Stimulating urban redevelopments through value capturing

An explorative study into the characteristics, benefits, ideal context for enabling the developers' contribution to public space

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Colophon

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Abstract:

There is a big demand for housing in the Netherlands and a significant portion of that demand can be facilitated through urban redevelopments. Urban development is hindered by financial barriers that cause public financial deficits. Stimulating urban redevelopment can be achieved by stimulating feasibility. The developers' contribution is a value-capturing tool that can facilitate private contributions to public space. Through contributions in public space, feasibility can be stimulated by optimizing and widening the developers' business case. Using the Delphi method, a panel of developers was formed to analyse the relation between the developers' contribution and developer decision-making in practice. Decision-making is determined by the type of contribution, benefits for the developer, a context and conditions. Private contributions to public mean taking responsibility in some way. Doing this can add value in various ways, but developers are mainly driven by financial aspects. There are certain conditions to doing the contribution, of which the level of financial feasibility is the most important. The willingness to contribute is highest when a municipally adopts a passive role. Developers should be aware of the benefits and municipalities must be aware of the context that enables private contributions. Further research could improve the significance and confidence in the findings.

Key terms: urban redevelopment, financial deficits, value capturing, developer decision-making, developer's contribution

Preface

This thesis brings an end to the Master of Science in Management in the Built Environment (MBE) at the Faculty of Faculty of Architecture and the Built Environment of the Delft University of Technology, and thereby an end to my years of studying. This final project is the result of almost a year's work, starting in September 2019.

During my studies my interest in complex urban area developments grew. The combination of economic aspects with urban redevelopments, from the perspective of a developer resulted in the subject of this thesis. Although in my mind the subject was constantly changing, the end-product is actually very close to what the initial focus of this study was. The process of writing this thesis could be described as a rollercoaster, with periods of high productivity followed by countless hours of wandering around in a cloud of literature and publications.

I would like to thank my supervisors for their support and feedback. Both mentors allowed me to dive in the subject and form my own path. Karel, thank you for your uplifting words when I thought I was completely lost. Philip, thank you for your guidance by providing indepth knowledge on the subject of building economics.

I am also grateful for the help from Paul Oligschläger, who provided guidance during my internship at KPMG and with this thesis. I am very grateful to Paul for the opportunity to do my graduation internship at KPMG Real Estate Advisory, allowing me to experience projects in consulting while at the same time being able to work on this thesis.

I would like to express my appreciation to all participants to the interviews and survey, which in almost all cases could be taken on very short notice.

Finally, I would like to thank my friends and family for their support. A special thanks goes out to Britt for her motivational speeches, ever enduring support and patience at times when I was not at my best.

The subject of real estate development is something that I would very much like to pursue during my professional career. Looking back on this period, I realize that I thought I knew a lot, but writing this thesis taught me that there is still so much more to learn.

Enjoy reading!

Jeroen de Koning Amsterdam August 2020

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Executive summary

1. Problem statement

The Netherlands is dealing with a high demand for housing caused by demographic trends and changing household preferences. It is estimated that the Netherlands needs 1 million additional homes before 2030. These homes can be built by either expanding the urban areas or by transforming and densifying the existing urban areas. Up to one third of the entire demand for additional dwellings could be accommodated in urban areas. Although greenfield development is less costly, less complex and less time consuming, both national and local government policies favour urban redevelopment over greenfield development. The benefits of urban redevelopment include environmental gains, such as the preservation of nature, reducing environmental footprint with higher densities and reduced commutes; social gains, such as affordability and reduced social segregation; and economic benefits such as increased agglomeration strength and utilizing plots to their full potential.

Despite the benefits, the amount of homes being constructed in urban areas has been insufficient for many years (van der Heijden & Boelhouwer, 2018; Franzen et al., 2017). This is because redeveloping urban areas comes with barriers that hinder progress. These barriers include, among others, long procedures, complicated ownership situations and especially high costs (Verheul et al., 2018). Initial investments in land acquisition, sanitation, and necessary to infrastructure are initiate development. These barriers cause both public and private deficits in urban redevelopment projects. This is something that a significant portion of urban redevelopment projects deal with (Holt et al., 2018; van Walsum, 2019). Per dwelling, the deficit can run up to €28.500 (Manifest Binnenstedelijke Transformaties, 2017). The most important cause of public deficits is public space (Holt et al, 2018).

While there used to be subsidies and funds in place to cover such deficits, this has become a thing of the

past (Heurkens *et al.*, 2020). At the same time, the traditional cost recovery methods are not sufficient for the types of expenditures experienced in urban redevelopments (Verheul *et al.*, 2018). To recover the costs in urban redevelopment, there is a call for alternative financing methods (Noring, 2019; Mulhall, 2018). The public sector is traditionally seen as the one responsible for providing public space and other public goods (Heurkens *et al*, 2020; Daamen *et al.*, 2019; Offermans & van de Velde, 2004). The public sector's willingness to invest in public projects is decreasing (Franzen *et al.*, 2017) and at the same time, there is an increasing involvement of the private sector in public space and infrastructure (Heurkens, 2020).

Value capturing is a method that is often called as a promising additional source of public revenue (Noring, 2019; RVO, 2019). In a time when local governments are experiencing a declining revenue from traditional sources, combined with rapid urbanization which requires big public investments, value capturing as an additional source of public revenue sees increased attention internationally (Ingram & Hong, 2012). While there seems to be a broad interest in these instruments, the practical application, the non-monetary benefits and the politics in implementing these instruments is field of knowledge hardly touched by literature (Fischer, 2019).

The initial focus of this research lies at barriers of urban redevelopment and the concept of value capturing. The main research question is: *how can value capturing instruments stimulate urban redevelopment and how does this influence the decision-making of real estate developers*?

2. Theory

With findings from a literature review, the following sub questions are answered. These sub questions should provide a basis for the following empirical research. One of the value capturing instruments found in literature will be further examined in the empirical part.

— How can urban redevelopment be stimulated? Urban redevelopment deals with barriers that cause financial deficits. Private contributions to public space are required to initiate urban redevelopment. Investments in public space help to stimulate feasibility through optimizing and widening the development business case. Over the years, the private sector has already become more involved in the development of public space.

— What is value capturing?

Value capturing can be used as a tool to redeem some of the external value that is caused by a certain activity and send it back to the actor or activity that caused that value increment, making it equitable.

- Which value capturing instruments can be found in literature?

There are a variety of instruments that are known in literature. An overview can be found in appendix A In these instruments, the value increments have to be assessed and some kind of contribution to the investment causing the increment has to be decided upon. Many instruments are complex and time consuming to implement. Implementing instruments that require tax reform is especially difficult. Some instruments seem more promising than others due to simplicity.

The *developers' contribution* is a tool that seems to facilitate the call for private investments. Through this instrument, voluntary contributions are made to public goods.

The definition in this research: the instrument can be seen as an investment in the public space that creates additional value. 'Additional' because the developer could have chosen not to do it; it is a voluntary investment, meaning based on one's own choices. Contributing is taking responsibility over development or maintenance, or through financial or non-financial contributions. The contribution, by definition, adds value to the public space. This means there is a positive externality; others also benefit from the value increment. Because the tool can be interpreted broadly and implemented without regulatory changes, this is a useful instrument to further research. This leads to the following adaptation of the main research question for the empirical research: *How can the developer's contribution stimulate urban redevelopment and how does this influence the decision-making of real estate developers*?

To answer this main question, the following sub questions are formulated:

Q1) What does the developers contribution look like in practice

Q2) Why would a developer choose to do a developers' contribution

Q3) Under what conditions is a developer willing to do a developer's contribution.

Q4) What public role is necessary to increase the willingness to commit to a developer's contribution

3. Method

Because the characteristics, motivations and conditions for the developers' contribution are fields of knowledge hardly touched by literature, this research has an explorative qualitative nature. The Delphi method, which is an iterative feedback technique with a panel of experts, was used to gather the opinions and find consensus. By doing a first round with semi-structured interviews, followed by a second round consisting of a survey, the panel participants could provide and verify data individually. The panel consists out of a group of developers, selected based on pre-set criteria to ensure panel quality (N=13).

First round

The developers were provided with an explanation of the developers' contribution. Then the participants were asked about the characteristics and motivators of such contributions in past or current projects, and about the conditions and ideal public role when considering the developers' contribution in future projects.

The findings from the first round are analysed and form the basis of the survey in the second round. The participants received feedback of their answers compared with the rest.

Second round

In the second round, the participants had the ability to verify and supplement the answers from the previous rounds. Using ranking methods, the participants could weigh the different types of added value from doing contributions and their preferred public role.

Expert interviews

Through expert interviews, subject experts offered their perspective on the findings from the first two rounds, thereby increasing the confidence in the findings.

4. Findings

The main findings of this research are presented by the main research topics.

The developer's contribution in practice

There are ways in which developers can take responsibility in public space. A developer can take full responsibility of the development and maintenance of public space, which is taken over by the investor/homeowner after completion. This allows for a lot of control over the public space, maximizing its potential benefits. There is disagreement on whether privately owned public space should be non-excludable. Full responsibility can also be temporary, and thus the maintenance is taken over by the municipality. Municipal maintenance comes with great restrictions on the quality. Developers can also contribute by only doing the development and then handing over the responsibility of public space to the municipality. The other methods are taking partial responsibility through providing capital or by other investments. This leads to a low impact on the public space, but is also less beneficial.

Benefits to the developer

Developers can benefit from contributing to public space. These benefits can be expressed in types of added value:

- Concept added value: The integral approach of the problem and realization of different functions, increasing the quality of the concept.
- Financial added value: A more profitable result concerning price-performance, cash flow, continuity, profits and risk allocation.
- Procedural added value: Fulfilling private and public interests and improving decision-making, public-private relation.

- Contextual added value: Better integration with other areas, projects and project initiatives outside of the plan area.
- Business added value: Enhancing potential of future project through improved reputation, skillset, knowledge and purpose.

This study resulted in the identification of 24 variables which can be grouped in the five types of added value. The variables can be found in the web in 8.04. Certain benefits receive additional attention from developers. Through contributions, the relation with the municipality can be improved. This can lead to a better process, benefits in acquisition and leverage within the project due to informal relations. Although very subjective, intrinsic motivation plays an important a role in the decision-making. Contributing can lead to an increased end value and marketability of the development. The quality of public space is increasingly better valued by the market.

The variables are interrelated and lead to four main outcomes; saleability, process, future business possibilities and societal interest.

The respondents were asked to weigh the added value types. In the decision-making process, developers are driven by the financial added value, followed by conceptual added value. Other value types are ranked lower, but do make up for a significant portion of their decision-making. Developers are focused on direct benefits. The more direct the benefit is received, the more important an added value is. The procedural added value was ranked third overall, business added value fourth and contextual added value fifth.

Each developer has its own interests, therefore the role a certain benefit plays in the decision-making is different. Funded developers are more focussed on financial aspects and are less concerned with adding value to the concept relative to the others. Compared to the others, independent developers are the least concerned about procedural added value. Contractor developers are most concerned about increasing the quality of the concept and the process relative to the other developers, and the least concerned about contextual added value.

Conditions to contributing

The respondents indicated that there are four hard conditions and three soft conditions to doing a developers' contribution. The most important condition to doing contributions is financial feasibility. How healthy a business case is determining to which extend a developer is willing to do a contribution. Another important condition to doing contributions is a constructive relationship with the municipality. The size of a municipality determines the willingness to invest. Being involved as area developer means developers are willing to contribute. Involvement after completion is a soft condition to contributing. Although not direct, a developer is always involved after completion due to the informal relations within the world of real estate development. This means that developers that do not contribute slowly build a reputation that has a negative effect on their future business possibilities.

Public role

Developers indicated that instruments belonging to a passive public policy leads to the biggest willingness to contribute. Capacity building instruments are ranked highest, followed by market shaping tools. Stimulating instruments was ranked third and regulating instruments were ranked lowest. This indicated a clear preference for a passive policy over an active policy.

Urban redevelopment is a process in which often multiple stakeholders are involved. Cooperation between those stakeholders is very important in order to initiate the development. The municipality can facilitate this cooperation through capacity building instruments. Developers indicated that an important condition for a passive policy to work is through updated planning policies, belonging to the market shaping instruments.

A passive policy requires private effort. This could lead to stagnation of the development. A municipality never uses only one role, the roles are always used in conjunction. The passive policy should therefore be combined with regulatory and stimulating instruments to act as big stick to force developers to act.

Another issue with the passive policy is that the private initiative means handing over control. While developers trust themselves to develop according to high standards, they do not have the same trust for other developers. They therefore stress the importance of regulating instruments, which should regulate a minimum quality standard. Concluding, developers have the biggest willingness to contribute when a municipality adopts a passive policy, which means a combination of instruments belonging in all roles that allows them to take initiative, cooperate and develop according to a minimum standard.

5. Conclusion

With the answers from the sub-questions, the main research question can be answered: *How can the developer's contribution stimulate urban redevelopment and how does this influence the decision-making of real estate developers*?

Urban development is hindered by financial barriers that cause public financial deficits. Stimulating urban redevelopment can be achieved by stimulating feasibility. The most important cost that causes financial deficits is public space. The developers' contribution is a value-capturing tool that can facilitate private contributions to public space. Through contributions in public space, feasibility can be stimulated by optimizing and widening the developers' business case.

The developer decision-making is affected by the added value of the contribution, conditions to doing a contribution, the type of contribution and the public role. Figure 8.06 presents a model of the developers' decision-making when considering a developers' contribution.

By doing a contribution, the developer is taking over a liability from the municipality. However, a developer might be willing to contribute because of the benefits of doing the contribution. The benefits of committing to a developers' contribution to public space are financial, concept, procedural, business and external added value. The decision of doing a contribution is dependent on how a developer values these benefits. There is a difference in how different types of developers value the benefits. Overall, financial added value is the most important benefit to the developer. Other added values play a role in the decision-making to.

There are also certain conditions to doing a contribution. The hard conditions; financial

feasibility, tender criteria, constructive relation with the municipality and area development are criteria that cause a developer to do a contribution. The soft conditions also weigh in to the decision, but are not necessary.

Developers indicate they are most willing to use the developers' contribution when the municipality adopts a passive policy. Because of the required

private effort when adopting a passive policy, urban redevelopment can only be stimulated when the municipality uses regulatory and stimulating instruments to force developers to act.

To conclude, a developers' contribution can stimulate urban redevelopment by overcoming one of the financial barriers. By doing so, the developer can add value to society and itself.



Figure 1: Conceptual model, adapted with findings (Chapter 8, Figure 8.06)

6. Limitations

The explorative nature of this research formed the rationale for the Delphi method. The findings in this study are limited by this method. Because of the setup, the findings should be regarded as opinions. To further verify the concepts, additional quantitative research is required. Because of time constraints, the Delphi method was restricted to two rounds, therefore heavily relying on the synthesis of the author between the rounds. Furthermore, the broad definition of the concept of the developers' contribution required some steering during the interviews. While coding was used to refrain from subjective input in the synthesis and the concept of the developers' contribution was predefined, the method chosen did allow for noise in the data. This means there is no guarantee the same results would be obtained using the same method. The findings in this study did show similarities with earlier findings

by other authors. The variables discovered showed overlap with a framework provided by ULI (2018). Findings in this study aligned with the conclusion of Ramselaar & Keeris (2011) that developers are primarily focussed on financial aspects, although this study presented other non-financial aspects that were too important not to be considered. Also, the findings were validated by expert interviews, giving more confidence to the findings.

7. Recommendations

Based on the findings of this research, recommendations are formed that are focussed on how the develops' contribution can stimulate urban redevelopment. The findings in this study indicate that developers and municipalities can have a

mutual interest in voluntary private responsibility in the conception of public space.

Municipality

A municipality can learn from the results by understanding what context to create to enable voluntary private contributions to public scape.

- This research indicates that private contributions to public space can help to overcome the financial barriers regarding urban redevelopment. When faced with public financial deficits, a municipality should therefore take this in mind, and should try to create a context in which the developers' contribution is enabled.
- Enabling private contributions to public space means allowing more private involvement in the development of public space. This means a municipality must be willing to take a more passive role in urban redevelopments.
- Developers indicate that they are willing to provide contributions to a high quality, but that freedom is limited when a public space is maintained by the municipality. They indicate plan making and quality standards are too much focussed on maintenance and efficiency. Allowing more freedom could result in more private involvement and a higher quality.
- Developers indicate they have a better understanding of the markets' demand. They also indicate that privately maintained space is used better. The developers indicate that private involvement therefore leads to a better quality of the public space in a city. Maximizing quality should be a shared interest for the developer and the municipality, therefore a municipality should be aware of this difference when making plans, during negotiation and when approving plans.
- The level of excludability of public space is an important subject in negotiations and plan making. Excludability on one hand is not in the interest of the public, while at the same time there are disagreements about the responsibility of space that is non-excludable.

Developers

The following recommendations describe how developers can make use of this research by realizing the benefits a voluntary private contribution can have.

- The developers' decision-making is affected by the added values of the contribution, conditions to doing a contribution, the type of contribution and the public role. A developer should be aware of the factors that weigh in on the decision to reach an optimal outcome.
- Private contributions to pubic space can lead to benefits for to developers that eventually lead to an increased saleability, improved process, more future business possibilities and a societal interest. Understanding the benefits better can lead to more contributions that cause a mutual benefit for both municipality and the developer.
- Stimulating feasibility requires developers to widen their business cases. This means other, less direct benefits should be taken into account when making investment decisions

Further research

- Further quantitative research into the weight of the benefits, conditions and context should be performed to provide more significance.
- This study was limited to three developer types, further research could study the remaining
- In this study, differences between the developer types were examined. The spread in the data hints at other factors that might play a role, such as education. Further research could provide an explanation.
- The conditions for doing developers' contributions are a list that is by no means exhaustive. Further explorative research could indicate more conditions to doing voluntary private contributions

Reading Guide

The thesis is structured as described below:

1. Introduction

The research theme and problem analysis are presented. The problem is defined and the research questions are developed.

2. Urban area development

The next two sections provide a background of knowledge needed to answer the research questions. The subject of urban area development is explored through a literature review.

3. Value capturing

The other leading topic of this study is explored through literature.

4. Theory conclusions

The preliminary conclusions are presented, forming the basis for the following part of the study. New research questions are added.

5. Method

In this part of the study presents the method that is used to answer the research questions for this study

6. Results round one

In this part the results from the first round are presented, along with a preliminary synthesis.

7. Results round two

The results from the survey in round two are presented.

8. Synthesis

In this part the results from both rounds are analysed to find relations. The results from both rounds are examined to find what causes the answers. Also, the findings are compared with findings from the literature review.

9. Conclusions and recommendations

The sub questions and main research question are answered, and recommendations are provided.

10. Discussion

This section presents a discussion of the results and its limitations. Also, the validity and reliability of the results is discussed.

11. Reflection

The societal and scientific relevance is explained and a reflection is provided for the used method and results of this study. Also, a personal reflection of the research process is presented.

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1. Introduction

1.1 Theme

The strong demand in the residential market is dominating discussions about area development in the Netherlands. An aging population and changing housing preferences drive the demand for smaller households. Combined with a strong trend of urbanization, it is clear that the current housing stock is not sufficient in accommodating this demand. It is estimated that the Netherlands needs an additional 1 million homes before 2030 (BPD, 2017). The current shortage (2019) is at 290.000 dwellings.

The Dutch population will grow with 5% until 2030. The number of households will grow much stronger, with about 9%. Over the past 15 years, the average household size in the Netherlands has dropped from 2,3 to 2,2. It is expected to decrease further, reaching 2,1 in 2030 (ABF Research, 2019). The main driver behind this trend is the increasing amount of single person households, due to individualization and aging (ABF Research, 2019). The increasing number of households combined with changing preferences for housing is putting a huge pressure on the market.

While demographics are changing in the Netherlands as a whole, the trends are very geographically differentiated. Urbanization is already having its effect on the demand and supply in housing in the peripheral areas in the Netherlands. Municipalities outside cities are seeing high levels of aging (Dutch: *vergrijzing*), partly because of younger residents migrating to the cities. The demand for housing is stagnating in these areas and the supply side is responding. Around 2030, it is forecasted that more homes will be demolished than built in Groningen, Limburg and Zeeland. A decade later, Friesland and Drenthe will follow (ANP, 2019).

It becomes clear how increasingly important the role of development in and around cities is. Out of the entire demand, about 10-30%, so 100.000-300.000 dwellings, could be built in urban redevelopment areas according to BPD (Brink Management, 2017). When only regarding the physical and legislative possibilities, between 35-75% of the total demand for dwellings could be accommodated in urban redevelopment areas according to a study by PBL (2016). According to the province of Utrecht, two-third of the total demand for dwellings should be realized in Utrecht's urban areas (Stedelijke Transformatie, 2019).

The demand for additional homes has been long known, however, the supply of new homes is lacking (van der Heijden & Boelhouwer, 2018; Franzen *et al.*, 2017). The central government made agreements with municipalities, provinces, market actors and housing associations to set the ambition to build 75.000 dwellings per annum. Some calculations even amount to 100.000 dwellings per annum (van der Heijden & Boelhouwer, 2018). Although local governments often share this ambition, authorities are seeing difficulties in achieving it. In 2018 the number was not achieved, and the added stock in 2019 will neither satisfy this ambition (ABF Research, 2019).

1.2 Problem analysis

While there is a big demand for urban housing, the supply of new homes is lacking. Urban redevelopment suffers from barriers that hinder progress. These barriers include, among others, long procedures, complicated ownership situations and especially high costs (Verheul *et al.*, 2018). Initial investments in land acquisition, sanitation, and infrastructure are necessary to initiate development.

In their research Holt *et al.* (2018); 78% of all studied municipalities expected a public deficit and 39% expected a private deficit. Half of the municipalities indicated that public space was one of the causes of private deficits. For public deficits, public space was the number one cause.

A more recent study by van Walsum (2019) showed that half of the cases researched expected a private deficit and 80% expected a public deficit. Today, developing in inner city areas shows a financial deficit of up to €13.000 per dwelling (Halt *et al.*, 2019; ten Have, 2019). BPD argues this can run up to €18.000 and they claim that over a third of their redevelopment projects had financial deficits (Hagendijk, 2017). In urban redevelopments in Rotterdam and The Hague, a deficit of €28.500 per dwelling was calculated (Verheul *et al.*, 2017). The average deficit in redevelopments in recent years was €28.500 according to the 'City Deal Binnenstedelijk Bouwen en Transformatie' (Manifest Binnenstedelijke Transformaties, 2017). There are problems with the current cost recovery methods and at the same time the ability to cover the financial deficits through subsidies and other funds has decreased (Heurkens *et al.*, 2020).

The economic crisis and the following financial crisis caused an increased interest in alternative methods for compensating the cost of infrastructure investments and other public goods (Noring, 2019; Mulhall, 2018). Especially in urban area developments, there is a call for these alternative instruments (Heurkens *et al.*, 2020). Attempts to raise taxes by governments across the world are fiercely opposed (Ingram & Hong, 2012) and, especially in the Netherlands, subsidies that used to cover the financial deficits in urban redevelopments are a thing of the past (Daamen & Heurkens, 2018; Ten Have, 2019; Franzen *et al.* 2017). In the Netherlands, the public sector is traditionally seen as the one responsible for providing infrastructure and other public goods (Heurkens *et al.*, 2020; Daamen *et al.*, 2019; Offermans & van de Velde, 2004). The public sector's willingness to invest in public projects is decreasing (Franzen *et al.*, 2017). There is a structural trend that the private sector is recognizing the relation between public value and private results, and that the market parties are changing their role and behaviour accordingly (Heurkens, 2020). Various cases have shown that a private responsibility for public space can have beneficial effects for the stakeholder's involved (Daamen *et al.*, 2019). Private involvement in public space can create value for society, community support for the development, trust in developers, and a quicker process and bring local interests and visions to the table (Bouwend Nederland *et al.*, 2019).

In the quest for alternative or supplementary methods in the urban redevelopment process, value capturing is often mentioned as a solution (Noring, 2019; RVO, 2019). In a time when local governments are experiencing a declining revenue from traditional sources, combined with rapid urbanization which requires big public investments, value capturing as an additional source of public revenue sees increased attention internationally (Ingram & Hong, 2012). Value capturing is a term that is used for instruments that claim (a share of) the value increase created by investments in public goods and send it back to the actor/activity that caused that value increase. Implementing value capturing instruments can cause projects with a public interest, which would not have been built otherwise, to see daylight (Offermans & van de Velde, 2004). While there seems to be a broad interest in these instruments, the practical application, the non-monetary benefits and the politics in implementing these instruments is field of knowledge hardly touched by literature (Fischer, 2019).

1.3 Problem definition

There is a high demand for dwellings in urban areas. Literature underlines the benefits of urban redevelopment, and both local and national policy is aimed at facilitating the demand for dwellings in urban areas. Development in urban areas is prone to a number of barriers. The public sector is less willing and able to invest to cover the financial deficits.

There seems to be a decreased support for investments in the public space, which are necessary to stimulate urban redevelopments. In both literature and news articles, there is a call for alterative

instruments to stimulate urban development. Value capturing instruments are frequently named as a possible solution. While this research is aimed at urban area developments in the Netherlands, the shifting responsibility of investments in the public space from the public to the private side seems to be a worldwide problem. The following research will focus on how value capturing can stimulate urban redevelopment. Because of the demand for private investments, the developers' decision-making is also covered. Figure 1.01 shows the conceptual model for the first part of this research.



Figure 1.01: initial conceptual model

The main research question of this study is *how can value capturing instruments stimulate urban redevelopment and how does this influence the decision-making of real estate developers*?

To be able to answer this question the following sub-questions are formulated for the initial part of this research:

- How can urban redevelopment be stimulated?
- What is value capturing?
- Which value capturing instruments can be found in literature?

After exploring value capturing instruments, one of these instruments will be selected for further research. Through the empirical research the instrument will be examined in practice. Also, its effect on the developers' decision-making is explored.



This part presents the findings from the literature review for the subject of urban redevelopment. This chapter provides the available knowledge found in literature related to the subject and tries to answer the following research question;

- How can urban redevelopment be stimulated?

To answer this question, first an understanding is needed of urban area development; why it is necessary, why it is beneficial, who the important stakeholders are, how the process looks like, and what the issues are that prevent urban redevelopment from happening.

2.1 Demand for dwellings

This part explores why it is necessary to stimulate urban redevelopment in the first place.

As mentioned in the introduction, demographics in the Netherlands are changing. According to CBS StatLine (2019), the Dutch population is growing (0,48% annually over last 20 years) and the number of households increasing much fasten, with an average of 0,85% annually over the last 20 years. During these last 20 years, the total dwelling stock has increased with 0,83% annually on average. Over the last 10 years, these numbers show even more problems, with the population increasing faster (0,52% annually), the number of households growing faster (0,88% annually), but the total housing stock growing slower at (0,79% annually). This means, the number of households is growing faster than the amount of homes in the Netherlands, and that trend is more noticeable over time.

The economic crisis had big impacts on the residential market. Transactions dropped by more than 50%, prices fell with 20% and the supply side responded. The production of dwellings dropped to almost half of before-crisis levels (van der Heijden & Boelhouwer, 2018). More recently, the nitrogen-crisis in the Netherlands caused projects to be withhold with an estimated worth of around €5 billion in 2019 and another €1 billion a year until 2023 according to ABN Amro (Buijs, 2019). While the production of dwellings negatively affected by events, the population of the Netherlands keeps on growing. The current shortage is 290.000 dwellings, and this number keeps on growing. The shortage of dwellings is the biggest in the cities, indicated by the massive price increases. After years of suburbanization, living in cities increased in popularity during the 90's. The housing-crisis is the most urgent task for local governments in urbanized areas (van Dam & de Groot, 2017).

The question that follows is where that demand for housing should be accommodated. The transformation versus expansion method has been a subject of debate over the last years (PBL, 2016). The two ways of thinking are explained as following:

Expansion

The number of empty office and industrial locations is not sufficient to accommodate the demand for housing. Also, inner city transformations are complex and time consuming. Problems in supply could lead to an overheated housing market. The chance of overproduction is taken for granted. Investments in non-existing infrastructure and public goods are much higher in expansion areas, but this comes at the benefit of cheaper land acquisition and lower construction costs. Furthermore, the average household of the Netherlands wants a ground-bound dwelling with a back yard. To mitigate an economic crisis and housing-crisis, it is necessary to build in greenfield locations.

Transformation

Transformation of empty and underused industrial- and office areas offer opportunities to accommodate the demand for dwellings. By redeveloping, urban areas are used better, causing; an increased agglomeration strength, investments from the past are better used, investments usually generate a better yield, greenfield locations are preserved and the current stock is used more sustainable. Redevelopment should be the priority, and expansion should only be permitted when it does not lead to vacancy. The debate is usually conducted by on one side (expansion): traditional developers, investors and contractors, and on the other side (transformation): niche developers, public authorities, architects, city planners and heritage organizations (PBL, 2016). The total demand for dwellings cannot be accommodated in urban redevelopments only. Various studies indicate a wide range in the contribution of urban redevelopments in the total housing shortage. According to desk research by PBL (2016), Deloitte, EIB and Posthouwer about 5 percent of the demand for dwellings can be accommodated in vacant office, retail and health facilities. When un-used industrial and business areas are considered, the share of redevelopment in the total demand for housing increases to 10-30%. When only looking at physical and legislative possibilities, between 35-75% of the total demand can be accommodated in urban redevelopments (PBL, 2016). Franzen *et al.* (2017) argue that 60% is to be built in urban areas. Brink Management (2017) argue that only 9% can be built before 2030. When interviewing market parties, Verheul *et al.* (2017) found that only 25% of the housing shortage could be solved by market parties with the current barriers to urban redevelopment. As PBL (2016) mentions, the debate between expansion and transformation is ambiguous and subject to flaws, such as misinterpretation of assumptions, regional differentiations, different ambitions and the lack of use of facts.

Governments (policy)

Local governments' policies are aimed at urban redevelopment (van der Heijden & Boelhouwer, 2018). Instruments like the 'Ladder voor duurzame verstedelijking' argue that area developments in greenfield locations are only acceptable when there are not options in urban areas. At the same time, only 24% of municipalities in the West of the Netherlands, which is the most urbanized area, found no difficulties in finding locations to accommodate residential development (Stec Groep, 2018). The most problematic issue was the absence of land positions and locations suitable for redevelopment (Stec Groep, 2018).

2.2 Benefits of urban redevelopment

Besides the demographic changes and policy, there are other arguments for why the demand for housing should be accommodated in urban redevelopments. The expansion versus transformation debate suggests there are benefits, but also barriers to urban redevelopment. Literature mentions several benefits to urban redevelopment. By definition, redevelopment offers the opportunity to change the existing places into more successful ones. Urban redevelopment benefits include the benefits of urban places and the benefits of the opportunity for change. Urban environments have environmental, social and economic benefits (Dale & Newman, 2009).

Environmental

Accommodating space in the urban redevelopments mean greenfield locations can be preserved. Also, environmental footprints can be reduced due to density (Dale & Newman, 2009). The proximity to public infrastructure decreases the dependency on automobiles (van der Heijden & Boelhouwer, 2018). Also, because people live closer to jobs in the city, urban redevelopment can reduce commuting traffic (Daamen & Heurkens, 2018). Redevelopment also offers the opportunity to contribute to the energy-transition (Manifest Binnenstedelijke Transformaties, 2017).

Social

Social clusters that can exist due to the density are crucial in sustainable development of areas (Dale & Newman, 2009). Without urban redevelopments that increase the supply of houses in urban areas that are high in demand, housing prices will grow even faster, leading to social segregation (Verheul *et al.*, 2017). Affordability already is a big issue, but especially for starters it will become harder to afford a home in these areas.

Economic

Redevelopment locations offer great potential for the private sector to gain from under-exploited plots (McCarthy, 2002). As mentioned before, this means urban redevelopment can contribute to the housing crisis, but also to other sectors. Places created by redevelopments attract groups that are key to the economic prosperity of cities (Dale & Newman, 2009). The public side benefits from the increased employment and tax income gained by redevelopments (McCarthy, 2002). Urban Redevelopments increase the agglomeration strength of the cities (Daamen & Heurkens, 2018; Manifest Binnenstedelijke Transformaties, 2017). While the Netherlands is one of the densest countries in the world, our cities and metropolitan areas are far from the world's biggest. Dutch urban areas are missing economic agglomeration strength compared with international competitors (CRA, 2019). Areas with strong agglomeration power attract international businesses and talent. As a major factor for the Dutch international business climate, stimulating the growth of these areas is a key policy of the central government.

2.3 Urban redevelopment process

This part explores the process of urban redevelopment. Urban redevelopment is the transformation of underused or degraded areas in urban environments. Within area transformations, there is a difference in how development takes place. Area development and project development can be distinguished. Area development is focussed on the area and comes with the tasks of process management, cooperation and the financial approach. Within an area development, multiple project developments can take place. This can also be performed by multiple developers. Project development is mainly focussed on the development of real estate.



Figure 2.01: area development versus project development

Development cycle

The urban area development process can be seen as three phases, land development, real estate development and operation & maintenance (Giezen *et al.*, 2013). The first phase is usually a public undertaking, performed by municipalities and land development companies. There are some exceptions, often involving big developers, where the private sector is doing the land development. This phase consists out of acquiring land, managing it for a certain period and preparing land for construction, and subsequently selling it to the market. In the second phase, developers, housing associations or other private parties develop real estate on the plot and sell it after completion, or keep it in their own portfolio. In the third phase the real estate is managed and operated by investors, housing associations, real estate managers or individual owner-occupiers. Figure 2.02 shows which main stakeholders are involved at which moment.



Figure 2.02: area development value chain (edited from Franzen et al., 2017).

2.4 Stakeholders

In urban area developments multiple stakeholders are present, which can be seen in value chain as presented in figure 2.02. The following part highlights the main stakeholders in the process.

Developers

While each individual developer has its own characteristics, a categorization can be made among them. There are different types of developers in the field, each with its own goals and approaches.

5 developer types (based on Nozeman & Fokkema, 2008; Franzen *et al.*, 2017):

The contractor-developer. These developers are affiliated with contractors. Developing is a mean to maintain workflow for the contractor. Their goal is a constant cash flow with small margins, focusing on quantity.

The independent developer. These developers are independent companies, often differentiating themselves with a certain approach or niche market.

The investing developer. The investing developer is affiliated with institutional investors. They develop mainly for their own portfolio, with a long-term scope.

The funded developer. These developers are affiliated with financial institutions such as banks, resulting in easy and direct access to project financing.

Other developers. Some companies develop real estate, but have a different core business. They often operate in other sectors, such as public transport, retail or logistics.

Delegated developers. These developers, delegated by a risk bearing investor, are developing for a fee, often dependent on the achieved result.

Besides the types, developers can also be categorized according to their operating market, ea. housing, retail, office and industrial. The focus for this research is housing. The 'other developer' type, although there are some exceptions, is not often involved in the development of housing.

Banks

Banks provide an important part of development financing in urban redevelopment. Development financing happens in the form of loans for the real estate development phase from banks. These loans have a high interest, as a result of the high-risk profile. Due to regulatory changes following the economic crisis, risk-bearing capital could be obtained with lower loan-to-value ratios (Franzen *et al.*, 2017; Bouwend Nederland *et al.*, 2019) and in many cases higher interests (Robbe, 2015).

Investors

The investor is interested in the cash flow resulting from user rents. By holding on to real estate over time, he looks for a return. The rents are capitalized into the investment value of a development.

There are a number of real estate investors involved in the Dutch real estate market. There is a difference between institutional investors and real estate investors. Developers differ in risk appetite; some investors are also willing to provide higher risk development financing. Others are strictly turn-key investors.

Owner-occupier

Houseowners, or the owner occupiers, are a special type of real estate investor. Their willingness to buy is affected by aspects such as accessibility, location and property features.

Municipalities

Governments play a significant role in urban redevelopment.

Composed in 1962, the Spatial Planning Act, or WRO (*Dutch: Wet op Ruimtelijke Orderning*), is the legal tool that lets the Dutch government regulate land-use. Hereby, the municipality can determine the purpose of land and exercise influence on building plans. In the Netherlands, the state can utilize two forms of law; public law and private law. The main difference is that public law focusses on the state and on the general public, private law is focussed on private individuals. Dutch municipalities have control over the most important public planning and development instruments. They have absolute control of land-use through the land-use plan, which they are obliged to compose and update. In the Netherlands, land may only be developed in accordance to the land-use plan, as laid down by the municipalities is somewhat limited compared to the national government (Hobma & de Jong, 2016). The municipal tax in the Netherlands is about 8% of the total municipal income per year. Another minor source of income are administrative charges, but they involve high process costs. Through private law planning instruments, municipalities are allowed to act as market parties and make substantial profits (Hobma & de Jong, 2016). Under private law, a municipality is also allowed to enter in public private partnerships (PPP).

Municipalities have reactive and proactive powers. Reactive powers are used to react to private sector development initiatives. Private initiatives must be in line with the local and national planning and development law. Proactive powers enable public development initiative. Some form of control must be required. This can be achieved through multiple powers available to municipalities, such as the purchasing land under private law, pre-emption rights and expropriation (Hobma & de Jong, 2016).

Instruments shape, regulate and stimulate the market, in other words; they positively or negatively influence investment decisions from the private sector (Adams & Tiesdell, 2012). Policy instruments can be grouped in 4 groups: market shaping instruments, market behaviour regulating instruments, market stimulating instruments and capacity building instruments (Verheul *et al.*, 2017; Adams & Tiesdell, 2012).

Market shaping instruments shape the decision environment for the involved actors. It includes changing the context by making plans, reforming institutions and strategic transformation. Market behaviour regulating instruments control market actions and constrain the decision environment of the involved actors. These instruments include the land use plan and parking policies. Market behaviour stimulating

instruments expand the decision environment of the involved actors. With these instruments, governments can lubricate the market in places where markets are thin. These instruments require some sort of governmental body to encourage private or semi-private actors to develop in places where it otherwise would not develop, or to achieve a better quality than would otherwise occur (Adams & Tiesdell, 2012). These instruments include subsidies, tax reforms and operating under private law.

Capacity building instruments enable development by stimulating actors to operate more efficiently within their decision environment. These instruments include facilitating cooperation, process consultation, networking and area managers.

The instruments can be grouped in four roles which the municipality can adopt. They can be seen over two axes (Verheul *et al.*, 2017). The vertical axis in figure 2.03 deals with the type of involvement; at a distance or through consultation. The second axis deals with type of steering, hard instrument al steering on one side, and soft relational steering on the other end. Stimulating and regulating instruments, or hard steering, are considered active public policy, capacity building and shaping markets, or soft steering, are considered passive policy (Bouwend Nederland *et al.*, 2019).



Figure 2.03: conceptual roles public actors in in urban development (from Verheul et al., 2017).

How the municipality uses its instruments defines its land policy. In two extremes, a municipality can have an active land policy or a passive land policy. With an active policy, the municipality is in charge of the development. They acquire land, does the land development, and sells the land to developers. With a passive policy, municipalities define the boundaries for the development, but leave the land development to the private sector. More municipalities are changing their active role towards a more passive role (Franzen *et al.*, 2017). When adopting a passive policy, municipalities require private sector effort to implement the municipalities' ambitions. Because, compared to a more active role the municipality is less financially involved, they can have control over developments without hurting their own interest. However, this can also mean there is a risk developments take longer or do not happen at all, as the private sector might be less willing to participate due to the profit reducing regulations. The cities of Amsterdam and Rotterdam represent the two very different approaches. The municipality of Amsterdam is willing to do pre-investments and be restrictive towards the private sector. This active role is justified by the strong market appeal of the city. The municipality of Rotterdam, on the other side, adopts a passive role, allowing for private sector initiatives and public-private cooperation.

2.5 Traditional financing

Land development phase

During the land development phase, investments are made that are necessary to initiate development. The land must be prepared for the real estate development in the next phase. In the Netherlands, the public sector is traditionally seen as the one responsible for providing infrastructure and other public goods necessary to initiate development (Heurkens *et al*, 2020; Daamen *et al*., 2019; Offermans & van de Velde, 2004). This is very different in the US, where private developers usually pay for public amenities to be installed in their developments (Noring, 2019).

Cost recovery

Municipalities are required to recover the municipal costs for the land preparations from the parties who benefit, in practice these are developers, through development contributions (Hobma & de Jong, 2016). Developers that own land in urban redevelopment areas can *voluntarily* contribute or can be *forced* to contribute unprofitable components of the area development. While municipalities are required to recover the municipal costs for facilities in developments, they can also apply *above plan equalization*. This allows negative results from one area development to be equated with positive results from another area development that has some functional relation, making both projects have a closed business case. This contribution in this case is facilitated through anterior agreements, which will be explained in the next part. With this method, the municipality can choose to initiate a development with strategic or social benefits, but with a (initial) negative financial result (Giezen p.18).

There are three ways contributions to the land development costs are achieved; private law partnership agreements, cost recovery under public law and sale of land that has been prepared for construction.

The *voluntary* development contributions can be arranged through partnership agreements. *Anterior agreements* are agreements made before the site development plan is settled, *posterior agreements* are made after. Anterior agreements allow much room for negotiations, because they are made before the site development plan is set. Posterior agreements must be in line with the site development plan. In 95% of the cases in urban redevelopment, these financial contributions are settled through anterior agreements (Robbe, 2015). Through anterior agreements, the municipality is able to raise more money than is legally required through cost recovery under public law.

There are no rules on which costs can be recovered through anterior agreements. The contribution is connected to the costs that can be recovered through public law (see box). However, the contribution in anterior agreements can include many other things, including public amenities and above-plan contributions. Usually the contribution is defined by a certain percentage of the development value, or an absolute amount per housing unit sold.

Contributions should not lead to easier cooperation with the municipality. Therefore, all contributions should be formalized (Hobma & de Jong, 2016). Otherwise, doing contributions to enable a smooth process could lead to extortion by municipalities.

When no prior agreement can be reached, the municipality draws up a site development plan. This plan *forces* developers to contribute to the municipal costs. What costs can be recovered are listed in the Spatial Planning Act (see box). The site development plan contains the works needed to prepare an area for development, a land development budget, containing the costs of acquisition, land preparation and additional facilities and estimated revenues of land allocation, and it is described how the costs are to be recovered. There is also room for above-plan costs in the land development, but there are limits to which costs can be enforced. There is a limit to the maximum amount of costs that can be recovered to protect developers. The costs are recovered when a developer applies for the environmental permit.

Costs to be recovered

Municipalities make costs due to acquiring and preparing land for development, but also due to municipal services and public facilities. The costs for acquiring land are expressed in WRO 6.2.3. They include land value, value of to be demolished real estate, costs for obtaining control of the land, this can be through purchasing or expropriation, and costs of demolishing, removing and relocating real estate, infrastructure and obstacles. The costs are related to the to be developed area and range from;

- Doing land, acoustic, environment and other relevant studies.
- Land sanitation and land works
- Facilities, as explained in WRO 6.2.5. These are projects that cannot be financed through operational revenues.
 - o Sewerage systems
 - Roads, public parking, public squares, pavements, bicycle paths, water works, bridges, tunnels, culverts, quays, docks, piers.
 - Public transportation networks
 - o Public green, parks, playgrounds, non-commercial sport facilities.
 - Public lighting and fire hydrant.
 - Street furniture, playground equipment, decorative elements, art objects and fencing in public spaces.
 - o Buildings with environmental, hygienic, archeologic or health purposes.
- Administrative costs for initiating, construction, managing and controlling planning procedures, works.
- Compensation for environmental losses
- Already made expenses
- Future expenses
- Damage compensations
- Interest costs

Based on: Wet Ruimtelijke Ordening (2006), & Hobma & de Jong (2016).

The costs can also be recovered through selling the land prepared for construction. The land price then contains the costs for preparing the land and other municipal costs for facilities, usually along with some profit. The price for which land prepared for construction is sold by the municipality is composed out of the municipal costs for acquiring land, preparing land and related facilities. Besides these costs, the municipality is also aiming to make a profit.

In order for development to take place, the costs for the land development should be covered by the price a developer is willing to pay for that plot. The dominant land price determination method is the residual land value (Giezen *et al.*, 2013). Land prices are determined through the residual method in 97% of the cases in the biggest cities of the Netherlands (Stec Groep, 2019). The residual land price is the maximum price level a developer is willing to pay for the land. At the basic level, the residual land value is the difference between the maximum achievable development value and the development costs. This level is determined when development costs, tax and a reasonable level of profit are subtracted from the development value of the end product. Figure 2.04 visualizes how the residual land value is determined. When the residual land price that a developer is willing to pay is lower than the land development cost, the GREX is unprofitable, leading to stagnation. A higher difference between the real estate development cost and the development value enables more investment in public space.



Figure 2.04: residual land price determination

2.6 Barriers of urban area development

As mentioned in the introduction, before an urban site can be redeveloped into a residential area, significant investments need to be made. These areas also face other financial barriers. These include the following: (Adams & Tiesdell, 2012; Manifest Binnenstedelijke Transformaties, 2017; Ten Have *et al.*, 2017; Verheul *et al.*, 2017; Daamen & Heurkens, 2018; Daamen *et al.*, 2019; Heurkens *et al.*, 2020).

<u>Infrastructure</u>: two kinds of infrastructure investments can be distinguished: investments needed to adjust the existing infrastructure to integrate the development with the neighbouring area, and investments needed to improve accessibility within the development. Large development sites may require advance transportation infrastructure provision, including connections to roads, highways, waterways and public transport networks. The connections can be extensions of roads, public transport lines and stations, shared mobility hubs, bridges, tunnels, noise-screens. Also, off-site connections need to be taken into regard. Infrastructure is not limited by transportation, it includes water management with investments in water supply and drainage networks, energy networks like a heat net and connections to surrounding networks.

<u>Parking space:</u> Parking spaces are often required by local standards and take up valuable space in developments.

<u>Sanitation</u>: Soil can be contaminated due to previous functions. Especially in urban redevelopments, which often take place in vacant, obsolete or under-utilized industrial areas, sanitation costs can be very significant. <u>Public amenities</u>: In areas that need to be transformed into places suited for residential use, public amenities such as schools, health centres and communal centres are missing and cause significant investments.

<u>Parks and public space</u>: urban redevelopments are often in need of severe adaptations of the public space before the area is habitable. Due to smaller apartments in urban area, there is a bigger demand for public space (Offermans & van der Velde, 2004).

Land acquisition: Ownership control must be achieved, following the feasibility study. For the private-sector, buying out current land-owners can be very expensive and often impossible. When land-owners do not follow the land-use plan, the public sector can step in and make use of pro-active planning instruments. Voluntary purchase agreements or expropriation are instruments that can be used by the authorized public sector to achieve ownership control (Hobma & de Jong, 2016). This involves high costs and long procedures. Especially in cities that are high in demand, land speculation causes an even bigger problem. Scattered ownership is also a cause for high land acquisition costs (Heurkens *et al.*, 2020; Holt *et al.*, 2018, Ten Have *et al.*, 2017). Besides deficits, scattered ownership is also a key reason for stagnation. In countries around the world, multiple ownership of land or property creates significant redevelopment constraints (Adams & Tiesdell, 2012). According to a study performed among developers, disagreements with neighbouring land owners are the most important bottlenecks that cause delays (Stec Groep, 2018). In a study by Adams, 80% the studied developments experienced disruption due to ownership constraints (Adams & Tiesdell, 2012). A typical example of this barrier is in the case of the Binckhorst, where scattered ownership was one of the barriers that caused an integral masterplan to be replaced with an incremental redevelopment plan (Daamen *et al.*, 2019).

Because there is such a big difference in land value between land with agricultural and residential objectives, land speculation has its effects on land price levels. Areas see increasing land values when they seem likely to be (re)developed and require a new land-use plan (Giezen *et al.*, 2013). Because of land speculation, the acquisition costs increased. Land speculation is a serious issue in urban redevelopments (Verheul *et al.*, 2017). Land speculation does not only take place to benefit from the value increment when selling the land to the land developing party, but also to gain ownership control and possible development rights in a later phase (Segeren, 2007).

<u>Process and consultation</u>: Urban redevelopments take longer than expansions (Stec Groep, 2018). Besides the longer timespan, the complexity of urban redevelopment due to the abundance of stakeholders requires a lot of expertise and time. Costs of consultants and managers are high compared with greenfield developments. Public involvement and investments that lead to ideation are necessary to help with initiating the development process (Daamen *et al.*, 2019).

<u>Damages:</u> According to the Spatial Planning Act nearby real estate owners should be compensated for damages caused by development (Hobma & de Jong, 2016).

<u>National and local</u> legislation that restrict development. The stricter environmental standards such as noise, smell and energy performance put a burden on the costs of development. Policies can also limit income, with local policies such as social housing norms. More recently the nitrogen policy had a negative effect on the sector causing delays (Buijs, 2019).

<u>Smaller scale of development:</u> Because urban redevelopments are often smaller than greenfield developments, the scale advantage disappears (Heurkens *et al.*, 2020).

<u>Market conditions:</u> Urban development is highly dependent on market cycles. Because revenues in the development budget of the site development plan are future revenues, they are dependent on market trend assumptions. The financial crisis is a fresh reminder of how this can turn out, when the markets went down (Verheul *et al.*, 2017), leaving big gaps in the business case of developments. During the crisis the supply of dwellings dropped by half (van der Heijden & Boelhouwer, 2018). The financial crisis had a big impact on the availability of risk-bearing capital (Franzen *et al.*, 2017; Bouwend Nederland *et al.*, 2019). The loan-to-value (LTV) ratios that were in use before the crisis were based on the assumption that residential prices would always increase. The risk perception, or the risk of default, was small. The financial crisis changed this assumption, and LTV-ratios dropped. Banks are holding back on loans, making it more difficult for developers to find financing (Robbe, 2015).

Construction costs have been rising for a long time and especially during the last years prices have risen so significant that it causes problems throughout the entire real estate value chain (de Leeuw, 2018). The increasing development cost that follows, causes the residual land price that developers can afford to decrease. Also, the increasing construction costs lead to higher costs for infrastructure and other public goods.

Affordability is growing concern in the Dutch residential market. Especially for starting households, the cities have a low supply of affordable housing. Besides the restricting policies on affordability, there is also a maximum of what the market is able to afford. The high land costs for developers due to the traditional land development system steer development towards high-rise apartments (Verheul *et al.*, 2017). However, it is important to keep the housing preferences of households in mind, which indicate that there is a big demand for sub-urban living in urban areas (van der Heijden & Boelhouwer, 2018).

<u>Uncertainty caused by governing</u>: Inadequate steering of local governments, with unclear visions and goals, lead to uncertainty. Clear goals and flexibility in planning are considered a significant method to speed up the redevelopment process (Stec Groep, 2018). The lacking capacity and continuity in public sector are another uncertainty (Verheul *et al.*, 2017). The electoral cycle and political calculation, which is inherent to planning, creates political uncertainty (Adams & Tiesdell, 2012).

Value jump:

Traditional land development is aimed at increasing value by, for example, using planning instruments to change the land use from agricultural to residential. The municipality can then benefit from the value increment that the change in land use caused. In urban environments, this value jump is a lot harder to achieve because of the existing function and existing buildings (Robbe, 2015).

The financial barriers create financial deficits. The deficits appear on both the public and the private side. In their research Holt *et al.* (2018); 78% of all studied municipalities expected a public deficit and 39% expected a private deficit in their urban redevelopment projects. Half of the municipalities indicated that public space was one of the causes of private deficits. For public deficits, public space was the number one cause. A more recent study by van Walsum (2019) showed that half of the cases researched expected a private deficit and 80% expected a public deficit.

Today, developing in inner city areas shows a financial deficit of up to €13.000 per dwelling (Halt *et al.*, 2019; ten Have, 2019). BPD argues this can run up to €18.000 and they claim that over a third of their redevelopment projects had financial deficits (Hagendijk, 2017). In urban redevelopments in Rotterdam and The Hague, a deficit of €28.500 per dwelling was calculated (Verheul *et al.*, 2017). The average deficit in redevelopments in recent years was €28.500 according to the 'City Deal Binnenstedelijk Bouwen en Transformatie' (Manifest Binnenstedelijke Transformaties, 2017).

In their survey, Holt *et al.*, (2018) studied the top reasons for public and private deficits among 18 municipalities:

Pri	vate costs (most to least important):	Public costs (most to least important):	
1	Parking	1	Public space
2	Demolition / Sanitation	2	Plan costs
3	Disappointing result real estate	3	Area infrastructure
	exploitation/development (affordability)	4	Main infrastructure (costs for to be developed real
4	Acquisition costs		estate, as listed in WRO)
5	Public space-infrastructure	5	Demolition/sanitation
		6	Acquisition / buying out – expropriating
		7	Underground infrastructure
		8	In place barriers

Figure 2.05: Top reasons for public and private deficits (from: Holt et al., 2018).

Subsidies to cover deficits

Municipalities, provinces and the national government used to be able to cover deficits using subsidies. Large funds for subsidies that used to cover the financial deficits in urban redevelopments have been dismantled in recent years (Daamen & Heurkens, 2018; Ten Have, 2019; Franzen *et al.* 2017; Offermans & van de Velde. 2004). In 2020, a new subsidy called the Regeling Woonbouwimpuls of €1 billion was initiated, and this could be a remedy to the public financial deficits.

2.7 Overcoming the barriers

There are many financial barriers that hinder progress in urban redevelopment. Summarizing, the financial barriers are the high costs involved, of which public space is said to be to most important, changed market situations and the discrepancy between redevelopment in an urban setting and the traditional cost recovery system. There is a limit to the amount and the type of costs that can be recovered by a municipality and which investments are necessary in urban redevelopments. Subsidies that used to be in place to cover the financial deficits have been dismantled.

Financial deficits occur most at the public side. Because subsidies have stopped, there seems to be a call for increased private contributions to the public investments that are necessary for initiating urban redevelopment. The increasing involvement from developers in public space is not new. Especially in urban area developments, the private side has already been taking an increasingly leading role in the conception of public space (Offermans & van der Velde, 2004). Because public space is the main issue hindering feasibility, the focus of the next part will be on investments in public space in urban redevelopments.

2.8 Private contributions to investments in public space

Investments in public space should be considered as a broad concept (Daamen *et al.*, 2019). The public space is made up out of parks, green, open space, infrastructure and community services. These are essential elements for communities and the success of urban redevelopments. Public space is defined as space that is publicly accessible. Although everyone can make use of the place, public space is a rival good,

meaning using it will diminish the utility to other users (Webster, 2007). Although in the case of public space this is a very slow process, maintaining the public space is a major expense. Investments are necessary to develop and maintain the public space. When publicly accessible space is non-excludable, inherently this brings the problem of free riders; many people benefit from public space without having contributed to the costs (Adams & Tiesdell, 2012). Public space degrades after time because individuals enjoy the benefits but only bear a fraction of the costs (Webster, 2007). There is a difference in public and semi-public space, where the latter is often owned by developers, investors or owner-occupiers. Semi-public space is not always seen as non-exclusive, sometimes a fee or contribution can be charged for using it (Adams & Tiesdell, 2012). The excludability is a point of discussion in urban development (Heurkens *et al.*, 2020).

For a long time, the public sector has been seen as the one responsible for public space. However, various cases have shown that a private responsibility for public space can have beneficial effects for the stakeholder's involved (Daamen *et al.*, 2019). Private involvement in public space can create value for society, community support for the development, trust in developers, a quicker process and bring local interests and visions to the table (Bouwend Nederland *et al.*, 2019).

There is a structural trend that the private sector is recognizing the relation between public value and private results, and that the market parties are changing their role and behaviour accordingly (Heurkens, 2020). Some developers are even willing to accept a lower yield (Offermans & van der Velde, 2004). Developers move from a position of low interest in and low control on the quality of public space, towards a position of high interest and high control (figure 2.06).



Figure 2.06: UAD stakeholder interest in high quality space and control on quality matrix (based on Heurkens, 2020; Heurkens, 2018; Offermans & van der Velde, 2004).

As one of the main reasons for public deficits, private contributions to public space are necessary to urban redevelopment. Developers can contribute to public space in various ways. As described in the previous part, often these contributions happen through anterior agreements. In these agreements, arrangements can be made for the responsibility of private sector. From public to private, the role of a developer in public space can be explained as (ULI, 2018):

- 1. Public sector is fully responsible for development and maintenance
- 2. Developers/private sector contribute to capital and maintenance
- 3. Private sector is fully responsible for development and maintenance

Also, the ownership of the public space can differ. When the privately owned space is often referred to as semi-public space.



Figure 2.07: possibility to add value throughout the process of the conception of public space (based on Smeenk, 2007).

Taking responsibility early in the process leads to a higher possibility of adding value. In the early phases in the process of the conception of public space there is a greater ability to control and steer what is being developed (Smeenk, 2007).

Stimulating feasibility

To overcome the financial deficits, two strategies can be adopted to stimulate the feasibility of area developments (Heurkens *et al.,* 2020); optimizing financial business case by reducing costs and increasing revenue (1), and widening the business case by creating value on other levels (2). The next part will elaborate how developers can adopt these strategies to increase feasibility by investing in public space.

There is a trend that the private sector is recognizing the relation between public value and private results (Heurkens, 2020). There is a mutual relation between real estate and public space; through real estate development contributions are made to public space, and public space has an impact on the value of real estate.



Figure 2.08: mutual dependency of functions (based on Offermans & van de Velde, 2004)

The influence of the quality of public space has on real estate is a subject that is often covered in literature. Investments in public space create value on multiple levels. The value is accumulated at various stakeholders in and outside the plan area (Zhao *et al.*, 2012). Many of the benefits from investments in public space ends up at other stakeholders than the one making the investment. These benefits can be called externalities. Externalities are social costs or benefits that are created when something is produced or consumed that do not translate into private benefits or costs (Adams & Tiesdell, 2012). Also, investments in public space result in short term value gains and long-term value growth. Indirect and direct value can be distinguished (Robbe, 2015).

In urban redevelopment, value can be hard to define, predict, identify and analyse (Knowles & Ferbrache, 2016). Value is a multi-dimensional term and can be interpreted differently by different individuals (Adams & Tiesdell, 2012). The following six categories of value are identified, containing financial and non-financial values:

- *Exchange value.* Represents trading price.
- *Use value.* The contribution to productivity, profitability and competitiveness.
- *Social value.* The extent to which social interaction is enhanced.
- *Environmental value.* Degree of robustness, flexibility and adaptability related to equity and biodiversity.
- *Image value.* Contribution to identity, reputation, vision and prestige.
- Cultural value. The relation to its context.

Investments improving the quality of public space can improve the following characteristics of areas. These concepts are non-exclusive and intertwined, as they can affect each other; Accessibility, economic performance, employment, urban quality, awareness, character, attractiveness, recreational value, green and sustainability (based on: Offermans & van de Velde, 2004; Knowles & Ferbrache, 2016; Daamen *et al.*, 2019; Heurkens *et al*, 2020).

These characteristics have an effect on the exchange value;

Land value. Quality of public space is the first factor that defines how land acquires value (Ingram & Hong, 2012; Cervero & Murakami, 2008).

Property values. The quality of public space has an impact on property values. Several studies showed that parks and nature have a positive effect on property values (Daamen *et al.*, 2019). Within 500 meters, values can increase by 15%. Prices directly next to parks make an even bigger value jump, real estate value increases of up to 49% have been recorded (McCord *et al.*, 2014). Consumers have an increasing appreciation of the quality of public space, which is represented in their willingness to buy (Knowles & Ferbrache, 2016).

Most developers sell their building at completion to either investors or owner occupiers. Their willingness to buy is reflected in the development value. Their willingness to buy is dependent on how much they value real estate and its characteristics, and this differs per individual. How much the investment in public space will impact the development value is therefore different per individual. Some investors might value some characteristics of real estate more than others. It is hard to change the embedded culture of institutional investors (Adams & Tiesdell, 2012). This requires institutional chance. It may be necessary to restructure the short-term developer and long-term investor real estate involvement to deliver the full financial benefits. Some (hit-and-run/trader) developers see no benefit in investing in long-term quality, even though beneficial towards future residents and investors, but go for quick wins (Adams & Tiesdell, 2012).

Public space can play a role in the first strategy of stimulating feasibility: optimizing the business by increasing revenue and decreasing costs. Literature suggests there is a strong link between the quality of public space and exchange value received by the developer.

For the second strategy, widening the business case, first the benefits of investments in public space to developers must be examined. Many of the values that are created through investments in public space happen in the form of externalities; not all value that is created is presented in the exchange value received. Real estate development is driven by exchange value (Adams & Tiesdell, 2012). This is also reflected in real estate developer decision-making, which is primarily focused on financial aspects (Ramselaar & Keeris, 2011). When widening the business case, the developer should not only take direct exchange value into account. The accrued value that is created through development should be regarded in a business case. However, many of these values are hard to quantify. Besides being prone to time-uncertainty, the indirect value created is therefore hard to take into account when taking an investment decision. Figure 2.09 gives an overview of other potential benefits for developers from investments in public space, grouped per development phase (ULI, 2018).

Planning and design	Project marketing
Community support	Strong market demand for high quality public space
Increased support by influential public stakeholders and investors	Increased marketability due to project differentiation
Easier zoning approvals Increased development size	Ability to enhance project branding and firm reputation
Enhanced likelihood of winning tenders	Public recognition through sponsored public events, awards or iconic features
	Increased project visibility because of foot traffic
Project completion	Operations and maintenance
Accelerated market absorption rates	Increased net operating income
Enhanced asset value through higher rent	New sources of revenue streams
premiums lower vacancy rates and faster lease-	
ups	Long-term cost savings through resilience promoting amenities
ups Increased market value	Long-term cost savings through resilience promoting amenities Better mortgage insurance rates
Increased market value Economic development supporting project value	Long-term cost savings through resilience promoting amenities Better mortgage insurance rates Sustained value/future-proofing
ups Increased market value Economic development supporting project value Equitable development opportunities	Long-term cost savings through resilience promoting amenities Better mortgage insurance rates Sustained value/future-proofing Increased business for retail tenants
Increased market value Economic development supporting project value Equitable development opportunities	Long-term cost savings through resilience promoting amenities Better mortgage insurance rates Sustained value/future-proofing Increased business for retail tenants Increased residential tenant retention
ups Increased market value Economic development supporting project value Equitable development opportunities	Long-term cost savings through resilience promoting amenities Better mortgage insurance rates Sustained value/future-proofing Increased business for retail tenants Increased residential tenant retention Long-term real estate value appreciation

Figure 2.09: potential benefits for developers by supporting public space (from: ULI, 2018).

The operations and maintenance benefits, benefit stakeholders involved beyond project completion. For all developer types other than the investing developer, these benefits are not directly received. However, they should be represented in the development value when a developer hands over the ownership of a development to an owner-occupier or investor.
The benefits for developers can also be grouped according to value types. For developers, four types of added value resulting from private investments in public space can be distinguished (Bult-Spiering, 2003):

- Concept added value: The integral approach of the problem and realisation of different functions, increasing the quality of the concept.
- Financial added value: A more profitable result concerning price-performance, cash flow, continuity, profits and risk allocation.
- Procedural added value: Fulfilling private and public interests and improving decision-making, public-private relation.
- Contextual added value: Better integration with other areas, projects and project initiatives outside of the plan area.

2.9 Developer decision making

The last part elaborated upon the theoretical benefits from investments in public space. How much a developer can contribute to public space, however, is still bound to development feasibility. The feasibility is dependent on the market appeal, financial viability and other criteria. When either of these is not accomplished, the development is considered not feasible, commitment is not achieved and development concept has to be abandoned or revised. Five categories are identified that all need to be met before a project can be fully committed to and development can continue. The categories are: ownership, regulation, physical conditions, market appeal and financial viability (Adams & Tiesdell, 2012).

<u>Ownership:</u> The developer must have ownership control. All property rights must be acquired that enable the right to develop for a certain site.	<u>Physical suitability:</u> The site must be able to physically accommodate the development. Physical and infrastructural constrains must be resolved. This includes structural purposes, but also health.				
<u>Regulation:</u> Plans must be in line with the local and national planning and development law. In regulated industries like the Netherlands, government consent is necessary. Plans have to be in line with the local planning policies, but also to construction standards and building regulations. The key consent that is required is permission	<u>Market appeal:</u> To make sure the development concept still meets the demand that follows from the development pressure, market appeal must be checked.				
according to the Environmental Licensing Act (Hobma & de Jong, 2016).	<u>Financial viability</u> : For the private sector, this usually means costs must be outweighed by the revenues. If the development is viable, the next step is to find funding.				

Both Adams & Tiesdelll (2012) and Ramselaar & Keeris (2011) found certain moments during the development process when the commitment decision is made. During this moment, a decision is made to invest. Developers should consider all feasibility categories when making an investment decision. There are financial and non-financial aspects to decision-making. However, when making investment decisions, developers are primarily focused on financial aspects of a project (Ramselaar & Keeris, 2011). Financial feasibility is based on market demand upon completion of the project (Adams & Tiesdell, 2012). As developments can take years to accomplish, this means financial feasibility studies are always prone to *uncertainty*. Literature on the non-financial aspects of developer decision making is thin (Schiltmans, 2013). As each developer might have a different decision-making process, this subject is left open for exploration during the research.



This part presents the findings from the literature review for the subject of value capturing. This chapter provides the available knowledge found in literature related to the subject and tries to answer the following research questions;

- What is value capturing?
- Which value capturing instruments can be found in literature?

As explained in the previous part, investments in infrastructure and other public goods can cause value to be created that benefits external stakeholders. Using the first strategy to stimulate feasibility for unprofitable public projects, costs must be decreased and/or revenues must be increased. The concept of value capturing is an example of how revenues in such projects can be increased through capturing external value. This part describes the concept of value capturing and the methods to apply the principle.

Public amenities

Public space and community services are amenities that should be accessible to everyone. Because access to these amenities cannot be excluded, this creates the problem of free riders (Adams & Tiesdell, 2012). Multiple international studies show that it is very difficult to capture value afterwards (Daamen *et al.,* 2019). This implies that when value is to be captured from public investments, there must be some sort of method to make this happen before the value is created. Literature shows an increasing interest in value capturing as an alternative method for financing (Ingram & Hong, 2012; Noring, 2019; Mulhall, 2018).

Adams & Tiesdell (2012) explain that market structure is also a reason why various steams of value are not captured by developers. As developers often sell after completion, they have no long-term interest in the value of development. A big problem is reflection of future value growth in the exchange value at completion, and this requires institutional change (Adams & Tiesdell, 2012). That change in the development value chain is required, is also supported by Verheul *et al.* (2017), Franzen *et al.* (2017) and Robbe (2015).

3.1 Definition

The concept of value capturing dates back to the late 19th century (Zhao *et al.*, 2012 According to the Netherlands Enterprise Agency (RVO, 2019), value capturing is a cash flow steering method that capitalizes future income to cover current deficits, stimulating the development of socially desirable projects and creating ground for new initiatives. The exact definitions differ in literature.

Principle:

Batt (2001) describes it as "a means by which to finance ... in a way that allows for efficient economic performance, simple administration, financial justice, and social facility". According to Mathur & Smith (2012); "Value capturing is the identification and capture of the increase in land value resulting from public investment in infrastructure". Zhao *et al.* (2012) distinguishes two groups impacted by value capture: developers & property owners. McAllister *et al.* (2018) define value capturing as policies intended to "secure societal benefits from increases in land value that can arise from changes to land-use rights through the planning system and/or investment in public infrastructure". Wolf-Power (2019) argues value capturing's underlying idea is that the public sector, and not the landowner, should benefit from public investments or regulatory changes that increase real estate values, because the value increment "rightly belongs to society at large". Batt (2001) agrees and argues that because value in urban redevelopment often is a direct result of public investments, the added value should be reclaimed and returned to the public. He further elaborates that the logic upon which value capturing rests is that because value derives from joint

community effort, society has a principled right to its claim (Batt, 2001). Ingram & Hong (2012) agree with the societal justness created by value capturing, value capturing is "equitable because those who did not contribute to the increased value do not retain the financial benefits". The concept of justness is questioned by Mulhall (2018), as he argues the value increase that landowners experience can also be viewed as a return on risk of holding the land as an investment asset exposed to economic cycles.

Most literature reviewed in this desk study was focussed on value capture of infrastructure investments.

There seems to be disagreement about the moment the value is captured. Two concepts are revenue generating (Roukini & Medda, 2012; Zhao *et al.*, 2012; Fischer, 2019; Wolf-Power, 2019) and recouping value increments (Medda, 2012; Mathur & Smith, 2012; Noring, 2019; Gielen & Tasan-Kok, 2010). Some authors mention both (Batt, 2001; McAllister *et al.*, 2018; Offermans & van de Velde, 2004).

As there are different methods to capture value, the definition is also prone to differentiation on some dimensions. In general, value capturing is a term that is used for **instruments** that, at a certain point in **time** or timespan, claim (a share of) the **value increments** from **private actors**, created by **investments in non-excludable public amenities**, and send it back to the **actor/activity** that caused that value increase, therefore making it **equitable**.



Figure 3.01: Concept of value capturing

Figure 3.01 shows a conceptualization of how a value capturing instrument works by its definition. The instrument needs assessment of value increment, determination of contribution and the organizational implementation of the instrument.



Figure 3.02: Equity principle visualized. (own illustration)

Value capturing

In figure 3.02, the equity principle of value capturing instruments is visualized. Notice that with a lower level of public spending, the same investment for a public amenity can be achieved. When the level of public spending remains equal, but the value capturing tool brings in extra revenue, this could lead to a bigger investment in the public amenity. Value capturing instruments can therefore achieve two things; decrease public costs (1) and increase investment public amenity (2).

Implementation

As value capturing seeks to generate revenue by extracting a portion of the value increment, assessment of the value increment is an essential part of value capturing (Zhao *et al.*, 2012). Often, more attention is payed to the impact of planning policies on costs than on increased revenue and thus added value (Adams & Tiesdell, 2012). It is very hard to assess the value increment caused by a particular action, because the value is a product of different factors that also had an effect on the value (Ingram & Hong, 2012). Separating the value increment of public investment from privately financed developments such as buildings is very hard (Noring, 2019). The value increment, when considering developers as beneficiaries, is reflected in development value or development opportunities.

While there seems to be a broad interest in these instruments, the practical application, the non-monetary benefits and the politics in implementing these instruments is field of knowledge hardly touched by literature (Fischer, 2019). Attempts to implement foreign value capturing instruments in the UK have been difficult due to operational complexity or unintended consequences (Noring, 2019). Implementing new tax regimes are complex, costly and time-consuming procedures in countries with established administrative systems (Medda, 2012).

Public investments can create value on multiple levels, thus value capturing instruments can also be combined (Zhao *et al.*, 2012). Caution is necessary, as the total level of value captured should not exceed the total benefits created by the investment, otherwise the instruments contradict the rationale of value capturing.

Literature is very thin in describing evaluation methods of value capture strategies (Roukini & Medda, 2012). A few frameworks are given. Roukini & Medda (2012) evaluate and compare different instruments using the following approach:

- Efficiency: evaluate whether cost to contributors is related to benefits they receive.
- Equity: whether their contribution depends on the degree of benefit.
- Sustainability: whether it will be durable in the future; safety margins and future prospective.
- Feasibility: political feasibility; administration feasibility (complexity).

The value capturing implementation process according to Medda (2012):

- 1. Setting accessibility targets
- 2. Reviewing planning and fiscal urban framework
- 3. Selecting value capture mechanisms
- 4. Engagement (stakeholder management)
- 5. Monitoring

Wolf-Powers (2019) identifies five questions that should be asked when considering value capture proposals.

- 1. From whom will the public sector be recovering economic value created as a result of public-sector actions or infrastructure/public-realm investments?
- 2. To whom will that economic value be likely to accrue after being recovered and distributed?
- 3. What is the relationship of the value-recovery mechanism to the overall taxation and budget process?
- 4. Who bears financial risks (if any) associated with depending on future revenues to fund current investment?
- 5. Who is involved in governing value recovery and allocation?

According to Mathur & Smith (2012) selection of value capturing instruments instrument depends on)

- The enabling environment: Does legislation allow it?
- Stakeholder support: would developer community oppose?
- Institutional capacity: does government have financial, administrative and technical capacity to undertake
- Revenue yield: would instrument yield adequate revenues? Which is better or maybe combination?
- Horizontal & vertical equity:
- Voter approval

Free riders & prisoners dilemma in value capturing.

The problem of free riders might even be more relevant in the case of private contributions to public investments. When free riders enjoy the benefits of public goods made possible by private investments, this may seem even more unfair than when the investment was made by public money. In a prisoner's dilemma, no one is able to act in their best interest without knowing the intention of the other players in the game. A parallel can be drawn with public investments. Eventually, it is in everyone's best interest, but no-one wants to contribute on themselves. In a private market, the last to settle is in the strongest position (Adams & Tiesdell, 2012). When implementing value capturing the first mover problem can be a serious problem, and the problem of free riders afterwards. To prevent this from happening, some instruments force beneficiaries to contribute through legal actions. The case of business investment zones can do this when 70% of owners participate in contributions to public investments and force free riders to pay their share (Daamen *et al.*, 2019).

Effect:

The effect of value capturing instruments is a subject of debate in literature. Value capturing instruments are complex, time consuming and uncertain in outcomes compared to traditional systems (Mulhall, 2018). RVO (2019) says the weaknesses of value capturing are; that it is hard to unite stakeholders and ask for contributions to future benefits, value capturing involves complex organizational/legal constructions, initial investments are hard to recoup, and the uncertainty of future revenues. Value capturing is often a supplementary source of financing, used in combination with traditional sources such as the government's general resources (Offermans & van de Velde, 2004). In some cases, the funding being raised through value capture tools is also very dependent on local and national conditions (Fischer, 2019). On a more positive note, besides leveraging financial results, value capturing instruments can also increase integrated decision-making because of stakeholder involvement (Fischer, 2019).

3.2 Instruments:

As there are different definitions, there are also different forms of value capturing. Literature describes multiple value capturing instruments. These instruments are implemented throughout the world. Through literature study, an overview of the different value capturing instruments is provided in figure 3.03.

		Mathur & Smith, 2012	Fischer, 2019	Medda, 2012	Offermans & van de Velde, 2004	Noring, 2019	Zhao et al.2012	Verheul et al, 2017
Betterment Tax	Impact fees	х	х		х		х	
	Land value Taxation	х				Х	х	
	Special Assessment Districts	x	x				x	
Value increment contributions	Tax Increment Financing	х	х	х	х	х	x	х
Joint development mechanisms	Joint development	х		х			х	
	Developer contributions				х			x
	Benefit sharing				x			
	development rights				х			х
	Air rights	х					×	х
	Public asset cooperation					Х		х
	Negotiated exactions						x	

Figure 3.03: Value capturing instrument categorization

Offermans & van de Velde (2004) distinguish direct and indirect instruments. The indirect instruments capture value from developers or real estate owners through voluntary contributions or governmental actions. Medda (2012) distinguished 3 forms of value-capturing used internationally in transportation investments: Betterment tax, value increment contributions, and joint development mechanisms. Within these categories, there are differences between the instruments.

Betterment tax

Betterment tax, or benefit assessment, are instruments that use tax on the value added by public investments to fund those investments. Literature hints these are used afterwards.

Impact fees:

Impact fees are not used in the Netherlands, as local municipalities do not have the authority to tax specific areas for public investments (Hobma & de Jong, 2016; Offermans & van de Velde, 2004). In the US, impact fees are widely used (Mathur & Smith, 2012).

Land value taxes:

Land value are similar to property taxes but apply to land prices. They are imposed to capture the increase in land value (Zhao *et al.*, 2012).

Special assessments:

Special assessments are levies that are imposed on private actors whose direct benefits caused by public investments significantly exceeds those that accrues to the general public (Zhao *et al.*, 2012).

Value increment contributions

These are Instruments that earmark future revenues. The principle is based on the assumption that public investments lead to value growth. Tax mechanisms are used to stimulate development of the area. Examples of such mechanisms are tax relief and tax-breaks, or through tax disincentives. The public sector can use financing systems and tools to raise capital, including bonds or the pay-per-use approach, in which the tax increment is collected annually until projects are financed (Medda, 2012).

TIF:

TIF is a very popular tool in the US, where they are seen as effective and proven (Medda, 2012). TIFs try to capture the value uplift through bonds that are

Joint development mechanisms

This category includes cooperation mechanisms between public and the private sector. PPP is a mechanism that is used successfully throughout the world (Heurkens, 2012).

Joint development:

This is PPP in general. Through a joint development the public shares risk and reward with the private sector. This offers development opportunities to developers.

Private management of public space:

Privatizing management of public space reduces the public costs for maintenance. Because development of public space usually benefits landowners, taking management of the public costs is not relevant for developers that immediately sell after completion (Verheul *et al.*, 2017).

Developer contributions:

In the developer's contribution model, developers voluntarily contribute to public investments because they benefit from the improved quality. Usually these are single one-of contributions (Offermans & van de Velde, 2004). The contribution can also be in the form of a development. An example in London is the development of a railway station by a private developer in exchange for land and parking facilities around the station (Sims & Berry, 1999).

Developers are not interested in expenses that fail to produce direct return (Adams & Tiesdell, 2012). It is therefore important that the value increment is, in some form, represented in a return for the issued against the expectation of future tax increases (Medda, 2012).

In the Netherlands, some experiments have been done with TIF. Due to the low real estate tax and level of value increase in urban redevelopments, the impact of TIF is marginal (Verheul *et al.*, 2017). To increase the effectiveness of these instruments, the tariffs have to be increased and the municipalities need to align their systems (Offermans & van de Velde, 2004). TIFs have controversial aspects. Because TIFs are used in cases where the public does not own the land, so the public uses public money to investment in private projects (Noring, 2019).

developer. The values that are created with urban redevelopment can be grouped in exchange value (financial) and other value (non-financial).

Benefit sharing:

This method is known and has been in use in the Netherlands in smaller projects (Offermans & van de Velde, 2004). Public and private sector prearrange the allocation of profits that result from public investments. Agreements are made about the contribution on these investments from the private side. For example, the level of contribution can be set by capping a certain profit. By enabling developers to make a market-conform profit, this instrument does not scare off private actors.

Development rights:

Development rights on public land can be awarded to private actors that contribute to the public investment. This offers development opportunities to developers.

Air rights:

As a variant of development rights, this allows development on top of new or existing infrastructure or other public goods. The most famous examples where air rights were implemented can be found Manhattan, where air rights contributed to the preservation of multiple historic buildings.

Public asset cooperation:

A public asset cooperation is a semi-public entity that is in ownership of infrastructure or other public

goods. The entity finances, maintains and operates the asset. The goal is public benefit, but without the administrative-governmental barriers of public actors (Noring, 2019) and with distance from politics (Daamen *et al.*, 2019). By having the public sector as the majority stakeholder ensures that the public interest is considered in operational day-to-day decisions (Cervero & Murakami, 2008). In Hong-Kong such an entity has been successfully used in the MRTC rail company. The private side of the entity had a market disciple that increased efficiency and entrepreneurship (Cervero & Murakami, 2008).

Negotiated exactations:

In exchange for the benefits, developers can be asked to give away part of their land for public services (Zhao *et al.*, 2012).

3.3 Comparing instruments

The different instruments can be compared with another using specific features to the instruments that can be distinguished (Zhao *et al.*, 2012). The features of the value capturing instruments are presented in figure 3.04. The Zhao *et al.* (2012) framework is edited as some categories are less relevant in this study. The categories are:

Contributor: The actor that makes the contribution to the public investment. In some cases, the developer makes a contribution but costs are ongoing. This will be reflected in development value of the asset at completion. *Targeted benefit*: the type of value increment that is targeted by the instrument. *Coordination*: how the instrument is coordinated. This can be either taxing authorities, through negotiations or partnerships. The *timing*: The third classification is whether the tool was implemented before or after the public investment was made. *Space*: this category relates to the affected area in which the category is implemented. Some policies only effect the site on which the public investment is made, some policies affect certain sites in proximity to the investment, while some others affect entire areas. *Cost*: The type of cost is classified as upfront, which means initial capital to finance the project, or ongoing costs for management and operation of the public asset. *Ownership*: the last category applies to whether the public asset is in ownership of the public or private sector, or a combination.

		Contributor	Targeted benefit	Coordination	Timing	Space	Cost	Ownership
	options.	Landowner Developer		Taxing authority Negotiation Partnership	Before Ongoing After	<i>On-site Off-site Entire area</i>	Upfront (capital) Ongoing (operating)	Public Private
Betterment Tax	Impact fees	Both	Property value growth Development value	Taxing authority	After	Off-site	Upfront	Public
	Land value Taxation	Landowner	Land value growth	Taxing authority	Before & After	Entire area	Upfront & ongoing	Public
	Special Assessment Districts	Landowner	assessed special benefits	Taxing authority	Before	Off-site	Upfront	Public
Value increment contributions	Tax Increment Financing	Landowner	Property value growth	Taxing authority	Before	Off-site	Upfront	Public
Joint development mechanisms	Joint development	Developer	development privileges	Partnership	Before & After	On-site & off- site	Upfront & ongoing	Both
	Developer contributions	Developer	Development value growth	Negotiation	Before & Ongoing	On-site & off- site	Upfront or ongoing	Public
	Benefit sharing	Developer	Development value growth	Negotiation	Before & After	On-site & off- site	Upfront	Public
	development rights	Developer	Development opportunities	Negotiation	After	On-site	Upfront & ongoing	Public
	Air rights	Developer	Development opportunities	Negotiation	After	On-site	Upfront	Public
	Public asset cooperation	Developer	Development value growth	Partnership	Before & After	On-site	Upfront & ongoing	Both
	Negotiated exactions	Developer	Development value growth	Negotiation	Before	On-site	Upfront	Both

Figure 3.04: Value capturing instrument characteristics

3.4 Concluding

Value capturing instruments offer methods to send external benefits back to the source of that value. Value capturing theory describes various ways in which these external benefits can be reclaimed, elaborating on the different kinds of benefits, its' recipients and features for implementation. The implementation and effects of these instruments is a subject that is hardly touched by literature (Noring, 2019). The instruments vary in complexity, and some instruments require time-consuming procedures before they could be implemented, such as tax-reform.

For further research, one of the value capturing instruments is selected for further research. Because of its simplicity, alignment with the current regulatory context and broad interpretation, the *developers' contribution* is the instrument that seems the most promising.



4.1 Theoretical framework

The main research question of this study is *how can value capturing instruments stimulate urban redevelopment and how does this influence the decision-making of real estate developers*? To answer this question, first an understanding about urban redevelopment and value capturing had to be formed. This led to the following research questions were:

- How can urban redevelopment be stimulated?

Urban redevelopment deals with barriers that cause financial deficits. Private contributions to public space are required to initiate urban redevelopment. Investments in public space help to stimulate feasibility through optimizing and widening the development business case. Over the years, the private sector has already become more involved in the development of public space.

- What is value capturing?

Value capturing can be used as a tool to redeem some of the external value that is caused by a certain activity and send it back to the actor or activity that caused that value increment, making it equitable.

- Which value capturing instruments can be found in literature?

There are a variety of instruments that are known in literature. In these instruments, the value increments have to be assessed and some kind of contribution to the investment causing the increment has to be decided upon. Many instruments are complex and time consuming to implement. Implementing instruments that require tax reform is especially difficult. Some instruments seem more promising than others due to simplicity.

The *developers' contribution* is a tool that seems to facilitate the call for private investments. Through this instrument, voluntary contributions are made to public goods. Because the tool can be interpreted broadly and implemented without regulatory changes, this is a useful instrument to further research.

The developers' contribution to public space is the subject during the next steps of this study. This leads to the following adaptation of the main research question for the empirical research: *How can the developer's contribution stimulate urban redevelopment and how does this influence the decision-making of real estate developers*?

While literature hints at the added value of investments in public space to developers, they seem rather vague and inconclusive. The implementation and benefits of value capturing instruments is a field of knowledge that is barely touched. Although many cases provide examples of benefits for developers, it would be interesting to see whether a representative sample of the developers in practice experienced the developers' contribution and what the effects were. Part 3.1 portraits different questions that should be asked when studying value capturing instruments. Based on these questions the focus of the questions for the next part of this study are defined. The developers' contribution will be explored by looking at *what* is contributed, *why* a developer decided to contribute and *when* a developer is willing to contribute.

What: A contribution to public space means some kind of responsibility is transferred to the private sector. How a contribution can be made is subject to rules, as formulated in the Spatial Planning Act.

Why: Contributions to public space should benefit the developer is some way. This added value is subject to uncertainty and can be hard to quantify. While literature suggests development is driven by exchange value, some other benefits might occur. Different types of developers have different goals and might value these benefits differently. For example; independent developers and delegated developers could be more focused on direct financial return than other developer types.

When: Before a developer can decide to contribute to public space, the development has to be feasible. Other conditions might apply to this decision moment. Because of the time uncertainty of value, longer

involvement might be a necessary condition to commit to a contribution. The decision moment is also influenced by the role of the municipality. What instruments they use to exert their power create a context in which the developer must make their decision. Some roles restrict developers, while other roles require private sector initiative.

The setup is shown in figure 4.01 by the conceptual model for the empirical research.



Figure 4.01: conceptual model for the empirical research

The following study focusses on what was contributed and how, why the contribution was made and when the decision to make such a contribution is made. This leads to the following research questions:

Q1) What does the developers contribution look like in practice

Q2) Why would a developer choose to do a developer's contribution *(what is the added value for the developer)*

Q3) Under what conditions is a developer willing to do a developer's contribution

Q4) What public role is necessary to increase the willingness to commit to a developer's contribution



5.1 Research design



Figure 5.01: Research design

In the research design in figure 5.01, the research questions are presented and the approach to how these questions are answered is portrayed. The main research question of this part of the study is *how can the developer's contribution stimulate urban redevelopment and how does this influence the decision-making of real estate developers*?

This resulted in the initial research questions:

- How can urban redevelopment be stimulated?
- What is value capturing?
- Which value capturing instruments can be found in literature?

These questions are answered in the theory section. The developers' contribution was selected as the most promising instrument that was able to stimulate urban redevelopment. This conclusion led to the following research questions;

- What does the developers' contribution look like in practice?
- Why would a developer choose to do a developers' contribution?
- Under what conditions is a developer willing to do a developer's contribution?
- What public role is necessary to increase the willingness to commit to a developer's contribution?

5.2 Literature review:

The first goal of the literature review is to get familiar with the subjects of this research. The subject of value capturing was explored, which led to initial research questions. The literature review resulted in answers to the initial research questions by covering the subjects of urban area development, barriers of urban area development and value capturing. The literature review provided an overview of value capturing instruments and the most promising instrument is picked for further research. Picking this instrument meant the subject of developer decision-making also had to be explored. The literature review resulted in the identification of possible variables to be used in the rest of this research.

5.3 Empirical research:

Because the characteristics, motivations and conditions for the developers' contribution are fields of knowledge hardly touched by literature, this research has an explorative nature. Because ideas need to be generated the Delphi method is chosen. The method is an iterative feedback technique with a group of experts (Keeney *et al.*, 2001). The technique consists out of a number of rounds, interspersed by controlled feedback (Powell, 2003). By doing multiple rounds, a consensus among the participants is sought. The majority of this research is of qualitative nature. The data received in the first round of the study is validated through a limited statistical examination. The Delphi method is an iterative approach, meaning that there is an interplay between the collection and analysis of data (Bryman, 2015).

Delphi:

The Delphi method is a technique that is useful for gathering opinions of a diverse group of experts (the panel) on practice related problems (Powell, 2003. The method is useful to achieve consensus among the panel in an area with little empirical evidence (Murphy *et al.*, 1998). The method has been used extensively to identify and rank concepts (Schmidt, 1997). As is expressed in the theory section, an investment in public space is hard to quantify. The added value of a developers' contribution is therefore predominantly subjective. This makes Delphi a useful method, as it was developed as a means to handle opinions rather than objective facts (Schmidt, 1997). Because participants provide input individually, the Delphi method is not prone to domination by powerful individuals (Murphy *et al.*, 1998). It allows everyone to speak freely and provide honest answers.

The panel:

The representativeness of the panel is assessed on the qualities of the panel rather than its numbers (Powell, 2003). Panel sizes ranging from 10 to 1685 have been recorded. The quality of the panel is based on the experience of the participants in the subject. The main aim of the panel selection is therefore; N>10, with >50% of the participants having more than ten years of experience in the field.

Participants should not be selected on the basis of acquaintance with the researcher they should be chosen for their experience in the subject and credibility with the audience (Murphy *et al.*, 1998). Groups with varying personalities and different perspectives produce higher quality answers than homogeneous groups (Delbecq *et al.*, 1975). This means the participants should be a heterogeneous group of developers, with differing types, roles and experience. Four developer-types are approached; contractor-developers, independent developers, investing developers and funded developers. The 'other developer' type is dropped, because their main focus is out of scope for this research. To have a representative panel, the **size** of the developer is also taken into regard. The developers that are approached are listed on the PropertyNL Top-101 Developers 2019 (PropertyNL, 2019).

Method

Based on the above criteria, developers are approached. Searching participants is done through deskresearch, LinkedIn queries and through professional connections. The selected participants receive an interview invitation, with a summary of the research topic and background. If interested and willing to participate to the interview, the participants received a sample interview protocol beforehand. The invitation can be found in appendix H and the protocol can be found in appendix G.

#	Developer	Function	Relevant field experience	Developer type	Remain in ownership	Date
INT1	Investing developer 1	Development Manager	19 years	Investing developer	Yes	13-05-20
INT2	Funded developer 1	Project Director	25 years	Funded developer	Yes	11-05-20
INT3	Funded developer 1	City Developer	4 years	Funded developer	Yes	23-04-20
INT4	Investor 1	Director Dutch Residential Investments	21 years	Investor	Yes	13-05-20
INT5	Contractor-developer 1	Project Developer	3 years	Contractor-developer	No	12-05-20
INT6	Independent developer 1	Developer	4 years	Independent developer	Temporary	13-05-20
INT7	Independent developer 2	Senior Project Developer	6 years	Independent developer	No	04-05-20
INT8	Independent developer 3	Senior Development Manager	14 years	Independent developer	Temporary	12-05-20
INT9	Independent developer 4	Project Developer	6 years	Independent developer	Temporary	11-05-20
INT10	Independent developer 5	Partner	19 years	Independent developer	No	06-05-20
INT11	Contractor-developer 3	Region manager	16 years	Contractor-developer	No	08-05-20
INT12	Independent developer 6	Director of Acquisition	21 years	Independent developer	Yes	29-04-20
INT13	Contractor-developer 4	Concept Developer	12 years	Contractor-developer	Yes	07-05-20

Figure 5.02: List of panel members

For this research, two rounds are performed with the panel. Because of the abundance of variables and overall load on the participant, doing more rounds could waste panel members' time and could cloud consensus (Schmidt, 1997). It is also difficult to retain a high response rate when doing multiple rounds (Keeney *et al.*, 2001).

The participants received an invitation and a sample interview protocol. The invitation was done to gain their interest. The protocol allowed the panel to prepare for the topics.

Round one

The first round consists out of a face-to-face interview. The first round should be unstructured and seeks an open response, allowing the participants a free scope to elaborate on the subject (Keeney *et al.*, 2001; Rowe, 1994). The role of the first round is to identify issues to be addressed in later rounds. Panel members are asked to respond and talk about topics related to the research questions of this study, in order to generate ideas. Open-ended questions are preferred to increase the richness of the data collected (Powell, 2003). Rapport, the relation between the interviewer and interviewee, is essential for good qualitative interviewing (Moerman, 2010). The panel participants are asked the effort to cooperate in two rounds, so it is important to build a positive relation with the panel.

The interviews take place in a semi-structured setup. Topics are described beforehand, but the order and depth of the questions can differ in each interview. The interviewee has a great leeway in how to reply (Bryman, 2015). This allows a natural flow during the interview, increasing rapport (Moerman, 2010). The interviews last about 60 minutes. During this time, the interviewer and interviewee introduce themselves, re-introduce the topic, discuss the topics and close the interview. 60 minutes was chosen because of the benefits of planning, as all developers do the interviews during workhours.

Participants are asked to describe variables and give their rationale for naming them. To reduce the amount of bias, it was important that the interviewee was able to talk freely. This also means the interviewer should minimize the amount of suggestive comments. Letting their own opinions, biases and expectations intrude the interview is a great risk for unexperienced interviewers (Bryman, 2015).

Because the participants have different backgrounds and might have experience at other companies with differing profiles of their current employer, the participants are asked to answer questions from the perspective of their current employer.

Developers' contribution assessment:

Because participants could have differing conceptions of the developers' contribution, a very broad definition is provided in the interview invitation, the interview protocol and during the interview. The definition was the following:

The developers' contribution can be seen as an investment in the public space that creates additional value. 'Additional' because the developer could have chosen not to do it; it is a voluntary investment, meaning based on one's own choices. The contribution, by definition, adds value to the public space. This means there is a positive externality; others also benefit from the value increment. Examples: private sector contributions to parks, single financial aids to community services, private sector maintenance of public space. Contributing is taking responsibility in development, maintenance, single financial contributions, continuous financial contributions or other contributions (time/capacity/knowledge/etc.)

In the study, public space is defined as space that is publicly accessible or non-excludable.

Due to the covid-19 related lockdown during the interviewing phase of this research, the interviews had to be carried out using a digital video communication medium. Interviewing is a game of both verbal and non-verbal communication (Moerman, 2010), so being able to see the participant is an important aspect of making observations. Also, meeting face-to-face increases the chance of participation in further rounds (Keeney *et al.*, 2001).

The interviews in the first round touch the following topics. Some topics are discussed to create a context, while others are direct questions aimed at answering the sub-questions of this research.

Interviewee background

- The background of the interviewee is discussed.
- Academic background
- Professional background
- Current function

Company profile

To understand to which developer type the participant belongs, the participant is asked to provide a short description of their current company's profile and strategy.

Definition and responsibility of public space

The participants are asked to define what public space means to them and what aspects give quality to public space. Following, the participants are asked who is responsible for what type of space. Also, changes of this responsibility over time are discussed.

Method

Past/current projects with developers' contribution (Q1)

The developers are asked to recall projects where the developers' contribution might have taken place. The participants are asked what this contribution looked like and how it took place.

Reasons, motivators and effects of such decisions (Q2)

Looking the past or current projects involving a developers' contribution, the participants are to list reasons that led to that decision. Also, the participants are asked to elaborate upon the effects of such contributions.

Conditions for doing contributions in the future (Q3)

Development is only possible when certain conditions are met. The developers are asked for additional conditions for doing the developers' contribution, in past projects and for future projects.

Preferred role of the public sector (Q4)

The respondents are asked what role a municipality should adopt to increase the developers' willingness to invest in public space. Do they prefer a more active or a more passive land policy?

The interview protocol can be found in appendix G.

Feedback:

The results of round one are analysed and provide the basis for the second round, which is in the form of a questionnaire.

One of the problems with the semi-structured nature of the first round in Delphi, is the abundance of data. Including everything in the next rounds would lead to very extensive questionnaires, decreasing panel participation (Keeney *et al.*, 2001). The feedback therefore drops some of the answers received from the interviewees.

The interviews are analysed through coding. This means data is broken down into components, which are given names (Bryman, 2015). The codes are formulated based on the relation between findings from literature and the data received, and form the basis of the variables used in round two. The final variables for the sub-questions are defined, which are validated in the survey of round two.

Because this is the only moment and form of any contact between the panel members, the feedback provided to the panel members is very important. The feedback participants receive is a list of their results of the first round, compared with the overall result. This feedback is provided in the invitation to the survey for round two.

Round two

The survey of the second round seeks more specific information, using the results from the first round. To increase confidence in the findings, it is important to make use of different methods and perspectives (Bryman, 2015). In Delphi, the second round seeks quantification of earlier findings (Powell, 2003). In this study the survey uses ranking techniques and verification.

The first questions in the survey ask verification of the variables that are distinguished after the first round. Because the first round sought open responses, participants could have forgotten answers. With the first question, participants are able to verify the answers provided by them and the other panel members.

The questions are set up using a Likert scale of 3 with the options "agree", "neutral" and "disagree". The 3-point scale is used because these questions are designed to validate the answers from the first round, the variables are not weighed individually.

To obtain a sense of which factors are key, the constant sum method is used in one question. The respondents are asked to distribute 100 points over the five categories that are defined from the results of the first round. This forces the respondent to take time and think about how important each category really is. Using the constant sum method, a ratio-variable can be given that can be analysed to weigh the assessed variables (Field, 2013). The results from the constant sum question are examined by developer type. To get

a sense of the level of consensus of the panel members for the determined means, the minimum values, maximum values and the standard deviation are presented.

The third survey question works with the same method as the first question. The respondents are asked to verify whether they agree with certain conditions.

The participants are asked to rank four roles a municipality can adopt from 1 until 4. For the midpoint of this data, the median is used, which is most suitable method to find a central tendency for ordinal (Field, 2013). The survey can be found in the appendix F.

5.4 Synthesis

During synthesis, the results from both rounds are analysed to find relations. The answers to questions in the interviews and survey are examined to find what causes the answers. Also, the findings are compared with findings from the literature review. The preliminary conclusions are discussed with experts.

Expert interview

The perspective of the results from both rounds is limited to the private sector. Confidence in the findings can be increased by using multiple perspectives (Bryman, 2015). Through expert interviews, subject experts from outside the developer population offer their perspective on the findings from the first two rounds. Through predefined questions the experts are asked to provide their opinion and reflect upon the results and preliminary conclusions of the study.

The expert panel consists out of two professionals with extensive experience on the subject. The first expert is a professor of land development at the TU Delft, with over 25 years of experience. The second expert is head of the chair of development at the NEPROM School of development. Besides she has over 24 years of experience in the market. NEPROM is an advocacy group with a goal to stimulate cooperation between the public and the private side on the subject of real estate development.

	Name	Function	Experience	Date
EXPERT 1	Prof.dr. Willem Korthals Altes	Professor Land Development TU Delft	25 years of academic experience	09-06- 20
EXPERT 2	Hella Hendriks	Head Chair of Development NEPROM	24 years of field experience	10-06- 20

Figure 5.03: Expert interview participants

5.5 Trustworthiness

Trustworthiness in qualitative research is made up out of four criteria; credibility, transferability, dependability and confirmability (Bryman, 2015). The credibility of this research is ensured through participant validation. The results from the interviews are shared with the participants, and the answers are validated in the second round. Due to the small sample and depth of qualitative research, qualitative findings are very dependent on the context. This is why an elaborate description of that context is very important to ensure transferability (Geertz, 1973). In the Delphi method, not the sample (or panel) size, but the quality of the panel is the most important factor ensuring representativeness and transferability. Also, in this study the findings are triangulated by combining semi-structured private sector interviews with expert interviews, findings from literature, and publications. The dependability of the research is assured through recordings of the interviews, transcripts and data analysis. While always being prone to some kind of subjectivity, conformability is pursued through trying to remain as unbiased and objective as possible, both during the interviews and during analysis.

5.6 Ethical considerations

The researcher is obliged ethically to make sure the identity of the participants is not disclosed to other panel members (Keeney *et al.*, 2001). The panel members are not aware of the identity of the other panel members. Anonymity ensures the respondents feel free to provide trustworthy answers.

To reduce errors due to translation, all interaction with the panel and the expert panel was in Dutch. For the purpose of readability, interview quotations are translated.

Sending reminders could lead to the participants feeling forced into returning the survey. After two reminders it was decided to close the survey and examine the data that was received until that point.

In the invitation received by the panel members received the ethical guidelines were presented:

- The interview is recorded for analysing purposes
- The audio recording is stored offline and only accessible to the researcher
- The audio recording will be deleted after completing the thesis
- The participants are free to withdraw from participation, in that case all answers will be deleted

6. Results round one

In this part the findings resulting from the research performed as described in the methods section. First results from the round one are presented, which form the basis for the survey of round two. Later the results from round two are presented. The first round of the empirical research consisted out of semi-structured interviews with thirteen developers. The interviews touched multiple topics, described in the methods section. This part presents the results of the interviews.

6.1 The developers' contribution in practice

Before this theme was discussed, a definition of the developers' contribution was provided. The contributions have to be projects that are publicly accessible.

Closability

There was disagreement among the participants on the meaning of public space and semi-public space. This also resulted in arguments about who is responsible for providing public space in the first place. Some participants said that public space should be lockable. This is necessary, in some cases to make a space manageable. Others participants said public space should never be excludable in any way. INT13: "when you place a fence that can be closed, it is not public but private space". The responsibility will be further discussed in part 6.4.

Public space is a hot topic. Attention for public space:

Public space in cities is a hot topic. Participants indicated that this is a big point of discussion today (INT6). This is related to growing cities. Because of the high densities, public space becomes more important for a liveable city (INT10; INT13). Because apartments get smaller, people are more aware of the shared facilities around them. The public space becomes the urban living room (INT7). This is also in line with a global trend of sharing. People are more willing to share facilities than they used to, or as one interviewee responded: "Sharing is the new owning" (INT11).

Types of contribution

To what is contributed?

After coming to a mutual understanding of the *developers' contribution* and *investments in public space*, the participants were asked if they could recall past projects or current projects where such contributions have taken place. This resulted in a wide range of answers. Participants came up with the following projects:

- Higher spatial quality than demanded by municipality (INT2; INT6; INT7; INT10)
- Parks (INT6; INT9; INT12)
- Community services (INT3; INT6; INT8; INT13)
- Street furniture (INT7)
- Open space (INT1; INT5; INT6)

- Landmarks (INT5)
- Art (INT4; INT9; INT11)
 - Infrastructure (INT6)
 - o Parking garage (INT2; INT5)
 - o Mobility hub (INT3)
 - o Streets (INT1)
- Entire land development (INT1; INT2; INT6)

How is contributed?

There are two kind of contributions, the ones that add quality and the ones that are necessary to initiate development (INT10). A developer can contribute to public space by being fully or partially responsible for

the development or the maintenance of a project. This full or partial responsibility can come in a number of forms. The following contribution types are distinguished:

Name	Type of contribution	Development	Maintenance	Ownership
R1	Full responsibility	Private	Private	Private
R2	Temporary full responsibility	Private	Private, then public	Private, then public
R3	Partial responsibility by development	Private	Public	Public
R4	Partial responsibility by providing capital	Public-Private	Public	Public
R5	Partial responsibility by maintenance	Public	Private	Public
R6	Partial responsibility through other investment	Public	Public	Public

Figure 6.01: types of responsibility

R1: Full responsibility for development and maintenance:

- Entire land development (INT1; INT2; INT6)
- Mobility hub (INT3)
- Parking garage (INT2)
- Parks (INT6; INT12)

- Landmarks (INT5)
- Art (INT4; INT9; INT11)
- Open space (INT5; INT6; INT7)
- Developers can contribute by taking full responsibility of the development and maintenance of a project in the public space. A developer wants to step out of a project after completion (INT6). Most developer types are not involved after completion. However, full responsibility of maintenance means the private sector remains responsible. This can be achieved by investors who maintain and operate, or through owners-associations.

There are certain advantages to full responsibility. A developer can control the quality and concept through the development and developers indicate that private maintenance is often better than municipal maintenance. There are also questions about giving full responsibility to developers. The subjects of maintenance will be further discussed in part 6.4

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R2 Temporary full responsibility:

- Infrastructure (INT1)

- Open space (INT1; INT6)
- Community services (INT6; INT8; INT13)

Some respondents indicated that the full responsibility was only temporary. This allowed them to control or establish a concept before the municipality takes back responsibility (INT6; INT8). INT8: "sometimes we hold on to the community services or public space in our development. This helps us control the establishment of the concept. Often this has a commercial motivation". Another participant explained: "in one case we deliberately chose to invest in a public park well before the housing units were constructed and sold. As parks need to grow over time, this allowed the park to be in place when the real estate was sold. This definitely increased the end-value, as people could actually see a park instead of pictures on a brochure." (INT9)

R3 Partial responsibility by development

- Parking garage (INT2)
- Parks (INT9; INT10)
- Open space (INT8)

- Higher spatial quality than demanded by municipality (INT2; INT10)
- Street furniture (INT7)

Parks (INT9)

Partial responsibility can come in four forms. The first one is responsibility for development. Developers prefer to develop something themselves, instead of with a financial contribution (INT9). By contributing to something in the form of a development, developers have more control over the outcome. This allows them to align the public space with their concept, which can ultimately lead to financial benefits.

R4 Partial responsibility by providing capital

- Higher spatial quality than demanded by municipality (INT2; INT6; INT7; INT10)
- Infrastructure (INT6)
- Community services (INT3)

Although not in favour, participants indicated that they made contributions in the form of capital. Contributing to public space with financial contributions is nothing new, a municipality is legally obliged to recover the costs of public space from developers. The developers' contribution, however, asks for a contribution outside of the initial business case. Participants indicated that this especially happens when a developer does not agree with a public space proposed by a municipality. Often, they are willing to do a contribution to increase the initial quality (INT7).

R5 Partial responsibility by maintenance

The participants could not recall a partial contribution that only involved maintenance. INT9 indicated that this does happen in the form of maintenance by individuals and by owner association, often informal. This is usually when public space is not used by other people. This type of public space can be called appropriated space, people claim a piece of public space (INT9).

R6 Partial responsibility through other investment

- Events in the public space (INT12)

One participant indicated contributions were made by hosting events in public space for place-making and area positioning (INT12). This benefitted both residents and other stakeholders.

6.2 Benefits to the developer

Benefits

This part of the interview was focussed on the added value of the contribution to the developer. The participants were asked an open question: *What are the benefits of doing an extra step?* By looking back at projects and naming motivators for the decision and the effects of the contributions, participants indicated how the contribution has benefitted them. The benefits are grouped according to the types of benefit for developers.

- Concept added value
- Financial added value
- Procedural added value
- Contextual added value

Besides the four types of added value from investments in public space, another category could be identified; business added value. The following definition is used:

Business added value: Enhancing potential of future project through improved reputation, skillset, knowledge and purpose.

Concept added value: Control on concept and neighbourhood.

The contribution improved the developers' control over the area. A developer wants to exert control over the area in which they are developing. One interviewee indicated that "people buy from a brochure" and that "if a space is used well is not represented in the buying price" (INT10). Especially true in the early stages of a development, a contribution can help to steer an area in their favour (INT3; INT4; INT6; INT7). When the contribution is in the form of maintenance and ownership, you can control the concept and area better after completion (INT10).

Improved performance of concept

The real estate concept worked better due to the contribution. As a few participants indicated, "sometimes putting in extra effort in the public space helps the concept forward" (INT3; INT8; INT11). By keeping ownership of public amenities after completion, you can make a concept work better (INT13). Also, you can provide the project with a unique selling point (INT10)

Quality not sufficiently guaranteed

The contribution acted as an anchor, providing a guarantee for the quality of the area. The participants indicated that developers are much more aware of what users want. More on this in part 6.4. In some cases, they want something different than the municipality and in that cases a contribution helps (INT8).

Also, the guarantee can work the other way around. Because of joint commitment to the contribution, backing down was not possible anymore. In that way, the contribution was a result of the cooperation with other parties (INT3). This is not as much an added value, but a reason why the contribution happened.

Quality not sufficient for aimed market

The contribution improves the overall quality of the public space, this was necessary because it suited better with the demands of the intended buyer or user. "The quality needed to be improved for the type of residents you want" (INT7). "You want the quality to match that of your intended product. Sometimes extra steps are necessary." (INT12).

Financial added value: Increased development value

The end-value received by a developer increased with the contribution. As twelve out of thirteen developers indicated, a high quality will pay itself back in the end-value. "The quality of the public space is one of the most important factors that determine the value of real estate" (INT2). Also, tenants are willing to pay more rent (INT4). "In the end, development is about money." (INT9) "When you see an opportunity for financial gains, a developer will grab it" (INT3). This was reflected by other participants. Four participants indicated that the increased end value is the number one reason for doing contributions.

The financial benefit is very hard to quantify. It is really hard to link a certain investment to a certain benefit. Especially in urban redevelopments, this is near impossible due to the many stakeholders involved (INT12).

Increased chance and speed of sale

The saleability or marketability of the real estate was improved with the contribution. You can make a project more known by the public with your contribution (INT12). Better public amenities increase the marketability (INT1; INT4; INT7; INT8). One interviewer indicated that the quicker selling process was the number one reason of doing a contribution (INT9).

Increased future value growth

The contribution improved the sustained value growth for the real estate (INT1). When you are longer involved, you want to be able to benefit from value growth (INT12). Not every participant agreed, stating that "speculation on value growth does not really happen" (INT13).

Increased value retention

The contribution improved the resilience to market downturns over time, providing more security for a value stability over time. Real estate retains its value through contributions to a high-quality public space and through private maintenance. "In a competitive market people are willing to pay high amounts for small houses. When the markets cool down, people will start to look at other things. The public space then plays a vital role in the value retention" (INT13). Participants indicated that privately maintained public space is better for value retention (INT4). Also,

public space with a low quality deteriorates quicker, increasing the risk for investors (INT10).

Decreased tenant turnover

People live longer in places they like. *A higher quality of public space decreases the rate tenants relocate, providing a steadier cash flow and more security* (INT1).

Alignment with investor goals

The contribution improved the alignment of the real estate development with goals by the investor. These goals are often not just financial return, but also a societal impact. Investors are also looking for a social return (INT4). This has also changed over time, as investors demand a higher quality of public space than before (INT7).

Procedural added value: Enhanced process with municipality (in project)

The contribution improved the process with the municipality, decreasing conflicts with the municipality and allowed the process to go faster and smoother. Two participants indicated investments in public space causes a better process between municipality and developer (INT7; INT8). Also, working on something together improves the process (INT11).

Leverage at municipality (in project)

The contribution created leverage for the developer on the municipality, creating possibilities within the project. One participant: "it's a give and take relation, sometimes you need to do things to get other things done" (INT11). Another participant: "the main reason to contribute at an early stage of the negotiations is to be allowed to realize a bigger volume" (INT1). This is confirmed by other participants, contributing allows you to "build more houses" (INT7) and "sometimes other functions, like a supermarket" (INT11).

Enhanced relation with community

The contribution improved community involvement and relation, decreasing the chance for complaints and objections. "The contribution improved the relation with neighbours, because they saw we are trying to do something good" (INT3). Another participant indicated that neighbours can be attached to the existing situation. "You want to give something back to the community when you replace something" (INT13)

Cooperation with other parties

The contribution led to better cooperation with other parties. You can acquire better relations with other stakeholders (INT3). Also, through contributing you can attract other entrepreneurs (INT12).

Continuity

The contribution ensured a certain project continuity. Urban area developments are long projects that ask for clear concepts with a high ambition, involving looking further than your own business case, to stimulate involvement and continuity (INT5).

Contextual added value: Improved integration with neighbourhood

The contribution enhanced the integral approach to the area, improving integration with the existing structure. Contributing to public space helps to let your development fit better in an area (INT6; INT7). Sometimes something is missing and a contribution is necessary to increase plan intergrality (INT9; INT13).

Contribution to city

The contribution can help to add something to a city. Developers want to contribute to a city in which they operate (INT10; INT12). With the help of the contribution a unique project was added to the city (INT5).

Enhanced area positioning

The contribution helped to position an area in the market. "Some areas are still empty, sometimes the area needs certain investments in public space to position itself in the market"" (INT1). "The area is still to empty, so it needs additional investments in public space" (INT7). These areas need to prove themselves. Investing here is an extra risk, but sometime contributions are necessary to position the area. People need to get a sense of 'this is where I should live' (INT3; INT12). By doing a unique concept with extra investments in public space, you

Business added value:

Improved relation with municipality

The contribution helped to improve the relation with a municipality, and led to advantages in acquisition and future projects. INT5: "Doing contributions shows you are willing to take on projects that require a step 'extra', municipalities will remember this for future projects". You can create goodwill at the municipality (INT13). "If you do something right, you will have an advantage for future acquisitions through informal relations" (INT9).

As two participants indicated, contributing helps to create a long-term relation between a developer and a municipality; "You try to become the partner of preference for the municipality" (INT6), and "We want to become a partner of the city" (INT12). can create a new hotspot (INT6). Area positioning tools, or place making does not only attract future residents, it also attracts investors (INT4).

Societal responsibility

The contribution was done with because of a responsibility to society. "As a developer, you have the responsibility to build a better word. Some developers say "the end product was not that nice, but I made a decent profit"" (INT9). "The real estate development sector had a bad name; this is why we take corporate responsibility very serious. A healthy profit and building good things are just as important" (INT11). One participant: "If we don't want to live there, we don't do it" (INT7). Also, the impact of real estate development over time is a reason; "you build something that will last 100 years" (INT10). INT2: "Real estate is not a disposable product; you want to build something that lasts".

Sustainability

Through a contribution, you can increase the sustainability on the level of an area. Through contributions in green and infrastructure, a developer can have an impact on sustainability (INT11). Sustainability is also appealing to future home owners. "For future owners, sustainability has an impact on their mortgages" (INT7).

A positive relation with the municipality is necessary, because I can also work the other way: "I frequently heard municipalities say they do not want to cooperate with certain developers. 'I heard the municipality say: If a certain developer wants to do a project, we will not make agreements because we already know those developer will not stick to those agreements.' For that same reason, developers with a good reputation are welcomed to cooperate" (INT7) this is confirmed by another participant: "If you mess up once, you will never be able to develop something in this municipality" (INT9).

Reputation

Through contributions, you build a good reputation. A good reputation is crucial to gain the trust of the municipality (INT1). Having a good reputation does not only work beneficial for the developermunicipality relation, investors are also willing to think further with developers that proved themselves (INT4). One participant indicated: "It is a small world; everyone has a certain reputation" (INT9).

This is why a reputation can also work out very negative. "You do not want to be known as a developer that develops bad projects" (INT6). If you are known as a developer that is not willing to take extra steps, you will be surpassed by competitors that will (INT13).

One participant indicates: "reputation is really important; however, reputation is never a goal on its own" (INT3).

Building portfolio

Contributions in projects can help to build a developers' portfolio. If you have built nice things in the past, you can use that for acquisition INT11. Developers use their portfolio in tenders (INT10). Also, people refer to your past projects (INT10). "You will be approached sooner because of your portfolio. If your portfolio is good, you will get a seat at the table before others" INT13

Job satisfaction

Making contributions to public space is something that can make the job more enjoyable and satisfying. This is especially necessary in projects with a long scope (INT5).

Motivation

The contribution was done because of the intrinsic motivation of a developer. As two participants indicated, in the end you want to be able to drive past a project and feel proud (INT9; INT12). INT6: "You just don't want to create something that you feel ashamed about". The motivation to build nice things seems not only driven by a societal contribution, but also just because developers 'like' to develop rewarding projects. INT2: "It is not only about money, you also just want to create good things", INT3: "everyone in our company just wants to produce nice things". One participant goes even further: "As developers, it's in our DNA" (INT1).

Improving skills/knowledge

The contribution helped us to enhance our skillset as developers. In one case the contribution was to a nearby soccer field. Doing this helped them understand the importance of contributions to society and how community involvement could be improved (INT3).

Experiment

Through a contribution, you can experiment with new ideas and concepts. "You can experiment with certain things. This is really important factor, because you can use the lessons learned for further projects" (INT11).

6.3 Conditions to contributing

The participants were asked through open questions what additional conditions there are to doing contributions, besides the regular feasibility conditions; ownership, regulation, physical conditions, market appeal and financial viability.

Financial feasibility

Although the participants were explicitly told that regular feasibility conditions apply, financial feasibility was considered too important not to list. Participants indicated that *everything is dependent on the financial feasibility* (INT3; INT10; INT11). "It does happen that developers go a long way with contributions and adding value, but without any financial guarantees. This resulted in deficits and sometimes even bankruptcies" (INT4). The level of feasibility is also important. When a project is financially healthy, a developer is more willing to contribute. When feasibility is an issue in the first place, doing a contribution is hard (INT13).

Tender criteria

Often, *the contributions are a result of tenders*. Because of high competition, developers differentiate themselves through contributing to public space (INT1). "With a tender, push your proposal to the edge" (INT6). When your contribution is set in a tender, you cannot avoid it. When it is part of a task, contributing is inevitable (INT2).

In these cases, it was hard to identify a contribution. The definition of the developers' contribution is a contribution that is higher than required. A high bid does not mean a contribution was made. In some cases, showing a willingness to invest in public space was one of the reasons of winning a tender (INT6). Through tender criteria, municipalities can steer, and almost enforce a contribution (INT3).

Direct relation with real estate

Participants indicated that a contribution to public space will only be done when there is a *direct relation between the public space and a developers' project*. There should be a direct relation to your own development (INT10; INT13). This is contradicted by another participant who stated that the public space should not necessarily have a direct relation with a development (INT1). Contributions to things outside your area can also help to create certain benefits.

Good relation with municipality (dialogue vs discussion)

Two developers indicated that a *good relation with the municipality is necessary to do contributions* (INT13; "When there is a dialogue with the municipality, you are more willing to do a contribution. When there are a lot of conflicts, a developer will be more focussed on his own goals" (INT13)

Long-term involvement (after completion)

Some developers indicated that *involvement after completion was a condition to doing contributions* (INT9). The added value of contributions ends up after completion (INT11). INT3 "When you are involved after completion, you will always contribute more than when you leave".

Area development vs project development

Some developers indicated that when you only develop a plot, the general responsibility for public space was in the hands of the public. This resulted in a condition that was supported by some participants that said: *area development is necessary for a developer to do contributions*. In area development developers always take extra steps (INT1; INT8; INT13). The size of the development determines if and how high the

contribution is. When the development consists out of many housing units and there is a healthy business case, there is an unwritten rule that you make a contribution to society (INT3).

Area dominance

Dominance in an area is a condition to contribution. "Dominance brings responsibility" (INT4). When a developer is dominant in an area, they are more willing to contribute. When they are a small player, they are less likely to contribute.

6.4 Public role

To discover what might be necessary to increase the willingness to invest in public space through the developers' contribution, the developers are asked about land policy, responsibility of public space and how this is subject to change.

Land policy

A municipality can have a land policy that is between passive active. Literature suggests that this has been changing from active to passive. The interviewees are asked whether they experienced this change, and which role they think will increase their ability and willingness to contribute.

Noticed a change over time?

Five out of thirteen the participants indicated that the role of the municipality has changed. The municipality is taking a facilitating role, the responsibility of public space shifts towards the private side (INT6; INT11).

One interviewee indicated that, although formally more facilitating, municipalities do not chance all of a sudden and they are still very involved (INT6).

Two developers indicated that there were no changes (INT2; INT8).

INT8: when projects grow in size, the role of the municipality changes. Bigger scope means more private responsibility. The size of projects is dependent on the state of the economy. So, role is a derivative of the economy

While everyone is more aware of the importance of public space, the municipality is still doing this the same. Everything is based on urban planning policy and the maintenance budget (INT2).

Two interviewees (INT8; INT9) indicated that changes were not necessary and the best solution is a policy somewhere in the middle. The current policy and system are a result of experience and is there for a reason; "they work very efficient" (INT8).

Developers on passive policy:

Most interviewees indicate that a passive role works best. Overall, the six out of thirteen interviewees indicated that a more facilitating policy would lead to more contributions and a better process. Only one participant indicated an active role would lead to more contributions.

"Facilitating role works best" (INT1), "a facilitating role is always better" (INT4). A facilitating role works best because the developer takes more initiative (INT9). INT13 indicates that a facilitating role works best in area developments; "You need a municipality to arrange the cooperation between stakeholders. When the developers are slow, a municipality should be more directive and stimulating". INT11 indicated that a facilitating role is best, but there should be updated planning policy. There is disagreement about who is responsible for the conception of public space when the municipality has a facilitating land policy. INT7: "the private sector should be the one responsible for creating public space", while INT10 indicates that creating public space with a facilitating land policy is a shared responsibility. Even if public space is privately owned, it should be a shared responsibility (INT5). Developers and the municipality see problems with private responsibility. The municipality is scared of giving away control (INT1). This is why many developers underline the importance of regulating instruments when adopting a facilitating policy.

Developers on the regulating role within facilitating:

Although developers prefer a facilitating land policy that lets them take more responsibility, the interviewees do indicate that the regulating role is very important. This is contradicted by other interviewees, saying that the rules are to limiting.

The real estate sector has a bad name. This is because developers that have different interest than municipalities. Developers always have a commercial interest; the municipality always has a societal interest. This is why the municipality should always remain in control, because eventually all problems end up at the municipality (INT6). As one respondent (INT7) described: "we trust that we can deliver quality, but we do not have that confidence in other developers. The municipality should be careful".

Most participants agreed that there should always be a cooperation between private and public. There should always be a narrative between the municipality and the developer (INT4). Because of different goals, full responsibility of either public or private causes harm to the other (INT6).

Especially when there are many stakeholders involved, regulating role is very important (INT4). Also, the scope of the development is important. Area developments require a regulating and directing role. "On the level of a plot, you can leave it up to the developer. Area direction needs to happen by municipality "(INT9). Not having a directive or regulatory role leads to decreasing integration within areas. "If all plots do something for themselves, you will end up with standalone projects" (INT9).

Participants indicated that they are more able to develop concepts because they know what users want (INT2; INT7; INT9; INT10). However. Control on overall quality is still necessary, because although developers trust themselves to deliver quality, "we do not trust other developers to do the same" (INT7). A municipality should therefore use regulating instruments to control an area. They need to come up with demands for the area. These should not be too specific because the private sector knows better what a user wants, but when everything is left to developers this opens up changes for hit-and-run developers.

Not every developer thinks the same. INT2: "The rules are to limiting, a municipality should listen more to developers." Also, one interviewee indicated that a municipality should not try to give too much vision, because developers are better at this (INT9). How a municipality controls quality is very dependent on the people working there (INT7). Developers indicate that there are divergent interests within a municipality that cause problems with private involvement. These issues are especially experienced when a municipality adopts an active land policy.

Developers on active land policy:

Opposite of a facilitating policy is the active land policy. In this part the developers were asked for opinions on an active land policy and if this would lead to more contributions.

One participant (INT5) described that when a municipality has an active land policy, the willingness to contribute increases. This is because an active policy shows municipal leadership and leads to a higher quality (INT5).

INT1 indicates that municipalities are not comfortable taking an active role. Partnering with a developer that has a long-term interest is comforting for them.

While not in favour of an active land policy, one interviewee indicated that when public space is privately owned and the municipality gives up control, this can have serious impact when an area is changed in the future. The result could be long and expensive procedures for gaining back control (INT6). This is an argument for an active policy, where the municipality takes more responsibility.

Problem with active policy:

The municipality is not well aware of the demands of the users.

Participants indicated that public space developed by the public sector is worse than privately developed public space. INT2: "a plan for public space is driven by low costs for maintenance and city urbanists that want to leave their mark on the design". INT9: "everything is designed to be vandalism-proof. Aesthetics are less important, while this is important for the marketability of real estate." INT10: "a developer knows what the consumer wants in terms of public space. The current system where the municipality determines the plan quality is very top down, residents are not involved." One interviewer confirmed this by giving an example of the different user appreciation of the public space between a plan where quality was controlled very strict by the urban planning department and the urbanists that work there, and a plan where the quality control was done by the municipal port authority, which was much more allowing (INT2). One of the problems of municipal plan making, is that they make plans that are city-wide (INT7). The system is not built for creating areas with different identities. INT7: "a developer is much more capable of aligning public space with the demands of users, and because of competition they can develop it at much lower costs.

Developers on public space ownership

The ownership of public space is a big point of discussion. Interviewees notice a change. "The municipality used to be responsible, but this is changing" (INT11), and "everything that was publicly accessible used to be the full responsibility of the public sector, that has now changed" (INT1). Municipalities are not willing to take more public space in ownership (INT10). There are frequent discussions about the amount of public space (INT1).

This is reflected in the demand for privately owned public space. There seems to be a bigger demand for semi-public space (INT1; INT11). Especially in cities, more public space is needed on privately owned land (INT7). This requires the role of the municipality to change. Because there is an existing ownership situation, it is necessary to re-allocate space. Building public space on land owned by the municipality and real estate on privately owned land is much easier to do in greenfield development (INT7).

The reason a municipality is not willing to take more public space, is because of the costs of maintenance. More on this in the next part.

Semi-public space:

The ownership of public space can be in the hands of the public, or in the hands of the private sector (semipublic space). Who should own public space depends on the context and on excludability. There was disagreement among the interviewees whether a public space could be closed. Some interviewees indicated that when there is a fence, it should be privately owned (INT13). INT4: "When a place can be closed, it is not really public space". Accessibility can be very subjective. "When there are borders to a space, the responsibility is of the investor or owner's association. These borders can be physical, but sometimes the borders are more subjective. The question of responsibility is a question of inclusivity versus exclusivity. Excludable space should not be in the hands of the public" (INT8).

Also, some interviewees indicated that the public space becomes a private responsibility when the developer is developing the entire area (INT1; INT2).

Interviewees indicated that semi-public space had certain benefits. Experiments and new things which are more difficult in public space are possible in semi-public space (INT11). But overall, a municipality is and should be careful with allocating semi-public space due to problems that may arise later because of missing control (INT6).

Public space is public responsibility:

Not all participants were in favour of semi-public space. Two interviewees indicated that publicly accessible space should always be a public responsibility. "The city belongs to everyone, so public space is a public responsibility" (INT2). Especially when a space cannot be closed off, the public side should be fully responsible (INT3).

INT5 was more moderate, stating that the responsibility lies mostly at the municipality, but it should be done in conjunction with developers.

What is necessary, is clear ownership. The places with unclear ownership are prone to degradation (INT8).

Developers on public space maintenance

The same discussion about ownership responsibility can be held for maintenance. Participants indicated that there are problems with public maintenance and the municipal maintenance department. Private maintenance could be a solution, but that also has some constraints. INT8: "maintenance is a subject that no-one wants to touch. It is not exciting, but crucial for an area to work". Maintenance is such an issue because the municipality does not want more public space because of costs, and a (most) developers want to step out of a project after completion.

Again, the opinions on who is responsible are split. INT10: "however uses the space defines who is responsible for maintenance". Again, accessibility is an important criterion. When a place can be closed off, the responsibility lies at the private sector (INT4; INT7; INT10). Others indicated that maintenance should always be done by the municipality (INT8). Some developers underline the benefits of privately maintained public space (INT3; INT6). The participants agree that the municipality does not want more public space.

Privately maintained public space:

Some participants were not happy with public maintenance, indicating that municipal maintenance is of a lower quality than private maintenance (INT10). Maintenance by the municipality is often not sufficient (INT9). Public space is deteriorating because of lacking municipal maintenance (INT2). Private maintenance is better for value retention than public maintenance (INT13). INT3 indicates that public space is also used better when privately maintained.

Maintenance can be organized by the private sector through owners-associations. INT6: "This comes with uncertainty; if the costs of maintenance turn out to be very high, no one will want it". The benefit of private maintenance is that maintenance can be enforced through apartment rights and owners-associations. "This can be far more effective than municipal maintenance" (INT1).

When you are dominant in an area, it makes sense to initiate a private area management organization payed for by an investor (INT4). The opinion that private maintenance through owners-associations is more effective, is shared by the municipality (INT2). INT10 describes that owners-associations will play an increasingly important role. "There are owners-associations for ground-bound dwellings, which is new, just to maintain shared semi-public space" (INT10). Adding, "maybe there should be a private maintenance company where owners and users pay for" (INT10).

Interviewees indicate a few issues with private maintenance. They feel a municipality is responsible for maintenance of non-exclusive space (INT8). Besides, maintenance of public space creates a conflict with the way most developers operate; they leave after completion (INT3). Also, maintenance through an owners-association is impossible for social housing (INT7). People are not willing to contribute because of their low income, and housing associations do not consider public space as their goal (INT10; INT7)

Maintenance department

Interviewees indicated that one of the biggest constraints in doing contributions is the municipal maintenance department. Interviewees indicated that they are very willing to contribute, but that it is impossible due to issues with the municipal maintenance department. Eight out of thirteen participants indicated that often they want to contribute to a high quality, but the maintenance department is not willing to pay for maintenance. The municipal maintenance department is filled with 'asset managers', they want to maintain their assets and don't like changes (INT10). As INT8 describes: "a financial contribution for development is fine, the biggest problems lie at the maintenance of space".

Mismatch role maintenance, land department and urban planning department.

A municipality is made out of different departments. INT7: "The municipality is a multi-headed monster". Municipalities work very much in sectors. Every department has different goals and answers to a different alderman. Because there are so many different goals, it is very hard to come up with an integral plan (INT8). Negotiations with the urban planning department about a contribution to the development of public space is considered easy, but problems seem to arise when the maintenance department becomes involved (INT3). Maintenance is often postponed to the later phases. Often there is a discussion between the land and maintenance departments (INT2). People in the maintenance department also have a completely different background than the land department (INT8), seeming to make the process a lot harder.

No room for experiments:

Because the influence of the maintenance department, developers indicate there is limited freedom (INT10). Everything in the public space is pre-decided by the maintenance department, so there is very little room for experiment (INT7). What is allowed in the public space is listed in a manual provided by the municipality. As stipulated, this handbook is driven by reducing costs of maintenance (INT9). "The entire system is built around planning and efficiency, they (the municipality) do not want anything new" (INT10). The quality that is proposed by developers is therefore often lowered (INT9). One interviewee (INT7) provided a striking example. A case was described where the developers wanted to incorporate high-quality pavement from a circular material. The developers were willing to pay for the development, but it ended up being dismissed by the municipality because of the maintenance department. Like regular pavement, it would have to be replaced in 25 years. This material was not in the municipal manual for public space, so instead the municipality chose newly created pavement of lower quality to be installed now, and again in 25 years. Some participants indicated that it should be wise for the maintenance department to recognize the added value of qualitative public space (INT2) INT2: INT0). The municipality is your much for your muc

value of qualitative public space (INT3; INT7; INT9). The municipality is very much focused on maintenance, not on quality (INT7). The power of the maintenance department can also work the other way around, whenever the maintenance department is on board, there is much room for negotiations (INT9).

Other subjects

Hit-and-run developers:

Participants indicate that contributions can add value to society and can benefit the developer themselves. One problem with contributions is the competition of hit-and-run developers (INT1). Hit-and-run developers are interested in quick financial gains and leave after completion. Because those who are involved after completion are the ones who benefit the most from the added value of contributions, the hit-and-run developer is less willing to do contributions. The reason developers have a bad reputation is because of the hit-and-run developers than have a short involvement, some developers only think about quick gains (INT9). Competing with hit-and-run developers is very hard when tenders are mostly focused on price (INT1; INT13). They can offer bigger amounts, which is also very hard to compete with in private acquisitions (INT7). Two participants (INT6; INT7) indicated that they do not even participate in price-based tenders.

When a tender is focused on quality, hit-and-run developers do not stand a chance (INT6; INT9). Whether the tender criteria are well defined determines if hit-and-run developers are able to enter the field (INT8). Also, reputation is very important and this helps to compete (INT1). Municipalities recognize hit-and-run developers (INT13).

However, not every participant thinks the same. INT13 indicates that the quality demanded in tenders are often too much, leaving little room for contributions elsewhere. Also, because of the bad name of the sector, everyone is more aware of their societal impact (INT4; INT13).

Increased valuation by investors:

There is more awareness for the importance of public space (INT10). Everyone is more interested in shared facilities (INT2) and the willingness to invest in social goals has also grown significantly for investors (INT4). The attention for public space by investors has increased according to six developers (INT1; INT3; INT7; INT11; INT12; INT13). People used to only look at the real estate, but its context has become more important (INT1). The ones that benefit the most are those involved after completion. Thus, the value growth caused by a high-quality public space should be represented in the development value. Whether the quality of public space is represented in the end value received by a developer depends on the investor. Overall, investors value public space more than they used to, but this is different for every developer (INT1; INT11). Pension funds have more societal interests than most real estate investors (INT1).

Not every participant agreed. Public space has always been important (INT2; INT6; INT8). Participants also indicated that not every developer is willing to buy public space (INT10). When the ownership and maintenance of public space becomes the responsibility of the investor, the work of the investor changes (INT6).

There is a difference in the value recognition of public space between individual buyers and investors. Investors are more aware of long-term value growth. Buyers value what they see now and see on a brochure (INT12).
6.5 Preparation of survey

The interviews led to a number of variables that are validated through a survey among the panel. This allows the participants to confirm and if necessary, complement their scores. To prepare the survey for the second round, the results from the first round Q2 and Q4 are examined. The first question is examined along with the results of the other subjects in part 8.

Benefits to the developer

Variables

The first question of the interview resulted in 27 variables, grouped in 5 value types. Some of them were named more often than others. Because participants were not provided information or hints, they could have forgotten variables. At this stage, every variable that could be detected is included for verification in the survey. The respondents received an explanation for each value type and variable. To confirm whether these variables are correctly observed, the respondents are asked whether they agreed that a certain variable played a role in decision-making when considering a contribution. See question one of the survey in appendix F.

Added value type	Variable	Code	named by # participants	%
Concept added value	Control on concept and neighbourhood.	C1	4	31%
	Improved performance of concept	C2	6	46%
	Quality not sufficiently guaranteed	C3	3	23%
	Quality not sufficient for aimed market	C4	2	15%
Financial added value	Increased development value	F1	12	92%
	Increased chance and speed of sale	F2	8	62%
	Increased future value growth	F3	2	15%
	Increased value retention	F4	3	23%
	Decreased tenant turnover	F5	1	8%
	Alignment with investor goals	F6	3	23%
Procedural added value	Enhanced process with municipality (in project)	P1	3	23%
	Leverage at municipality (in project)	P2	3	23%
	Enhanced relation with community	P3	2	15%
	Cooperation with other parties	P4	2	15%
	Continuity	P5	1	8%
Contextual added value	Improved integration with neighbourhood	E1	7	54%
	Contribution to city	E2	4	31%
	Enhanced area positioning	E3	7	54%
	Societal responsibility	E4	5	38%
	Sustainability	E5	1	8%
Business added value	Improved relation with municipality	B1	8	62%
	Reputation	B2	5	38%
	Building portfolio	B3	4	31%
	Job satisfaction	B4	1	8%
	Motivation	B5	7	54%
	Improving skills/knowledge	B6	1	8%
	Experiment	B7	1	8%

Figure 6.02: added value variables results round one

Types

To get a sense of the weight of each value type, a constant sum question is used. Besides the four value types found in literature, another value type is added that could be distinguished from the results; business added value. A description is provided underneath. The value types are explained to the respondent and they are asked to distribute 100 points over the five types. See question two of the survey in appendix F.

- Concept added value: The integral approach of the problem and realisation of different functions, increasing the quality of the concept.
- Financial added value: A more profitable result concerning price-performance, cash flow, continuity, profits and risk allocation.
- Procedural added value: Fulfilling private and public interests and improving decision-making, publicprivate relation.
- Contextual added value: Better integration with other areas, projects and project initiatives outside of the plan area.
- Business added value: Enhancing potential of future project through improved reputation, skillset, knowledge and purpose.

Conditions to contributing

The following conditions could be defined from the interviews. In this question, the same applies as the first question. Respondents are asked whether they agree a certain condition is a necessary condition to doing a contribution. See the third question of the survey in appendix F.

Condition		# named by	
	Code:	participants	%
Financial feasibility	V1	4	31%
Tender criteria	V2	4	31%
Direct relation with real estate	V3	2	15%
Good relation with municipality (dialogue vs	V4	2	
discussion)			15%
Long-term involvement (after completion)	V5	3	23%
Area development vs project development	V6	3	23%
Area dominance	V7	2	15%

Figure 6.03: conditions results round one

Public role

In the last question the respondents are asked about the public role that is necessary to increase their willingness to contribute. Through a ranking question, the respondents could indicate which role they preferred. The roles are explained by providing a description of the role and the associated instruments and a graphic to show how the roles related.

Feedback

A critial part of the delphi method is the feedback. Along with the invitation, feedback was provided to the panel members. The feedback consisted out of the results for each individual and the overall results.



This part presents the results of the survey in round two. Participants were asked to fill in the survey. After one reminder, five panel members responded. One more reminder was sent to improve the response rate. Eventually, nine out of thirteen panel members responded to the survey, a response rate of 69%.

7.1 Benefits to the developer

The first question asked the respondents if they agreed that a variable plays a role in decision-making when considering a contribution.

Variables

Added value type	lded value type Variable		Round	Round	Δ round
			one (N=13)	two (N=9)	one-two
Concept added value	Control on concept and neighbourhood.	C1	31%	100%	+69%
	Improved performance of concept	C2	46%	100%	+54%
	Quality not sufficiently guaranteed	C3	23%	86%	+63%
	Quality not sufficient for aimed market	C4	15%	86%	+71%
Financial added value	Increased development value	F1	92%	100%	+8%
	Increased chance and speed of sale	F2	62%	88%	+26%
	Increased future value growth	F3	15%	100%	+85%
	Increased value retention	F4	23%	86%	+63%
	Decreased tenant turnover	F5	8%	20%	+12%
	Alignment with investor goals	F6	23%	86%	+63%
Procedural added value	Enhanced process with municipality (in				
	project)	P1	23%	100%	+77%
	Leverage at municipality (in project)	P2	23%	89%	+66%
	Enhanced relation with community	P3	15%	100%	+85%
	Cooperation with other parties	P4	15%	57%	+42%
	Continuity	P5	8%	40%	+32%
Contextual added value	Improved integration with				
	neighbourhood	E1	54%	100%	+46%
	Contribution to city	E2	31%	100%	+69%
	Enhanced area positioning	E3	54%	100%	+46%
	Societal responsibility	E4	38%	100%	+62%
	Sustainability	E5	8%	100%	+92%
Business added value	Improved relation with municipality	B1	62%	100%	+38%
	Reputation	B2	38%	88%	+50%
	Building portfolio	B3	31%	83%	+52%
	Job satisfaction	B4	8%	80%	+72%
	Motivation	B5	54%	100%	+46%
	Improving skills/knowledge	B6	8%	86%	+78%
	Experiment	B7	8%	86%	+78%

Figure 7.01: added value variables results round one

Figure 7.01 shows an overview of how the variables scored. A high score means many participants agreed that the given variable plays a role in decision-making when considering a contribution.

A few things stand out. What is striking, is that the percentages for all variables grew. This means that for each variable, respondents complemented their initial answer. On average the percentage of participants that agreed a variable is an added value grew with 57%.

While F3 and P4 were described by two participants in the first round, all respondents to the survey agreed that an *increased future value growth* and *enhanced relation with community* are added values that weighs in on the decision. E5 experienced an even bigger change. During the first round, *sustainability* was only mentioned by one panel-member. In the survey, every respondent agreed that this is an added value. P1 *Enhanced process with municipality*, B6 *Improving skills/knowledge* and B7 *Experiment* are other notable variables that each made a significant jump in percentage.

From the 27 variables, all but three scored higher than >80%. F5 *Decreased tenant turnover* scored 20%, P4 *Cooperation with other parties* scored 57% and P5 *Continuity* scored 40%.

Figure 7.02 shows the variables with a score of 50% or higher from round one and the scores of those variables in round two. The variables that were most recognized in the first round were, but one all validated in the second round with a 100% score.

Round one >50%			Result round two
Variable	Code	Percentage	
Increased development value	F1	100%	100%
Increased chance and speed of sale	F2	67%	88%
Improved relation with municipality	B1	67%	100%
Improved integration with neighbourhood	E1	58%	100%
Enhanced area positioning	E3	58%	100%
Motivation	B5	58%	100%
Improved performance of concept	C2	50%	100%

Figure 7.02: highest scoring added value variables

Types

The second question asked the respondents to weigh the added value types. The respondents were asked to distribute 100 points over the five value types to provide a ranking for the types of added value. Figure 7.03 presents an overview of the results of the survey. The figures that follow provide more detailed information on the spread of the data. An even distribution of the scores would have led to 20% for every added value type.

Added value types	Contr	actor-de	veloper	Funde	ed devel	oper	Indepe	endent d	eveloper	Total		
Number of	N=3	Stdev	Rank	N=2	Stdev	Rank	N=4	Stdev	Rank	N=9	Stdev	Rank
Average of Concept		-	-		Stacv	Kurik		-			Stacv	Rank
added value	28%	10,4	1 st	18%	20,5	2 nd	26%	14,4	2 nd	25%	13,3	2 nd
Average of Financial added value	27%	28,9	2 nd	37%	9,9	1 st	35%	22,3	1 st	33%	20,7	1 st
Average of Procedural added value	25%	13,2	3rd	17%	2,8	3 rd	10%	3,7	5 th	17%	9,8	3 rd
Average of Contextual added	606	2.6	c th	1 704		ath	1 4 04		۸th	1 7 04		Бth
Average of Business	0%0	3,6	5"	1790	19,1	4	1490	4,8	4	1∠%0	8,8	J
added value	14%	6,6	4 th	12%	14,1	5 th	15%	10,2	3 rd	14%	8,7	4 th

Figure 7.03: added value types results round two

The following figures present the results for the different types of added value by the three developer types. To get a sense of the coherence of data and the level consensus, the max/min and standard deviation is shown.



Figure 7.04: results concept added value



Figure 7.06: results procedural added value



Figure 7.08: results business added value



Figure 7.05: results financial added value



Figure 7.07: results contextual added value



Figure 7.09: summary of added value types

Overall, the respondents indicated that the most important value type is the *financial added value* type with 33%. There is a wide range of answers. For the funded and independent developers, the financial added value was ranked first with 37% and 35% respectively. The contractor developer ranked it second. The funded developers had the most consensus, within the other developer types there were very differing opinions on the weight of the financial added value.

The *concept added value* type was ranked second with a score of 25%. The contractor developers ranked this value type first with similar scores, the other developers ranked it second important, although the range suggests bigger differences within the groups. The funded developer shows a big gap with an average of 18% for concept added value.

The *procedural added value* type was ranked third with a score of 17%. The independent developer ranked this value type lowest with 10%, while the others ranked it third. There was a high consensus among the funded and independent developers.

The *business added value* was type ranked fourth with a score of 14%. Although the ranks differed, the average sample score for all developers was similar between 12-15%.

The *contextual added value* was type ranked fifth and last overall with a score of 12%. While it was ranked fifth, only the contractor developer type indicated with a high level of consensus that this was the least important value type with a score of only 6%, less than half that of averages for the other developers.

The *contractor developer* ranked the types in descending order; 1: concept, 2: financial, 3: procedural, 4: business, and 5: contextual added value. The contractor developer rates the contextual added value especially low, compared with the other developers. The concept, financial and procedural added value had a similar score.

The *funded developer* ranked the types in descending order; 1: financial, 2: concept, 3-4: procedural and contextual, and 5: business added value. The financial added value was by far most important, scoring more than twice as high as the other value types.

The *independent developer* ranked the types in descending order; 1: financial, 2: concept, 3: business, 4: contextual, and 5: procedural added value. The financial added value was rated the highest with 35%. The procedural added value is rated lowest from all developer types, with 10%.



Figure 7.10: added value type results round two

7.2 Conditions to contributing

In the third question of the survey, the respondents were asked whether they agree a certain condition is a necessary condition to doing a contribution.

Condition	Code:	Round one (N=13) %	Round two (N=9) %
Financial feasibility	V1	31%	89%
Tender criteria	V2	31%	78%
Direct relation with real estate	V3	15%	44%
Good relation with municipality (dialogue vs discussion)	V4	15%	78%
Long-term involvement (after completion)	V5	23%	22%
Area development vs project development	V6	23%	67%
Area dominance	V7	15%	22%

Figure 7.11 conditions results round two

Figure 7.11 shows an overview of how the variables scored. A high score means many respondents agreed that the condition is necessary to doing a contribution.

V1 *Financial feasibility* and V2 *tender criteria* were most observed in the first round. In the second round, almost all respondents indicated that financial feasibility is an important criterion. Tender criteria also scored high. V4 *Good relation with municipality (dialogue vs discussion)* was observed only twice during the first round, but was rated as a condition by seven out of nine respondents. Six out of nine respondents agreed that contributions required an involvement as area developer instead of project developer. V5 *Long-term involvement* and V7 *Area dominance* scored low with 22%.

7.3 Public Role

The participants were asked to rank the role they thought would increase their willingness to contribute to public space.

Role	Contractor- developer	Funded developer	Independent developer	Total
Number of respondents	N=3	N=2	N=4	N=9
Market shaping	2 nd - 3 rd	3 rd - 4 th	2 nd	2 nd
Regulating	4 th	3 rd - 4 th	3 rd	4 th
Stimulating	2 nd - 3 rd	2 nd	4 th	3 rd
Capacity building	1 st	1 st	1 st	1 st

Figure 7.12: public role results round two

Figure 7.12 shows an overview of the median ranks of the public roles. Capacity building was ranked first overall. Capacity was ranked first by all developer types. The market shaping role was ranked second. The funding developer ranked the market shaping role lowest, shared with the regulating role. The stimulating was rated third. The independent developer was the only one to favour the regulating role over the stimulating role. The regulating role was ranked last.



8.1 The developers' contribution in practice

During the interviews, the participants were asked to what amenities in public space they have contributed. The following types could be identified:

- Higher spatial quality than demanded by municipality (INT2; INT6; INT7; INT10)
- Parks (INT6; INT9; INT12)
- Community services (INT3; INT6; INT8; INT13)
- Street furniture (INT7)
- Open space (INT1; INT5; INT6)

- Landmarks (INT5)
- Art (INT4; INT9; INT11)
- Infrastructure (INT6)
 - o Parking garage (INT2; INT5)
 - o Mobility hub (INT3)
 - o Streets (INT1)
- Entire land development (INT1; INT2; INT6)

Most of these contributions are costs that a municipality can recover through the Spatial Planning Act, as listed in the textbox in section 2.5. Those costs are related to the minimum quality a municipality has planned for an area. The participants were explicitly explained that the definition of the developers' contribution was a contribution on top of what could be legally recovered. The listed contributions that match the recoverable costs therefore should have been contributions to an additional quality of the public space. One respondent also described this, stating that there are two kind of contributions, the ones that add quality and the ones that are necessary to initiate development (INT10). The most four important costs that caused public deficits were *public space, plan costs, area infrastructure* and *main infrastructure* (Holt *et al.*, 2018). The focus for this research was on public space. Besides contributions to infrastructure and by taking responsibility of the entire land development. This shows that the contributions can also stimulate feasibility through other areas than public space.

Municipal costs for public space should be recovered, according to the Spatial Planning Act. This means that when a developer takes responsibility for the costs, they (partially) take away a liability from the municipality. These contributions have to be formalized (Hobma & de Jong, 2016). The participants indicated that the contributions happened in the form of anterior agreements and through tenders.

Investments in public space are necessary, but there was disagreement on the definition of public space. The participants recognized the changing role of the private sector in public space. Developers can contribute by taking some kind of responsibility. During the interviews six different types of responsibilities were distinguished, ranging from full responsibility, temporary responsibility and partial responsibility by different investments.

Name	Type of contribution
R1	Full responsibility
R2	Temporary full responsibility
R3	Partial responsibility by development
R4	Partial responsibility by providing capital
R5	Partial responsibility by maintenance
R6	Partial responsibility through other investment

Figure 8.01: types of private responsibility in public space

Full responsibility:

Ten out of thirteen respondents indicated they have made contributions in the form of full responsibility of public space. A private responsibility in the form of ownership and maintenance means the public space becomes semi-public space. This has some implications. The municipality hands over control over the public space. The excludability of semi-public space is a subject of debate for the developers, as some indicated that semi-public space should be closable. Developers describe that municipalities are not willing to take on more public space, and there is an increased demand for semi-public space.

Participants indicate that municipal maintenance is often not sufficient and leads to degradation. Private maintenance can be organized by investors and owners-associations. Private maintenance is thought to be of higher quality. One of the reasons is that private maintenance can be enforced through apartment rights and owners-associations.

Respondents did not agree on whether public space should be closable. They did agree that a semi-public space should be publicly accessible, but when borders are placed this semi-public space becomes excludable. Instead of physical borders, borders can also be experienced, it is therefore very subjective. Participants indicate that borders are necessary to make a place manageable. The excludability of public space is a point of discussion in the urban redevelopment sector (Heurkens *et al.*, 2020).

Partial responsibility:

Some respondents indicated that they do not feel responsible for providing public space and that this should be a task for the municipality. These participants were more in favour of other forms of taking responsibility. However, participants describe that municipal involvement comes with problems. Although the participants describe the benefits of private maintenance, most participants indicate that developers are more willing to contribute to the development of public space instead and leave maintenance in the hands of the municipality.

Most developers indicated that they are more willing to be responsible for the development than to offer a financial contribution. Being responsible for the development allows the developer to be more in control.

However, doing the problem with doing contributions to public space that is maintained by the municipality, is that the maintenance department is very limiting. Respondents describe that the maintenance department has a lot of control during anterior agreement negotiations and during the process of approvals. Respondents indicated that the municipality is an organization with divergent goals. There seems to be a mismatch of interests within the municipality. Developers indicate that compared to the municipality, they are much more aware of the demands of users. They describe that they are willing to contribute to a high-quality public space, but that agreement from the maintenance department is a big barrier. The municipal maintenance department causes public space to be designed for effective maintenance. This results in a lower quality than developers want. Also, the municipal system is built for city-wide plans. There is little room for changes and experiments because of the maintenance driven approval and because of too much direction.

8.2 Benefits to the developer

Variables

The second round resulted in a list of 27 variables. Of this list, three scored significantly lower than all others. This means these variables cannot be considered as relevant as the others. These variables; F5 *Decreased tenant turnover* (20%), P4 *Cooperation with other parties* (57%) and P5 *Continuity* (40%), are therefore dropped. The other variables were validated by >80% of the respondents. The remaining variables are listed in figure 8.02.

Added value type Concept added value	Variable Control on concept and neighbourhood. Improved performance of concept Quality not sufficiently guaranteed Quality not sufficient for aimed market	Code C1 C2 C3 C4
Financial added value	Increased development value Increased chance and speed of sale Increased future value growth Increased value retention Decreased tenant turnover Alignment with investor goals	F1 F2 F3 F4 F5 F6
Procedural added value	Enhanced process with municipality (in project) Leverage at municipality (in project) Enhanced relation with community Cooperation with other parties Continuity	P1 P2 P3 P4 P5
Contextual added value	Improved integration with neighbourhood Contribution to city Enhanced area positioning Societal responsibility Sustainability	E1 E2 E3 E4 E5
Business added value	Improved relation with municipality Reputation Building portfolio Job satisfaction Motivation Improving skills/knowledge Experiment	B1 B2 B3 B4 B5 B6 B7

Figure 8.02: final list of added value variables.

When the results of round one and round two are compared, some variables that were described only a few times during round one resulted in a high score in round two. This indicates that the participants forgot to mention the variable in the first round and complemented his/her answer during the second round. Because respondents could only agree a certain variable played a role, the variables were not weighed. The fact that most respondents did not mention a variable in an open question, but confirmed it in a closed question, could give an indication of how important that variable really is. The biggest changes appeared for

Synthesis

Increased saleability

Consumers have an increasing appreciation of the quality of public space, which is represented in their willingness to buy (Knowles & Ferbrache, 2016). Six participants supported this by indicating that investors and buyers are more aware of public space and this is represented in the end value. Two respondents indicated that there is a big difference among investors. The increased development value has a relation with long-term value growth and increased value retention. Investors benefit from these variables, but since not every investor shows these benefits in the end-value they are willing to pay, the developer is not fully benefiting from the contributions to public space. The short-term of developers and long-term involvement investors leads to sub-optimal financial benefits (Adams & Tiesdell, 2012). Reflection of future value growth in the development value received by developers at completion requires institutional change (Verheul *et al.*, 2017; Franzen *et al.* 2017; Robbe, 2015; Adams & Tiesdell, 2012).

Control

The participants indicated that contributing lead to bigger control over the public space, which had an effect on the performance of the concept. This is in line with what Smeenk (2007) concluded. This variable is especially relevant when the contribution is early in the process. The sooner a developer is involved in the conception of public space, the more control over the outcome the developer has.

Motivation

Seven participants described *intrinsic motivation* to be an important reason for doing contributions. Through the interviews it became clear that the motivation was a very significant factor during decision-making. The motivation argument could not be observed during literature studies. The motivation had a relation with job satisfaction.

Process with the municipality

Developers indicate that contributions help to enhance the process of urban redevelopment. By doing contributions the developers enhance the relation with the municipality and created goodwill. Developers described a tit-for-tat relation. Through informal relations, developers seemed to have an advantage in future tenders. This seems to be conflicting with the Spatial Planning Act, as municipalities should not let contributions lead to easier cooperation. This is why all agreements for the contribution should be formalized (Hobma & de Jong, 2016). Letting contributions determine the level of cooperation could lead to extortion. Though formally not allowed, many participants indicated that this is a reality. It also seems like a reality that is hard to avoid. Respondents described that in the world of real estate development there are many informal relations.

Improved reputation

Many respondents indicated that the contributions lead to a better reputation. They indicated that this improved relation has a positive impact on both the developer-municipality relation and the developer-investor relation, thereby increasing the possibilities for future business. It also works the other way around; a bad reputation has a very negative impact on those relations. As some developers indicated, a reputation is something that sticks with the developer in the long term. This means that the reputation is a very significant factor in the developer decision making. Improving reputation through contributing to societal goals, in this case public space, is something that is widely known in business. Corporate Social Responsibility, or CSR, is something that is rapidly expanding among businesses and corporations because of their significant impact on society (Yam, 2012). Considering a broader range of issues when making

investments decisions can yield both financial and non-financial benefits (Pivo, 2008). It is broadly recognized that companies with a high level of societal expenditures have better reputations, which in turn tends to be reflected in the financial performance of those companies (Brammer & Millington, 2005). Societal contributions can also have a significant effect on stakeholder management, as stakeholders have a more positive impression of the company (Brammer & Millington, 2005). One participant indicated that a good reputation is not a goal on its own. This is in line with de Graaf (2008), stating that it is rather a tool for receiving more business possibilities, better staff, easing development process and receiving a greater financial result. A positive reputation improves their financial result by cutting costs in for example recruitment and acquisitions. The positive impact of contributions to public goods leads to a better reputation and is therefore an important factor in improving financial results and improving business possibilities.

Comparing variables with literature:

The literature review provided one framework with possible benefits to developers when supporting public space. Without giving the respondents the framework, all variables from ULI (2018) except the ones in the operations and management phase were confirmed with the interviews. An overview can be seen in figure 8.03. In this study also other variables were discovered. As will be described in the following part, the variables are interrelated.

	Related to
Planning and design	variable
Community support	P3
Increased support by influential public stakeholders and investors	P1/P3/F6
Easier zoning approvals	P1
Increased development size	P2
Enhanced likelihood of winning tenders	B1
Project marketing	
Strong market demand for high quality public space	F1/F2/F4
Increased marketability due to project differentiation	F2
Ability to enhance project branding and firm reputation	F2
Public recognition through sponsored public events, awards or iconic features	E3
Increased project visibility because of foot traffic	F2
Project completion	
Accelerated market absorption rates	F2
Enhanced asset value through higher rent premiums, lower vacancy rates and faster lease-ups	F1/F2/F4/F5
Increased market value	F1
Economic development supporting project value	E2
Equitable development opportunities	E4
Operations and maintenance	
Increased net operating income	F1
New sources of revenue streams	F1
Long-term cost savings through resilience promoting amenities	-
Better mortgage insurance rates	-
Sustained value/future-proofing	F4
Increased business for retail tenants	-
Increased residential tenant retention	F5
Long-term real estate value appreciation	F3/F4
Project resilience during economic downturns	F4

Figure 8.03: Variables from ULI (2018) matched with variables from interviews

Variable relation



Figure 8.04: interrelation between the added value variables

Through the interviews, many respondents indicated that often an added value is an added value, because it leads to another added value. In the web displayed in figure 8.04, six variables are highlighted in the middle. The types of the variables are displayed by their colour. The relations between the variables are displayed by the arrows. Some variables lead to another variable, while some variables are determined by others. All variables lead to a variable in the middle. These six variables can be grouped in four themes that seem to be the guiding themes in the developer decision-making. They can be considered the main outcomes of the developer.

1: Saleability. Participants indicate that the many of the reasons why a developer should contribute to public space eventually result in a better price and saleability of the developed real estate.

2: Process. Through contributions the process of the development can be enhanced. The process was enhanced through a better relation with the municipality and the community, leading to fewer conflicts and delays.

3: Future business possibilities. The contributions lead to a beneficial relation with the municipality and to better job satisfaction, increasing possibilities for future business.

4: Societal interest. The developers indicated that their societal interest has increased over the years. The societal interest seems to play an important role in decision-making.

Types

During the interviews certain variables were distinguished that did not fit in any of the categories of added value provided by Bult-Spiering (2003). The variables that did not fit all had a relation with the company itself, its employees and future business possibilities. Therefore, a fifth category was added; business added value. The survey resulted in a ranking of the value types determined by a 100-point sum that is distributed among the five value types. An even allocation of points would have led to a 20% score for each value type.

Financial added value scored highest, with a score of 33%. Overall, the concept added value was rated second important with an average score of 25%. Both score over the average of 20%, so this indicates developers are predominantly driven by financial added value and concept added value. The results of round two show a similarity with prior studies that indicate that developers are primarily focused on financial aspects (Ramselaar & Keeris, 2011). There was, however, a low level of consensus among the contractor and independent developers for the weight of the financial added value, and a low level of consensus for the funded and independent developers for the weight of the concept added value.

There seemed to be agreement on the business added value, which ranked fourth. Procedural added value ranked third and contextual added value ranked fifth. Both were subject to big differences between the developers.

Overall, the contextual added value was ranked lowest. The interrelation between the variables show that overall, the contextual added value type has a less direct impact on the developer. Variables in the concept, financial and procedural added value type that lead to a better saleability or process can mean a direct result for the developer. The future business possibilities are an indirect benefit. This shows a relation between how direct a benefit is received and how important the respondents have rated the value type. The more direct the benefit is received, the more important an added value is.

Within the developer types, there seems to be a difference in how important the types of added value are in their decision-making. The funded and independent developers rated the financial added value much higher compared to the other value types than the contractor developer. This could be explained by the different interests per developer.

Contractor developer. A contractor-developers main goal is to maintain workflow for the contractor, small margins are not unusual (Franzen *et al.*, 2017). This could explain why the contractor developer rates the financial added value relatively low, compared with other developers. Because the contractor developer is mostly concerned with quantity, this could explain why the procedural added value is rated very high, compared with the other developers. A better process means better continuation of the work. One other thing that stands out is the contextual added value. Other respondents indicated that contractor developers operate very efficient and focused on square meters (INT9). Also, they operate with low margins which might indicate they are focussed on their own development. This explains why contractor developers might be less focused on adding value to the context compared with other developers.

Funded developer. Backed by financial institutions, the funded developers' interests are driven by financial results (Nozeman & Fokkema, 2008). This could explain why the funded developer rated the financial added value much higher than the other value types. The difference was also higher relative to other developers. The funded developer rated the concept added value type relatively low. Again, this in line with the main focus of the developer. Other respondents (INT1; INT4) indicated that investors are changing and demand more societal impact. This could explain why contextual added value was rated 17%, which is the highest of all developers.

Independent developer. The independent developer is completely dependent on its results for the continuation of business. The financial added value was the most important, but followed more closely by the concept added value, compared to the funded developer. This can be explained by the interest of an independent developer; they need to differentiate themselves (Franzen *et al.*, 2017). The independent

developer rated the procedural added value lowest of all developers. Which again is not surprising considering the independent developers are often smaller organizations, and, independent. The size and autonomy of independent developers could result in less demand for procedural added value.

8.3 Conditions to contributing

During the first round seven conditions were identified as additional conditions for doing contributions, next to the general feasibility conditions. These conditions were validated through the survey in the second round.

The most frequently mentioned condition was *financial feasibility* (V1). This is very similar to the general feasibility condition *financial viability*. In the definition provided by Adams & Tiesdell (2012), financial viability means the costs are outweighed by the revenues. In real estate development, costs precede revenues. Besides, costs and revenues are subject to market conditions, delays and other factors. The answer to financial viability is therefore not a very clear line, because both costs and revenues are uncertain. With the financial feasibility condition, participants indicated that the willingness to contribute increases when a business case is 'healthy'. This is backed by participants stating that a maximizing profit is not the main goal of a developer (INT11) and that there is an unwritten rule that you contribute when a business case allows it (INT3).

A *good relation with the municipality* (V4) was named one of the most important conditions to doing contributions. Goodwill can exist at a municipality, but it also works vice versa. A constructive relation between the municipality and developers that allows for dialogue is necessary to allow private involvement. As the respondents indicated, a good relation with the municipality is also a result of doing the contribution.

Tender criteria (V2) was another condition that was frequently mentioned. In tenders, developers want to win and due to competition, they push their proposal to the limits. This often leads to contributions to public space that were higher than the public costs that can be recovered through the Spatial Planning Act.

Respondents indicated that being involved in an urban redevelopment as an area developer instead of a project developer was a condition to doing contributions. This was supported by several respondents indicating that in area development, you always take extra steps (INT1; INT8; INT13). The size of the development determines the willingness to invest. Scale advantages of bigger advantages play a role.

Other criteria were mentioned less often. The question asked in the survey was if a condition was a necessary condition to doing a contribution. The conditions that were less frequently mentioned are evaluated as soft conditions; conditions that weigh in during decision-making, but are not directly necessary. *Long-term involvement* (V5) can be considered a soft condition. Short-term involvement does not necessary mean that developers do not want to contribute. On the contrary, most developers were not involved after completion. Some respondents did indicate that long-term involvement means they would contribute more. This makes sense, as most of the added value of contributions benefit the ones involved after completion.

The other soft conditions were *direct relation with real estate* (V3) and *area dominance* (V7).

The *increased development value* had a relation with the financial viability feasibility criteria. Market appeal is another one of the feasibility criteria for development (Adams & Tiesdell, 2012). This had a relation with the *increased chance and speed of sale* variable, which itself had a relation with *enhanced area positioning* and *improved performance of concept*. This indicates that doing a contribution to public space can have a positive relation with the development feasibility.

8.4 Public role

During the interviews, respondents were asked about what kind of public role would increase their willingness to invest. Most participants recognized that the public role was changing from active to passive. The changing role is considered to be driven by market conditions. Bigger developments should be governed with a passive policy. The policy has formally changed, but respondents indicated that the municipality is still highly involved through regulating instruments. Developers favoured a passive land policy in the first round. A passive policy contains the use of market shaping and capacity building instruments. An active policy contains the use of regulating roles. When faced with the roles in the second round, the developers indicated that their willingness to contribute is the lowest when the municipality uses regulating instruments. A simulating role was ranked third. This confirms the findings from the first round, the developers prefer a passive policy.

Role	Rank	Land policy
Capacity building	1 st	Dacciuo
Market shaping	2 nd	Passive
Stimulating	3 rd	Activo
Regulating	4 th	ACLIVE

Figure 8.05: roles that increase the developers' willingness to contribute and their related policy

Active versus passive role:

When adopting a passive policy, a municipality sets the boundaries for the development but need private responsibility in the development. This means a passive policy requires private sector effort (Franzen *et al.*, 2017). Developers indicated that a passive role would increase their willingness to contribute and the role would allow them to develop more in accordance with the users demands. However, when the developers act slowly, municipalities should be able to use stimulating instruments.

The participants indicated that the capacity building role of the municipality is the most important in urban redevelopments. In an area with multiple stakeholders, the municipality should facilitate cooperation between them. Using these tools, a municipality increases the willingness to contribute most. When the municipality adopts a passive role, the use of market shaping instruments is important. As one respondent described, a passive role only works if there is an updated planning policy. Verheul *et al.* (2017) identified unclear vision and plans as one of the main barriers of urban redevelopment. During the interviews, the participants indicated that when private involvement in public space increases, the municipality should make use of its regulating instruments. Developers and the municipalities see problems with handing over control to the private sector. When giving up control over public space, the municipality needs to set clear rules for the private sector. While developers trust themselves to deliver sufficient quality, they do not have that same trust in other developers. The bad name of the sector is caused by hit-and-run developers and these still operate. Some developers disagreed, stating that rules are to limiting and that leaving everything to developers is preferable.

8.5 Stimulating urban redevelopment

To be able to answer the main question of the empirical part of the research, the results from the empirical research are compared with the findings of the literature review.

How can the developer's contribution stimulate urban redevelopment and how does this influence the decision-making of real estate developers?

In order to stimulate urban redevelopment, financial deficits have to be overcome. The developers' contribution, is an instrument that lets developers voluntarily contribute to costs traditionally seen as a public responsibility. Public space was the most important cost that caused financial deficits (Holt *et al.*, 2018). Literature hinted at an increasing private role in the conception of public space. This is confirmed by the interviewees. Through the developers' contribution a developer takes responsibility of public space in some way.

Two strategies can be adopted to stimulate feasibility, optimizing and widening the business case (Heurkens *et al.*, 2020). Through the interviews benefits of the contribution are observed and validated through a survey. The added values support the two strategies.

The business case can be optimized by reducing costs caused by conflicts and delays, which is represented by *enhanced process with municipality* (P1) variable. Two types of contributions are identified, investments that add quality and those which are necessary to initiate development. This shows that besides initiating development, the contributions can also be used to increase revenues. Increased revenues are represented by *increased development value* (F1) and *increased chance and speed of sale* (F2).

Strategy two requires developers to include other values in their business case. Although financial added value is the most important for the developer, this study shows that developers can benefit in the form of other values. The relations between the variables shows that these other values can eventually lead to the most important outcomes in developer decision making, namely, saleability, process, future business possibilities and societal interest.

The decision-making process is evaluated by adapting the conceptual model of this study. In figure 8.06 the conceptual model of this research the results from the study are added. The conceptual is supplemented with the types of added value, developer goals, types of responsibility, types of investment, conditions to doing a contribution, preferred public roles and policy.



Figure 8.06: conceptual model, adapted with findings

8.6 Expert interview

In this part the results are evaluated through expert interviews. Both experts have an academic background and have a function at a real estate education and research facility. The experts were confronted with the results and preliminary conclusions from both rounds. Through predefined questions the experts were asked to provide their opinion and reflect upon the results of the study.

The developers' contribution in practice

Both experts recognized that in urban redevelopment areas, more private involvement in public space is needed.

The Spatial Planning Act states that there are three ways a municipality can recover costs for public space; private law partnership agreements, cost recovery under public law and sale of land that has been prepared for construction. In 95% of the cases the costs are recovered through an anterior agreement.

"Is there another way to contribute to public space than through anterior agreements? "

Expert 2 described that there are no other methods to contribute than through anterior agreements, except in the form of semi-public space. The benefit of anterior agreements is that the process is quicker and a municipality is committed to a project (Expert 1). Everything that is not included in these agreements is a non-obligatory payment, and this is illegal because it can lead to extortion (Expert 1). Non-obligatory payments can lead to abuse of power, so every contribution must be formalized in an anterior agreement.

Other contributions in the form of privately owned and maintained public space, or semi-public space, are possible. These contributions can also be part of a tender (Expert 1). These contributions do not contribute directly to the public financial deficits, but can add value to an area (Expert 2). This shows the ambiguity of the definition of a developers' contribution. A developer has an interest in saying he/she made a contribution outside of his business case, while in fact it was a regular contribution to public space.

The anterior agreements are made prior to the development, but real estate development requires costs to precede the benefits. Adding value to an area is therefore riskier to do at prior to the development than after (Expert 2). This is a paradox, because private voluntary contributions should be formalized before the development in order for it not to be a non-obligatory payment (Expert 1).

Contributions in the form of temporary full responsibility (R2) is always driven by fiscal reasons (Expert 1). Because a developer is not an investor, cash-flow is really important to the developer. Holding on to real estate or to maintenance puts a heavy burden on the financial balance, therefore it is always driven by a fiscal motivation.

Benefits to the developer

The experts were faced with the list of variables and were asked to provide comments on them. Also, the main drivers behind these decisions were asked.

Developers contribute to enhance the process with the municipality and to maximize the real estate value. Other, main reasons are making real estate more attractive and because they have an intrinsic motivation (Expert 2).

An enhanced process can be related to the moment the anterior agreement was made. Because of the moment the agreement is prior to development, private engagement helps the process (Expert 1). That a contributions lead to being allowed to increase the size of the development is not uncommon (Expert 1).

That "intrinsic motivation really is a thing" (Expert 2) is in line with what was described by multiple interviewees during round one, and by 100% of the respondents in round two.

On the *improved performance of concept* variable: a concept only works when it is being adopted by the residents. A developer can try to improve a concept at first, but it will work best when a developer is involved longer. This will also result in a higher value received (Expert 2).

The variables that were dropped after round two; *decreased tenant turnover, cooperation with other stakeholders* and *continuity*, were validated by Expert 1 and agreed they are not of the same level.

8.

The experts confirm that direct benefits (financial, conceptual and procedural value) are more important to developers than indirect benefits (business and especially contextual value).

Conditions to contributing

Long-term involvement as a condition to doing contributions was only confirmed by a few developers, and can be considered a soft condition. Short-term involvement does not necessary mean that developers do not want to contribute. However, developers indicate that hit-and-run developers that are not willing to contribute and only think about quick wins are still present. Because of the institutional fragmentation, most benefits of the contributions end up at the ones involved after completion. Because of the single perspective of the results, the experts were asked to confirm this condition.

"Do you believe long-term involvement is not necessarily a condition to doing contributions?"

Although not direct, every developer is involved in the long-term. Expert 2: "everyone talks, everyone has an opinion". There always is a long-term spinoff, therefore, a developer always has an interest in a development after completion. Developers that show they are not willing to take an extra step will build a reputation. This relates to the third goal of developers; future business possibilities.

The *direct relation with real estate* condition to contributions was only confirmed by 44% of the respondents in round two. However, a contribution must always have a direct relation according to the Spatial Planning Act (Expert 1). This conflicting result might be caused be the term direct relation, which is open for interpretation to the respondents.

Public Role

Developers indicate a facilitating role increases their willingness to contribute. The contributions are necessary to stimulate urban redevelopment. The facilitating role related to a passive land policy, however, requires private effort to initiate development. The experts were asked to provide an opinion on the relation between facilitating role and stimulating redevelopment.

"Does a facilitating role stimulate redevelopment?"

Both experts indicate that a facilitating role causes stagnation in the urban redevelopment process when no developers are willing to initiate the process. The facilitating role is therefore the exact opposite of what is necessary to speed up development when there is no private initiative. The facilitating role also brings another risk. Because of stagnation, blight becomes an issue (Expert 1). Not redeveloping for a long period also means a lower quality for a long period. Blight also scares away other investments, causing the area to degrade.

However, in an area with multiple stakeholders such as urban redevelopment, capacity building instruments are helpful to let developers compete. In those cases, when the market conditions allow it, a passive policy works better than an active policy (Expert 2). Cooperation is very important because it helps to initiate development. The cooperation between different developers leads to a bigger willingness to invest. Expert 2: "give multiple developers a seat at one table and you will see they will do their best to prove they are willing to take that extra step". When developers operate completely independent in an area with multiple stakeholders, there is a first mover problem; developers do not act because the other developers will not.

Expert 2 agrees with the developers that a passive policy works best in urban redevelopments, with the condition that cooperation is organized and the municipality must have a big stick to force developers to act. This means a municipality must also use its stimulating and regulating instruments. A municipality never uses only one role, the roles are always used in conjunction (Expert 1).

9. Conclusions and recommendations

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9.1 Final conclusions

This part will cover the conclusions of this study. Following the problem statement, the main question of this study was *how can value capturing instruments stimulate urban redevelopment and how does this influence the decision-making of real estate developers*? First the sub-questions for the literature study will be answered, which lead to the research questions for the empirical part of this study.

Literature review

How can urban redevelopment be stimulated?

While there is a big demand for urban housing, urban redevelopment deals with barriers. High costs in infrastructure, land acquisition, sanitation and public space, combined with changing market conditions and policy act as barriers that cause financial deficits. Public costs are considered the most important reason for financial deficits. Private contributions to public space are required to initiate urban redevelopment. Investments in public space help to stimulate feasibility through optimizing and widening the development business case. Over the years, the private sector has already become more involved in the development of public space and literature hints at the benefits of private contributions to public space.

What is value capturing?

Value capturing is a term that is used for instruments that, at a certain point in time or timespan, claim (a share of) the value increments from private actors, created by investments in public goods, and send it back to the actor/activity that caused that value increase, therefore making it equitable.

Which value capturing instruments can be found in literature?

There are a variety of instruments that are known in literature. In these instruments, the value increments have to be assessed and some kind of contribution to the investment causing the increment has to be decided upon. Many instruments are complex and time consuming to implement. Implementing instruments that require tax reform is especially difficult. Some instruments are easier to implement than others due to simplicity. The developers' contribution is an instrument that seems to facilitate the call for private investments. Through this instrument, voluntary contributions are made to public goods. Because the instrument can be interpreted broadly and implemented without regulatory changes, the developers' contribution was selected as the most promising instrument that was able to stimulate urban redevelopment. Based on this conclusion, the empirical part of this research was initiated.

By focussing on the developers' contribution value capturing instrument, the main research question for the following part was: *How can the developer's contribution stimulate urban redevelopment and how does this influence the decision-making of real estate developers*? The following sub-questions will be answered based on the results of the empirical research. These answers will form the basis of the answer for the main research question.

Empirical research

What does the developer's contribution look like in practice?

Developers can contribute by taking responsibility in the development and maintenance public space. Through the developers' contribution, contributions were made to types of costs that are reasons for public financial deficits. Two forms of contributions are distinguished, those which add quality and those which are necessary to initiate urban redevelopment. In most cases the contribution is settled through an anterior agreement. Six different kinds of taking responsibility are identified, which vary from taking full to partial responsibility. There is a trend that developers are more willing to take responsibility in public space.

Taking full responsibility of public space means that the municipality hands over control. This comes with benefits and disadvantages. By taking full responsibility a developer has more control over the area and concept. Developers also indicate that private maintenance is of higher quality than public maintenance. Private maintenance can be enforced through owners-associations and apartment rights. Privately maintained public space is also better used. The benefits have a positive relation on the development value received by a developer.

Developers have differing opinions on whether a developer should take responsibility of publicly accessible space. One of the disadvantages is that a municipality also loses control by giving up ownership. The other problem is that some developers feel semi-public space should be closable to make it manageable. Most developers indicate public space should not be excludable, which is a subjective concept and is determined by soft borders rather than physical borders. This brings up the question whether semi-public space is an appropriate alternative for public space.

Another method of contributing that developers described is through taking partial responsibility in the development. Developers indicate they are more willing to do the development themselves than to support public space through a financial contribution, because being in charge of the development leads to more control over the outcome. A big barrier to doing contributions to public space that is maintained by the municipality is the approval of the maintenance department during negotiations. While many developers indicate they are willing to contribute to a high quality, freedom is limited by the municipal maintenance department.

Why would a developer choose to do a developers' contribution?

added value is.

Contributions to public space potentially lead to certain benefits for developers, which can be expressed through twenty-four variables grouped in in five types. The entire final list of added value variables can be found in appendix C. Certain benefits receive additional attention from developers. Through contributions, the relation with the municipality can be improved. This can lead to a better process, benefits in acquisition and leverage within the project due to informal relations. Although very subjective, intrinsic motivation plays an important a role in the decision-making. Contributing can lead to an increased end value and marketability of the development. The quality of public space is increasingly better valued by the market. The variables are interrelated and lead to four main outcomes; saleability, process, future business possibilities and societal interest. The relations between the variables can be found in appendix D. In the decision-making process, developers are driven by the financial added value, followed by conceptual added value. Other value types are ranked lower, but do make up for a significant portion of their decision-making. Developers are focused on direct benefits. The more direct the benefit is received, the more important an

Each developer has its own interests, therefore the role a certain benefit plays in the decision-making is different. Funded developers are more focussed on financial aspects and are less concerned with adding value to the concept relative to the others. Compared to the others, independent developers are the least concerned about procedural added value. Contractor developers are most concerned about increasing the quality of the concept and the process relative to the other developers, and the least concerned about contextual added value.

Under what conditions is a developer willing to do a developers' contribution?

Four hard conditions and three soft conditions are identified. The complete list of conditions can be found in appendix E. The most important condition to doing contributions is financial feasibility. How healthy a business case is determining to which extend a developer is willing to do a contribution. Another important condition to doing contributions is a constructive relationship with the municipality. The size of a municipality determines the willingness to invest. Being involved as area developer means developers are willing to contribute. Involvement after completion is a soft condition to contributing. Although not direct, a developer

is always involved after completion due to the informal relations within the world of real estate development. This means that developers that do not contribute slowly build a reputation that has a negative effect on their future business possibilities.

What public role is necessary to increase the willingness to commit to a developers' contribution?

Developers indicated that instruments belonging to a passive public policy leads to the biggest willingness to contribute. Capacity building instruments are ranked highest, followed by market shaping tools. Stimulating instruments was ranked third and regulating instruments were ranked lowest. This indicated a clear preference for a passive policy over an active policy.

Urban redevelopment is a process in which often multiple stakeholders are involved. Cooperation between those stakeholders is very important in order to initiate the development. The municipality can facilitate this cooperation through capacity building instruments. Developers indicated that an important condition for a passive policy to work is through updated planning policies, belonging to the market shaping instruments.

A passive policy requires private effort. This could lead to stagnation of the development. A municipality never uses only one role, the roles are always used in conjunction. The passive policy should therefore be combined with regulatory and stimulating instruments to act as big stick to force developers to act.

Another issue with the passive policy is that the private initiative means handing over control. While developers trust themselves to develop according to high standards, they do not have the same trust for other developers. They therefore stress the importance of regulating instruments, which should regulate a minimum quality standard.

Concluding, developers have the biggest willingness to contribute when a municipality adopts a passive policy, which means a combination of instruments belonging in all roles that allows them to take initiative, cooperate and develop according to a minimum standard.

Main research question:

With the insights from the sub-questions, the main research question of this study can be answered: How can the developer's contribution stimulate urban redevelopment and how does this influence the decision-making of real estate developers?

Urban development is hindered by financial barriers that cause public financial deficits. Stimulating urban redevelopment can be achieved by stimulating feasibility. The most important cost that causes financial deficits is public space. The developers' contribution is a value-capturing tool that can facilitate private contributions to public space. Through contributions in public space, feasibility can be stimulated by optimizing and widening the developers' business case.

The developer decision-making is affected by the added value of the contribution, conditions to doing a contribution, the type of contribution and the public role. Figure 8.06 presents a model of the developers' decision-making when considering a developers' contribution.

By doing a contribution, the developer is taking over a liability from the municipality. However, a developer might be willing to contribute because of the benefits of doing the contribution. The benefits of committing to a developers' contribution to public space are financial, concept, procedural, business and external added value. The decision of doing a contribution is dependent on how a developer values these benefits. There is a difference in how different types of developers value the benefits. Overall, financial added value is the most important benefit to the developer. Other added values play a role in the decision-making to.

There are also certain conditions to doing a contribution. The hard conditions; financial feasibility, tender criteria, constructive relation with the municipality and area development are criteria that cause a developer to do a contribution. The soft conditions also weigh in to the decision, but are not necessary.

Developers indicate they are most willing to use the developers' contribution when the municipality adopts a passive policy. Because of the required private effort when adopting a passive policy, urban redevelopment

can only be stimulated when the municipality uses regulatory and stimulating instruments to force developers to act.

To conclude, a developers' contribution can stimulate urban redevelopment by overcoming one of the financial barriers. By doing so, the developer can add value to society and itself.

9.2 Recommendations

Based on the findings of this research, recommendations are formed that are focussed on how the develops' contribution can stimulate urban redevelopment. The findings in this study indicate that developers and municipalities can have a mutual interest in voluntary private responsibility in the conception of public space. The recommendations are aimed at developers and municipalities in urban redevelopments. Furthermore, recommendations for further research are formulated.

Municipality

The following recommendations describe how a municipality can learn by understanding what context to create to enable voluntary private contributions to public scape:

- This research indicates that private contributions to public space can help to overcome the financial barriers regarding urban redevelopment. When faced with public financial deficits, a municipality should therefore take this in mind, and should try to create a context in which the developers' contribution is enabled.
- Enabling private contributions to public space means allowing more private involvement in the development of public space. This means a municipality must be willing to take a more passive role in urban redevelopments.
- A passive role means private effort is necessary for development to commence. When developers do not act, the stagnation of urban redevelopment can lead to blight. This is why a municipality should always use a passive policy in combination with regulating and stimulating instruments to stimulate or force developers to act.
- Developers indicate that they trust themselves to deliver high quality, but do not trust others to do the same. Without regulating tools, hit-and-run developers can develop projects with a sub-optimal outcome as they go for quick wins, without thinking about long-term benefits. This is why regulating tools are necessary in order steer development in a direction with most benefits to society.
- Developers indicate that they are willing to provide contributions to a high quality, but that freedom is limited when a public space is maintained by the municipality. They indicate plan making and quality standards are too much focussed on maintenance and efficiency. Allowing more freedom could result in more private involvement and a higher quality.
- There are discussions about whether semi-public space can act as a replacement for public space. The interviews stressed that excludability is the biggest cause of this argument. Excludability can be experienced by the public through not only hard physical borders, but also through soft borders. On the other hand, developers indicate that to make a place manageable a place should be closable. Developers also indicate that a clear border between public and private ownership is necessary to prevent degradation. This is why the level of excludability and the manageability of a place should be an important subject of negotiations and plan making.
- Developers indicate they have a better understanding of the markets' demand. They also indicate that privately maintained space is used better. The developers indicate that private involvement therefore leads to a better quality of the public space in a city. Maximizing quality should be a shared interest for the developer and the municipality, therefore a municipality should be aware of this difference when making plans, during negotiation and when approving plans.

- A municipality should be aware of the conditions to doing contributions. This allows a municipality to predict in which areas it is likely or less likely a private involvement in public space will take place.

Developer

Taking private responsibility in the conception and maintenance of public space has certain benefits. The following recommendations describe how developers can make use of this research by realizing the benefits a voluntary private contribution can have.

- Figure 8.06 presents a model of the developers' decision-making when considering a developers' contribution. This model shows that the decision-making is affected by the added values of the contribution, conditions to doing a contribution, the type of contribution and the public role. A developer should be aware of the factors that weigh in on the decision to reach an optimal outcome.
- Private contributions to pubic space can lead to benefits for to developers that eventually lead to an increased saleability, improved process, more future business possibilities and a societal interest. Developers should be aware of these benefits, because a developer will weigh the costs and benefits of contributions when making investment decisions. Understanding the benefits better can lead to more contributions that cause a mutual benefit for both municipality and the developer.
- Stimulating feasibility requires developers to widen their business cases. This means other, less direct benefits should be taken into account when making investment decisions. The relation between the variables show that eventually, the indirect variables lead to benefits that are more directly experienced by the developer. Widening the business case is therefore not a subject of lowering profits. Many developers indicate that eventually the other added values of doing contributions outweigh the costs. Developers should be aware of these added values.
- Without stimulating urban redevelopment, stagnation causes areas to degrade. When developers have an interest in the form of land or real estate, they have an interest in stimulating the development. Through a contribution the financial feasibility of the urban redevelopment can be stimulated. The developer should be aware of the fact that he plays an important role in preventing stagnation of development.

Housing associations

— Because of their long-time involvement, housing associations would be an actor that would benefit from contributions in public space. Developers indicated that housing associations do not want to take responsibility in public space because it is not in their main goal. This study indicates that housing associations can benefit from doing these contributions. They should be aware of the benefits, as contributing can benefit the organization as well as their tenants.

Further research

Because this study has been completed does not mean the subject of this study has been researched completely. Further research can extend the field of knowledge regarding urban redevelopment and value capturing tools. The following recommendations are formulated for further research:

— The scope of this research was the value capturing instrument called the developers' contribution. As portrayed in the literature review, value capturing is a method that can be implemented through various instruments. Literature suggests that the use of value capturing instruments can increase the level of private contributions to public goods. Future research into other value capturing instruments could use the benefits of these private contributions found in this research, but focus on the implementation of the instruments instead.

- The focus of this research was on the benefits private contributions create at the side of the developer. Although variables from the external added value indicate benefits to the public, future research could further examine the benefits received by both the municipality and society.
- In this study the twenty-four final added value variables were validated through a Likert 3-point scale. This allowed the panel members to confirm and complement their original answers. Through a constant sum method, the value types in which the variables are grouped were weighed. The individual variables were not weighed through methods than would result in more descriptive data, because this aspect was out of scope. Because the interviews indicated that there was a difference in the level of significance between the variables, further statistical research in the weight of each variable could increase the field knowledge about developer decision-making when dealing with a developers' contribution.
- Within this study, the developers are grouped along their developer types. Although the developers' company profile plays a big role in how a developer will act, other factors might be interesting to research. The amount of spread in the data shows that there might be other factors weighing in. During this study the deliberate choice was made not to examine the added value and public role preference by other characteristics of the panel members. Although there was data on their experience, role and education background, this data was too thin and the spread was too high to make reliable conclusions. Through further studies into different developer characteristics and its relation to decision-making, more reliable conclusions for the entire population of developers can be made.
- In the panel not every developer type was represented by the same number of developers. Only one investing developer and two developers from one funded developer were interviewed. Subsequently, in the survey the investing developer did not participate. Furthermore, the *other developers* and *delegated developer* types did not take part in this study. Because the entire population of developers is made up out of developers belonging each type, further research could include these developers.
- The panel member consisted out of a group of twelve developers and one real estate investor. Many assumptions and educated guesses were made by developers about the end value received. This is an aspect that is prone to real estate development, as costs precede the revenues. There is always an uncertainty to the end value. This end value is determined by individual buyers and investors. Through further research their interest could be studied to make more valid assumptions on an end value received.
- The conditions for doing developers' contributions are a list that is by no means exhaustive. Further explorative research could indicate more conditions to doing voluntary private contributions.
- This study indicates that a passive public role increases the developers' willingness to commit to a developers' contribution. Although through the literature review, the interviews and the expert interview some implications about this role is formulated, further research can broaden the field of knowledge about the implications of this role and the relation to the willingness for voluntary private contributions.



10.1 Discussion of results

The field of knowledge regarding the effects and implementation of value capturing instruments, and in this case specifically the developers' contribution, was thin. While some authors describe the benefits of investments in public space, the benefits to developers when doing a voluntary contribution outside of their direct business case were to be observed. This led to the structure of the empirical research. The aim of the combination between the interviews and the survey was to first explore and subsequently validate the data received.

Literature suggested that real estate development was mainly driven by financial aspects. While this study confirmed that financial aspects are dominant in developer decision-making, other aspects were considered more important that literature stressed. Especially the intrinsic motivation argument is an aspect that was not discovered during the literature review. However, the developers in this study underlined the importance of this motivator.

Other added value variables were only mentioned a few times during the first round. An example is the *sustainability* variable, which was only mentioned by one panel-member, but confirmed by 100% of the respondents in round two. The fact that most respondents did not mention a variable in an open question, but confirmed it in a closed question, raises questions about how true the answers in the second round were.

The weight that is given to the added value types using the constant sum method with 9 respondents resulted in answers that provided low confidence of consensus in some cases. The wide range of answers and a very high standard deviation compared with the sample averages, mean the validity of some conclusions is low. The focus of this study, however, was mainly to explore the different variables in the decision-making process. Further statistical research of a bigger sample could provide more validity to the answers.

During this study, the interplay between the different roles and instruments of a municipality when using a policy became clearer. The method for choosing a role that would increase the willingness to contribute is therefore a question that is subject for debate, as a municipality will use a combination of those tools when adopting a policy. The conclusion that developers think a passive policy will increase their willingness to invest can therefore have a relation with their overall preference. As a private sector actor, it was therefore predictable that they would choose a role minimizing rules and maximizing possibilities.

During the interviews, not every participant reacted in the same way. Confusion about the topic sometimes led to answers that elaborated upon different subjects. This showed that the subject of contributing can be hard to define. Because the researcher does not have any influence during the survey, misinterpretation could have implications for the trustworthiness' of the answers.

For the ranking of the added value types and preferred public role, the results are examined for differences between developer types. There might be other determinants than the type in which a developer company can be grouped. It could also be useful to look for differences in experience or function of a developer. The focus for this research was on the developer type, because the data was too thin and there was too much spread in the data of other determinants that were recorded to make any reliable conclusions.

More on this in the part about external validity.

Limitations

The Delphi method is a useful tool to collect opinions. Literature around the method suggests there are limitations to the method due to aspects of seeking consensus, controlled feedback and the lack of panelmember interaction. Powell (2003) notes that literature suggests the consensus reached with the Delphi method can lead to a "watered down version of the best opinion", or to "bland statements that represented the lowest common denominator". The conclusions of this research should therefore be considered as what they are, opinions. When used correctly, Delphi can contribute significantly to broadening knowledge (Keeney *et al.*, 2001). The different kind of contributions, variables and conditions that resulted from this study are new frameworks that can be further researched.

Because of time constraints, it was decided that the mount of panel members was limited to thirteen. The survey that followed asked the same panel members for their answers. This limited the amount of input for this research. This resulted in the fact that not all developer types were included in this research.

The Delphi panel consisted out of members that had different backgrounds. Keeney (2001) warns about the potentially misleading title of expert for the participants. The level of expertise of this panel can be seen as a limitation, although it is up for debate. 62% of the panel members had over ten years of experience in the field.

The weight that developers give the added value types in decision-making does not say anything about the variables in that category. For example, the financial added value type consisted out of, among others, *increased development value* and increased *value retention*. While the interviews indicated that there is a difference in the weight of these variables, this study cannot do any hard conclusions because of this method.

Covid-19 crisis

Because of the Covid-19 crisis which took place during the empirical part of this research, some adjustments had to be made to the research method. The interviews had to take place via a digital video connection. Face to face interviewing allows for reading of non-verbal communication. This is more difficult through a video connection. Because of this, small hints could have been missed that could have led to more specific information requests from the interviewer. Another implication of the required digital interviews was that a real-life expert panel was impossible. A regular expert panel with discussions between the panel members over a digital connection considered impossible due to the technical and communicative constraints.

10.2 Validity and reliability

Reliability refers to the consistency of a measure (Field, 2013). Reliability is concerned with whether the results of a study can be repeated. Whether this study can be replicated is assured by elaborately describing the method and adding the participant invitation, interview protocol and survey to this research. By using the method described in this research, replication of this study should therefore come to similar results. However, the Delphi method is prone to flaws in reliability according to some authors (Keeney et al., 2001). If used in the same formation, there is no guarantee that the same results will be obtained (Keeney et al., 2001). Because of the explorative element in this study, observing the variables in a similar context could lead to slightly different answers because the results could be interpreted different. To increase the reliability of these answers, some questions were validated through the survey and by the expert interviews. Also, when compared with results of similar studies in literature the results of this research seemed to be reliable. Validity means whether a method actually measured what it was set out to measure (Field, 2013). Internal validity refers to whether conclusions based on causality relations are valid (Bryman, 2015). This results from this study must be cause by a certain independent variable. The independent variable in this study was the developers' contribution. The conclusions that are made assume that the respondents had an understanding of what this concept meant and that the effects described by the participants were caused by it.

Although an explanation was provided that explicitly told the respondents that the contribution should have been a contribution that was on top of what is legally required, this still could have led to answers that included the regular contribution to public space.

When developers say they contributed, it is a bit like a student marking his own homework. Another factor that could have played a role is that it is hard to make a reference. Because contribution happened there is

no similar situation where the situation did not happen. Because a baseline measurement is missing, it is hard to determine whether something was a contribution in the first place.

The missing baseline measurement also plays a role in defining the added value. Because there is no similar situation without a contribution, which value is added is hard to define. Also, due to the many factors that decide value in urban redevelopment it is hard to designate a certain value increment to a certain contribution.

Anterior cause a quicker process and municipal commitment to a project. This might have a relation with the *enhanced process with municipality* variable. Because there is no baseline, the enhanced relation with a municipality in the project might also be caused by the fact that the contribution was made through an anterior agreement.

External validity refers to whether the results from this research can be generalized beyond the context of this study (Bryman, 2015). For this research to be externally valid, the panel members should be a representative sample of the population. In Delphi, the representativeness of the panel can be assessed on the qualities of the panel (Powell, 2003). The quality of the panel is assured by having rules for the selection of participants. The research set out to have N>10 with >50% of the participants having more than ten years of experience in the field. This was achieved, with thirteen panel members and 62% having over ten years of experience. Also, groups with varying personalities and different perspectives produce higher quality answers than homogeneous groups (Delbecq et al., 1975). The entire population of developers is made up out of different developer types. During the first round the 'other' and 'delegated developer' types were not represented, and the 'investing' and 'funded' developers only consisted out of one company each. During the second round, only the 'contractor', 'funded' and 'independent' developers took part in the survey. This means that, based on the developer type a significant part of the developer population was not represented. However, through the depth of the semi-structured interviews and the number of interviews, the transferability is assured (Geertz, 1973). Also, many developers indicated they had a career at other developers prior to their current job. This means that developers themselves are already a representation of the population of developers. The panel consisted out of people with varying roles within their companies, varying from concept development, project development, acquisition, region managers and partners. The survey had a response rate of 69%. This can be considered acceptable in randomly selected samples (Bryman, 2015). Because the survey was handed out to the panel members, who were strategically selected, the incomplete response rate could lead to a less representative reflection of the population.

One other factor to representativeness is that the panel should not be picked based on their acquaintance with the interviewer. Because the world of development is a small world and finding participants can be tough, some panel members were eventually selected based on acquaintance. However, most of the respondents were selected by LinkedIn queries and through professional connections.

By combining semi-structured interviews with developers, expert interviews, findings from literature and publications, the conclusions of this study have been based on multiple perspectives and sources of information, ensuring transferability and thereby generalization of these results. There is one aspect of this study in which this conclusion about validity is not suiting. The weighing of the added value types is something that requires further quantitative research to make valid conclusions.



11.1 Research

Societal relevance

This research shows the benefits of private contributions to public space, therefore creating extra support for investments in a higher quality of public space. Stagnating urban redevelopment means the demand for dwellings is not facilitated, and those areas which are not developed suffer from blight. Stimulating redevelopment therefore has a societal relevance. This study was set in the context of the Dutch housing market, but the call for value capturing instruments is a worldwide phenomenon. The lessons from this study can be applied to similar contexts.

Interviewees indicated the increasing importance of qualitative public space. The lockdown measures during the covid-10 crisis caused everyone to make more use of nearby public space. This made the subject of qualitative public space even more relevant. Developers can learn from this study that private contributions in public space can lead to a number of benefits to them. By doing this, this research can contribute to achieving more support for qualitative public space.

Scientific relevance

This research fills a gap of knowledge about the implementation and effects of the developers' contribution. This study also concludes with a model for developer decision-making.

Frameworks regarding the developer decision-making could not be found in literature reviews. This means the conceptual model fitted with the outcomes of this research could have an impact on future research. The added value variables and framework build upon the frameworks provided by Bult-Spiering (2009) and ULI (2018). The conditions for doing contributions built upon the feasibility framework provided by Adams & Tiesdell (2012).

11.2 Method

The method used in this research is the Delphi method. This was not the initial approach of choice, but due to the consequences of the covid-19 crisis this method it turned out to be a good replacement for face to face interviews and expert panels. The individual interviews and controlled feedback allowed me to process data in between.

Because the developers' contribution with the definition used in this study was a term that was new for many panel members, this meant that some interviews did not went as well as the others. Although the relation between me and the interviewers was good, the answers that interviewees gave sometimes went in completely different directions. This meant the flow of each interview was totally different, which caused processing and analysing the interviews to be especially difficult and time consuming. The panel consisted out of thirteen members and lasted about 60 minutes each. This meant approximately thirteen hours of interviews had to be analysed.

The selection of respondents was done through LinkedIn queries and professional relations. Some developer types were not represented. Looking back, I would have selected two developers with similar functions for each developer type. This might have allowed the conclusions be narrower scoped and accurate.

The response rate for the second round was too low to base conclusions on some of the findings. These results are not shared in this report, because it was determined to keep them out of scope. The survey could also have been handed out among developers outside of the panel, if the new participants were correctly informed about the results of round one. This is not in line with the Delphi method, as new respondents did not go through the iterative process and could not provide input. More respondents to the survey meant

the individual variables could be weighed. This would mean the study would get a more quantitative approach.

11.3 Results

Value capturing is a term that is often used in literature and can be considered a buzz-word which has no singular definition (Heurkens, 2020). Through the literature review in the theory section, the use of value capturing instruments in urban redevelopment is explored and a list of value capturing instruments was composed. Not only did this provide a basis for the empirical research, this also established an understanding of the concept of value capturing. The empirical research led to a filled-in framework in which the developer's decision making is presented when considering the developers' contribution. Through the explorative nature of the first round of interviews, variables are distinguished which are later validated by the survey in the second round. Because of the characteristics of the Delphi method, these variables can be considered valid. The weighing of results, however, is something that requires more work in order for the findings to have more validity. This could be achieved by doing an additional round of Delphi, or a quantitative survey among a random sample of developers. However, this was out of scope for this study.

11.4 Personal reflection

Towards P1:

At the beginning of the graduation period, I quickly found a subject that I was interested in. During the summer before the start of education, I already had thought and talked with professionals about possible subjects and possible graduation internships. Based on my personal interest for urbanism and real estate development, the choice for the Urban Development Management lab was easy. During my Bachelor and Master, I was very interested in courses about economics and finance. I wanted to combine these subjects with urban development, so the initial focus was financing urban redevelopment through the perspective of a developer. After reading many articles and publications about this subject, the focus for my P1 was averting the unprofitable top margin in urban redevelopments: learning from innovative value-capturing instruments. The goal was to make an inventory of value capturing instruments and select the most relevant instrument(s).

Towards P2:

During the period between the P1 and P2 I started my graduation internship. Although it became clear there was no data I could use, KPMG provided me with a mentor and a relevant internship next to doing my thesis. The weeks before the P2 were very stressful. The list of value capturing instruments was completed, but the next steps were still unclear to me. The conceptual model that was presented during the P2 was a clear example of how unclear my approach was at that time. The initial focus was to do case studies of one of the instruments, but no relevant case could be found where one of the instruments was implemented.

Towards P3:

The feedback of the P2 was positive. After the P2, I experienced the first 'thesis dip'. Before the P3, I had yet to complete several courses from the Master that were postponed due to the covid-19 crisis. One of these courses was a course on qualitative research and these learnings proved to be indispensable for doing the interviews. Besides, the hours I had to spend doing these courses, next to an internship, caused my attention to be at other places than the thesis. Also, because I thought I did not know how to do interviews, I noticed
I procrastinated the interviews. The P3 was late in the overall process of this thesis. At the time of the P3, I had only done one interview. The feedback on the progress was positive, although it became clear I really needed to put in more work in order to finish the P4 on time

Towards P4:

Doing the interviews through over a digital video connection eventually turned out to work in my I favour in terms of respondents. At the beginning of the covid-19 crisis it was next to impossible to find developers willing to take part in the interviews, but after a while almost everyone that I contacted was willing to participate.

The period towards the P4 was particularly stressful. All thirteen interviews took place in a short period. On one hand this was very helpful because the full schedule of interviews allowed me to be in the flow of doing interviews, but on the other hand it was not possible to take a step back and look at the results. The expert interviews followed. While doing the expert interviews, I was still in the middle of processing the data. This actually allowed me to understand the data better, but this limited the answers the experts could provide. The expert interviews took place two weeks before the P4 presentation.

Towards P5:

The feedback of the P4 was very positive. I made substantial progress since the previous supervisions. There were some misunderstandings after the presentation about the validity of the data. The discussion and reflection upon the results was something that still needed improvement. Although the presentation itself went very well, the final presentation needed to include more summarizing slides in between to make the content more digestible. Because of the summer holidays, the graduating presentation was delayed until late August. This meant a gap of 61 days between the P4 and the P5. With a summer vacation in planning, the weeks of not working on the subject resulted in at least a week of getting back into the subject. Eventually the deadline neared and the productivity increased, resulting in the thesis that lies before you.

Looking back on the research until now:

The problem with doing research is that at the beginning, you cannot be sure the path that you chose is the right one. The path that I chose started with a demand for housing, evolved into value capturing instruments and ended up in interviews about their responsibility in public space. Although there is a clear relation, which is portrayed in this study, it feels like the final conclusions are a long way from where I intended to go with this study. The other important critique is the vagueness of some of the main concepts in this study. The developers' contribution, the definition of public space and quality are concepts that can be interpreted in various ways. This caused the results to be bit '*wollig*' in some cases.

While the goal and exact subject of the research has changed over time, the way I wanted to do the study has not. Although I had the impression, I changed my entire thesis just before each presentation, it actually remained very similar. I am especially proud of the method that was chosen. Looking back at the P1, the approach has remained very similar. It took a great amount of energy and patience, but doing thirteen interviews has helped me understand the subject better and it improved my ability to do interviews.

I learned that I need deadlines in order to work efficiently. After each presentation I ended up in a dip with an extended period of slow progress. One of the reasons is that I felt very insecure about the direction is was taking and wanted to make sure I was doing something that made sense. This resulted in the reading of hundreds of publications and changing my entire thesis document. Like I mentioned, my approach is actually very similar to the one I chose at the beginning of the process. This taught me that sometimes just doing is better than overthinking.

12.

- Adams, D., & Tiesdell, S. (2012). *Shaping places: Urban planning, design and development.* London: Routledge. (2012).
- ABF Research (2019). Primos 2019: Prognose van bevolking, huishoudens en woningbehoefte 2018-2050. Retrieved from: <u>https://www.abfresearch.nl/publicaties/rapportage-primos-2019/</u>
- Batt, H. (2001). Value capture as a policy tool in transportation economics: An exploration in public finance in the tradition of henry george. *The American Journal of Economics and Sociology, 60*(1), 195-228. doi:10.1111/1536-7150.00061
- BPD (2017). 1 miljoen woningen nodig tot 2030 [Blog post]. Retrieved from https://www.bpd.nl/actueel/blog/integrale-gebiedsontwikkeling/1-miljoen-woningen-nodig-tot-2030
- Bouwend Nederland, Ministerie van BZK, NEPRO & VNG (2019. Reiswijzer Gebiedsontwikkeling 2019. Retrieved from: <u>https://europadecentraal.nl/wp-content/uploads/2019/10/Reiswijzer-Gebiedsontwikkeling-2019.pdf</u>
- Brammer, S., & Millington, A. (2005). Corporate reputation and philanthropy: an empirical analysis. *Journal* of Business Ethics, 61(1), 29–44.
- Brink Management (2017). De reële transformatiepotentie in bestaand bebouwd gebied. Reference: 000294.002.01/17000538-1/JvdW/ ISO: MHe/IJ .
- Bryman, A. (2015). Social research methods. Oxford, United Kingdom: Oxford University Press.
- Buijs, M. (2019). *Stikstof-uitspraak kost bouwsector komende vijf jaar 14 miljard omzet.* ABN Amro Insights. Retrieved from: <u>https://insights.abnamro.nl/2019/08/stikstof-uitspraak-kost-bouwsector-komende-vijf-jaar-14-miljard-omzet/</u>

Bult-Spiering, M. (2003). Publiek-private samenwerking: De interactie centraal. Utrecht: LEMMA.

CBS (2019). StatLine. Retrieved from: https://opendata.cbs.nl/statline#/CBS/nl/

Cervero, R., & Murakami, J. (2009). Rail and property development in hong kong: Experiences and extensions. *Urban Studies, 46*(10), 2019-2019. doi:10.1177/0042098009339431

College van Rijksadviseurs (*CRA*) (2019). Guiding Principles Metro Mix.

- Daamen, T. & Heurkens, E. (2018). 'Nieuwe' instrumenten in gebiedsontwikkeling: lessen uit de internationale praktijk. *Jaarcongres Stedelijke transformaties*.
- Daamen, T., Heurkens, E., Hobma, F., & van Zoest, S. (2019). Leren van stedelijke transformatie: Over sturingsdilemma's en veerkracht in binnenstedelijke gebiedsontwikkeling. Den Haag: Platform 31.
- Dale, A., & Newman, L. (2009). Sustainable development for some: Green urban development and affordability. *Local Environment, 14*(7), 669-681. doi:10.1080/13549830903089283
- De Graaf, K. (2008). De Dossier Reputaties. *Uitslagen 5e Building Business Reputatie Monitor*. Retrieved from: <u>https://docplayer.nl/9285834-Volker-wessels-vastgoed-ymere-en-arcadis-hebben-de-</u> <u>sterkste-reputaties.html</u>
- De Leeuw, M. (2019). Stijgende bouwkosten: alles wat u moet weten. Retrieved from: <u>https://www.cobouw.nl/bouwbreed/artikel/2018/05/stijging-bouwkosten-alles-wat-u-moet-weten-</u> <u>101261184? ga=2.50715567.721672660.1578062290-22241598.1574782804</u>
- Delbecq A.L., Van de Ven A.H. & Gustafson D.H. (1975) *Group Techniques for Program Planning: A Guide to Nominal and Delphi Processes.* Scott, Foresman and Co., Glenview, IL.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. sage.

- Fischer, L. (2019). Value capture in situ: Participation, evaluation, and signaling in kansas city, mo. *Journal of Planning Education and Research, (2019).* doi:10.1177/0739456X19873953
- Franzen, A., Ten Have, F., Uitzetter, D., & De Zeeuw, F. (2017). #trackchanges. *Veranderingen in de waardeketen van gebiedsontwikkeling*
- Geertz, C. (1973). Thick Description: Toward an interpretive theory of culture.'. *The Interpretation of Cultures: Selected Essays, New York, Basic Books.*
- Giezen, M., Driessen, P. P. J., Spit, T. J. M., & Gier, A. (2013). Grondbeleid en duurzame ruimtelijke ontwikkeling
- Gielen, D., & Tasan-Kok, T. (2010). Flexibility in planning and the consequences for public-value capturing in uk, spain and the netherlands. *European Planning Studies, 18*(7), 1097-1097. doi:10.1080/09654311003744191
- Hagendijk, K. (2017). *Transformatie naar meer wonen stad lukt niet zonder rijksbijdrage.* [Blog Post]. Retrieved from: <u>https://www.gebiedsontwikkeling.nu/artikelen/transformatie-naar-meer-wonen-stad-lukt-niet-zonder-rijksbijdrage/</u>
- Heurkens, E. (2012). *Private Sector-led Urban Development Projects: Management, Partnerships & Effects in the Netherlands and the UK.* Delft University of Technology, Delft
- Heurkens, E. (2018). Private sector-led urban development: Characteristics, typologies and practices. In: Squires, G., Heurkens, E. & Peiser, R. (eds.) *Routledge Companion to Real Estate Development*. London, Routledge, pp. 107-122
- Heurkens, E.. (2018-2). *Privaat-gestuurde Gebiedstransformaties*. Masterclass PPP bij Stedelijke Transformaties, Rotterdam, 8 February 2018.
- Heurkens, E., & Hobma, F. (2014). Private sector-led urban development projects: comparative insights from planning practices in the Netherlands and the UK. Planning Practice and Research, 29(4), 350-369.
- Heurkens, E., Homba, F., Verheul, W.J., & Daamen, T. (2020). Essay: Financiering van gebiedstransformatie. Den Haag: Programma Stedelijke Transformatie/Platform31
- Hobma, F., & de Jong, P. (2016). *Planning and development law in the netherlands : An introduction* (Eerste druk ed.). 's-Gravenhage: Instituut voor Bouwrecht.
- Holt, D., Mulder, K., & van Walsum, L. (2018). *Analyse onrendabele toppen.* Den Haag: Programma Stedelijke Transformatie
- Ingram, G. K., & Hong, Y.-H. (2012). *Value capture and land policies.* Bolton: The Lincoln Institute of Land Policy.
- Keeney, S., Hasson, F., & McKenna, H. P. (2001). A critical review of the Delphi technique as a research methodology for nursing. *International journal of nursing studies, 38*(2), 195-200.
- Knowles, R., & Ferbrache, F. (2016). Evaluation of wider economic impacts of light rail investment on cities. Journal of Transport Geography, 54, 430-439. doi:10.1016/j.jtrangeo.2015.09.002
- Manifest binnenstedelijke transformaties. (2017). *Manifest binnenstedelijke transformaties*. Retrieved from https://www.gebiedsontwikkeling.nu/artikelen/manifest-binnenstedelijkegebiedstransformatiesaangeboden/
- Mathur, S., & Smith, A. (2012). A Decision-Support Framework for Using Value Capture to Fund Public Transit:LessonsFromProject-SpecificAnalyses.MTIReportNo.11(14).http://transweb.sjsu.edu/project/1004.html
- McAllister, P., Shepherd, E., & Wyatt, P. (2018). Policy shifts, developer contributions and land value capture in London, 2005–2017. *Land Use Policy*, no. 78, pp. 316–326.

- McCarthy, L. (2002). The brownfield dual land-use policy challenge: Reducing barriers to private redevelopment while connecting reuse to broader community goals. *Land Use Policy, 19*(4), 287-296. doi:10.1016/S0264-8377(02)00023-6
- McCord, J., McCord, M., McCluskey, W., Davis, P., McIlhatton, D., & Haran, M. (2014), Effect of public green space on residential property values in Belfast metropolitan area. *Journal of Financial Management of Property and Construction 19*(2), 117-137.
- Medda, F. (2012). Land value capture finance for transport accessibility: a review. *Journal of Transport Geography 25 (2012)* 154–161.
- Moerman, G. (2010). Probing behaviour in open interviews. A field experiment on the effects.
- Mulhall, T. (2018). Capturing land value uplift to deliver infrastructure and affordable housing in a market economy – recent experience in UK. *Annual World Bank Conference on land and poverty. Washington D.C. March 2018.*

Murphy M.K., Black N., Lamping D.L., McKee C.M., Sanderson C.F.B., Askham J. *et al.* (1998) Consensus development methods and their use in clinical guideline development. *Health Technology Assessment* 2(3).

- Noring, L. (2019). Public asset corporation: A new vehicle for urban regeneration and infrastructure finance. *Cities, 88,* 125-135. doi:10.1016/j.cities.2019.01.002
- Offermans, R., & van de Velde, D. (2004). Value Capturing: potentieel financieringsinstrument voor Nederland?. *Ieder zijn deel: Locatiebereikbaarheid anders aanpakken.*
- PBL (2016). Transformatiepotentie: woningbouwmogelijkheden in de bestaande stad. Den Haag
- Pivo, G. (2008). Responsible property investing: what the leaders are doing. *Journal of Property Investment and Finance, 26*(6), 562–576. https://doi.org/10.1108/14635780810908406
- Powell, C. (2003). The delphi technique: myths and realities. *Journal of Advanced Nursing, 41*(4), 376–382.
- PropertyNL (2019). PropertyNL Top-101 Ontwikkelaars 2019: Alles draait om de dozen. Retrieved from: <u>https://propertynl.com/Nieuws/PropertyNL-Top-101-Ontwikkelaars-2019-Alles-draait-om-de-</u> <u>dozen/8deb2ce2-7edf-41dc-8e2f-5096a3601bf3</u>
- Ramselaar, A., & Keeris, W. (2011). Een beslissingsondersteunend model bij projectontwikkeling: Voor investeringsselectie, monitoring en evaluatie. *Real Estate Magazine,(Special)*, 2011.
- Robbe, C. (2015). Verkenning nieuwe financieringsvormen in gebiedsontwikkeling.Platform 31/PAS bv.Retrievedon5-9-2019https://www.ideeenbankgroningen.nl/uploads/afbeeldingen/kennisbank/verkenning-nieuwe-financieringsvormen-in-gebiedsontwikkeling.pdf
- Roukouni, A., & Medda, F. (2012). Evaluation of value capture mechanisms as a funding source for urban transport: the case of London's Crossrail, *Procedia-Social and Behavioral Sciences*, 4, 2393-2404.

Rowe, E. J. (1994). *Enhancing judgement and decision making: a critique and empirical investigation of the Delphi technique* (Doctoral dissertation, University of the West of England at Bristol).

RVO (2019). Value capturing. Retrieved on 10-12-19 from: https://www.rvo.nl/initiatieven/financieringsvoorbeelden/value-capturing

Schiltmans, A. (2013). Crisis bestendig ontwikkelen. Master City Developer, Rotterdam (Master's thesis).

Schmidt, R. C. (1997). Managing Delphi surveys using nonparametric statistical techniques. *Decision Sciences, 28*(3), 763-774.

- Segeren, A. (2007). *De grondmarkt voor woningbouwlocaties: Belangen en strategieën van grondeigenaren.* Ruimtelijk Planbureau.
- Sims, L., Berry, J. (1999). Various ways of recovering increases in land an property values the example of North America.
- Smeenk, H.J, (2007). *Investeren in de openbare ruimte? Optiek vanuit ontwikkelend Nederland* (Master's thesis).
- Stec Groep (2018). Doorlooptijd van nieuwbouwprojecten. Retrieved from: http://ww.nvm.nl
- Stec Groep (2019). Benchmark Gemeentelijke Grondprijzen 2019-2020. Retrieved from: http://stec.nl/
- Stedelijke Transformatie (2019). "We hebben elkaar keihard nodig" Interview met Rob van Muilekom,
gedeputeerde provincie Utrecht. Retrieved from:
https://www.stedelijketransformatie.nl/actueel/stedelijke-transformatie-nieuws/we-hebben-elkaar-
keihard-nodig
- Ten Have, F. *et al.* (2017). PPS Positieve Prikkels tot Samenwerking. Publiek-private samenwerking bij gebiedsontwikkelingen: Sneller, beter en goedkoper, Deloitte Real Estate Advisory & Partnerships
- Ten Have, F. (2019). *Laat Rijk meebetalen aan onrendabele top bij nieuwbouw.* [Blog Post]. Retrieved from: https://www.gebiedsontwikkeling.nu/artikelen/laat-rijk-meebetalen-aan-onrendabele-top-bijnieuwbouw/
- Urban Land Institute [ULI] 2018. *The case for open space: Why the real estate industry should invest in parks and open space.* Washington, DC: ULI Center for Sustainability and Economic Performance.
- van Dam, F. & de Groot, C. (2017). 'De triomf van de stedelijke voorkeur', *Ruimte + Wonen*. Retrieved from: www.ruimteenwonen.nl/detriomf-van-de-stedelijke-voorkeur
- Van der Heijden, H., & Boelhouwer, P. (2018). Wat is er aan de hand met de woningmarkt? Vastgoedrecht (Zutphen), 2018(6), 125-131.
- Verheul, W.J., Daamen, T., Heurkens, E., Hobma, F., & Vriends, R. (2017). *Gebiedstransformaties Ruimte voor durf en diversiteit.*
- Walsum, van L. (2019). *De wondere wereld van onrendabele toppen*. [Blog Post]. Retrieved from: <u>https://www.gebiedsontwikkeling.nu/artikelen/de-wondere-wereld-van-onrendabele-toppen/</u>

Webster, C. (2007). Property rights, public space and urban design. *Town Planning Review, 78*(1), 81-101. Wet Ruimtelijke Ordening. (2006, October 20). Retrieved from: <u>https://wetten.overheid.nl/BWBR0020449</u>

- Yam, S. (2013). The practice of corporate social responsibility by malaysian developers. *Property Management*, 31(1), 76–91. <u>https://doi.org/10.1108/02637471311295423</u>
- Zhao, Z., Iacono, M., Lari, A., & Levinson, D. (2012). Value capture for transportation finance. *Procedia Social* and Behavioral Sciences, 48, 435-448. doi:10.1016/j.sbspro.2012.06.1023

13. Appendices

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Appendix A: Value capturing instruments

		Contributor	Targeted benefit	Coordination	Timing	Space	Cost	Ownership
	options.	Landowner Developer		Taxing authority Negotiation Partnership	Before Ongoing After	<i>On-site Off-site Entire area</i>	<i>Upfront (capital) Ongoing (operating)</i>	Public Private
Betterment Tax	Impact fees	Both	Property value growth Development value	Taxing authority	After	Off-site	Upfront	Public
	Land value Taxation	Landowner	Land value growth	Taxing authority	Before & After	Entire area	Upfront & ongoing	Public
	Special Assessment Districts	Landowner	assessed special benefits	Taxing authority	Before	Off-site	Upfront	Public
Value increment contributions	Tax Increment Financing	Landowner	Property value growth	Taxing authority	Before	Off-site	Upfront	Public
Joint development mechanisms	Joint development	Developer	development privileges	Partnership	Before & After	On-site & off- site	Upfront & ongoing	Both
	Developer contributions	Developer	Development value growth	Negotiation	Before & Ongoing	On-site & off- site	Upfront or ongoing	Public
	Benefit sharing	Developer	Development value growth	Negotiation	Before & After	On-site & off- site	Upfront	Public
	development rights	Developer	Development opportunities	Negotiation	After	On-site	Upfront & ongoing	Public
	Air rights	Developer	Development opportunities	Negotiation	After	On-site	Upfront	Public
	Public asset cooperation	Developer	Development value growth	Partnership	Before & After	On-site	Upfront & ongoing	Both
	Negotiated exactions	Developer	Development value growth	Negotiation	Before	On-site	Upfront	Both

Appendix B: types of private responsibility in public space

Name	Type of contribution	Development	Maintenance	Ownership
R1	Full responsibility	Private	Private	Private
R2	Temporary full responsibility	Private	Private, then public	Private, then public
R3	Partial responsibility by development	Private	Public	Public
R4	Partial responsibility by providing capital	Public-Private	Public	Public
R5	Partial responsibility by maintenance	Public	Private	Public
R6	Partial responsibility through other investment	Public	Public	Public

Appendix C: added value variables

Added value type Concept added value The integral approach of the problem and realization of different functions, increasing the quality of the concept.	Variable Control on concept and neighbourhood. Improved performance of concept Quality not sufficiently guaranteed Quality not sufficient for aimed market	Description The contribution improved the developers' control over the area. The real estate concept worked better due to the contribution. the contribution acted as an anchor, providing a guarantee for the quality of the area. The contribution improves the overall quality of the public space, this was necessary because it suited better with the demands of the intended buyer or user.	Code C1 C2 C3 C4
Financial added value. A more profitable result concerning price- performance, cash flow, continuity, profits and risk allocation.	Increased development value Increased chance and speed of sale Increased future value growth Increased value retention	The end-value received by a developer increased with the contribution. The saleability or marketability of the real estate was improved with the contribution. The contribution improved the sustained value growth for the real estate. The contribution improved the resilience to market downturns over time, providing more security for a value stability over time.	F1 F2 F3 F4
	Decreased tenant turnover Alignment with investor goals	The contribution improved the alignment of the real estate development with goals by the investor.	F5 F6
Procedural added value Fulfilling private and public interests and improving decision-making, public- private relation.	Enhanced process with municipality (in project) Leverage at municipality (in project)	The contribution improved the process with the municipality, decreasing conflicts with the municipality and allowed the process to go faster and smoother. The contribution created leverage for the developer on the municipality creating	P1 P2
	Enhanced relation with community	possibilities within the project. The contribution improved community involvement and relation, decreasing the chance for complaints and objections.	Р3
	Cooperation with other parties Continuity	, , ,	Р4 Р5
Contextual added value Better integration with other areas, projects and	Improved integration with neighbourhood	<i>The contribution enhanced the integral approach to the area, improving integration with the existing structure.</i>	E1
project initiatives outside of the plan area.	Contribution to city	<i>The contribution can help to add something to a city.</i>	E2
	Enhanced area positioning Societal responsibility	<i>The contribution helped to position an area in the market.</i> <i>The contribution was done with because of a responsibility to society.</i>	E3 E4

	Sustainability	Through a contribution, you can increase the sustainability on the level of an area.	E5
Business added value Enhancing potential of future project through	Improved relation with municipality	The contribution helped to improve the relation with a municipality, and led to advantages in acquisition and future projects.	B1
improved reputation, skillset, knowledge and purpose.	Reputation	Through contributions, you build a good reputation.	B2
	Building portfolio	, Contributions in projects can help to build a developers' portfolio.	B3
	Job satisfaction	Making contributions to public space is something that can make the job more enjoyable and satisfying.	B4
	Motivation	<i>The contribution was done because of the intrinsic motivation of a developer.</i>	B5
	Improving skills/knowledge	<i>The contribution helped us to enhance our skillset as developers.</i>	B6
	Experiment	Through a contribution, you can experiment with new ideas and concepts.	B7





Appendix E: conditions to contributing

Condition	Code:	Soft/hard condition
Financial feasibility	V1	Hard
Tender criteria	V2	Hard
Direct relation with real estate	V3	Soft
Good relation with municipality (dialogue vs discussion)	V4	Hard
Long-term involvement (after completion)	V5	Soft
Area development vs project development	V6	Hard
Area dominance	V7	Soft

Appendix F: Survey

6/17/2020

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Default Question Block

Beste ontwikkelaar.

Allereerst dank dat u nogmaals wilt bijdragen aan mijn afstudeeronderzoek voor de master Management in the Built Environment aan de TU Delft.

Dit onderzoek focust zich op hoe de ontwikkelaarsbijdrage binnenstedelijke ontwikkeling kan stimuleren. Hiervoor onderzoek ik de beweegredenen en de randvoorwaarden voor het doen van zo'n extra investering.

De resultaten uit de eerste ronde interviews zijn verwerkt. Deze tweede ronde is deels ter verificatie van de resultaten uit de interviews. Het geeft ook een kans om uw antwoorden aan te vullen. Omdat de interviews veelal bestonden uit open vragen, kunnen sommige antwoorden onvolledig zijn. In de uithodiging zag u hoe uw resultaten zich verhouden met de rest.

De vragenlijst bestaat uit vier korte onderdelen en zal ongeveer 5 minuten in beslag nemen. Alle informatie zal anoniem worden verwerkt, de resultaten zijn niet terug te leiden naar u of uw organisatie. Mocht er iets onduidelijk zijn, u kunt mij bereiken op jeroenjasperdekoning@gmail.com.

- Jeroen de Koning

Voornaam

Bedrijf

Een korte reminder.

De ontwikkelaarsbijdrage: De ontwikkelaarsbijdrage kan gezien worden als een extra investering in iets wat kwaliteit toevoegt aan

de publieke ruimte. 'Extra', omdat de ontwikkelaar dit niet had hoeven doen; het is dus een vrijwillige investering, d.w.z. op basis van eigen keuzes. De investering voegt per definitie waarde toe aan de publieke ruimte. Er vindt dus een positieve externaliteit plaats (anderen profiteren ook van deze toegenomen waarde).

Publieke ruimte is gedefinieerd als non-exclusieve ruimte; iedereen heeft toegang. Afsluitbaarheid voor het onderhoudbaar houden van een plek is irrelevant.

Voorbeelden: private bijdrage aan park, eenmalige gift voetbal vereniging, privaat onderhoud van openbare ruimte. Bijdrage is het nemen van verantwoordelijkheid in de vorm van:

- * Aanleg
- * Beheer
- * Eenmalige financiële bijdrage
- * Continue financiële bijdrage
- * Overige bijdrage (tijd/capaciteit/kennis/etc.)

Uit de interviews zijn sub-variabelen gekomen, die zijn ingedeeld in 5 categorieën meerwaarden. Deze meerwaarden zijn redenen voor een ontwikkelaar om een ontwikkelaarsbijdrage te doen.

De volgende5 vragen gaan over deze redenen. Graag hoor ik of deze meerwaarden van belang zijn in de overweging zo'n extra investering te doen

Deze vragen geven de mogelijkheid om aan te vullen op de resultaten uit de eerste ronde interviews.

5 categorieën:

inhoudelijke meerwaarde:

De integrale aanpak van een probleem en de realisatie van verschillende functies die de kwaliteit van de oplossing vergroten.

Financiële meerwaarde:

Een gunstiger financieel resultaat voor wat betreft prijs/kwaliteit, cashflow, continuïteit, opbrengst/winst en risicoallocatie. Proces meerwaarde:

Het stimuleren van het proces, realiseren van publieke en private belangen en het verbeteren van publieke en private relaties

Externe meerwaarde:

Het toevoegen van waarde voor, en een betere afstemming met andere gebieden, projecten en project initiatieven buiten het plangebied.

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Bedrijfsmeerwaarde:

Het vergroten van kansen in toekomstige projecten door reputatie en kunde, en de zin in het werk.

Zijn de volgende meerwaarden van belang in de overweging voor een ontwikkelaarsbijdrage?

Inhoudelijke meerwaarde

	Eens	Neutraal	Niet eens
Controle op omgeving en concept. De bijdrage vergrootte de controle van de ontwikkelaar op de omgeving en het concept.	0	0	0
Concept beter tot uiting laten komen Het concept van de ontwikkeling kwam beter tot uiting.	0	0	0
Kwaliteit onvoldoende gewaarborgd. De bijdrage zorgde voor een betere waarborging voor de kwaliteit van de omgeving	0	0	0
Mismatch kwaliteit publieke ruimte ivm beoogde doelgroep. De bijdrage voegde kwaliteit toe aan de omgeving, en dat was nodig voor een match met het beoogde product	0	0	0

Zijn de volgende meerwaarden van belang in de overweging voor een ontwikkelaarsbijdrage?

Financiële meerwaarde

	Eens	Neutraal	Niet eens
Hogere eindwaarde De eindwaarde van het de ontwikkeling nam toe door de bijdrage.	0	0	0
Verbeterde verkoopsnelheid De verkoopsnelheid en verkoopbaarheid van het vastgoed nam toe door de biijdrage.	0	0	0
Toekomstige waardegroei De bijdrage zorgde voor een toename in de waardegroei	0	0	0
Waardevastheid De bijdrage zorgde voor grotere waardevastheid van het vastgoed	0	0	0
Lagere omloopsnelheid Door de bijdrage bleven bewoners langer wonen	0	0	0
Confirm doelstellingen belegger. De bijdrage zorgde voor een betere match met de doelen van de belegger	0	0	0

Zijn de volgende meerwaarden van belang in de overweging voor een ontwikkelaarsbijdrage?

Proces meerwaarde			
	Eens	Neutraal	Niet eens
Goed proces met gemeente De bijdrage verbeterde het proces met de gemeente gedurende het project	0	0	0
Leverage bij gemeente in project De bijdrage leverde leverage op bij de gemeente binnen het project	0	0	0
Goede relatie met buurt Door de bijdrage werd de relatie met de buurt en bewoners beter.	0	0	0
Samenwerking met andere partijen. de bijdrage zorgde voor een betere samenwerking met andere partijen	0	0	0
Continuiteit Door de bijdrage werd de continuiteit van het project beter gegarandeerd	0	0	0

Zijn de volgende meerwaarden van belang in de overweging voor een ontwikkelaarsbijdrage?

Externe meerwaarde

	Eens	Neutraal	Niet eens
npassing buurt De bijdrage zorgde voor een betere integratie met de omgeving	0	0	0
Bijdrage aan stad Door de bijdrage werd iets toegevoegd aan de stad.	0	0	0
Positionering van gebied Door de bijdrage werd een gebied beter op de kaart gezet.	0	0	0
Maatschappelijke verantwoordelijkheid als ontwikkelaar De bijdrage wsa in lijn met de maatschappelijke verantwoordelijkheid	0	0	0

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	Eens	Neutraal	Niet eens
Duurzaamheid De bijdrage kwam ten goede van duurzaamheid.	0	0	0

Zijn de volgende meerwaarden van belang in de overweging voor een ontwikkelaarsbijdrage?

Bedrijfsmeerwaarde			
	Eens	Neutraal	Niet eens
Goodwill bij gemeente (tbv acquisitie en leverage) Door de bijdrage verbeterede de relatie met de gemeente en dat heeft geleid tot voordelen in volgende projecten	0	0	0
Reputatie De bijdrage kwam ten goede van de reputatie van het bedrijf	0	0	0
Opbouwen portfolio Door de bijdrage werd het portfolio opgebouwd.	0	0	0
Werkplezier Door de bijdrage nam het werkplezier toe	0	0	0
Motivatie De bijdrage was in lijn met de intrinsieke motivatie	0	0	0
Kennis/kunde Door de bijdrage nam de kennis en kunde binnen het bedrijf toe.	0	0	0
Experiment Met de bijdrage was er een mogelijkheid tot experimenteren met nieuwe ideeën	0	0	0

De ontwikkelaarsbijdrage:

Een korte reminder:



De ontwikkelaarsbijdrage kan gezien worden als een extra investering in iets wat kwaliteit toevoegt aan de publieke ruimte. 'Extra', omdat de ontwikkelaar dit niet had hoeven doen; het is dus een vrijwillige investering, d.w.z. op basis van eigen keuzes. De investering voegt per definitie waarde toe aan de publieke ruimte. Er vindt dus een positieve externaliteit plaats (anderen profiteren ook van deze toegenomen waarde).

Naast het aangeven van de redenen, wil ik graag vragen of u kunt aangeven hoe belangrijk de categorieën zijn in de overweging tot het doen van een ontwikkelaarsbijdrage. Dit doet u door 100% te verdelen over de 5 categorieën.

Geef aan hoe belangrijk welk soort meerwaarde is in de overweging voor een ontwikkelaarsbijdrage (constant sum methode)

	Niet belangrijk							Niet belangrijk				
	0	10	20	30	40	50	60	70	80	90	100	
Inhoudelijke meerwaarde De integrale aanpak van een probleem en de realisatie van verschillende functies die de kwaliteit van de oplossing vergroten.												16
Financiële meerwaarde Een gunstiger financieel resultaat voor wat betreft prijs/kwaliteit, cashfow, continuiteit, opbrengst/winst en risicoallocatie.												0
Proces meerwaarde Het stimuleren van het proces, realiseren van publieke en private belangen en het verbeteren van publieke en private relaties.												0
Externe meerwaarde Het toevoegen van waarde voor, en een betere afstemming met andere gebieden, projecten en project initiatieven buiten het plangebied.												0
Bedrijfsmeerwaarde Het vergroten van kansen in toekomstige projecten door toenemende reputatie, kunde en zingeving.												0
Total	:										10	6
Een korte reminder:												C
De ontwikkelaarsbijdrage:												
De ontwikkelaarsbijdrage kan g	gezien	worden als	een extra	investerin	g in iets wi	at kwaliteit	toevoegt a	ian de pub	lieke ruimte	e. 'Extra', c	mdat de	
ontwikkelaar dit niet had hoeve	n doen	; het is dus	een vrijw	illige inves	tering, d.w	z. op basi	s van eiger	h keuzes. I	De invester	ing voegt p	per defini	tie waarde

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toe aan de publieke ruimte. Er vindt dus een positieve externaliteit plaats (anderen profiteren ook van deze toegenomen waarde).

Naast de meerwaarden, zijn uit de interviews ook een aantal **randvoorwaarden** gekomen. Deze dienen als aanvulling op de gebruikelijke randvoorwaarden voor het ontwikkelen. De gebruikelijke haalbaarheidsvoorwaarden zijn: eigenaarschap, in lijn met beleid, fysiek/technische haalbaarheid, markt-aantrekkelijkheid en financiële haalbaarheid.

Geef aan welke randvoorwaarden noodzakelijk zijn voor het doen van een ontwikkelaarsbijdrage. De volgende voorwaarde is noodzakelijk:

	Eens	Neutraal	Niet eens
Financiële haalbaarheid	0	0	0
Onderdeel van de opgave	0	0	0
Directe relatie investering en vastgoed	0	0	0
Dominantie in gebied (>50%)	0	0	0
Lange termijn betrokkenheid (na ontwikkeling)	0	0	0
Goede relatie gemeente (dialoog vs discussie)	0	0	0
Gebiedsontwikkeling (vs projectontwikkeling)	0	0	0

Een korte reminder: De ontwikkelaarsbijdrage: Q

De ontwikkelaarsbijdrage kan gezien worden als een extra investering in iets wat kwaliteit toevoegt aan de publieke ruimte. 'Extra', omdat de ontwikkelaar dit niet had hoeven doen; het is dus een vrijwillige investering, d.w.z. op basis van eigen keuzes. De investering voegt per definitie waarde toe aan de publieke ruimte. Er vindt dus een positieve externaliteit plaats (anderen profiteren ook van deze toegenomen waarde).



Overheden kunnen verschillende rollen aannemen. Bovenstaand geeft een overzicht van de verschillende rollen.

A. Richtinggevende rol

- Visie-formulerende instrumenten
- Creëren gebiedspotenties en geven richting aan de keuzes van marktpartijen (markt-vormend)
- bijv. stedelijke beleidsdocumenten, woonvisies, masterplannen

B. Regulerende rol

- Juridisch-planologische instrumenten
- Bakenen gebiedspotenties af en beperken de keuzemogelijkheden van marktpartijen (markt-regulerend)
- bijv. bestemmingsplannen, aanbestedingen

C. Stimulerende rol

- (In)direct kosten- en/of risico-verlagende instrumenten
- Vergroten gebiedspotenties en verruimen de keuzemogelijkheden van marktpartijen (markt-stimulerend)
- bijv. subsidies, belastingregelingen, onteigeningen, infra-investeringen

D. Faciliterende rol

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Instrumenten die het organiserend vermogen vergroten

· Verkennen gebiedspotenties en helpen marktpartijen nieuwe keuzemogelijkheden te ontdekken (markt-faciliterend)

• bijv. organiseren van samenwerking, netwerkvorming, procesbegeleiding, conflictbestrijding, vertrouwen

Bij welke rol van de gemeente is er de meeste bereidheid bij ontwikkelaars om een ontwikkelaarsbijdrage te doen? Rangschik de rollen van meest naar minst bereid om te investeren (1 = meest, 4 = minst).

Richtinggevend

Regulerend

Stimulerend

Faciliterend

Einde survey. Ga door naar het volgende deel om uw antwoord op te sturen

Bedankt voor het invullen!

Mocht er nog iets onduidelijk zijn, u kunt contact met mij opnemen via jeroenjasperdekoning@gmail.com

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INTERVIEW QUESTIONS

Interview protocol voor het afstudeeronderzoek van Jeroen de Koning

Interview

Dit is een protocol voor een semigestructureerd interview. Terwijl we langs de beneden staande onderwerpen lopen wil ik het gesprek waar het kan de vrije loop laten gaan. Het interview zal ongeveer een uur duren.

Datagebruik: Om interrupties door notuleren van het gesprek te voorkomen zal het interview worden opgenomen. De audio opname wordt offline bewaard en is alleen toegankelijk voor de onderzoeker en het onderzoeksteams. De opname wordt verwijderd na het succesvol afronden van de scriptie. Het getranscribeerde verslag wordt een jaar na het afstuderen verwijderd. Het gesprek zal niet worden gedeeld en de resultaten worden anoniem verwerkt. Dit houdt in dat persoonlijke informatie zoals naam en locatie niet worden gebruikt. Om wel een beeld te kunnen vormen van de respondenten wordt de informatie beperkt tot functie en de betrokken organisatie. Per interview kunnen individuele afspraken worden gemaakt die van deze richtlijnen afwijken. De resultaten worden alleen gebruikt voor onderzoeksdoelen. De interviews worden geanalyseerd door het transcriberen en coderen van de audio opname. Hierdoor wordt gezocht naar patronen in de resultaten en zodoende worden verschillende cases vergelijkbaar met elkaar.

0. Algemeen

Persoonlijke info

- Opleiding
- Vorige werk ervaring

Omschrijving bedrijf

- Strategie
- Soort projecten

Functie binnen bedrijf

- Werkzaamheden
- Lopende projecten
 - Binnenstedelijk of uitleg?
 - o Bestaande situatie?
- Specifieke rol in de strategie van ontwikkelingsprojecten

1. Bijdragen publieke ruimte.

Door de woningcrisis is er een grote vraag aan woningen in binnenstedelijke gebieden. Vanwege de hoge initiële investeringen in de publieke ruimte komen ontwikkelingen vaak niet rond. Er wordt steeds meer gekeken naar de private kant voor meer bijdragen aan deze investeringen.

Definitie:

- Wat versta jij onder publieke ruimte?

- Wat versta je onder kwalitatieve publieke ruimte?

Bijdrage publieke ruimte:

- In welke vorm dragen jullie bij aan de ontwikkeling van de publieke ruimte?
- Hoe wordt dit bepaald?
- Ben je betrokken (geweest) in projecten waar extra investeringen gedaan in de kwaliteit van de publieke ruimte? *

* Zo ja:

Context project:

- Achtergrond ontwikkeling
- Binnenstedelijk of uitleg?
- Bestaande situatie?
- Plannen voor gebied
- Stakeholders in gebied

Rol publiek (gemeente)

- Actieve vs faciliterende rol?
- Anders dan gebruikelijk? Veranderd over tijd?

Rol privaat

- Langetermijn denken vs projectmatig?
- Relationeel (zacht) vs instrumenteel (hard) sturend?
- Anders dan gebruikelijk? Veranderd over tijd?

Beweegredenen bijdrage publieke ruimte:

- Wat heeft ertoe geleid om deze keuze te maken?
- Wat is het verwachtte effect? Wat levert het jullie op?

Mogelijke antwoorden: Financieel (lange termijn waardegroei, misschien wel kortetermijn) / reputatie / goodwill / resultaat (gewoon mooie dingen bouwen, intrinsieke motivatie) / sociaal doel / ..

- Zou dit een manier zijn om meer projecten te doen?
- Wat is er voor nodig om dit te doen bij toekomstige projecten?

Mogelijke antwoorden: verandering waardeketen / meerekenen waardegroei in eindwaarde / rol gemeente / andere doelgroepen / context / projectgrootte, etc.

* Zo nee:

Randvoorwaarden extra investeringen publieke ruimte

- Wat zou er voor nodig zijn om tot de keuze te komen om meer investeringen te doen in de publieke ruimte?

Mogelijke antwoorden: verandering waardeketen / meerekenen waardegroei in eindwaarde / rol gemeente / andere doelgroepen / context / projectgrootte

- Wat heeft dit voor invloed op jullie (financiële) resultaten?
- Langetermijndenken ondersteund door beleggers?
- Rol gemeente /

4. Resultaat

Terugkijkend op een afgerond project of kijkend naar een lopend project.

Lopend project indien extra bijdrage:

- Tevreden met hoe het project verloop?
 - Financieel / relationeel met gemeente, overige partijen /

Afgeronde projecten:

- Wat is het effect geweest van (overige) afgeronde projecten waar extra investeringen in de publieke ruimte zijn gedaan?

• Financieel / relationeel met gemeente, overige partijen /

5. Overig

- Overige projecten -> algemene opmerkingen?
- Zijn er nog overige vragen/opmerkingen die je hebt die kunnen bijdragen aan het onderzoek?

Bedankt voor het nemen van de tijd om deel te nemen aan het onderzoek. Mocht je geïnteresseerd zijn kan ik de resultaten van het afgeronde onderzoek met je delen.

Contact Informatie: J.J. de Koning. T: +31 6 5394 5330. E-mail KPMG: dekoning.jeroen@kpmg.nl

Appendix H: Interview invite

UITNODIGING INTERVIEW

Informatieblad voor participanten aan het afstudeeronderzoek van Jeroen de Koning

Interview informatie

Allereerst bedankt voor het nemen van de tijd om dit document door te lezen. In het volgende stuk wordt een samenvatting gegeven van de aanleiding, achtergrondinformatie en methode van mijn afstudeeronderzoek, getiteld *Stimulating urban redevelopments through value capturing.*

- Grote behoefte binnenstedelijke woning ontwikkeling wordt bemoeilijkt door grote hoge initiële investeringen in kwaliteit publieke ruimte.
- Private bijdragen aan deze traditioneel publieke investeringen lijken een oplossing te bieden
- d.m.v. interviews met ontwikkelaars en investerende partijen worden voorwaarden en beweegredenen voor het doen van deze bijdragen onderzocht

Achtergrond:

De grote woningbehoefte is een van de leidende onderwerpen in het bouw-gerelateerde nieuws gedurende de afgelopen jaren. Er is een discussie gaande waar de grote vraag naar woningen gefaciliteerd moet worden, binnenstedelijk of in uitleggebieden. Verschillende onderzoeken zeggen dat ongeveer de helft van de woningen in binnenstedelijke gebieden moet kunnen worden gebouwd. Hoewel veel onderzoek naar de voordelen van binnenstedelijk bouwen wijst, en dit argument ook wordt gedragen door de (lokale) overheden, blijken gestelde targets voor de binnenstedelijke woningbouw al jaren niet haalbaar. Binnenstedelijk bouwen brengt nu eenmaal veel moeilijkheden met zich mee, zowel financiële, gerechtelijke en organisatorische barrières bemoeilijke bouwen blijkt vaak onvoldoende. Hoge initiële investeringen in de publieke ruimte in combinatie met een moeilijkere waarde sprong in vergelijking met uitleglocaties vragen om alternatieve instrumenten. Die investeringen zijn nodig om het gebied bewoonbaar te maken, maar leiden vaak ook tot een lange termijn waardegroei.

Value capturing is een veelbelovende methode die investeringen terug laat stromen naar degene die de investering maakte. Door verschillende instrumenten (de ontwikkelaarsbijdrage, verbindingsheffing, toegevoegde waarde belasting, ontwikkelaarsrechten, etc.) wordt het draagvlak voor een kwalitatieve publieke ruimte vergroot. Een onderscheid kan worden gemaakt tussen verplichtende (belastings-) instrumenten en vrijwillige bijdrages van baat hebbende partijen. Dit roept de volgende vragen op; waarom, en onder welke voorwaarden zijn ontwikkelaars bereid om investeringen te doen in de kwaliteit van de publieke ruimte?

Investeringen in kwalitatieve publieke ruimte?

De publieke sector wordt traditioneel gezien als verantwoordelijk voor het doen van investeringen in publieke ruimte. Dit kan breed worden opgevat, zowel publieke faciliteiten (infrastructuur, groen, straatmeubilair, verlichting, instellingen, etc.) als evenementen die placemaking moeten bevorderen.

De WRO verplicht gemeenten een groot deel van deze kosten te verhalen op baat hebbende partijen. In de regel gaat dat via grondopbrengsten. Voor alle partijen is het vaak gunstig om anterieure afspraken te maken over de bijdrage. Er zijn echter ook kosten die niet verhaald kunnen worden. Daarnaast is de traditionele manier waarop kosten terugverdiend worden vaak ontoereikend. Onrendabele toppen van soms wel tienduizenden euro's per woning zijn een realiteit in binnenstedelijke gebiedsontwikkelingen. Met beperkte financiële middelen tot haar beschikking wordt het voor gemeenten steeds lastiger om hulp te bieden. Waar vroeger deze onrendabele toppen konden worden opgelost door overheden, hebben beleidsmatige wijzigingen hier verandering in gebracht; nationale subsidies werden stopgezet. Het is dus lastiger geworden voor gemeenten om te investeren in kwalitatieve publieke ruimte.



Figuur: veranderende rol in gebiedsontwikkeling.

De markt neemt een steeds actievere rol in bij gebiedsontwikkelingen, overheden nemen een meer faciliterende rol in. In andere landen is dit al veel langer het geval; hier wordt ook het ontwikkelen van de publieke ruimte niet altijd gezien als de verantwoordelijkheid van een overheid.

Ontwikkelaarsbijdrage

Zoals benoemd is value capturing een veelbelovende methode. Een van die instrumenten, de ontwikkelaarsbijdrage, lijkt goed te passen in de hedendaagse trend van een actievere rol van de markt in gebiedsontwikkeling. De bijdrage kan bestaan uit een bijdrage aan een investering in de publieke ruimte, of de ontwikkeling hiervan zelf in hand nemen. Bekende buitenlandse voorbeelden zijn het Londense Chiswick Park en Bryant Park in NYC, twee succesvolle cases van gebieden waar door middel van private investeringen de publieke ruimte is ontwikkeld, leidend tot een waardegroei bij de betrokken partijen.

Als marktpartij speelt financieel resultaat een cruciale rol in de besluitvorming bij ontwikkelaars. Het doen van een investering moet natuurlijk wel iets opleveren. Veel onderzoek en resultaten van de genoemde voorbeelden laten zien dat investeringen in de publieke ruimte vaak leiden tot lange termijn waarde groei. Dit roept de vraag op of dit wordt gereflecteerd in de eindwaarde die een ontwikkelaar ontvangt. Daarnaast spelen elementen als onderhandelingspositie, opdoen van ervaring en sociale doelen ook een rol. Uiteraard is hierin de context, betrokken partijen en projectgrootte ook belangrijk.

Methode:

In dit onderzoek wil ik door middel van interviews met woningontwikkelaars en investerende partijen te weten komen hoe zij in de wedstrijd staan. Zijn er binnenstedelijke projecten geweest waar extra (meer dan nodig) investeringen zijn gedaan in de kwaliteit van de openbare ruimte? Zo ja, wat was de reden hiertoe? Zo nee, wat zou er voor nodig zijn om deze investeringen wel te doen? Wat zou het opleveren?

Door inzicht te krijgen in de beweegredenen van ontwikkelaars hoop ik bij te kunnen dragen aan het creëren van meer draagvlak voor kwalitatieve publieke ruimte. Hierdoor zouden het binnenstedelijk gebiedsontwikkelingsproces sneller moeten kunnen verlopen.

Datagebruik

Om interrupties door notuleren van het gesprek te voorkomen zal het interview worden opgenomen. De audio opname wordt offline bewaard en is alleen toegankelijk voor de onderzoeker en het onderzoeksteams. De opname wordt verwijderd na het succesvol afronden van de scriptie. Het getranscribeerde verslag wordt een jaar na het afstuderen verwijderd.

Het gesprek zal niet worden gedeeld en de resultaten worden anoniem verwerkt. Dit houdt in dat persoonlijke informatie zoals naam en locatie niet worden gebruikt. Om wel een beeld te kunnen vormen van de respondenten wordt de informatie beperkt tot functie en de betrokken organisatie. Per interview kunnen individuele afspraken worden gemaakt die van deze richtlijnen afwijken.

De resultaten worden alleen gebruikt voor onderzoeksdoelen. De interviews worden geanalyseerd door het transcriberen en coderen van de audio opname. Hierdoor wordt gezocht naar patronen in de resultaten en zodoende worden verschillende cases vergelijkbaar met elkaar.

Intrekken van deelname

De geïnterviewde is vrij om achteraf de deelname aan het interview in te trekken, zonder een reden te geven. Alle informatie zal in dat geval worden verwijderd.

Onderzoeksteam

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Stimulating Urban Redevelopment through Value Capturing