation houses are often the more the affordable properties on the market.

Equity

In contrast to existing home-owners, first-time buyers do not have a property yet that will be sold on the market around the same time they purchase a new property. Therefore, first-time buyers have not been able to enjoy the growth in home equity and the redemption of a mortgage during the past few years and do not have the possibility to use the capital gains from home ownership (Aerts, 2022). Even though this equity is tightened into the property, access to this equity has become more important during the past years due to the price developments on the owner-occupied housing

market, and becomes accessible to transferring homeowners (Boelhouwer et al., 2022). This has also played a more important role in weakening the position of first-time buyers on the owner-occupied housing market, as they do not have access to this developed equity. Because of the lack of built up equity, first-time buyers are often bound to the financing ceiling of the available mortgage, and are therefore limited to the cheaper properties. However, demand for these cheaper properties has increased significantly.

Sub-conclusion limited accessibility first-time buyers

The first-time buyers that experience the most problems with regard to accessibility to the housing market are the households that have an income between modal and 1,5 modal. Their income is too high to qualify for social rent, but too low to get a mortgage that complies with the current property prices. This price bracket makes them reliant on the lower price segment of the housing market. However, the competition in the lower price segment is too high as result of the increase in quantitative housing shortage since 2009 (Aerts, 2022). This has increased the share of unsuccessful buyers during the past year. The competition with older and richer buyers has weakened the position of first-time buyers and the accessibility of young households to homeownership are very sensitive to any alterations in the housing finance system (Neuteboom & Brounen, 2011).

Therefore, the main difference between first-time buyers and existing homeowners, limiting their accessibility to the owner-occupied housing market can be allocated to the financial capacity. The financial capacity of the majority of first-time buyers is limited by their income, limiting the maximum mortgage capacity based on the LTI ratio. Secondly, the absence of homeownership results in no build up equity through the high increase in property prices during the past year or through the redemption of a mortgage, which could be used with the purchase of a new property. The annual gross income of this group of limited first-time buyers is often between the €40.000 and €60.000 comparable to a 1 – 1,5 modal income.

3.4.4 Neighboring countries

The next section will discuss and compare the characteristics and position of first-time buyers in neighboring countries to the first-time buyers in the Netherlands. This comparison is made to learn whether the characteristics and position on the housing market of first-time buyers in neighboring countries are comparable to the Netherlands.

The United Kingdom

The United Kingdom has a larger owner-occupied and private rental segment than the Netherlands, but a significantly smaller social rental segment (Department for Levelling Up, Housing and Communities, 2022a). The vast majority of first-time buyers can be allocated to the age bracket of 25 to 34 years old, setting the average age of first-time buyers in the UK is 34 years old (Department for Levelling Up, Housing and Communities, 2022b). Despite the relatively young average age of first-time buyers in the UK, almost all first-time buyers provide a deposit with the purchase of their first property, of which 85% used savings to do so (Department for Levelling Up, Housing and Communities, 2022c). Unsurprisingly, 63% of the first-time buyers were high-income households (Department for Levelling Up, Housing and Communities, 2022b). This results in only 22% of the first-time buyers taking out a mortgage of 90% or higher.

Comparable to the Netherlands, the accessibility of first-time buyers to the UK owner-occupied housing market has decreased (Carozzi, 2020). Down-payment requirements have increased, causing young households with limited financial resources to be outbid by older, existing home-owners. In 2022, the amount of first-time buyers on the UK housing market dropped by 10% (Department for Levelling Up, Housing and Communities, 2022b). Additionally, the construction rate has been low causing a shortage in housing provision (Ruddock & Ruddock, 2016).

Belgium

With a home-owner rate of 72%, Belgium has a relatively large homeownership segment compared to the Netherlands (Eurostat, n.d.). Belgium has been a country with a large share of homeowners for a long time (De Decker & Dewilde, 2010). At the end of the 19th century, the government started the promotion of homeownership and discouraged other forms of tenure. Belgium knows stable homeownership rates (Lennartz et al., 2016). With the relative small rental market, the majority of first-time buyers are direct entrants to the owner-occupied housing market. Before the financial crisis, the success of younger generations entering the owner-occupied housing market was partially because of financial help from family, as almost 20% received gifts or loans from family members (Heylen et al., 2007). In 2013, 91% of the first-time buyers were younger than 35 years old, with an average age of 27 years old (Heylen, 2016).

However, the strong increase in property prices since 2019 has strongly decreased the affordability of the Belgian housing market (Warisse, 2022). This has also led to an increase in down payment by first-time buyers, which is was an average of €55.000,- in 2021, only 25% of the first-time buyers had an LTV between 90 and 100%.

Germany

The ratio between the different housing segments in Germany is contrasting to the housing markets in the Netherlands, the UK, and Belgium. Germany has a low home ownership of only 45% which is the second lowest percentage of homeowners of all OECD countries (Kaas et al., 2020). The German housing market is largely renter-orientated, encouraged by housing policies that stimulate the rental sector and incentivize households to rent.

Despite the level of homeownership has been traditionally low especially for young households, a decrease in homeownership of young households has been observed (Thomas & Mulder, 2016). While the number of first-time buyers is declining, the average age of first-time buyers is increasing (Voigtländer & Sagner, 2019). The number of first-time buyers has been decreasing since 2002 and the share of first-time buyers on the housing market has been very low during the past few years. The average age of first-time buyers has risen since 1996, setting the average at 40+. Since 2012, the average income of first-time buyer has been increasing as well.

The mindset of German households is also different compared to that of the Dutch households. In Germany, young households value flexibility and feel like a rental property is a more appropriate step towards accessing the housing market than the purchase of a property (Toussaint et al., 2007). Therefore, the majority of first-time buyers in Germany are former tenants, contrasting to the first-time buyers in Belgium. Additionally, they feel more pressure to save for a deposit with the use of "Bausparen", before the purchase of property to be able to have acquire a mortgage with a maximum LTV of 70 – 80%. Contrasting, households in the Netherlands see the purchase of a property has a way to build equity (Elsinga et al., 2007), and consider a LTV of 100% completely natural (Toussaint et al., 2007).

Comparable to the Netherlands, the house prices in Germany have increased in a higher pace than the wages have (Lutz, 2020). This has decreased the affordability of housing for the majority of the population. Despite the decline in financing costs, the costs to access the housing market such as acquisition costs, transfer tax and equity capital have risen (Voigtländer & Sagner, 2019). These costs are related to the increasing house prices and are ineligible for financing, and can add up to 15% on top of the purchase price of the property. According to Voigtländer and Bierdel (2017), this makes the access to homeownership in Germany more challenging than in the Netherlands, especially for the low- and middle-income households.

3.4.6 Interventions

The deteriorating position of first-time buyers on the Dutch housing market has also caught the attention of the Dutch government. Over the past few years, the government has implemented several policies to increase the accessibility of first-time buyers to the Dutch owner-occupied housing market (Ministry of the Interior and Kingdom Relations, 2021b).

Exemption transfer tax

Since 2021, the government has implemented a one-time-only transfer tax exemption for first-time buyers. The usual transfer tax rate for a owner-occupied properties is 2% and for buyers that use the property as investment 10,4% (Ministry of Finance, 2023). There are several requirements to be able to get the exemption. The buyer has to be younger than 35 and the maximum property value is €400.000,-. The objection of the exemption is to improve the position of first-time buyers on the owner-occupied housing market in comparison to the position of investors who pay 10,4% transfer tax on properties (Ministry of Finance, 2023).

Starter loan

The starter loan (in Dutch 'Starterslening') was introduced in 2003 by the Stimuleringsfonds Volkshuisvesting (SVn). The main purpose was to enhance the accessibility of first-time buyers to the Dutch owner-occupied market (Stimuleringsfonds Volkshuisvesting, 2013). First-time buyers can get the starter loan on top off their mortgage to compensate the difference between the price of the property (with a maximum of a LTV of 100%) and the maximum mortgage allowed by the bank (Stimuleringsfonds Volkshuisvesting, n.d. -a). The loan is currently provided by 250 municipalities in the Netherlands. A starter loan has an interest-fixed period of 15 years and the mortgage has to be redeemed within 30 years. The benefit of the starter loan is that it can be redeemed anytime without any fines, and that no rent or redemption is due during the first three years, as the rent is paid by the municipality during the first three years (Stimuleringsfonds Volkshuisvesting, 2022). It is required to have a mortgage with NHG to be able to take out a starter loan (Nationale Hypotheek Garantie, 2023b).

Thus, a starter loan increases the funding capacity of first-time buyers. However, the increase of the house prices was partially caused by the increase of the funding capacity of households (De Nederlandsche Bank, 2020). Therefore, first-time buyers do not experience the beneficial effect they should experience from their increased funding capacity. In the end, it results in an even higher increase in house prices and higher mortgages.

National fund affordable owner-occupied housing

To increase the opportunities of first-time buyers on the housing market, the Dutch government is developing a National Fund Affordable Owner-occupied Housing (Ministry of the Interior and Kingdom Relations, 2023b). With the fund of €40 million, the government aims to help first-time buyers to acquire an owner-occupied property. The vision of the fund is to provide 10.000 affordable properties per year to first-time buyers, with the use of the existing purchase instrument: KoopStart (Conijn & Van Son, 2021). The €40 million would be used to pay for the given discount that is provided with the application of KoopStart. However, no official layout of the fund has been published yet.

Alternative purchase instruments

Multiple products have been developed to increase the affordability for homebuyers and to decrease their risk (Dol et al., 2012). These products are being supplied by housing associations, municipalities, developers, and other organizations. Regarding the current housing market circumstances, a house is not only a basic need, but also a risk full investment. One of the categories within the supplied products are the alternative housing purchase instruments. These instruments offer alternative

approaches to the purchase of a house for households that cannot afford it. Because of the current housing market, first-time buyers form a big part of these households.

Fair value balance

Around the year 2000, the desire to verify the fairness of the division of value development applied to alternative purchase instruments increased (Conijn & Schweitzer, 2000). This resulted into the development of the fair value, ensuring that the financial benefits and financial disadvantages for the buyer of the property are balanced (Conijn & Van Son, 2021). Since 2011, the fair value has been set at 1 : 1,5, meaning that the share of value development for the housing association providing the property was set at a maximum of 1,5 times the provided discount percentage. In practice, this means that when a discount of 30% is provided, a share of 45% of the value development is for the housing association. Housing associations selling properties for a price lower than 90% of the market value are obligated to apply the fair value method (Conijn et al., 2023). However, other parties selling properties under the market value with the use of alternative purchase instruments are not bound by the fair value.

The fair value balance is amongst others dependent on a variety of (financial) parameters (Conijn & Van Son, 2021). Especially the fluctuations in the mortgage interest rate during the past years is reason to revise and update the fair value balance. Other factors such as the relatively new exemption of transfer tax for first-time buyers and the increase in properties prices also influence the calculation of the fair value balance (Conijn et al., 2023). A study by Finance Ideas on behalf of the Dutch government has resulted into the advice of changing the current fair value of 1 : 1,5 to 1 : 1, which will be implemented in the near future. The result of this future adjustment is that the value loss in a falling market will be lower for a housing association and the gain in value in a rising market will be lower for a housing association since the share of value development will be less than in the current situation. From the user's perspective, the gain in value in a rising market will be higher, but the value loss in a falling market will also be higher since the share of value development will increase with the implementation of the new fair value.

4. Empirical outcomes

This chapter elaborates on the empirical research that was conducted and its findings. This empirical research complements the previous chapter in which the inaccessibility of the housing market to first-time buyers was elaborated. This chapter analyzes the following alternative purchase instruments: KoopGarant, KoopStart, Slimmer Kopen, and Duokoop. The analysis establishes which factors of these instruments enable the accessibility of first-time buyers the housing markets, and which of these instruments' factors form a barrier. The empirical research of this study existed of interviews with three different categories of interviewees: the providers of the instruments, the intervening external factors, an experts on the subject. This chapter is divided into three parts: (1) the analysis of the instruments individually, providing the positives and negatives of each instrument with respect to first-time buyers and the providers of the instruments, and (2) the comparison of the studied instruments with regard to the positives and negatives of both the users and the suppliers of the instruments, and (3) the findings based on the comparison of the discussed instruments.

4.1 Analysis

The individual analysis of the instruments is divided into four categories. These categories each have their own influence on whether the instrument enhances the accessibility of first-time buyers to the Dutch housing market. The alternative purchase instruments are analyzed with regard to the following four areas: **(1) Product**; the instrument is first analyzed on how it works and its setup. **(2) User**; the instruments are analyzed from the user's perspective, in this case the first-time buyers in the Netherlands. **(3) Supplier**; consequently, the product is analyzed from the supplier's perspective, in this case the providers of the instruments. **(4) External intervening factors**; lastly, the external factors intervening with the function of the product are established.

4.1.1 KoopGarant

The first alternative purchase instrument to be analyzed is KoopGarant, as this is the most-known and most frequently used instrument in the Netherlands. Since 2004, there have already been 40.000 KoopGarant properties been sold (Stichting OpMaat, 2023a), which is equal to almost 1% of the Dutch owner-occupied housing stock. The goal of KoopGarant is to diminish the gap between renting and buying a property for lower and middle income households (Dol et al., 2012). It provides owner-occupied housing for households that earn too much to be eligible for social housing, but too little to be able to acquire a house on the free owner-occupied market, which is, as determined in chapter 3, the group of first-time buyers that are limited the most when it comes to accessing the owner-occupied market.

(1) product

In 2004, Stichting OpMaat introduced KoopGarant to the market as a purchase instrument (C. Hanemaaijer, personal communication, April 4, 2023). OpMaat manages the instrument and issues licenses to housing associations, real estate developers, and municipalities which allows them to sell properties with the use of KoopGarant (Stichting OpMaat, n.d.-a). Currently, 130 housing associations own a KoopGarant license (C. Hanemaaijer, personal communication, April 4, 2023). It is applicable to both newly built and existing properties (Stichting OpMaat, n.d.-b). Stichting OpMaat often plays an advisory role in new projects on how to incorporate affordable housing within in a project, and provides trainings to real estate agents that sell KoopGarant properties, (C. Hanemaaijer, personal communication, April 4, 2023). In addition, Stichting OpMaat focusses on whether existing products still meet the demand within the housing market, whether the existing products are still compliant with the current laws and regulations, and focusses on the development of new alternative purchase instruments.

The license holder, usually a housing association, sells a KoopGarant property with a discount on the market value (Stichting OpMaat, 2023a). This makes the property more affordable. The market value is defined by an independent appraiser, and the discount percentage is set between 10% and 50% (Conijn & Van Son, 2021). The applied discount percentage is set by the license holder, and is in practice usually between the 10% and 30%. The land of the property is leased out to the buyer of the property and the canon is paid off at once. The lump-sum payment is incorporated into the purchase price. Therefore, no yearly canon payment is due. KoopGarant includes a buy-back guarantee which obligates the license holder to repurchase the property within three months. The original KoopGarant buyers then receive the price they paid with the original purchase plus or minus a part of the developed value (C. Hanemaaijer, personal communication, April 4, 2023). The buy-back guarantee is the reason why KoopGarant is usually used by housing associations and not by real estate developers, as they do not want the obligation to repurchase the properties.

Figure 14 shows the expenditures made by both the supplier and the user at the moment a KoopGarant property is sold to the buyer, well as the receivables at the moment of sale of the property. The share of value development to be received by both the housing association and the buyer of the property can be both positive or negative. Since a housing association is the usual license holder of a KoopGarant property, the fair value as explained in chapter 3 is applied to the division of the developed value.

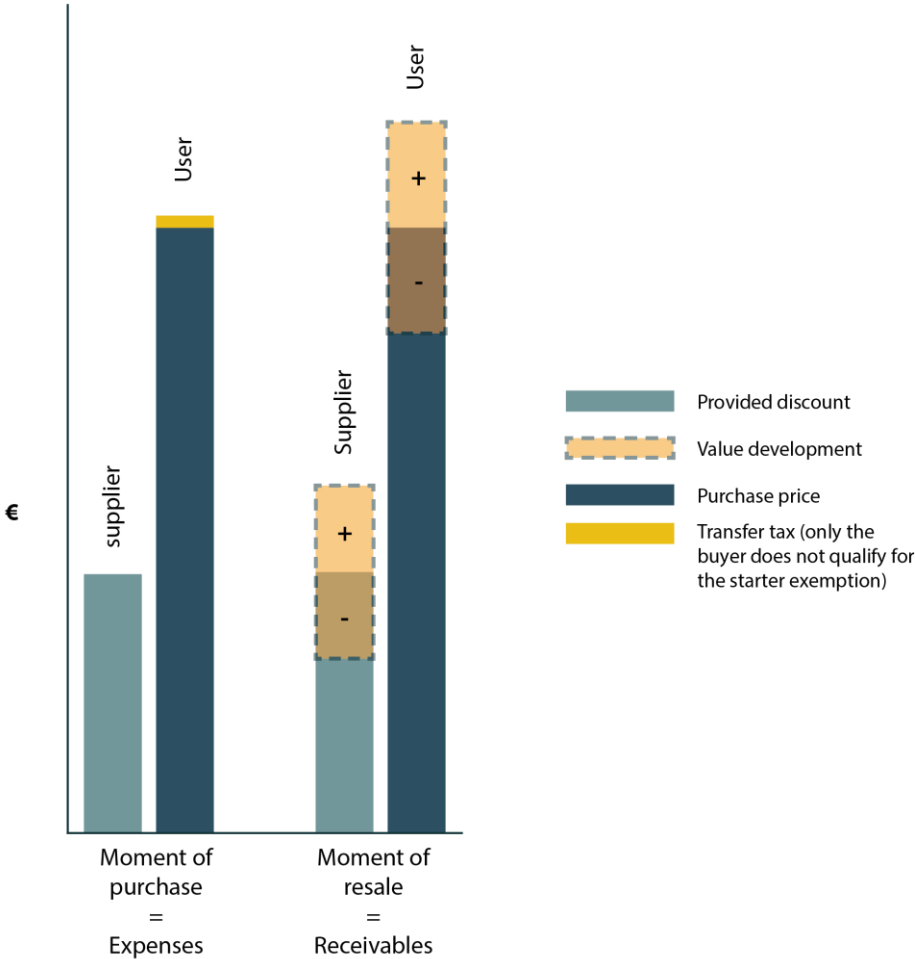


Figure 14. The expenditures and receivables for the supplier and the user of KoopGarant(own figure).

KoopGarant has been approved by both the NHG and the Dutch tax administration. KoopGarant properties can be purchased with the use of equity, a mortgage, or a combination of both (Stichting OpMaat, 2023b). The mortgage rent is fiscally deductible. Many of the housing associations and developers that sell KoopGarant properties obligate the buyer to finance the properties with the use of the NHG. This sets a limit to the maximum mortgage amount for KoopGarant properties of €405.000 in 2023. A regular mortgage can be combined with a starter loan to increase the funding capacity of first-time buyers on the housing market. If the municipality provides starter loans, it can be combined with a regular mortgage for the purchase of a KoopGarant property. However, the municipality providing the loan may apply special conditions (Stichting OpMaat, n.d.-c).

When the property is resold to the housing association, the development of the value, both an increase or decrease, is divided according to the method agreed on in the KoopGarant purchase agreement (Stichting OpMaat, 2023a). When the license holder is a housing association, the fair value determined by the Ministry of the Interior and Kingdom Relations needs to be applied which is currently 1 : 1,5 (C. Hanemaaijer, personal communication, April 4, 2023). Thus, when a discount of 30% was given, the housing association participates for 45% in the increase or decrease of the value development, and the buyer of the property participated for 55% in the increase or decrease of the value development (figure 15). When the provided discount is higher than 33,3%, the share of value development for the license holder is limited at 50%. (Dol et al., 2023). Thus when a discount of 40% is given, the share of value development for the license holder will be limited to 50% instead of 60%. However, the fair value rate will soon be lowered. If any improvements have been made to the property by the owners, such as an extension of the property or an improvement to the bathroom, the appraiser decides what effect the improvements had on market value of the property (Stichting OpMaat, 2023a). The increase in value because of these improvements will be fully allocated to the owner, since they are the ones who financed the improvements.

(2) User

The given discount makes the property more affordable with regard to two aspects. Because of the given discount, the property is sold for a lower price than the market value. As discussed in chapter 3, one of the biggest limitations for potential first-time buyers is that the maximum available mortgage does not comply with the current prices on the Dutch owner-occupied housing market. The discount of a KoopGarant property results in a lower purchase price that is in line with the buyer's financial capacity. Secondly, the lower outstanding mortgage results in lower monthly housing costs compared to the monthly costs of a mortgage financing a property on the regular market.

“KoopGarant allows households to purchase a property and to build up some equity through their owner-occupied property which is a substantial difference compared to renting a property”

(C. Hanemaaijer, personal communication, April 4, 2023).

As discussed in chapter 3, the opportunity for a household to build equity is one of the benefits of homeownership. The opportunity to build equity is one of the reasons why the accessibility of first-time buyers to the housing market is of relevance, since it prevents the formation of a prosperity gap between insiders and outsiders to the owner-occupied housing market.

The goal of the obligation to repurchase the property has been inserted into KoopGarant to ensure the effect of the instrument for a longer term (C. Hanemaaijer, personal communication, April 4, 2023). Because households are obligated to sell the property back to the license holder, it then becomes available again to the target group: the middle income households, often first-time buyers. With this goal in mind, it does not happen very often that KoopGarant properties can be redeemed.

Purchase of a KoopGarant property		
Market value property		€300.000
- discount	30%	<u>- €90.000</u>
Paid purchase price		€210.000

Sale of a KoopGarant property - no value development		
Market value property including improvements		€310.000
Market value property excluding improvements		<u>- €300.000</u>
Value improvements		€10.000
Value development to divide	€300.000 - €300.000	€-
Share value increase/decrease for the buyer	55% x €-	€-
Share value increase/decrease for the lease holder	45% x €-	€-
Repurchase price	€210.000 + €10.000	€220.000

Sale of a KoopGarant property - positive value development		
Market value property including improvements		€370.000
Market value property excluding improvements		<u>- €360.000</u>
Value improvements		€10.000
Value development to divide	€360.000 - €300.000	€60.000
Share value increase/decrease for the buyer	55% x €60.000	€33.000
Share value increase/decrease for the lease holder	45% x €60.000	€27.000
Repurchase price	€210.000 + €10.000 + €33.000	€253.000

Sale of a KoopGarant property - negative value development		
Market value property including improvements		€250.000
Market value property excluding improvements		<u>- €240.000</u>
Value improvements		€10.000
Value development to divide	€240.000 - €300.000	€-60.000
Share value increase/decrease for the buyer	55% x €-60.000	€-33.000
Share value increase/decrease for the lease holder	45% x €-60.000	€-27.000
Repurchase price	€210.000 + €10.000 + €-33.000	€187.000

Figure 15. Calculations of the purchase and sale of a KoopGarant property with no value development, positive value development, and negative value development (own figure).

Because of the buy-back guarantee, owners of a KoopGarant property have the certainty that their property will be sold to the license holder within three months (Stichting OpMaat, 2023a). This assures them that the property will also be sold in economically less beneficial times. The repurchase of the property always happens based on a valuation of the market value. However, in practice it can be seen that these valuations are always somewhat behind on the market value (C. Hanemaaijer, personal communication, April 4, 2023). In an economically beneficial time this could be a disadvantage for the owners. In an economically less beneficial time, this could be an advantage for the owners. So whether the buy-back guarantee can be seen as an advantage or not to first-time buyers is dependent on the market conditions at the time of repurchase but is also depending on the preferences of the owner.

Besides the usual financing costs such as transfer tax, mortgage advisory costs, the NHG fee, and notary fee, there are no extra costs involved for the potential buyers of a KoopGarant property (Stichting OpMaat, n.d.-d). The majority of KoopGarant properties are existing properties (C. Hanemaaijer, personal communication, April 4, 2023). Therefore, transfer tax needs to be paid in most cases as the properties are being sold "kosten koper". The 2% transfer tax only needs to be paid on the purchase price and not on the received discount. However, if a household is eligible for the "starter exemption", no transfer tax is due. Similar to when a KoopGarant property is a newly built house, since the property is then sold as "vrij op naam".

Sometimes, the license holder offers the opportunity to fully redeem the KoopGarant discount and thereby acquire the bare property rights from the license holder (Stichting OpMaat, n.d.-e). Both the given discount and the share of the development of the value need to be paid to the license holder. Transfer tax needs to be paid on the repayment of the discount if the household is not eligible for the starter exemption (C. Hanemaaijer, personal communication, April 4, 2023). However, whether redemption is possible or not is dependent on the policy and strategy of the housing association. Since most housing associations have the aim to hold these properties in their portfolio as affordable properties, it does not happen very often in practice.

As the NHG is often an obligated component of KoopGarant, some of the risk that is normally involved in the purchase of a property and taking out a mortgage is eliminated. The risk created by the division of the developed value when the property is repurchased by the license holder is minimized by the regulations of the NHG, as KoopGarant is on the list of purchase instruments without equity risk. The division of risk does limit a household's growth of equity in economically beneficial times. However, it also slows down a household's decrease in equity in economically less beneficial times.

(3) Supplier

Since the license holder is the party that provides the discount, it is necessary that the license holder, mostly housing associations, has sufficient funds to be able to finance this given discount. In return for the given discount, the license holder has the right to participate in the division of the developed value. This is appealing in a growing market, but creates equity risk in a falling market (Conijn & Van Son, 2021).

The revenue of KoopGarant to the license holder exists out of the repayment of the given discount and the share in the potential increase in value.

The positive side to the obligation to repurchase the property is that the license holder, normally a housing association, can provide the property as a KoopGarant property to first-time buyers again (Conijn & Van Son, 2021). However, the license holder needs to have enough funds because of the obligation to repurchase the property that the license holders have.

“Therefore, KoopGarant properties need to be included on the balance sheet of the license holder which significantly limits them in their financial freedom, this is seen as an obstacle by some housing associations.”

(C. Hanemaaijer, personal communication, April 4, 2023).

This is also one of the reasons why the number of sold KoopGarant properties has decreased compared to the past. Even though there are 130 housing associations that have a KoopGarant license, the number of sold KoopGarant properties has been decreasing for the past years (Capital Value, 2019). In 2021, 236 KoopGarant properties were sold, while 1125 properties were repurchased (Stichting OpMaat, 2022). Only 15% of these repurchased properties were offered as KoopGarant properties again. The rest was either sold on the free market or rented out as a social rental property. Another 280 KoopGarant property contracts were terminated as the discount was paid off by the owners. Only 25% of the 130 license holders are active in the deployment of KoopGarant.

(4) External intervening factors

The license holders is the executing party of KoopGarant. Therefore, OpMaat has no influence on the amount of properties that are actually sold with the use of KoopGarant, and is fully dependent on the deployment of the instrument by the license holders. Secondly, the product also relies on the continuation of the approval of the NHG as the NHG has a big influence on whether mortgages are issued to potential buyers of KoopGarant properties (M. Sippekamp, personal communication, May 3, 2023). Thirdly, the product needs to be kept up-to-date with the latest legislation and regulations (C. Hanemaaijer, personal communication, April 4, 2023).

4.1.2 KoopStart

The second purchase instrument to be analyzed is KoopStart. The development of the instrument started after real estate developers had expressed their interest in KoopGarant in 2012 (C. Hanemaaijer, personal communication, April 4, 2023). However, the fact that the buy-back guarantee was a part of KoopGarant formed a barrier that stopped them from using it. Therefore, Stichting OpMaat introduced KoopStart to the real estate market in 2014 (Stichting OpMaat, 2023c). The introduction of KoopStart contributed to the accessibility of first-time buyers to the owner-occupied housing market, in particular newly built properties (Conijn & Van Son, 2021). In the meantime, there are around 30 – 40 real estate developers that own a KoopStart license are therefore authorized to sell properties with a KoopStart discount (C. Hanemaaijer, personal communication, April 4, 2023). In 2021, 95 KoopStart properties were sold, of which 90 were newly-built properties (Stichting OpMaat, 2022).

(1) Product

The foundation of KoopStart is the same as KoopGarant. Stichting OpMaat manages the instrument and issues the licenses to housing associations, real estate developers and municipalities. While KoopGarant is usually used by housing association, KoopStart is mostly used by real estate developers (C. Hanemaaijer, personal communication, April 4, 2023). Real estate developers apply KoopStart in particular when newly built properties need to be sold against a lower price than the market value for example based on the agreements with the municipality (Dol et al., 2023).

KoopStart properties are sold by license holders with a discount between 10% and 50% on the market value (Stichting OpMaat, n.d.-f). The discount rate differs per property and is selected by the license holder (Stichting OpMaat, 2023c). The land of the property is in leasehold and the ground rent is bought off. This lump-sum payment as already been integrated into the purchase price of the property, so no monthly or yearly ground rent is due. KoopStart does not include the buy-back

guarantee, but there is the possibility to incorporate the obligation to offer for sale into the instrument. This is a decision made by the license holder (Stichting OpMaat, 2023c).

Figure 16 shows the expenditures made by both the supplier and the user with the purchase of a KoopStart property, as well as the receivables at the moment of sale of the property. Assumptions made in this example are that there is a positive value development between the moment of purchase and sale and that the license holder is a real estate developer, receiving an equal share in value development as the provided discount.

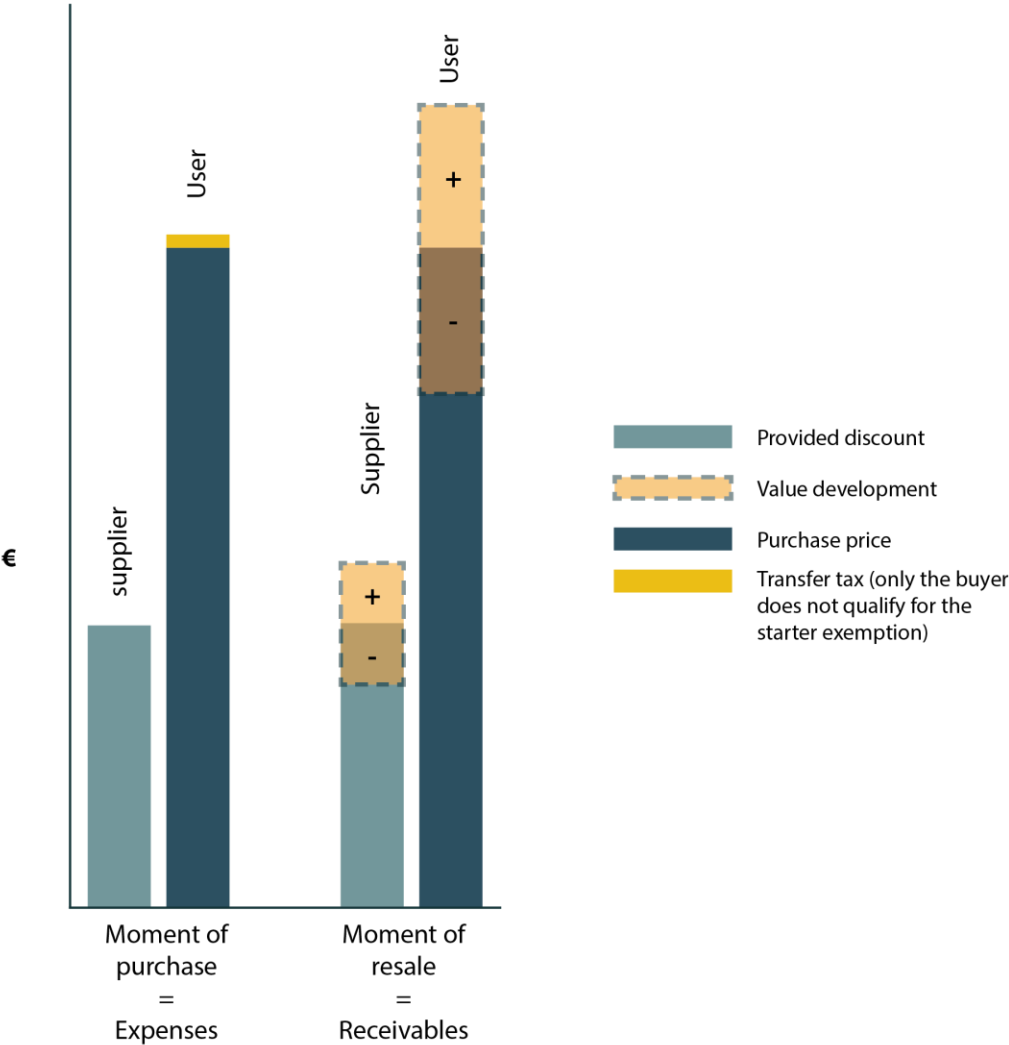


Figure 16. The expenditures and receivables for the supplier and the user of KoopStart (own figure).

KoopStart is an approved instrument by both the NHG and the Dutch tax administration. Therefore, a KoopStart property can be financed with NHG, and the mortgage interest is fiscally deductible. Many of the real estate developers that offer KoopStart properties obligate the buyers to finance the purchase with NHG. This sets a limit to the market value of a KoopGarant property, which is often, but does ease the process of obtaining a mortgage by the bank (M. Sippekamp, personal communication, May 3, 2023). In addition to a mortgage, buyers can apply for a starter loan if the municipality provides them (R. Luigjes, personal communication, May 9, 2023). Specific conditions may apply when used to purchase a KoopStart property (Stichting OpMaat, n.d.-f).

There are two different methods that can be used to determine the division of the developed value (Stichting OpMaat, 2023c). Whether the license holder has the choice to determine which method is used for the value division depends on whether the license holder is a housing association or not.

If the KoopStart property is being sold by a housing association, the fair value has to be applied to determine the division of the value development. The fair value is currently 1 : 1,5, but will be changed in the near future (N. Verhoef, personal communication, April 5, 2023).

However, most KoopStart license holders are real estate developers which do not have to use the fair value set by the Ministry of the Interior and Kingdom Relations (C. Hanemaaijer, personal communication, April 4, 2023). When a KoopStart property is provided by a real estate developer, there are two options with regard to the division of value development (Stichting OpMaat, 2023c). The first option is to use the fair value to determine the share of the real estate developer in the division of value development, which is 1 : 1,5 at this moment. This means the real estate developer participates for 45% in the increase or decrease of value development when a 30% discount is given. The second option is that the share of developed value is set equal to the given discount percentage. Thus, when a discount of 30% is given, the real estate developer participates for 30% in the increase or decrease of the value development (see figure 17). Which method is used, is up to the real estate developer and decided on before the property is sold. However, Stichting OpMaat advises real estate developers to apply the second option as research has shown that a value division equal to the given discount is more fair (C. Hanemaaijer, personal communication, April 4, 2023; Conijn & Van Son, 2021).

Any improvements made by the owners of the property, such as the construction of an addition to the property, a dormer window or upgrade of the kitchen, are valued by an independent appraiser (Stichting OpMaat, 2023c). This increase in value is fully allocated to the owner of the property.

(2) User

KoopStart lowers the monthly housing costs for a household as a result of the received discount, which is a maximum of 50% (Stichting OpMaat, n.d.-f). The KoopStart discount lowers the required mortgage amount and with that also the interest payments. The percentage decrease in housing costs can be compared to the received discount, with a correction for the mortgage interest deduction (Conijn & Van Son, 2021). However, the compensation that the buyer pays for the received discount is the division of the developed value when the property is sold again. Since the leasehold on the land is paid off, there are not financial consequences for the owners of the property for the ground lease.

KoopStart knows two different types of contracts. The first type includes a temporary obligation to offer, the second one does not (Stichting OpMaat, 2023c). The license holder decides whether to incorporate the obligation to offer into the contract or not. The contract without the obligation to offer allows the owners of the KoopStart property to sell the property on the free market, after which the KoopStart conditions are being discontinued. The contract with the obligation requires the owners to offer the property to the license holder before selling it on the free market during the first few years after the original purchase of the property (Stichting OpMaat, 2023c). KoopStart properties without the obligation to offer only contribute to the accessibility of first-time buyers to the housing market on one occasion: the first sale. KoopStart properties with the obligation to offer have the potential to enhance the accessibility of first-time buyers multiple times. However, this is dependent on the policy and strategy of the license holder at that time.

Purchase of a KoopStart property		
Market value property		€300.000
- discount	30%	- €90.000
Paid purchase price		€210.000
Sale of a KoopStart property - no value development		
Selling price property including improvements		€310.000
Value improvements		- €10.000
Selling price property excluding improvements		€300.000
Value development to divide	€300.000 - €300.000	€-
Compensation license holder		
Original discount		€90.000
Share value increase/decrease for the lease holder	30% x €-	€-
Total payment to the license holder		€90.000
Share of sale for the owner:	€310.000 - €90.000	€220.000
Sale of a KoopStart property - positive value development		
Selling price property including improvements		€370.000
Value improvements		- €10.000
Selling price property excluding improvements		€360.000
Value development to divide	€360.000 - €300.000	€60.000
Compensation license holder		
Original discount		€90.000
Share value increase/decrease for the lease holder	30% x €60.000	+ €18.000
Total payment to the license holder		€108.000
Share of sale for the owner:	€370.000 - €108.000	€262.000
Sale of a KoopStart property - negative value development		
Selling price property including improvements		€250.000
Value improvements		- €10.000
Selling price property excluding improvements		€240.000
Value development to divide	€240.000 - €300.000	€ -60.000
Compensation license holder		
Original discount		€90.000
Share value increase/decrease for the lease holder	30% x € -60.000	+ € -18.000
Total payment to the license holder		€72.000
Share of sale for the owner:	€250.000 - €72.000	€178.000

Figure 17. Calculations of the purchase and sale of a KoopStart property with no value development, positive value development, and negative value development (own figure).

The absence of a buy-back guarantee could be seen as a disadvantage of KoopStart in economically less beneficial times as it does not give the owners the guarantee that the property will be purchased by the license holder. In contrast, the absence could be seen as an advantage in economically beneficial times, as the owners have the freedom to sell the property on the free market against any price that is offered.

No extra costs are involved with a KoopStart property compared to the purchase of a regular property. In general, most KoopStart properties are newly built as most of the license holders are real estate developers and KoopStart does not involve the repurchase obligation. Therefore, the transfer tax is paid by the license holder for most of the KoopStart properties, as they are sold as “vrij op naam” properties (Stichting OpMaat, 2023c). If the KoopStart property is an existing property, the buyer usually pays the transfer tax, “kosten koper”, but only on the purchase price and not the discount (C. Hanemaaijer, personal communication, April 4, 2023). However, households that qualify for the starter exemption, do not need to pay the transfer tax.

A benefit for first-time buyers is that KoopStart holds the opportunity to settle with the license holder after 3 three years (Stichting OpMaat, 2023c). After three years of ownership, the KoopStart rights can be paid off and the owners of the property acquire the bare property rights from the license holder. An appraiser values the property and the improvements made to the property. To pay of the KoopStart rights, the given discount needs to be redeemed, and the share of the developed value as noted in the contract needs to be paid to the license holder. Extra costs attached to an intermediate settlement are the notary cost, the costs for the cadastral agency, and 50% of the appraiser costs. Additionally, 2% transfer tax needs to be paid on the amount payable to the license holder, except if owners of the properties qualify for the “starter exemption”. As the NHG is often obligation with the purchase of a KoopStart property, a share of the risk that is normally attached to getting a mortgage is eliminated.

A downside to KoopStart is that the developed value needs to be divided between the owner of the property and the license holder. This limits the household’s potential grow of equity with the increase of property prices. However, when the property prices decrease in economically less beneficial times, the division of the value development also limits the household’s decrease in equity.

(3) Supplier

The license holder, most likely a real estate developer, funds the discount of the KoopStart property until the property is sold again (Stichting OpMaat, 2023c). Therefore, the real estate developer only receives a part of the profit of the project when the properties are finished. The second part of the profit is stuck in the project until the properties are being sold for the second time. Meaning the developing party needs sufficient funds to be able to manage the deferred profits. In return for the opportunity costs (the costs of being unable to use the given discount to generate more money), the license holder receives part of the developed value. However, the real estate developer also shares the development of the value if has decreased, creating equity risk (Conijn & Van Son, 2021). The delay of revenue also means that the project entity cannot be terminated yet, because it is awaiting for the discount to be returned.

Since there is no obligation to repurchase, there is no need to have the full property on the balance sheet of the license holder, only a receivable with regard to the provided discount. This makes KoopStart more attractive as it does not limit the investment capacity from that perspective.

“The license holder can then insert the obligation to offer for 10 years into the contract, guaranteeing that the properties can be repurchased and sold to a household that meets the right criteria.”

(C. Hanemaaijer, personal communication, April 4, 2023).

If the license holder has the aim to keep the availability of affordable properties for first-time buyers, they can insert the obligation to offer into the contract. This is often done by developers that have certain arrangements with the municipality about the amount of properties they have to develop in a certain project, for a specific selling price, with the condition the properties are available to that certain target group for at least 10 years.

The revenue of KoopStart to be received by the license holder exists of the share in the potential increase in value, which is dependent on the given discount, and the given discount itself (Conijn & Van Son, 2021). The higher the increase in value, the higher the revenue. However, the discount is only repaid after the property is sold again. This means that the entity that was set up for the purpose of a development project, cannot be terminated until the properties are sold again. Because that is the moment that the discount is repaid and the bare property rights are being allocated to the buyer and removed from the entity (O. Koenders, personal communication, April 26, 2023).

(4) External intervening factors

Stichting OpMaat is not the party providing the properties, just the licenses. Therefore, OpMaat only has a partial influence on the amount of license holders and not the amount of KoopStart properties on the market (Stichting OpMaat, 2023c). Secondly, approval of the NHG is of great importance as it is a necessity to obtain funding in the form of a mortgage for the purchase of KoopStart property (M. Sippekamp, personal communication, May 3, 2023). The instrument continuously needs to meet the criteria set by the NHG to be categorized as an instrument that does not form any equity risk. Lastly, any changes in legislation and regulations can influence the functioning of KoopStart (C. Hanemaaijer, personal communication, April 4, 2023). Therefore, Stichting OpMaat is constantly checking whether the instrument still complies with the latest legislation and in contact with the Ministry of Interior and Kingdom Relations.

4.1.3 Slimmer Kopen

Slimmer Kopen is the third purchase instrument to be analyzed. The first Slimmer Kopen purchase was finalized in the year 2000 (N. Verhoef, personal communication, April 5, 2023). In the meanwhile, more than 4000 properties have been sold with a Slimmer Kopen discount. Slimmer Kopen is was initiated by the housing association Trudo in Eindhoven, which currently forms the core business of the association. Trudo is the main seller when it comes to Slimmer Kopen properties, but other housing associations can get a license as well. The instrument was initiated along the following three motivations:

(1) First of all, to give first-time buyers the possibility to access the owner-occupied housing market.

“From the perspective that someone with a modest income not necessarily has to live in a social rental property, but can also purchase a property and therefore built up some equity. And in this way create the opportunity to enter the regular owner-occupied housing market”.

(N. Verhoef, personal communication, April 5, 2023).

Not only first-time buyers whose income excludes them from the rental sector but also from the owner-occupied sector can purchase a Slimmer Kopen property, but also low-income households that would qualify for social housing are given the opportunity to purchase a property with the use of Slimmer Kopen.

(2) Secondly, Slimmer Kopen contributes to the emancipation of residents by the control that an owner-occupied houses provides to a household (Blijie et al., 2022). With a Slimmer Kopen property, the household is 100% the owner of the property (N. Verhoef, personal communication, April 5, 2023). The improvements made to the property will return to the owner once the property is sold, while the improvements made to rental properties will not be returned to the resident.

(3) The third motivation was to create variety in the neighborhoods of Trudo. In some social rent neighborhoods the quality of life is under pressure. Adding owner-occupied properties to that neighborhood to increase the bond between the residents and the neighborhood itself benefits the neighborhood and its livability (N. Verhoef, personal communication, April 5, 2023).

(1) Product

With Slimmer Kopen, Trudo provides a discount on the market value of a property. Both newly built and existing properties can be assigned as Slimmer Kopen properties. The majority are social rental houses that are sold as Slimmer Kopen properties in the long term (N. Verhoef, personal communication, April 5, 2023). The sale of these properties creates the revolving fund model in which the sale generates the funds to develop new projects that will be rented out as social housing, and will then be sold as Slimmer Kopen properties in the long term again. So the money gained by the sale of Slimmer Kopen properties is used as an investment to be able to sell even more Slimmer Kopen properties.

The given discount is fully dependent on the income of the household that purchases the property and the market value of the property to be purchased (Trudo, 2022). The maximum market value of Slimmer Kopen properties is set at €500.000,- and the maximum yearly household income is set at €72.938,- (Trudo, 2023). There is a minimum discount of 10% and the maximum discount is set at 50%. To be able to provide the properties to the right target group, there are three income categories to which certain minimum market values are assigned (figure 18). With this method, the most affordable properties will be available to the lowest-income households. In addition, the lower-income households can get a higher discount to partially compensate the lower available mortgage, making the properties more accessible.

Slimmer Kopen does not work with the leasehold of the ground, but the buyer needs to provide a mortgage promissory note to Trudo (Trudo, 2019). Secondly, in addition to that of the bank, a second right of mortgage needs to be established for the benefit of Trudo. The combination of the mortgage promissory note and the right of mortgage form the certainty for Trudo that the discount will be repaid (Conijn & Van Son, 2021). This has no financial impact for the buyers of the Slimmer Kopen property.

Market value	Social housing income				Middle-income	
	0	€25.476	€34.576	€44.036	€48.626	€58.001
	-	-	-	-	-	-
	€25.475	€34.575	€44.035	€48.625	€58.000	€72.938
€ 50.000 - € 150.000	35%	20%	10%	10%		
€ 150.001 - € 200.000	50%	30%	20%	10%		
€ 200.001 - € 250.000	43%	43%	30%	30%	10%	
€ 250.001 - € 300.000	40%	40%	40%	35%	20%	
€ 300.001 - € 325.000	36%	36%	36%	36%	25%	10%
€ 325.001 - € 350.000	36%	36%	36%	36%	30%	10%
€ 350.001 - € 400.000	37%	37%	37%	37%	37%	15%
€ 400.001 - € 425.000	40%	40%	40%	40%	40%	20%
€ 425.001 - € 450.000	44%	44%	44%	44%	44%	25%
€ 450.001 - € 475.000	47%	47%	47%	47%	47%	30%
€ 475.001 - € 500.000	50%	50%	50%	50%	50%	30%
> €500.000	No Slimmer Kopen Properties					

Figure 18: The provided discount of a Slimmer Kopen dependent on the market value of the property and the household income (adjusted from Trudo, 2023).

Figure 19 shows the expenditures made by both the supplier and the user with the purchase of a Slimmer Kopen property, as well as the receivables at the moment of sale of the property. Because Trudo is a housing association, they are obligated to apply the fair value method with the division of the developed value. Meaning that a discount of 30% results into a share of 45% of the value development for Trudo (see figure 20).

A housing association needs the approval of the Ministry of Housing, Spatial Planning and the Environment to sell existing social rental properties, which Trudo possesses (Trudo, 2019). Slimmer Kopen has also been approved by the Ministry of Finance. Therefore, the mortgage rent is fiscally deductible. Additionally, the NHG has qualified Slimmer Kopen as an instrument that does not form any equity risk. Trudo does not obligate buyers to get the NHG when purchasing a Slimmer Kopen property. However, many banks do have it as an requirement when a household takes out a mortgage to finance a Slimmer Kopen property (N. Verhoef, personal communication, April 5, 2023). This limits the maximum mortgage amount available for a Slimmer Kopen property as well.

The use of a starter loan is not possible for a Slimmer Kopen. This limits first-time buyers in expanding their financing capacity on top of their maximum mortgage.

The increase in value as a result of the following six types of improvements to the property will be fully designated to the owners who made them: (1) bathroom, (2) kitchen, (3) toilet, (4) heating system, (5) expansions, (6) energy-saving measures that improve the energy label of the property.

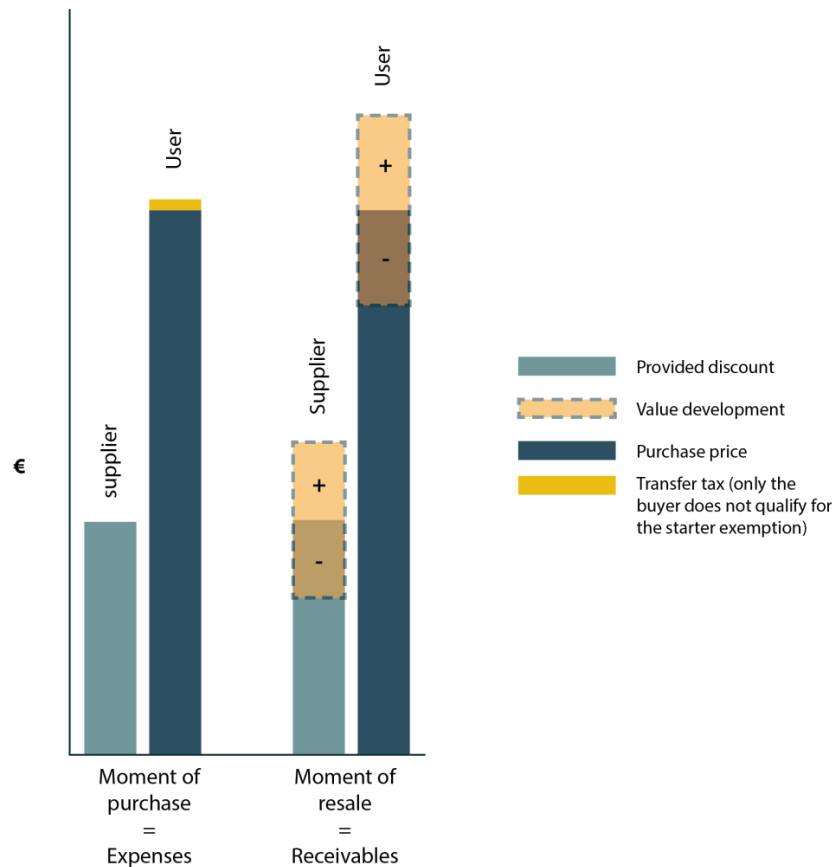


Figure 19. the expenditures and receivables for the supplier and the user of Slimmer Kopen (own figure).

(2) User

The Slimmer Kopen discount results in a lower purchase price compared to the market value, as well as lower monthly housing costs as a result of a lower mortgage (Trudo, 2022). There is a maximum discount of 50%, dependent on the market value of the property and the yearly household income. The lower purchase price and lower monthly housing costs make the properties affordable to first-time buyers that normally could not get sufficient mortgage (Conijn & Van Son, 2021).

Slimmer Kopen always includes the obligation to offer for sale, meaning that owners have to offer the property first to Trudo before they can sell it on the free market (Trudo, 2022). This does not give the owners the certainty that their property will be purchased by the housing association. However, Trudo repurchases the properties almost always, with very few exceptions (N. Verhoef, personal communication, April 5, 2023). The motivation is to support multiple first-time buyers in the purchase of their first property and to keep these properties available for their target group. The selection of the household buying the property is by drawing lots. There is no waiting lists and households need to be lucky with regard to how long it takes before the purchase of a Slimmer Kopen property is possible. Households that live in a social rental property owned by Trudo do get priority in the purchase of a Slimmer Kopen property to enhance the flow within the housing market. Looking at the distinction made in chapter 3, Slimmer Kopen partially prioritizes the former tenants as it results in the availability of a social rental property

Purchase of a Slimmer Kopen property		
Market value property		€300.000
- discount	30%	<u>- €90.000</u>
Paid purchase price		€210.000

Sale of a Slimmer Kopen property - no value development		
Market value property including improvements		€310.000
Market value property excluding improvements		<u>- €300.000</u>
Value improvements		€10.000
Value development to divide	€300.000 - €300.000	€-
Share value increase/decrease for the buyer	55% x €-	€-
Share value increase/decrease for the lease holder	45% x €-	€-
Repurchase price	€210.000 + €10.000	€220.000

Sale of a Slimmer Kopen property - positive value development		
Market value property including improvements		€370.000
Market value property excluding improvements		<u>- €360.000</u>
Value improvements		€10.000
Value development to divide	€360.000 - €300.000	€60.000
Share value increase/decrease for the buyer	55% x €60.000	€33.000
Share value increase/decrease for the lease holder	45% x €60.000	€27.000
Repurchase price	€210.000 + €10.000 + €33.000	€253.000

Sale of a Slimmer Kopen property - negative value development		
Market value property including improvements		€250.000
Market value property excluding improvements		<u>- €240.000</u>
Value improvements		€10.000
Value development to divide	€240.000 - €300.000	€ -60.000
Share value increase/decrease for the buyer	55% x € -60.000	€ -33.000
Share value increase/decrease for the lease holder	45% x € -60.000	€ -27.000
Repurchase price	€210.000 + €10.000 + € -33.000	€187.000

Figure 20. Calculations of the purchase and sale of a Slimmer Kopen property with no value development, positive value development, and negative value development (own figure).

With a few exceptions, the property is usually repurchased by Trudo. This can be seen as an advantage in economically less beneficial times as the property is sold relatively quick. However, this also minimizes the chance of having the freedom in economically beneficial times to sell the property on the free market.

Compared to the regular purchase of a property, there are no extra costs associated with the purchase of a Slimmer Kopen property. The majority of the properties are either existing social rental properties that are transferred into Slimmer Kopen properties or existing Slimmer Kopen properties which are being resold. Transfer tax of 2% is due on the purchase price of the property unless the buying party has the "starter exemption" for transfer tax (Trudo, 2022). For the minority of Slimmer Kopen properties that are newly built, no transfer tax has to be paid.

In principal, the Slimmer Kopen rights cannot be bought off by the owners of the properties (N. Verhoef, personal communication, April 5, 2023). So the agreements made with regard to the discount percentage and division of the developed value remain the same until the property is sold. Very rarely, properties get labeled to be sold market-conform. In that case, the owner of the Slimmer Kopen gets the opportunity to buy off the Slimmer Kopen rights and remain the resident of that property.

Since the banks usually require the owners to get a NHG on the mortgage, a part of the usual risk related to a mortgage and the purchase of a property is eliminated.

The division of developed value limits the household's opportunity to increase the equity coming from the ownership of a property. However, in economically less beneficial times it also limits the decrease of a household's equity. Additionally, without Slimmer Kopen, the household might not even be able to purchase a property at all and therefore not being able to increase their equity through the ownership of a property at all.

(3) Supplier

Trudo is the party that finances the given discount. Enough funds need to be available to compensate this within the finances of the housing association. Because there is only the obligation to offer the sale for the buyer of the property and no repurchase obligation for Trudo, the value of the property does not have to be on the balance sheet. However, it still partially limits their potential to initiate more developments since part of the money that would normally be received with the purchase of a property has not been received yet, and will only be received when the property is sold (N. Verhoef, personal communication, April 5, 2023).

The revenue of Slimmer Kopen exists out of the discount which is paid back when the property is sold and the potential increase in value over time (Conijn & Van Son, 2021). The developed value is a compensation for the provided discount. The higher the given discount, the higher the risk, since it is unknown whether the value development will be positive or negative. However, the higher the given discount, the higher the potential revenue.

Because of the division of value development, Trudo does have some equity risk as Slimmer Kopen has unfavorable results in a falling market (Conijn & Van Son, 2021). This risk increases with the provision of a higher discount percentage. Therefore, the higher the discount percentage, the higher the percentage of value development Trudo will receive. The risk of not receiving the repayment of the discount when the property is sold is mitigated with the implementation of the right of mortgage and the mortgage promissory note.

The absence of the repurchase obligation provides freedom to Trudo whether to repurchase a property or not, but does maintain the opportunity to repurchase the property and sell it again in the affordable segment, which is one of their goals (N. Verhoef, personal communication, April 5, 2023).

“In principle, we always repurchase the Slimmer Kopen properties because we would like to keep them available in the social owner-occupied sector as long as possible.”

(N. Verhoef, personal communication, April 5, 2023).

Slimmer Kopen also expands the financial resources of Trudo to invest in making their residential portfolio more sustainability and the increase of the production of affordable housing (N. Verhoef, personal communication, April 5, 2023; Blijie et al., 2022).

(4) External intervening factors

Around 300 – 400 Slimmer Kopen properties are being sold on a yearly basis (N. Verhoef, personal communication, April 5, 2023). The first factor influencing the number of Slimmer Kopen properties being provided is the amount of households terminating their social rental agreement of properties labeled as Slimmer Kopen properties. The second factor is the number of Slimmer Kopen properties being repurchased by Trudo. The third factor which only has a small effect on the availability of properties is the development of newly built houses that are being offered as Slimmer Kopen properties directly.

The instrument Slimmer Kopen can be quite vulnerable sometimes as regulations and legislation have a great impact on how the instrument functions (N. Verhoef, personal communication, April 5, 2023). And since Slimmer Kopen is the core business of Trudo, Trudo cannot have the same impact on the housing market as it does right now without the deployment of the purchase instrument. For example with the increase of the transfer tax to 8% which was intended for investors, resulted in Trudo having to pay 10,4% transfer tax as well on all the properties being repurchased. Eventually, housing associations and other parties providing purchase instruments were excluded from this increase in transfer tax. Currently, Trudo does not have to pay transfer tax at all as the main goal is to resell those properties as fast as possible, during which transfer tax is paid again.

Thirdly, the NHG has a big influence on the success of Slimmer Kopen. Currently, the maximum purchase price of a property being sold with NHG is set at €405.000,- Slimmer Kopen properties have a maximum market value of €500.000,- but with an average discount of 20%, the purchase price of these properties is less than the maximum amount set by the NHG. If the NHG were to change the maximum purchase price of the property to the maximum market value, some Slimmer Kopen would not qualify for a NHG anymore (N. Verhoef, personal communication, April 5, 2023).. This would challenge households to get a mortgage to be able to finance a Slimmer Kopen property.

4.1.4 Duokoop

The last purchase instrument to be discussed is Duokoop. In 2009, just after the beginning of the financial crisis, Duokoop was being developed (O. Koenders, personal communication, April 26, 2023). The banks announced that the maximum LTV was going to decrease. Therefore, households were faced with lower mortgages. Duokoop was developed and is still managed by the DNGB. The main motivation was to make an owner-occupied property more affordable for first-time buyers and young home-owners (O. Koenders, personal communication, April 26, 2023). Since the banks did not want to provide the high mortgages anymore, households needed own money to be able to purchase a property. Therefore, this alternative way of purchasing a property was developed. During the past 13 years, 1.400 lots have been bought by the Duokoop fund (DNGB, 2023a). The instrument is available to everyone as long as the property complies with the NHG requirements. The target group of Duokoop is therefore not limited to first-time buyers with a lower income. However, Duokoop is

willing to collaborate with new developments and to give priority to the lower and middle income households (Dol et al., 2023).

(1) Product

The foundation of Duokoop is ground lease. Every buyer, as long as the property complies with the NHG requirements, can apply for a purchase using Duokoop (Dol et al., 2023). Therefore, purchase price of the property cannot be higher than €405.000,- which is set by the NHG (NHG, 2023). The buyer chooses a property on the free market and hands in an application, with the help of a mortgage advisor, to the DNGB. The DNGB assesses the application on behalf of Duokoop fund (O. Koenders, personal communication, April 26, 2023). The buyer purchases the property and the Duokoop fund purchases the land when the application is approved (DNGB, 2023b). The buyer can use the land as if he was the owner. In return, a monthly canon is paid to the Duokoop fund. This canon is indexed on a yearly basis, based on the development of the general price level published by the CBS. This is comparable to the indexation of the rent each year.

Figure 21 shows the expenditures made by both the supplier and the user with the purchase of a Duokoop property, as well as the receivables at the moment of sale of the property. The assumption made in this example is that the ground was valued at 30%.

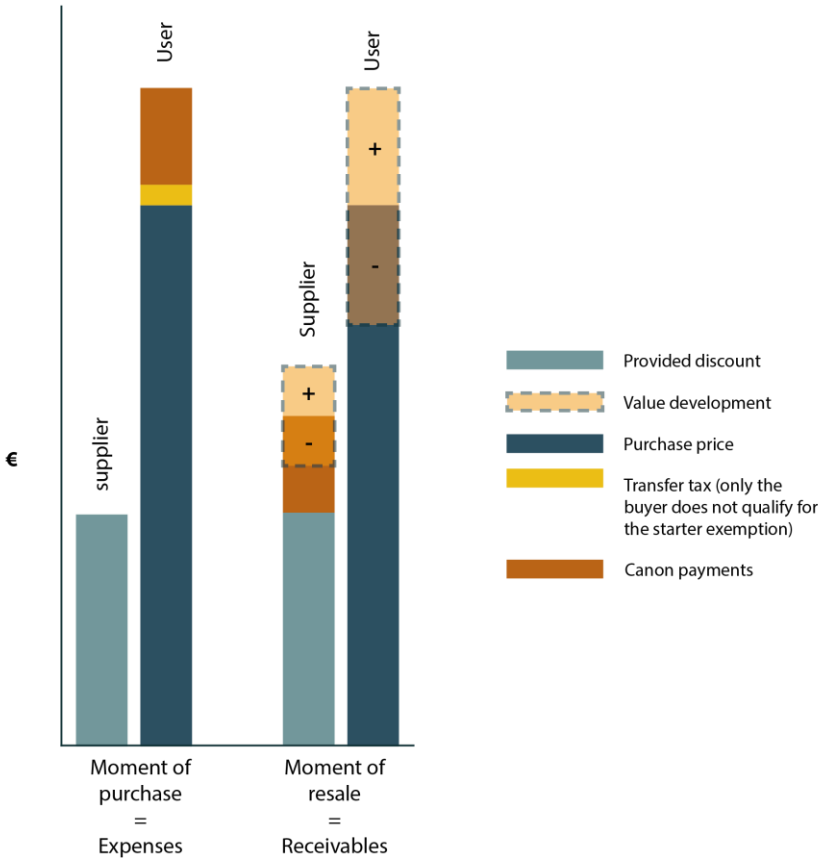


Figure 21. the expenditures and receivables for the supplier and the user of Duokoop (own figure).

The value of the land is always between 5% and 40% of the property (DNGB, 2023b). Since this is purchased by the Duokoop fund, the buyer of the property only needs to get a mortgage for the outstanding value of the property itself. This makes the purchase of a property with Duokoop more affordable than a regular purchase. This also results in lower monthly housing costs.

Duokoop is the party that handles all Duokoop contracts. However, with the implementation of Duokoop, there is always a mortgage advisor involved ensuring the clients know what Duokoop entails (O. Koenders, personal communication, April 26, 2023).

Duokoop has received approval from the Dutch tax administration (O. Koenders, personal communication, April 26, 2023), which makes the monthly canon fiscally deductible (DNGB, 2023b). Additionally, the NHG has approved the updated version of Duokoop: Duokoop 2023-1 as an instrument that without equity risk. The approval of the NHG makes it easier to obtain a mortgage (M. Sippekamp, personal communication, May 3, 2023).

A starter loan can be used to finance a Duokoop property under the condition that the municipality approves (Stimuleringsfonds Volkshuisvesting, n.d. -b). In case the municipality approves the application, a separate arrangement is provided: SVn starter loan with Duokoop. The second condition to obtain a starter loan in combination with a Duokoop property is that the starter loan has to be redeemed before the land (Duokoop share) is purchased by the owner (DNGB, 2023b).

The share of value development is equal to the percentage allocated to the land value of the property (DNGB, 2023b). When the land value was set at 30% of the property, the Duokoop fund also has a 30% share in the value development (figure 22). The increase in the value of the property as a result of improvements made to the property are fully assigned to the owner of the property (DNGB, 2023b). The Duokoop fund does not receive a share in this value development.

(2) User

Duokoop lowers the purchase price for amongst other first-time buyers since they only have to purchase the property as the Duokoop fund purchases the land (O. Koenders, personal communication, April 26, 2023). The percentage of the total value that the Duokoop fund purchases is based on the purchase price of the land value (DNGB, 2023b). This lowers both the necessary mortgage and the monthly housing costs, making the purchase of the property more affordable (DNGB, 2023b). However, a monthly canon has to be paid as a compensation to use the land. In May 2023, this canon was set at 3,95% of the Duokoop share per year (DNGB, 2023c).

When a property that was financed with the use of Duokoop is sold, the buyer of the property can choose whether to purchase the land from the Duokoop fund or to transfer the Duokoop contract (O. Koenders, personal communication, April 26, 2023). Therefore, it depends on the funding capacity and wishes of the new owner whether the Duokoop contract is being continued or not.

Similar to a regular property purchase, 2% transfer tax needs to be paid. However, if the property to be purchased is newly built, no transfer tax is due. Similar for when the buyer is eligible for the starter exemption. If the household is not eligible for the starter exemption, transfer tax has to be paid on the fiscal value of the ground leasehold rights (DNGB, 2023b). In addition to the costs made with a regular purchase of a property (transfer tax, notary costs etc.), a one-time only fee is charged by the DNGB (DNGB, 2023b). This is an amount of 1,5% excluding tax on the Duokoop share with a minimum of €1.500,-. This fee is not fiscally deductible.

Purchase of a Duokoop property		
Market value property		€300.000
- Duokoop share	30%	<u>- €90.000</u>
Paid purchase price property		€210.000
Sale of a Duokoop property - no value development		
Selling price property including improvements		€310.000
Value improvements		<u>- €10.000</u>
Selling price property excluding improvements		€300.000
Value development to divide	€300.000 - €300.000	€-
Division sales revenue		
Duokoop share	30% x €300.000	€90.000
Owner's share	70% x €300.000	€210.000
Improvements	€10.000	<u>+ €10.000</u>
Total share of sale for the owner:		€220.000
Sale of a Duokoop property - positive value development		
Selling price property including improvements		€370.000
Value improvements		<u>- €10.000</u>
Selling price property excluding improvements		€360.000
Value development to divide	€360.000 - €300.000	€60.000
Division sales revenue		
Duokoop share	30% x €360.000	€108.000
Owner's share	70% x €360.000	€252.000
Improvements	€10.000	<u>+ €10.000</u>
Total share of sale for the owner:		€262.000
Sale of a Duokoop property - negative value development		
Selling price property including improvements		€250.000
Value improvements		<u>- €10.000</u>
Selling price property excluding improvements		€240.000
Value development to divide	€240.000 - €300.000	€ -60.000
Division sales revenue		
Duokoop share	30% x €240.000	€72.000
Owner's share	70% x €240.000	€168.000
Improvements	€10.000	<u>+ €10.000</u>
Total share of sale for the owner:		€178.000

Figure 22. Calculations of the purchase and sale of a Slimmer Kopen property with no value development, positive value development, and negative value development (own figure).

The owner of the property can apply for an proposal with the purchase price of the land (the Duokoop share) which has a validity of three months (DNGB, 2023b). This can be retrieved unlimited times and for free. The price to purchase the land is based on the house price index by the cadastral agency which does not take any improvements to the property into consideration. When the value of the property has increased, the value of the land has increased as well. Similarly, a decrease in the property value also decreases the value of the land. When the buyer has accepted the proposal, the finances have to be arranged within three months. After the buyer has purchased the land, he is the full owner of both the property and the land, and no monthly canon payments are due anymore.

Since the banks usually have the NHG as a requirement to get a mortgage for a Duokoop property, part of the regular risk related to a mortgage and the purchase of a property is eliminated.

Since the development of the value of being divided between the owner of the property and the Duokoop fund, it limits the household's increase in equity. However, it also limits the decrease in a household's equity in economically less beneficial times. A majority of the Duokoop clients would not be able to finance an owner-occupied property at all without Duokoop. The application of Duokoop allows them to increase their equity through the redemption of their mortgage and allows them the opportunity to enjoy part of the potential increase in the value of the property (DNGB, 2023b).

(3) Supplier

The Duokoop fund finances the advantage of the amongst others first-time buyers since it finances the land of the property. The Duokoop fund is being funded by institutional investors such as banks, pension funds, insurers, and private individuals (DNGB, 2023b). The funding method of Duokoop is also a potential weakness of the instrument (O. Koenders, personal communication, April 26, 2023). The institutional investors do not have knowledge of the product yet. Therefore, their systems are not properly equipped to assess the opportunity to invest in the Duokoop fund, which requires more effort to bring it all together.

The revenue of Duokoop for the Duokoop fund exists out of the monthly received canon payments, and the potential increase of the land value of the property. The share in the development of the value is equal to the percentage the Duokoop fund pays for the ground. The higher the value of the land, the higher the canon payments, the higher the share in value development.

Because of the share in value development, both positive and negative, the Duokoop fund does have some equity risk. In a falling market, the value of the land will decrease as well and the fund will not be compensated for it. However, this risk also creates the opportunity to enjoy a potential increase in the land value.

(4) External intervening factors

The DNGB is not dependent on any real estate developers or housing associations with regard to the amount of properties that can be financed with Duokoop as it can be applied to any property as long as it meets the NHG requirements (DNGB, 2023b). However, the willingness of the institutional investors to invest in the Duokoop fund heavily affects the funding capacity of the fund. Therefore, the investors do have a big influence on the amount of properties that can be financed with the use of Duokoop (O. Koenders, personal communication, April 26, 2023). Higher canon payments make the instrument financially more attractive to investors, which could result into more investments, increasing the Duokoop fund. However, this would mean that the monthly costs of the Duokoop clients will increase, making the instrument less attractive to users.

Secondly, the approval of both the NHG and the Dutch tax administration are of great importance to the function of Duokoop. Without the approval of the NHG, households will encounter difficulties getting a mortgage to purchase a property with Duokoop. Without the approval of the Dutch tax administration, benefits such as the fiscal deductibility will be lost. Which would eliminate one of the benefits of being a property owner.

4.1.5 Comparison of the instruments

For first-time buyers, the use of alternative purchase instruments makes the purchase of owner-occupied properties more affordable by lowering the necessary mortgage amount.

“The purchase instruments make homeownership financially more accessible.”

(K. Dol, personal communication, March 31, 2023)

Even though the potential increase in value has to be shared, the implementation of the instruments provides the opportunity to build equity through the potential growth in value of the property and the mortgage redemption.

The barriers and enablers of KoopGarant are summarized in figure 23. For first-time buyers, KoopGarant makes owner-occupied properties more affordable because of the given discount, lowering the necessary mortgage amount and making home ownership more accessible. This provides the opportunity to build equity through the potential growth in value of the property and the mortgage redemption. Additionally, KoopGarant ensures that the property will always be repurchased by the license holder, which is beneficial in a falling market. The possibility of combining KoopGarant with a starter loan increases the financial capacity of the household on top of lowering the necessary financial capacity, making the property even more accessible.

Since the discount is established by the license holder, the discount may not be sufficient for some households to make the property affordable. Additionally, only part of the developed value is allocated to the owner since part of it is allocated to the license holder in return for the discount. Lastly, because of the repurchase obligation, the chances of getting the opportunity to redeem the KoopGarant discount and acquire the bare property rights as well are small.

However, the repurchase obligation is an enabler to enhance the accessibility of first-time buyers to the market since it allows the housing association retain the properties in the affordable segment for the long-term. Yet, this repurchase obligation also limits the investing capacity of the association since the properties have to be reserved on the balance sheet. Secondly, the potential decrease in value of the property forms equity risk as the association has a share in the value development, also when there is a value decrease.

KoopGarant	
First-time buyers	Provider
Enablers	Enablers
<ul style="list-style-type: none"> ● Owner-occupied property is more affordable because of the given discount (max. 50%). ● Provides the opportunity to develop equity. ● Aim is to keep these properties affordable for first-time buyers on the long-term through the repurchase obligation. ● The property is always repurchased by the license holder, which is beneficial in a falling market. ● Possibility to combine KoopGarant with the starter loan. 	<ul style="list-style-type: none"> ● Opportunity to keep the properties within the affordable segment on the long-term because of the repurchase obligation.
Barriers	Barriers
<ul style="list-style-type: none"> ● Discount depends on the license holder, usually a housing association. ● Only part of the developed value is allocated to the first-time buyer. ● Low chance of acquiring the bare property rights because of the repurchase obligation. 	<ul style="list-style-type: none"> ● Part of the sales revenue is delayed because of the provided discount. ● All KoopGarant properties need to be on the balance sheet of the license holder because of the repurchase obligation, limiting the investment capacity. ● Equity risk, there is the potential of decrease in value.

Figure 23. The barriers and enablers of KoopGarant from the perspective of the user and the supplier (own figure).

The barriers and enablers of KoopStart are summarized in figure 24. The main enabler of KoopStart in addition to the opportunity to acquire a property more affordably and getting the opportunity to build equity, is the chance to acquire the bare property rights after three years of ownership. However, this also means that usually only the first buyer profits and that the benefits from KoopStart disappear when the property is sold to the second buyer.

The license holder can implement the obligation to offer for sale to have the opportunity to repurchase the property and offer it as a KoopStart property to a certain target group again. The advantage of this is that the property does not have to be on the balance sheet, allowing a higher investment capacity. However, the provided discount does cause a delay of payment which limits the cash available for later development projects. In case of a project entity, this also means that the entity cannot be terminated yet as there is still revenue to be received.

KoopStart	
First-time buyers	Provider
Enablers	Enablers
<ul style="list-style-type: none"> ● Owner-occupied property is more affordable because of the given discount (max. 50%). ● Provides the opportunity to develop equity. ● After three years, the KoopStart rights can be bought off and the bare property rights can be acquired. ● Possibility to combine KoopStart with the starter loan. 	<ul style="list-style-type: none"> ● Freedom to choose whether to implement the obligation to offer for sale and acquire the right to purchase or not. ● There is no need to put the property on the balance sheet as there is no obligation to repurchase, so it does not affect the investment capacity of the entity.
Barriers	Barriers
<ul style="list-style-type: none"> ● Discount depends on the license holder, usually a real estate developer. ● Only part of the developed value is allocated to the first-time buyer. ● Not a long-term solution, if the obligation to offer for sale is implemented. 	<ul style="list-style-type: none"> ● Delay of project revenue because of the provided discount, resulting in lower available funds for the next project. ● This also means that the project entity of the development project cannot be terminated yet, as there is still revenue to be received. ● Equity risk, there is the potential of decrease in value.

Figure 24. The barriers and enablers of KoopStart from the perspective of the user and the supplier (own figure).

The barriers and enablers of Slimmer Kopen are summarized in figure 25. The main enabler of Slimmer Kopen is that the discount percentage depends on a household's income and the market value of the property. This allows the discount percentage to be adjusted to the needs of a specific households to make a property more accessible. However, Slimmer Kopen is not available in combination with a starter loan which lowers the opportunity of a household to increase their funding capacity. Additionally, the chances of acquiring the bare property rights as well are low.

Trudo implemented the obligation to offer for sale into Slimmer Kopen which allows them to have the opportunity to repurchase any Slimmer Kopen property, but does not obligate them. This way, they can offer the properties to their target group on the long-term, but do not have to include all the properties on the balance sheet limiting their investment capacity.

Slimmer Kopen	
First-time buyers	Provider
Enablers	Enablers
<ul style="list-style-type: none"> ● Owner-occupied property is more affordable because of the given discount (max. 50%). ● Provides the opportunity to develop equity. ● Aim is to keep these properties affordable for first-time buyers on the long-term through the repurchase obligation. ● Discount is dependent on the market value of the property and the household income. 	<ul style="list-style-type: none"> ● Opportunity to keep the properties within the affordable segment on the long-term because of the obligation to offer for sale, but no obligation to repurchase ● Slimmer Kopen provides Trudo the opportunity to invest more in increasing the sustainability of their portfolio and the development of affordable properties.
Barriers	Barriers
<ul style="list-style-type: none"> ● Only part of the developed value is allocated to the first-time buyer. ● Low chance of acquiring the bare property rights. ● Combination with the starter loan is not possible. 	<ul style="list-style-type: none"> ● Part of the sales revenue is delayed because of the provided discount ● Equity risk, there is the potential of decrease in value.

Figure 25. The barriers and enablers of Slimmer Kopen from the perspective of the user and the supplier (own figure).

On of the main enablers for first-time buyers besides the need for a lower mortgage to purchase a property is the possibility to buy the land from the Duokoop fund at any time. A second enabler is that Duokoop can be applied to any property within the requirements of the NHG, which makes the instrument bound to an individual instead of the property itself. Additionally, it is possible to increase the funding capacity for the purchase of a Duokoop property with a starter loan.

While the monthly housing costs are decreased because of the lower mortgage, a monthly canon has to be paid to the Duokoop fund, increasing those housing costs again. The canon is also yearly indexed.

Those canon payments are one of the big benefits to the providers of Duokoop as it generates extra revenue on top of the potential value development.

Duokoop	
First-time buyers	Provider
Enablers	Enablers
<ul style="list-style-type: none"> ● Owner-occupied property is more affordable because only the property needs to be purchased, not the ground (max. 40%). ● Provides the opportunity to develop equity. ● Always the opportunity to purchase the ground as well, terminating the ground lease contract. ● Deployable on every property within the NHG requirements, not dependent on the provision of properties by another entity. ● Possibility to combine KoopStart with the starter loan. ● The mortgage advisor is always the middleman, so the advice with regard to Duokoop is unbiased. 	<ul style="list-style-type: none"> ● The receipt of monthly canon payments, resulting in the certainty of revenue.
Barriers	Barriers
<ul style="list-style-type: none"> ● Only part of the developed value is allocated to the first-time buyer. ● Usually not a long-term solution, only if it is desired by the next buyer. ● Monthly canon payments that are being indexed every year. ● Register fee and transfer tax on the fiscal value of the ground lease. 	<ul style="list-style-type: none"> ● The lack of funding capacity since the amount of funding is dependent on external parties. ● Equity risk, there is the potential of decrease in value.

Figure 26. The barriers and enablers of Duokoop from the perspective of the user and the supplier (own figure).

4.2 Findings

With regard to the basics, the studied instruments are quite similar to each other. Buyers can purchase a property for a price below the market value to make it more affordable. This results into purchasing a property with a lower mortgage than usually, making the financing of an owner-occupied property more accessible. Within the comparison of the instruments as shown in figure 27, the outstanding relations between specific factors have been color-coded. These relations have led to the following three findings:

	KoopGarant	KoopStart	Stimmer Kopen	Duokoop
1. Product				
Managed by ...	Stichting OpMaat	Stichting OpMaat	Trudo	DNGB
Ground lease vs right of mortgage	Ground lease	Ground lease	Right of mortgage	Ground lease
Delayed payment	Delayed payment	Delayed payment	Delayed payment	Canon payments
NHG	Usually required	Usually required	Usually required	Required
Division of developed value	Fair Value	Usually 1:1	Fair Value	1:1
Improvements	For the buyer	For the buyer	For the buyer	For the buyer
Property bound vs individual bound	Property bound	Property bound	Property bound	Individual bound
2. User				
Pros / Cons monthly housing costs	Lower mortgage, lower monthly housing costs	Lower mortgage, lower monthly housing costs	Lower mortgage, lower monthly housing costs	Lower mortgage, lower monthly mortgage costs. Monthly/canon payments
Long-term deployment vs one-time only	Long-term	Usually one-time only	Long-term	Usually one-time only
In combination with a starter loan?	Yes	Yes	No	Usually
Obligations with sale of the property	Guaranteed repurchase by the license holder	Sometimes there is an obligation to offer the property for sale to the license holder.	Obligation to offer the property for sale to Trudo	The property can be sold on the free market, with or without the transfer of the ground lease. Setting up charges, transfer tax on the fiscal value of the Duokoop part
Extra costs	No	No	No	Yes
Possibility to acquire the bare property rights?	Usually not	Yes, after three years	Usually not	Yes
Available to ...	Selection criteria set by the license holder	Selection criteria set by the license holder	Low- and middle-income households	Anyone with buying a property within the NHG requirements
3. Supply				
Usual supplier	Housing association	Real estate developer	Trudo (housing association)	DNGB
Funder	Housing association	Real estate developer	Trudo (housing association)	Duokoop fund
Revenue	Repayment of the discount + share of developed value	Repayment of the discount + share of developed value	Repayment of the discount + share of developed value	Sale of the ground + share of developed value + monthly/canon payments
Obligations / rights during a resale	Obligation to repurchase the property	Option to insert the right to repurchase the property	The right to repurchase the property	Leasehold of the ground can either be transferred or not, up to the next buyer
4. External intervening factors				
Financing mortgage first-time buyers	NHG + mortgage provider	NHG + mortgage provider	NHG + mortgage provider	NHG + mortgage provider
Fiscally	Dutch tax administration	Dutch tax administration	Dutch tax administration	Dutch tax administration
Deployment scale dependent on...	The deployment of KoopGarant by housing associations (available properties, finances, # repurchased properties)	The deployment of KoopStart by real estate developers (housing construction rate, finances)	Financial capacity for new construction, the repurchase of properties, and the # terminated rental agreements	Financial capacity of the fund and the recommendations by mortgage advisors

Figure 27. Overview of the comparison of the four studied instruments (own figure).

4.2.1 Deployment capacity

All four studied instruments function and fulfill the purpose of increasing the accessibility of first-time buyers to the Dutch owner-occupied housing market. However, the instruments are being deployed in a relatively small quantity, questioning the actual impact they have on a relative small scale.

KoopGarant

The analysis of KoopGarant revealed that Stichting OpMaat is highly dependent on the license holder when it comes to the quantity of the deployment of KoopGarant, and that the sales number of KoopGarant properties has been decreasing for the past years. There are several factors that influence the deployment quantity of the KoopGarant license holders:

(1) Firstly, the license holder, usually a housing association, has to have the financial capacity to provide the discount that comes with KoopGarant properties. There has to be a reservation of the outstanding KoopGarant properties on the balance sheet because of the obligation to repurchase the properties. This limits the financial freedom of the association and weakens the investment capacity of the association. This is also one of the reasons why the number of KoopGarant properties have dropped so significantly.

(2) Secondly, the majority of KoopGarant properties sold are existing properties. Therefore, the housing association depends on the number of properties that become available for KoopGarant. Most commonly, these are KoopGarant properties that were repurchased and offered as a KoopGarant property again. However, in 2021 only 15% of the repurchased properties were put on the market again partly because of the previously described factor (1). According to a study by Capital Value, 88% of the participating housing associations had the desire to decrease the number of KoopGarant properties in their portfolio (2019). The main reasons were the risks associated with KoopGarant, the administrative burden, and the impact on the liquidity of the association.

KoopStart

Comparing the number of first-time buyers per year to the number of KoopStart properties per year, it can be concluded that the impact of KoopStart on the accessibility of first-time buyers is minimal. For the deployment of this instrument, Stichting OpMaat depends on the license holder, which is usually a real estate developer. Several factors influence the output of the real estate developer:

(1) First of all, the majority of the available KoopStart properties originates from new construction which is a lengthy process and is limited by the number of permits granted amongst others. With the current housing shortage, the housing prices have increased which makes it unattractive for real estate developers to sell the limited number of properties that they can develop for less than the market value.

(2) Secondly, the project entity that is usually set up for a project between the real estate developer and the contractor cannot be terminated once the project is finished because of the delayed payment. The provided discount will only be paid to the entity once the property is resold again.

(3) Lastly, the core business of real estate developers revolves around the development of a project, finalizing it, and moving on to the next project. This requires a significant amount of cash. Therefore, the opportunity cost is high for a real estate developer that implements KoopStart. The delay of earnings does not align with the core business of real estate developers as they have to be able to incur the delayed revenue because of this given discount to continue with the next project, and cannot invest these earnings in the next project until the properties are sold again.

Slimmer Kopen

There are several factors that influence the output of Slimmer Kopen properties:

- (1) The first factor that the amount of Slimmer Kopen properties is dependent on, is the amount of new construction allocated to be sold as Slimmer Kopen properties. The provision of social rental properties is one of the main activities of Trudo. Therefore, most of the investments will be allocated to the development of social rental properties instead of Slimmer Kopen properties.
- (2) The amount of Slimmer Kopen properties that Trudo can repurchase to sell again as Slimmer Kopen properties depends on the number of households that want to sell their Slimmer Kopen property which Trudo does not have any influence on.
- (3) The third factor that the number of Slimmer Kopen properties depend on is the number of social dwellings that are labeled as Slimmer Kopen properties that become vacant as a result of the termination of social rental contracts. However, Trudo has no influence on this amount.

Duokoop

Duokoop on the other hand is not property bound, but is bound to an individual (the client). Accordingly, the deployment capacity of Duokoop is not dependent on the number of properties that are available to this instrument.

However, Duokoop has its own limitations when it comes to increasing the output.

- (1) As found in the analysis of the instrument, the biggest weakness of Duokoop is the funding of the Duokoop fund. This is also one of the main reasons for being unable to increase the output of Duokoop as the financial capacity of the Duokoop fund is insufficient to expand.
- (2) Secondly, the provision of Duokoop is not consistent as money is deposited into the fund once in a while. Therefore, the Duokoop cannot be provided continuously as it is often awaiting new investments from external parties.
- (3) Finally, Duokoop is not only available to first-time buyers, but to everyone trying to purchase a property that fits within the NHG requirements. Therefore, the limited money available has to be shared across this bigger group of people rather than just the first-time buyers that are struggling (O. Koenders, personal communication, April 26 2023). This also limits the effect that Duokoop has on enhancing the accessibility of first-time buyers to the Dutch housing market.

Sub-conclusion

The factors that influence the opportunity to increase the deployment of an instrument and scale up the output are external factors that cannot be influenced by the providers of the instrument. These external factors can be seen as separate barriers, contributing to a bigger one: the limited deployment capacity. KoopGarant, KoopStart, and Slimmer Kopen all depend on the amount of properties available and are instruments that are property bound. As discussed in chapter 3, there is currently a high shortage of housing. The fact that these instruments are property bound therefore highly limits the deployment capacity. Duokoop is an instrument that is bound to an individual instead of to the property and can be applied to any property within the NHG requirements. This makes the deployment of the instrument more flexible and expandable. However, Duokoop has its own limitation with regard to expanding the deployment level, which is the financial capacity of the instrument, relying on external parties to invest in the fund of the instrument.

The instruments are successful on the relatively small scale they are deployed in right now. However, the external factors elaborated on above limit the possibility to deploy the studied instruments on a

bigger scale, preventing them from making a bigger impact on the accessibility of first-time buyers to the Dutch housing market.

4.2.2 Durability

KoopGarant and Slimmer Kopen are, in contrast to KoopStart and Duokoop, structured in a way to repeatedly enhance the accessibility of first-time buyers to market. The structure of KoopStart and Duokoop are more focused on enhancing the accessibility for the short-term, where usually only the first buyer of the property benefits from the deployment of the instrument.

The long-term structure originates from the desire to be able to redeploy a property for the same target group every time the property is sold. However, this desire is limited by (1) the instrument being bound to the property instead of the individual, and (2) the limitation of not being able to expand the deployment of the instrument.

The use of the long-term strategy does stimulate the property to be offered to the same target group, but also minimizes the opportunity for the first-time buyer to pay off the instrument's rights and become the owner of the bare property as well. This is a significant disadvantage compared to the KoopStart and Duokoop that do offer that option, but do not stimulate to enhance the accessibility of first-time buyers repeatedly.

Sub-conclusion

If the level of deployment would not be so limited and would be bound to an individual instead of the property, the desire to be able to repeatedly use an instrument on the same property would be minimized. However, the current situation in which the deployment of alternative purchase instruments is limited, forces the instrument to either focus on repeatedly providing a chance to first-time buyers to access the housing market and not give them the opportunity to acquire the bare property rights as well, or only stimulate the accessibility of the housing market with the first purchase of the property but provide the opportunity to acquire the bare property rights. So this barrier of having to choose between the two factors is a result of the previously discussed barrier, the limited deployment capacity.

4.2.3 Finances and risk

In chapter 3, it was concluded that the main problem with regard to the accessibility of first-time buyers was caused by the financial capacity. Additionally, in section 4.2.1 it was explained that the finances of the supplier of the instrument also form a barrier to increase the deployment capacity. Therefore, the instruments are being analyzed and compared with regard to the financial benefit they offer to the first-time buyers and the suppliers, as there are differences between the instruments with regard to financial input and output of both the user and the supplier of the instrument, and the level of risk that is associated with this.

Demand

When comparing the four instruments with regard to finances, Duokoop can be identified as the most expensive one from the first-time buyer's perspective (see figure 28). This is caused by the monthly canon payments which are required until the ground is purchased or the property is sold. KoopGarant, KoopStart and Slimmer Kopen do not require involve any canon payments. The expenditures are therefore the same for these three instruments as it only exists of the purchase price and the transfer tax if there is no starter exemption.

The receivables for all four instruments at the moment the property is sold again, exist out of the sale of the property plus the share of the value development (see figure 28). The illustrated difference between the share of value development is caused by the method used to divide the value development. Either the use of a value division corresponding to the given discount (1 : 1), or the use of the fair value rate (1 : 1,5) by housing associations which are usually the providers of KoopGarant

and Slimmer Kopen. However, the value development could also be negative, in which the the loss of value is lower when the fair value method is used to divide the value development. Meaning, that a lower potential gain in value translates to a lower risk of potential loss of value, and vice versa. A higher potential gain in value translates to a higher risk of potential loss of value.

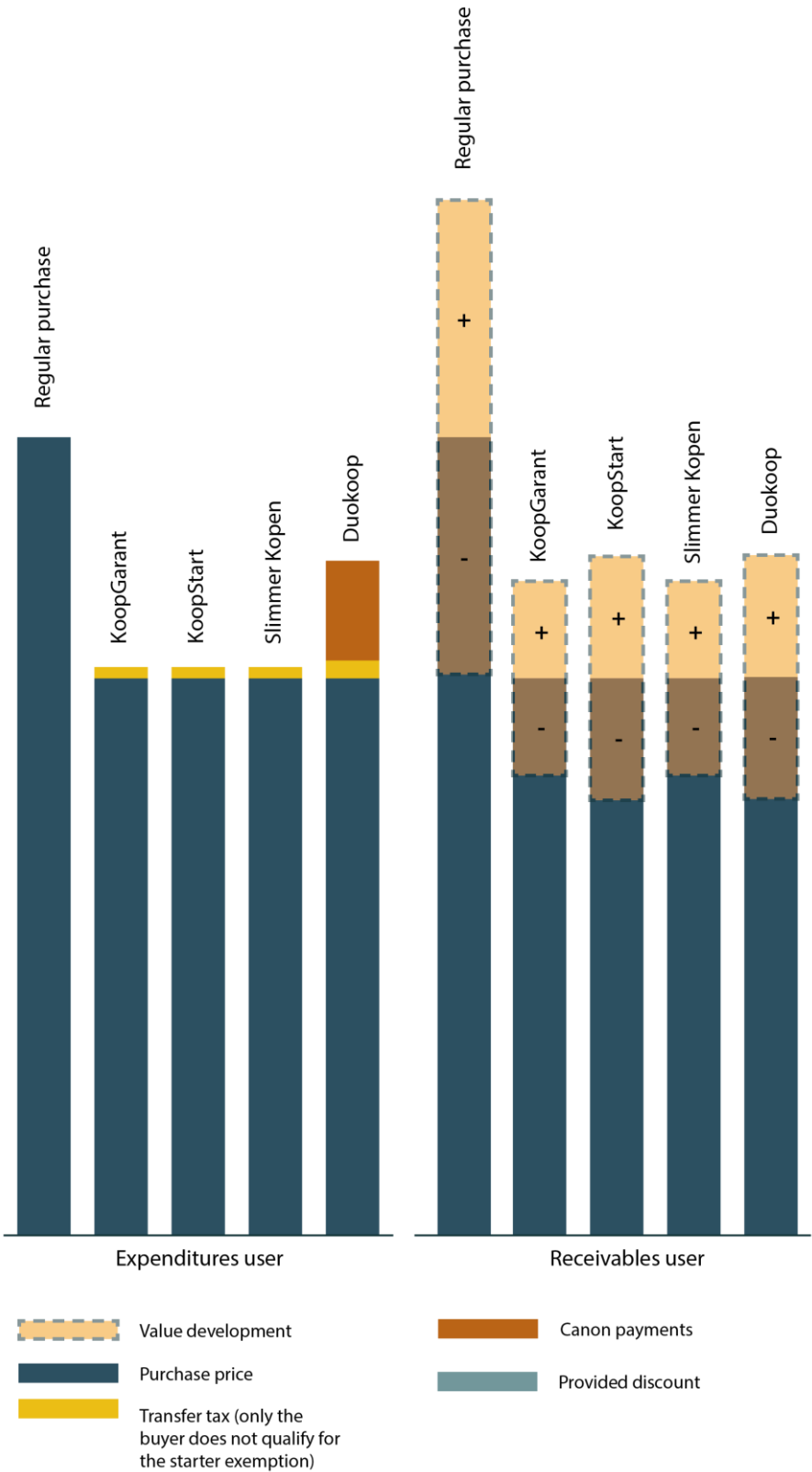


Figure 28: The expenditures and receivables per instrument from the buyer’s perspective (own figure).

Figure 28 also shows what the potential increase and decrease in value could be when a property is purchased without the use of an instruments. A higher purchase price needs to be paid since the full market value needs to be paid. This means that 100% of the value development is for the buyer. In a rising market this will result in a higher gain in value, but in a falling market a higher loss in value will be experienced.

Supply

As visualized in figure 29, the amount of financial input is for all four instruments the same if the given discounts (for KoopGarant, KoopStart, and Slimmer Kopen) are equal to the share of the ground value (for Duokoop). However, the receivables differ per instrument. The revenue with the use of Duokoop is the highest as the leaseholder of the ground receives monthly canon payments in addition to the resale of the ground and the share of value development. The revenue for KoopGarant, KoopStart, and Slimmer Kopen all exist out of repayment of the given discount plus the share of value development. The difference between the amount of value development is caused by the value development division method, which is either 1 : 1 or 1 : 1,5, depending on the type of supplier. However, the value development could also be negative. When the value development is divided using the fair value method, the earnings will be higher in case of positive value development than when the share of value development is set equal to the provided discount. However, in case of a negative value development, the loss of value will be higher as well. Meaning, that a higher potential gain in value translates to a higher risk of potential loss of value, and vice versa.

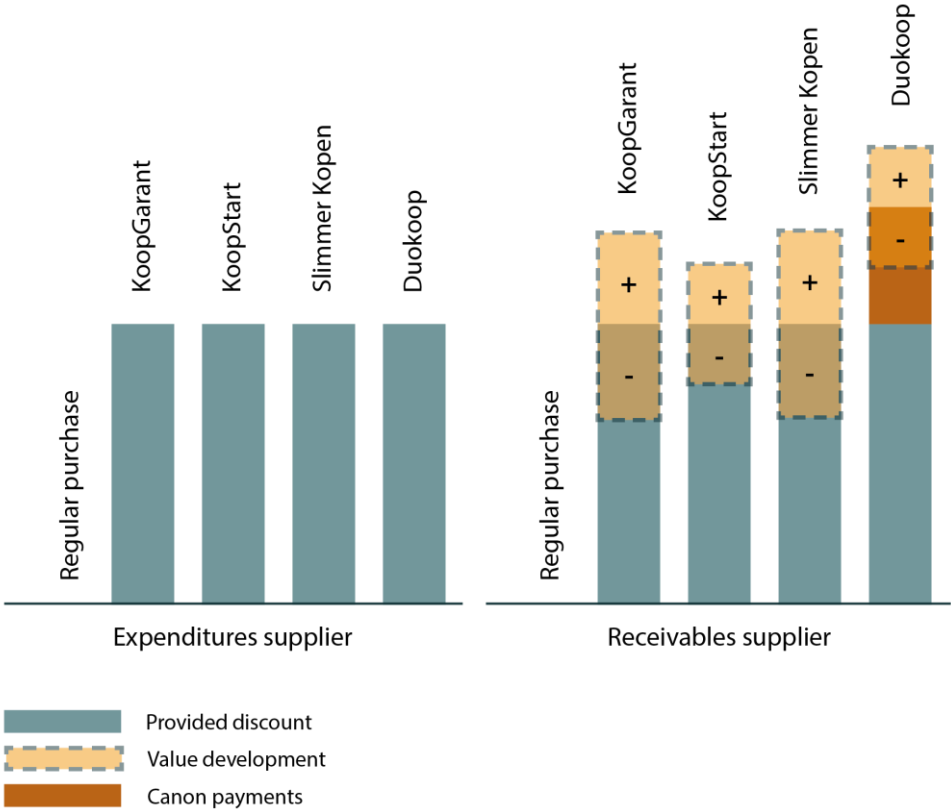


Figure 29: The expenditures and receivables per instrument from the provider’s perspective (own figure).

Sub-conclusion

KoopStart is currently the most beneficial instrument for a first-time buyer from a financial perspective if the value development of the property is positive. This is mainly due to the 1 : 1 value division that is usually applied, while KoopGarant and Slimmer Kopen have to divide the value according to the fair value ratio (1 : 1,5). This is financially less beneficial for the buyer in a rising market. The value division with the use of Duokoop is equal to the value division of KoopStart. However, the monthly canon payments make Duokoop financially seen the least beneficial for first-time buyers.

KoopGarant and Slimmer Kopen are from the first-time buyer's perspective financially seen the least risky in a falling market. This is due to the fair value method, assuring that the supplier of the instrument has a larger share in the loss of value than the user of the instrument.

From the supplier's perspective, Duokoop is financially the most beneficial in a rising market. In addition to the share of value development which the provider has the right to with every instrument, there is the monthly canon payments to be received. This results into the certainty of monthly revenue which is absent in the other instruments. KoopStart is financially the least beneficial in a rising market from the supplier's perspective as it provides the lowest share in value development and there is no monthly canon payments to be received.

Duokoop is financially also the most beneficial for the supplier in a falling market, since the supplier still has the assurance of receiving the monthly canon payments. KoopGarant and Slimmer Kopen are most risky financially seen, since they contain the largest share of value loss for the supplier of the instrument.

Additionally, combining this financial analysis with the previous findings, an instrument which is financially more beneficial to the supplier could motivate the deployment of the instrument. However, the financial benefits for the user of the instrument might become questionable. On the other hand, an instrument that is financially more attractive for the user might have a bigger impact on the increase of the accessibility of first-time buyers. However, the limited financial benefits for the supplying side might jeopardize the deployment and viability of the instrument.

Comparing the instruments with regard to the financial obligations of both parties and the financial benefits to gain, it can be concluded that the higher the financial benefit for the supplier, the higher the financial obligation for the buyer and vice versa. Additionally, the higher the potential increase in value, the higher the risk of potential loss. The lower the potential increase in value, the lower the risk of potential loss. This is applicable to both the first-time buyer's side and the supplier's side.

5. Discussion

In this chapter, the limitations to this study are being discussed, categorized by theoretical limitations, limitations to the scope of the research, limitations to the methodology of the research, and limitations to the suggested recommendations in chapter 6.

5.1 Limitations

Theoretical limitations

Special attention was paid to assure the most recent publications were reviewed at the time of the literature research. However, the reader should take into consideration that the housing market is constantly evolving, and that the reviewed literature might not be up to date with the current market situation. Subsequently, housing policy and regulations are adjusted quite regularly as well.

Secondly, a variety of different publications on first-time buyers and their accessibility to the housing market were taken into consideration. However, sometimes slightly different criteria were applied to the define the group or measure the accessibility of first-time buyers.

Thirdly, during the research study on first-time buyers, it became clear that there is a lack of published data on first-time buyers in the neighboring countries, especially in Belgium. This limited the information accessible to provide an extensive overview of the position of first-time buyers on the Belgian housing market, and make a substantial comparison to the Dutch first-time buyers.

Scope of the research

This study focused on how alternative instruments could contribute to increasing the accessibility of first-time buyers to the owner-occupied housing market. Since the financing capacity of first-time buyers was the main limitation in getting access to homeownership, the study mainly focused on the access to sufficient financial resources. However, this study has not addressed whether the properties that are made accessible with the use of the instruments, fit the demand of this target group in terms of quality, size, location etcetera. Yet, as described in chapter 3, these factors are also relevant to accessibility, since accessibility does not only refer to access to finance

Secondly, only four alternative purchase instruments were studied for this research. However, the Netherlands knows a wide variety of alternative purchase instruments. The conclusion of this study is therefore only applicable to the four studied instruments and cannot be generalized on other instruments without proper research first.

Methodology of the research

Empirical data was gathered through interviews with the providers of the instruments, the external intervening factors, and experts on this field of study. However, information on first-time buyers and prospective first-time buyers was gathered through literary sources, causing a variety in the method of data gathering.

Limitations to the recommendations

With the recommendation to make the deployment capacity of purchase instruments less dependent on external factors, it has not been taken into consideration what effect increasing the deployment capacity of instruments could have on the rest of the housing market or the accessibility of different household types.

Secondly, the deployment of an instrument that is individual bound instead of property bound is indirectly still dependent on the supply of properties. The individual using the instrument still has to be able to acquire a property. However, an individual bound instrument is dependent on the housing supply to a lesser extent and less selectively.

6. Conclusion and recommendations

This chapter provides the final conclusions to this research as well as the recommendations for practice based on these conclusions, and recommendation for future research

6.1 Conclusion

6.1.1 First-time buyers

Literature research has shown that the group of first-time buyers experiencing the most limiting access to homeownership, is the households with an income between €40.000 and €60.000, equal to a 1 – 1,5 modal income. This income does not allow them access to the social rental sector. On the other hand, it also does not allow them access to sufficient financial resources to access the owner-occupied housing market. Additionally, the Dutch private rental sector is too small to act as a buffer for this group of people. Their income results in a relatively low mortgage because of the LTI ratio, meaning they are limited to the lower price segment on the housing market. However, they are unable to compete with the high competition in the lower price segment as a result of the high housing shortage.

In comparison with existing homeowners, first-time buyers have not had any development of equity through homeownership which has had the largest share in growth of equity by 60% during the past years. This adds up to the shortcoming of the financial capacity of first-time buyers to be able to make a down payment.

To conclude, the main limitation for first-time buyers trying to access the Dutch owner-occupied housing market, and thus the main focus in the comparison of the alternative purchase instruments, is the limited financial capacity they have access to.

6.1.2 Alternative purchase instruments

According to the literature study, the financial capacity of first-time buyers is the greatest limitation in accessing the housing market. The instruments are designed to lower purchase price of a property, and therefore lower the necessary financial capacity. This enhances the accessibility to sufficient housing finance for first-time buyers, and thus overcoming the most limiting factor. The difference in instrument design influences the impact it has on the financial situation of the users.

In a rising market, KoopStart is currently the most beneficial instrument for first-time buyers from a financial perspective and Duokoop is the least beneficial. On the contrary, Duokoop is the most beneficial instrument for the supplying party from a financial perspective and KoopStart is the least beneficial.

In a falling market, KoopGarant and Slimmer Kopen are the least risky since it holds the lowest share in value development for the user of the instrument. Duokoop is the most expensive instrument for the user in a falling market because of the canon to be paid. On the contrary, Duokoop is the most beneficial in a falling market for the supplying party because of these canon payments. KoopGarant and Slimmer Kopen are the least financially beneficial in a falling market because of the relatively high share in the value development.

Thus, when an instrument is financially more beneficial to the user, the first-time buyers in this case, it is financially less beneficial to the supplier, risking the deployment and durability of the instrument. Correspondingly, when an instrument is financially more beneficial to the supplier, it is financially less

beneficial to the user, making the impact on lowering the necessary financial capacity for the user questionable.

The studied instruments work well on the relatively small scale they are deployed in. Since KoopGarant, KoopStart, and Slimmer Kopen are all property bound, the deployment capacity of the instruments is amongst others highly dependent on the number of available properties. With the current housing shortage and slow construction pace, this greatly limits the deployment capacity of the instruments. On the contrary, Duokoop is bound to an individual households instead of to the property. This makes the deployment of the instrument not dependent on the available properties. However, the funding of Duokoop relies on the investment of external investment parties, making the viability of the instrument vulnerable and the deployment capacity dependent on the investment quantity of external parties. To make a bigger impact, the instruments scale on which the instruments are being deployed should be increased. However, the quantity in which the instruments can be deployed is affected by external factors, limiting the opportunity to increase the scale in which the instruments are being used to enhance the accessibility of first-time buyers to the Dutch housing market.

The limited deployment capacity amongst others results in the aim to be able to repeatedly use an instrument. This has resulted in the repurchase obligation for KoopGarant and the obligation to offer for sale for Slimmer Kopen. For these two instruments, the deployment of the instrument is meant long-term. This minimizes the opportunity for the first-time buyers to pay off the instrument's rights and acquire the bare property rights, forming a substantial disadvantage to the instrument. On the contrary, Duokoop and KoopStart do provide the household the opportunity to pay off the instrument's rights and acquire the ground or bare property rights. However, with the deployment of these instruments only the first buyer of the property gets to enjoy the benefits. This would not be a problem if the instrument could be deployed on a bigger scale. However, since the level of deployment is limited, Slimmer Kopen and KoopGarant have implemented the certainty that they have to/can repurchase the property to solve this problem. However this forms an extra disadvantage to the instrument from the user's perspective as it minimizes the opportunity to acquire the bare property rights.

So to answer the main research question of this study: **“How could alternative purchase instruments be adjusted to increase the accessibility of first-time buyers to the Dutch housing market?”**:

The comparison of the four studied instruments: KoopGarant, KoopStart, Slimmer Kopen, and Duokoop, and the analysis of the instruments from both the user's and supplier's perspective, has led to the following conclusions: The deployment capacity of the instrument should be as independent from external factors as possible to increase the impact an instrument can have on the accessibility of first-time buyers to the housing market. Making an instrument individual bound instead of property bound minimizes the dependency on the housing stock. When the deployment capacity of the instrument is not dependent on the housing stock anymore, first-time buyers can be given the chance to acquire the bare property rights when they can afford it. Lastly, the financial benefits of the instrument should be distributed in a way that the instrument itself is financially viable, while it is still financially beneficial to the first-time buyer as the financial capacity of the first-time buyer is the biggest limiting factor in accessing the housing market.

6.2 Recommendations for practice

The findings of this research on the vulnerabilities and the limiting factors of the instruments have resulted into three general recommendations for practice addressing the structure of alternative purchase instruments. These recommendations could potentially increase the impact that an alternative purchase instrument can have on the accessibility of first-time buyers to the Dutch owner-occupied housing market. A practical example has been provided in which the three recommendations are combined and applied to the national fund of affordable owner-occupied housing.

General

(1) To increase the impact that an instrument can have on increasing the accessibility of first-time buyers to the Dutch housing market, the deployment quantity of an instrument should be able to respond to the demand. Therefore, an instrument's deployment capacity should be as independent from external factors as possible. Hence the recommendation to make an instrument individual bound instead of property bound. A individual bound instrument is able to respond to the especially the demand side of the housing market dynamics, eliminating the direct dependence on the supply side of the housing market. Additionally, to diminish the dependence on the financial input of investment parties, a revolving fund effect should be introduced into the structure of the instrument, ensuring that any revenue is used to invest in the deployment of the instrument itself.

(2) Giving the buyers the opportunity to acquire the bare property rights by eliminating the repurchase obligation / obligation to offer for sale. With the implementation of the previous recommendation, an individual bound instrument is less limited with regard to the deployment quantity, decreasing the urgency to tie the instrument to a property.

(3) An equilibrium should be found with regard to the distribution of financial benefits. From the first-time buyer's perspective it is important that the instrument is financially beneficial since the lack of financing capacity is the most important reason for first-time buyers to make use of an alternative purchase instrument. On the other side, the instrument itself should be financially viable to be able to function in the future as well.

Specific

The above-mentioned recommendations could be combined and applied in practice, to for example the national fund for affordable owner-occupied properties which was announced by the government. When a first-time buyer would like to make use of the fund, they would have to apply for it. Specific criteria should be in place to decide whether a household could participate or not, such as the financial capacity of the household. In case of approval, the fund would purchase a part of the property, and the household would purchase part of the property. The part of the property would be leased to the household who purchased and will use the property. The leasehold would be paid off, meaning there would be not monthly canon payments due. The percentage of the property that the fund purchases, would be equal to the share of value development that the fund participates in at the moment the property is sold again. Earnings made from positive value development should be reinvested into the fund to act as a buffer for properties with negative value development, or to be able to expand the fund. The buyer of the property has the opportunity to acquire the bare property rights by purchasing the part of the property that is owned by the fund, plus minus the share of value development belonging to the fund. The percentage of the property that the fund purchases, would be equal to the share of value development that the fund participates in. The value of the property would be determined by an appraiser at the moment of purchase and the moment of sale of the property.

6.3 Recommendations for future research

Although alternative purchase instruments have been a part of the Dutch housing market for multiple decades already, the accessibility of first-time buyers still remains a problem. At the same time, the position of first-time buyers on the housing market and their accessibility to especially housing finance keeps evolving. Therefore, the following recommendations for future research are provided:

(1) One limitation to this study was the absence of empirical data gathered directly from first-time buyers. Future research could interview the actual focus group of this problem to gather data on the limitations that first-time buyers experience in practice. First-time buyers that purchased their first property with the use of an alternative purchase instrument could provide information on the enablers of the used instrument. At the same time, unsuccessful first-time buyers could provide data on the barriers of the instruments.

(2) This study touched on the position of first-time buyers in neighboring countries very lightly. Future research could study the use and impact of alternative purchase instrument in countries with a comparable housing market to the Dutch one.

(3) Lastly, the Dutch housing market knows more alternative purchase instruments than the four that were studied in this research. More extensive research could include all instruments approved by the NHG to provide a more complete overview of the possibilities that the industry has to offer.

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Onderzoeksinformatie

Msc: Management in the Built Environment (MBE), TU Delft

Afstudeerbegeleiders: Ir. E.H.M. (Ellen) Geurts & Dr. H.M.H. (Harry) van der Heijden

Student: Deanne Muisers

Beste deelnemer,

Mijn naam is Deanne Muisers en op dit moment ben ik bezig met het uitvoeren van mijn afstudeeronderzoek voor de mastertrack Management in the Built Environment (MBE) aan de Technische Universiteit Delft. Voor mijn scriptie onderzoek ik welke alternatieve verkoopinstrumenten in Nederland de toegankelijkheid van koopstarters tot de koopwoningmarkt bevorderen, en welke barrières hier aan vast zitten. Als expert binnen dit gebied, nodig ik u uit om deel te nemen aan dit interview.

Het interview zal ongeveer 60 minuten duren. Buiten uw naam en de organisatie waar u werkzaam bent, worden er geen persoonlijke gegevens gedeeld in de onderzoeksoutput. Uw deelname is volledig vrijwillig, en u heeft het recht om op ieder moment van het onderzoek uw deelname terug te trekken. Het interview zal getranscribeerd worden, waarna u de tijd krijgt om eventuele rectificaties door te geven. Bedankt voor uw deelname aan mijn afstudeeronderzoek.

Met vriendelijke groet,

Deanne Muisers

d.w.t.muisers@student.tudelft.nl

+316 12 49 49 84

Toestemmingsformulier afstudeeronderzoek alternatieve verkoopinstrumenten Deanne Muisers

Dit toestemmingsformulier betreft een onderzoek dat wordt uitgevoerd in het kader van het schrijven van een afstudeerscriptie voor de mastertrack Management in the Built Environment (MBE). Deze mastertrack wordt gevolgd op de faculteit Bouwkunde aan de Technische Universiteit Delft.

- | | ja | nee |
|--|-----------------------|-----------------------|
| Ik heb de informatie betreffende het onderzoek gelezen en heb de mogelijkheid gekregen om vragen te stellen. Deze vragen zijn naar mijn tevredenheid beantwoord. | <input type="radio"/> | <input type="radio"/> |
| Ik neem vrijwillig deel aan dit onderzoek en begrijp dat ik vragen mag weigeren te beantwoorden en dat ik op ieder moment tijdens het onderzoek mijn deelname mag terugtrekken. | <input type="radio"/> | <input type="radio"/> |
| Ik geef toestemming om de audio van het interview op te laten nemen. Deze audio zal alleen gebruikt worden voor dit onderzoek en zal, nadat de opname getranscribeerd is, verwijderd worden. | <input type="radio"/> | <input type="radio"/> |
| Ik begrijp dat mijn naam en het bedrijf waar ik werkzaam ben genoemd kan worden in de scriptie, en dat er buiten deze informatie geen persoonlijke gegevens gedeeld zullen worden. | <input type="radio"/> | <input type="radio"/> |
| Ik begrijp dat de informatie die ik tijdens het interview verstrek geciteerd kan worden in de onderzoeksoutput. | <input type="radio"/> | <input type="radio"/> |

Naam deelnemer:

Werkzaam bij:

Handtekening:

Datum : __ / __ / __

Ik, de onderzoeker, verklaar dat ik deze deelnemer volledig heb geïnformeerd over het genoemde onderzoek. Als er tijdens het onderzoek informatie bekend wordt die de toestemming van de deelnemer zou kunnen beïnvloeden, dan breng ik deze persoon daarvan tijdig op de hoogte. Daarnaast zal het interview getranscribeerd worden en zal dit worden verzonden naar de deelnemer zodat deze persoon eventuele rectificaties kan doorgeven.

Naam onderzoeker:

Handtekening:

Datum: __ / __ / __

Appendix II - Interview protocol category A

Allereerst, bedankt voor je deelname aan dit interview en daarbij jouw bijdrage aan mijn afstudeeronderzoek. Ten tweede, even nogmaals de vraag of je goedkeuring geeft voor de opname van dit interview?

Introductie Dan zal ik mezelf even snel voorstellen. Ik ben Deanne Muisers, en studeer aan de faculteit Bouwkunde aan de TU in Delft. Ik ben op dit moment bezig met afstuderen voor de master Management in the Built Environment.

Onderzoek En tijdens mijn afstuderen doe ik onderzoek naar de rol die alternatieve verkoopinstrumenten kunnen spelen in de toegankelijk van de koopwoningmarkt voor koopstarters.

Doel Tijdens dit interview ga ik graag dieper in op de kenmerken en aspecten van de verschillende alternatieve verkoopinstrumenten, eventuele voor- en nadelen, en hoe dit verkoopinstrument koopstarters zou kunnen helpen.

Opzet Buiten je naam en de organisatie waar je voor werkt zal er geen persoonlijke of gevoelige informatie gebruikt worden in het eindproject. Daarnaast zal de opname van het interview verwijderd worden na het afronden van mijn scriptie. Voor dit semigestructureerd interview zijn er bepaalde vragen die van te voren opgesteld zijn, maar aanvullingen of extra informatie is altijd meer dan welkom. Het interview is opgedeeld in vier verschillende onderwerpen: (1) Koopstarters, (2) Alternatieve instrumenten (3) Het speelveld / context (4) Beleid en regelgeving. Als er verder geen vragen zijn dan zou ik graag willen beginnen.

Start interview

Achtergrond informatie

- Zou je eerst iets over jezelf willen vertellen, wie je bent, waar je je precies mee bezig houdt...

(1) Koopstarters

- In onderzoeken die jij gedaan hebt, hoe werden koopstarters en potentiële koopstarters daar gedefinieerd?
- Welke factoren lopen deze potentiële koopstarters op dit moment het tegen aan?
- Wat zijn de barrières met betrekking tot de financiering van een koopwoning voor koopstarters?

(2) Alternatieve koopinstrumenten

In Nederland zijn er verschillende verkoopinstrumenten actief op dit moment. Dit onderzoek vergelijkt de volgende instrumenten: KoopGarant, KoopStart, Slimmer Kopen, Duokoop.

- Welk probleem van koopstarters pakken elk van deze verschillende instrumenten aan en op welke manier?
- Hoe wordt met ieder instrument de financieringsmogelijkheden van koopstarter vergroot?

- Wat zijn de barrières voor deze verschillende instrumenten als het gaat om het vergroten van de toegankelijkheid van de koopwoningmarkt voor koopstarters? En hoe zou deze barrière verkleind of geëlimineerd kunnen worden?
- Vroeger werden er veel meer woningen verkocht d.m.v. KoopGarant. Wat is de reden dat deze cijfers gedaald zijn
- Wat is het effect van de terugkoopgarantie bij KoopGarant? En hoe groot is dit effect?

(3) Het speelveld / context

- Zitten er bepaalde nadelen aan het inzetten van alternatieve koopinstrumenten?
- Wat is de invloed/het gevolg van het toepassen van alternatieve koopinstrumenten op de rest van de woningmarkt?
- Hoe en door wie zouden selectiecriteria voor afnemers (kopers) van de koopinstrumenten bepaald moeten worden? Zijn dit bijvoorbeeld de aanbieders van de instrumenten, of de gemeenten, of de hypotheekverstrekkers?
- Wat is het belang van de NHG wanneer een alternatief koopinstrument wordt toegepast?
- Is de inzet van alternatieve koopinstrumenten een potentiële lange termijn oplossing?
- Wat is de incentive voor ontwikkelaars om woningen aan te bieden met gebruik van alternatieve koopinstrumenten?

(4) Beleid en regelgeving

Het laatste onderwerp dat ik graag wil bespreken is het beleid en de regelgeving met betrekking tot het creëren van betaalbare koopwoningen. De overheid heeft het nationaal fonds voor betaalbare koopwoningen aangekondigd. De opzet hiervan is om dit fonds te combineren met bestaande alternatieve verkoopinstrumenten, waaronder KoopStart.

- Wat is de reden om KoopStart te gebruiken voor dit fonds?
- Hoe gaat de overheid ervoor zorgen dat er genoeg woningen aangeboden kunnen worden met de instrument.

Afsluiting

- Zijn er nog mensen of partijen waarvan je zegt, die zijn ook interessant om een mee te spreken voor dit onderzoek?
- Zijn er nog andere bronnen/documenten die interessant zouden kunnen zijn voor mijn onderzoek?

Als er nog onduidelijkheden zijn, of verdere opmerkingen of vragen zijn die van pas kunnen komen voor dit onderzoek, neem dan vooral contact op. Hartelijk bedankt voor je tijd en openheid, en ik zal de transcriptie van dit interview opsturen zodat er nog eventuele correcties gemaakt kunnen worden.

Appendix III – Interview protocol category B

Allereerst, bedankt voor je deelname aan dit interview en daarbij je bijdrage aan mijn afstudeeronderzoek. Ten tweede, even nogmaals de vraag of je goedkeuring geeft voor de opname van dit interview?

Introductie Dan zal ik mezelf even snel voorstellen. Ik ben Deanne Muisers, en studeer aan de faculteit Bouwkunde aan de TU in Delft. Ik ben op dit moment bezig met afstuderen voor de master Management in the Built Environment.

Onderzoek En tijdens mijn afstuderen doe ik onderzoek naar de rol die alternatieve verkoopinstrumenten kunnen spelen in de toegankelijk van de koopwoningmarkt voor koopstarters.

Doel Tijdens dit interview kom ik graag achter de kenmerken en aspecten van *het desbetreffende verkoopinstrument* die niet online te vinden zijn. Daarnaast kom ik graag te weten hoe de ontwikkeling van *het desbetreffende verkoopinstrument* verlopen is, wat het doel van het *het desbetreffende instrument* is, eventuele voor- en nadelen, en hoe dit koopinstrument koopstarters zou kunnen helpen.

Opzet Buiten je naam en de organisatie waar je voor werkt zal er geen persoonlijke of gevoelige informatie gebruikt worden in het eindproject. Daarnaast zal de opname van het interview verwijderd worden na het afronden van mijn scriptie. Voor dit semigestructureerd interview zijn er bepaalde vragen die van te voren opgesteld zijn, maar aanvullingen of extra informatie is altijd meer dan welkom. Het interview is opgedeeld in verschillende onderwerpen: (1) Koopstarters, (2) *het desbetreffende verkoopinstrument* (3) Beleid en regelgeving. Als er verder geen vragen zijn dan zou ik graag willen beginnen.

Start interview

Achtergrond informatie

- Zou je eerst iets over jezelf willen vertellen, wie je bent, waar je je precies mee bezig houdt...

(1) Koopstarters

- Welke factoren lopen deze potentiële koopstarters op dit moment het tegen aan?

(2) *het desbetreffende verkoopinstrument*

- Wanneer, met welke motivatie en hoe is *het desbetreffende verkoopinstrument* tot stand gekomen?
- Wat zijn de voor- en nadelen van *het desbetreffende verkoopinstrument* voor de licentiehouders
- Wat zijn de voor- en nadelen van *het desbetreffende verkoopinstrument* voor de koper?
- Wat zijn de criteria voor partijen om licentiehouders te worden? Gaan jullie actief op zoek naar licentiehouders?

- Wie bepaalt de criteria waar kopers aan moeten voldoen? Bepaalt de licentiehouders deze, of bepalen jullie deze, bepalen gemeente deze? Zijn er "basiscriteria" die altijd in stand gehouden moeten worden?
- Hoe werkt het wanneer de koper de rechten van het instrument wil afkopen?
- Hebben jullie bij het opzetten van deze instrumenten samengewerkt met andere partijen? Bijv. banken / NHG? Is deze samenwerking er nog?

(3) Beleid en regelgeving

- Welke externe partijen hebben invloed op *het desbetreffende verkoopinstrument*?
- Welke externe factoren beïnvloeden het succes van *het desbetreffende verkoopinstrument*?

Afsluiting

- Zijn er nog mensen of partijen waarvan je zegt, die zijn ook interessant om een mee te spreken voor dit onderzoek?
- Zijn er nog andere bronnen/documenten die interessant zouden kunnen zijn voor mijn onderzoek?

Als er nog onduidelijkheden zijn, of verdere opmerkingen of vragen zijn die van pas kunnen komen voor dit onderzoek, neem dan vooral contact op. Hartelijk bedankt voor je tijd en openheid, en ik zal de transcriptie van dit interview opsturen zodat er nog eventuele correcties gemaakt kunnen worden.

Appendix IV – Interview protocol category C

Allereerst, bedankt voor je deelname aan dit interview en daarbij je bijdrage aan mijn afstudeeronderzoek. Ten tweede, even nogmaals de vraag of je goedkeuring geeft voor de opname van dit interview?

Introductie Dan zal ik mezelf even snel voorstellen. Ik ben Deanne Muisers, en studeer aan de faculteit Bouwkunde aan de TU in Delft. Ik ben op dit moment bezig met afstuderen voor de master Management in the Built Environment.

Onderzoek En tijdens mijn afstuderen doe ik onderzoek naar de rol die alternatieve verkoopinstrumenten kunnen spelen in de toegankelijk van de koopwoningmarkt voor koopstarters. En *de desbetreffende externe factor* speelt hier een belangrijke rol in.

Doel Tijdens dit interview kom ik graag achter de kenmerken en aspecten van *de desbetreffende externe factor* die niet online te vinden zijn. Daarnaast kom ik graag te weten hoe de ontwikkeling van *de desbetreffende externe factor* verlopen is, wat het doel van het *de desbetreffende externe factor* is, en de invloed van *de desbetreffende externe factor* of alternatieve koopinstrumenten in Nederland.

Opzet Buiten je naam en de organisatie waar je voor werkt zal er geen persoonlijke of gevoelige informatie gebruikt worden in het eindproject. Daarnaast zal de opname van het interview verwijderd worden na het afronden van mijn scriptie. Voor dit semigestructureerd interview zijn er bepaalde vragen die van te voren opgesteld zijn, maar aanvullingen of extra informatie is altijd meer dan welkom. Het interview is opgedeeld in verschillende onderwerpen: (1) *de desbetreffende externe factor* (2) Koopstarters (3) Alternatieve koopinstrumenten. Als er verder geen vragen zijn dan zou ik graag willen beginnen.

Start interview

Achtergrond informatie

- Zou je eerst iets over jezelf willen vertellen, wie je bent, waar je je precies mee bezig houdt...

(1) *de desbetreffende externe factor*

- Originele motivatie?
- Wanneer is het opgezet?
- Wie heeft het geïnitieerd?
- Hoe heeft het zich door de jaren heen ontwikkeld?
- Welke externe factoren hebben een grote invloed gehad op bepaalde ontwikkelingen van *de desbetreffende externe factor*?

- Wat is het huidige doel van *de desbetreffende externe factor*?
- Wat is het belang van *de desbetreffende externe factor*?
 - voor kopers?
 - Voor de overheid?

- Voor banken?
- Heeft de overheid nog invloed op de werking van *de desbetreffende externe factor*?
- Wat is het maatschappelijk doel van *de desbetreffende externe factor*?

(2) Koopstarters

- Op dit moment is er natuurlijk een groot probleem op de woningmarkt, waaronder de ontoegankelijkheid voor koopstarters. Speelt *de desbetreffende externe factor* hier op in, zo ja, hoe?

(3) Alternatieve koopinstrumenten

- Wat is de invloed van *de desbetreffende externe factor* op de alternatieve koopinstrumenten?
- Wat zijn de risico's van *de desbetreffende externe factor* in combinatie met alternatieve koopinstrumenten?
- Wat zijn de voor- of/en nadelen van *de desbetreffende externe factor* in combinatie met alternatieve koopinstrumenten?
- Hoe wordt er omgegaan met nieuwe koopinstrumenten?

Afsluiting

- Zijn er nog mensen of partijen waarvan je zegt, die zijn ook interessant om een mee te spreken voor dit onderzoek?
- Zijn er nog andere bronnen/documenten die interessant zouden kunnen zijn voor mijn onderzoek?

Als er nog onduidelijkheden zijn, of verdere opmerkingen of vragen zijn die van pas kunnen komen voor dit onderzoek, neem dan vooral contact op. Hartelijk bedankt voor je tijd en openheid, en ik zal de transcriptie van dit interview opsturen zodat er nog eventuele correcties gemaakt kunnen worden.