The Impact of Business Improvement Districts on Property Values

Evidence from Liverpool

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Preface

The handing in of this thesis marks the end of an adventure that has filled the past couple of months. The adventure started about a year ago, in spring 2016, when Erwin van der Krabben put me in contact with Alex Lord. I have always wanted to live abroad for a while and this turned out to be an opportunity in which I could combine this dream with conducting research in a subject that has always fascinated me. Therefore, at first I would like to thank both Erwin and Alex for offering me this opportunity.

In times of change, actors always try to find new approaches and strategies to conduct urban development. However, the post economic crisis era marks a period of instilling a more purposeful practice to learn lessons rather than reinvent wheels. The subject of this thesis might be an example of a lesson that has instilled worldwide: the concept of Business Improvement Districts. My fascination in Dutch spatial planning has always been the active role of public actors, which more than once has led to failures. Even though a significant change has occurred, worldwide successful concepts like Business Improvement Districts seem hard to implement due to institutional differences. This inspiration brought me to the successfulness of the concept itself, rather than the difficulties that come along implementation. A concept might be successful in liberal countries in which it was invented, but that does not necessarily mean it works well under different institutional conditions – even though implementation issues are treated carefully.

This research was conducted in Liverpool, a city that stole my heart. Not only did I meet wonderful people and created amazing moments, living in Liverpool also intrigued me because it actually is a city of change. I am convinced from the fact that living there for 5 months has helped me in understanding the outcome of my analysis. I got to know the areas, streets and properties that I used in my case study and I truly believe I therefore better understand my data.

Another important factor in understanding my data are the supervising moments of Alex Lord and Ary Samsura, my supervisors in respectively Liverpool and Nijmegen. I am very grateful for their advice, patience and critics. Furthermore, I would like to thank the BID Company in Liverpool and the people behind placemaking.bid for their support and help. A special thank you goes to Lisa and Esther, I hope one day you guys start the business you have always dreamt of. Last but not least, I would like to thank you as a reader for having interest in my research. I hope you will enjoy reading my thesis and that it might inspire you.

Esmée Jansen

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Summary

This study focused on the impact of Business Improvement District on commercial property values in Liverpool’s Business Improvement Districts: the City Central BID and the Commercial District. The major objective of this study is to see to what extent the formation of Business Improvement Districts led to changes in commercial property values in order to assess the impact and effectiveness of Business Improvement Districts. The concept of Business Improvement Districts – in which members of a certain district pay local levies that return to their district - has spread throughout the world since it was first established in Canada in the 1970s. As a result of this policy transfer, Business Improvement Districts differ locally, nationally and internationally. This study was conducted in Liverpool, in which two Business Improvement Districts have been established since 2005 – after a UK pilot proved success.

Data for this research was obtained by the Valuation Office Agency, Liverpool BID Company and the Liverpool City Council. The data collection consisted of both an interview and the gathering of rateable values. An interview with the BID Company was held in order to understand the working of the concept of Business Improvement Districts in Liverpool. Quantitative data was collected for all commercial property values in the Business Improvement Districts and an alternative comparison area within the same conditions. The main goal of this research was analysed by a multiple regression analysis, and was supported by several other statistical tests such as student's t-tests. Besides, the outcome was also visualised in maps to assess local differences over years.

The two Business Improvement Districts in Liverpool differ in terms of aims and expenditures. The City Central BID was established in 2005. Expenditures are mostly short-term and invested in cleaning, security and marketing. Commercial property values in the district show a rise since the establishment, although the economic depression has had its impact too. The Commercial District BID has been formal since 2011 and more than 50% of the expenditures are in capital projects. Such long-term investments do not seem to have a significant impact yet. This study in the effectiveness of Business Improvement Districts measured by property values was the first scientific research conducted in non-liberal countries such as the United States and Canada in which the concept had proven its success yet. Further research should be conducted over a longer period and should contain more Business Improvement Districts, in order to prove the impact of Business Improvement Districts on commercial property values. Nonetheless, this study can be seen as a careful indication towards the success of Business Improvement Districts in Liverpool, UK.
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## Introduction

The planning practice is increasingly changing since the financial and economic crisis of 2008 (Van der Krabben & Heurkens, 2015). New mechanisms and strategies have been adopted by governments worldwide. A significant development in public sector policy and practice has been the attempts to embed theories of learning and to instil a more purposeful practice to learn lessons rather than reinvent the wheel (Peel & Lloyd, 2005). Peel & Lloyd (2010), however, warn for problematic transfers if these are based on subjective perception using limited evidence, rather than considered rationality. One of the widely-adopted strategies is the formation of Business Improvement Districts [BIDs]. The first BID was established in Toronto in 1970 and since then, BIDs have spread throughout the world, to the United States, New Zealand, South Africa and Europe (Hoyt, 2005).

BIDs are a form of public/private partnership by which property and business owners elect to contribute financially to the development, maintenance and promotion of their commercial district (Lloyd e.a., 2003; Favro & Toto, 2016). Mitchell (2001) once described BIDs as an approach to regeneration whereby: “geographically defined majority of property owners and/or merchants agree to provide an extra level of public service in a specific area by imposing an added tax or fee on all of the properties and/or businesses in the area” (p. 6). Members of BIDs invest, in coordination with municipal public services, in supplemental services and investments in for example capital improvements, maintenance as street cleaning, marketing, safety and land use planning in cooperation with the municipality. The business aim is to end up in a more attractive and better functioning business district in which retail sales and property values will increase (Hoyt & Gopal-Agge, 2007).

Many scholars and policy makers all over the world try to counter the decline of inner cities and the loss of local businesses. Given the current public steering power in urban regeneration issues, a solution may be found in BIDs. It is widely agreed that transnational adoption of BIDs is principally a function of the model’s promise to “deliver increased economic and employment activity at little or no direct cost to taxpayers” (Stokes, 2006). In a highly competitive economy, businesses and visitors have a wide range of choice and they will choose for the best experience. BIDs are becoming a way to distinguish, as the levies can be seen as additional taxes which are immediately invested in their own district (Levy, 2001).

### 1.1 Research problem statement

In its most elementary form, all BIDs use its budget to provide local public goods. However, BIDs differ substantially both nationally and internationally (Hoyt, 2005). The first formation of a BID in for example the Netherlands had taken place in 2009, 40 years after the first ever BID was established in Canada. BIDs nowadays differ in terms of mission, authority and the legal and financial frameworks (Hoyt, 2005). The institutional design of BIDs strategies varies due to local adaptations. The adaptation of BIDs – for example - in the United Kingdom is being debated, because of a clause in the legislation that provides the local government with veto power on how money is spent (Hoyt & Gopal-Agge, 2007). Nevertheless, this example shows how adaptation differs per country and how the BID model implementation varies due to institutional issues at a national level. Nowadays, as a consequence of this, many different BID models exist.

Nonetheless, very little work has been done to measure their effectiveness after policy transfer. Most papers have studied the impact of BIDs on crime rates on a qualitative, case study basis, most of them in the United States. Ellen e.a. (2007) conducted a research about the impact of Business Improvement Districts on property values in New York City, saying that using property values to assess the impact of BIDs is reliable as property values provide a comprehensive
indicator of neighbourhood quality since they will capture the impact of any improvements effected by BIDs. This quantitative study compared the effectiveness of different types of BIDs in New York City. The study compared both residential as well as commercial property values within and surrounding BID boundaries to gain some insight into circumstances and underlying mechanisms through which BIDs affect property values and, at a larger scale, local economic development (Ellen e.a., 2007).

1.2 Research aim and research questions
As said, nowadays BID models exist in different varieties mainly due to institutional differences. Different backgrounds result in different missions, authorities, legal and financial frameworks. Ellen e.a. (2007) state that sizes of BIDs affect the effect on property values in New York City. However, no similar research has been done in more public-led countries, like the United Kingdom. BIDs often fill gaps in municipal services or compensate for what they do poorly (Levy, 2001). The effectiveness of BIDs in more public-led countries, where government’s work is more competent and effective, is thus to be questioned.

In the United Kingdom, BIDs can officially be established since 2005 and is therefore a relatively new mechanism compared to BIDs in Canada and the USA. In Liverpool, where the first BID was formed in 2005, two rebalots have been successful which can be seen as evidence for effectiveness. Currently, two BIDs exist in Liverpool: City Central BID and Commercial Centre BID, managed by the Liverpool BID company. A quantitative case study research in Liverpool will meet the approvals, given that BIDs are most successful in disinvested areas (Lloyd e.a., 2003; Sutton, 2014). Besides that, the existing BIDs in Liverpool differ in terms of history and missions and could therefore be interesting to compare. The City Central BID was established in 2005 and represents approximately 650 businesses in the city centre. In July 2013, the second rebalot was successful. The Commercial Centre BID was established in 2011 and was renewed for a further 5-year cycle in 2016, an 88% rateable value voted for renewal. The Commercial Centre BID covers 550 business, mainly professional (BID Company, 2017).

The objective of this thesis is to evaluate changes in commercial property values over years to discuss the effectiveness of BIDs in Liverpool. As Ellen e.a. (2007) stated, commercial property values can be seen as an indicator of neighbourhood quality. Secondly, using property data gives an appropriate insight into the precise effect of BIDs, as the data is at individual parcel level. Due to this, it is feasible to examine the effect of BIDs inside and outside the BID boundaries. Furthermore, differences between different types of BIDs can be examined (Ellen e.a., 2007). Since BIDs aim for quality improvements by contributing in area development, maintenance and such, it would be most likely that commercial property values – under reasonable conditions - increase due to the establishments of BIDs. The focus in this study is on commercial property values, as BIDs are mainly established in order to counter issues that affect commercial properties. Members of BIDs are mostly tenants or property owners of commercial properties. Therefore, effectiveness will be evaluated from their point of view.

A broader aim of this research will be the gaining of some insight into the circumstances under which BIDs may be a useful tool for local economic development. Considering that many policy makers nowadays are looking for new mechanisms and strategies in an attempt to counter inner city decline while public funds are decreasing, this research can be a helpful part of a broader perspective. BIDs occur as one of these new strategies in a planning world in which private sector gets more and more involved. After all, if it occurs that BIDs influence property values, it could turn out to be a boost for local economic development in general.
The research aims above lead to the following central question:

**To what extent did the formation of Liverpool’s City Central Business Improvement District and the formation of Liverpool’s Commercial District BID led to changes in commercial property values?**

The central research question will be distinguished by the following sub questions:

- What are underlying mechanisms and elements through which BIDs influence commercial property values?
- To what extent is there a significant difference between commercial property values in and outside the BID boundaries?
- To what extent is there a significant difference between commercial property values in the City Central BID and the Commercial District BID?
- Can the Liverpool BID strategy be seen as a successful tool for local economic development?

The central question will be answered by finding answers to the sub questions. Desk research will be conducted to find an answer to the first sub question. As there is not conducted a lot of research about this topic yet, an interview with the BID Company will firstly be held to gain more insight into mechanisms and elements that influence property values in BID areas. This will also give more insight into the working of BIDs in Liverpool, which is important considering the occur of differences worldwide. The second and third sub questions will be answered by descriptive statistics and statistical tests such as student's t-tests and regression models. Data contains rateable value data for all properties in the case study. The fourth and last sub question is an attempt in adding value to the bigger picture, namely the successfulness of the BID tool. More method details will be provided in the Methodology chapter.

1.3 Relevance

1.3.1 Societal relevance

Public-led countries struggle with the role of the public sector in the public realm since the economic crisis (Van der Krabben & Heurkens, 2015). Many municipalities are trying to find new ways to finance their area development plans. In 2005, Peel & Lloyd stated that governments worldwide try to adopt new mechanisms and strategies rather than reinvent the wheel. Considering that institutional, financial and legal frameworks differ nationally, the instilling of a new concept can have led to different outcomes. Therefore, measuring the effectiveness of new concepts is relevant in times of changing, especially in countries in which a governmental shift is going on.

The embedding of BIDs in these countries is relatively new, seeing that BIDs have been implemented in European countries in the past decade. In the UK, a pilot started in 2003. The first BID in Liverpool was established in 2005. Now, 12 years later, investment effects on property values could be tangible and measurable – if there is an effect. Property values are, as Ellen e.a. (2007) stated, an appropriate way of measuring the effectiveness: positive impacts on property values could prove the successfulness of BIDs. This study could serve as evidence for the effectiveness of BIDs and is therefore of societal relevance for the public sector, governments, property owners, retailers and existing BID companies.

1.3.2 Scientific relevance

BIDs have been subject of research in many studies such as Hoyt (2005), Peel & Lloyd (2005; 2008; 2010), Lloyd (2003) and many others. Studies primarily focused on policy learning (Peel...
& Lloyd, 2008, Peyroux e.a., 2012), the role of BIDs in regeneration issues (Lloyd e.a., 2003; Batchis, 2010), BIDs as a management tool (Grossman, 2010) and the impact on retail sales in the USA (Ha & Grunwell, 2014; Sutton, 2014). A few studies focussed on the effectiveness, such Hoyt (2005) and Calagnog (2006) did by examining the impact of BIDs on crime rates.

The study of Ellen e.a. (2007) tried to fill a gap by examining the general effectiveness of different types of BIDs by using a hedonic regression model. The impact on property values was seen as a prove for effectiveness. This quantitative study was examined in New York City and is therefore not generalizable – since the implementation of BIDs in other countries is different due to local conditions. This study will examine the impact of BIDs on property values in Liverpool and will add value to existing literature due to the expansion of generalizable data and results. The adding of evidence from another case study is of scientific relevance, especially because of the new gap that arose due to the implementation of the concept in other type of countries – UK in this case. The generalisability of the conclusion that Ellen e.a. (2007) have been given will improve by this study. Next to this, it also gives an insight into the effectiveness of BIDs in countries and cities that have been looking for new mechanisms as was also argued in the societal relevance section.

1.4 Reading guide

The overall structure of this study takes the form of 9 chapters. Chapter 2 begins by over viewing the theoretical dimensions of the research. The third chapter is concerned with the methodology used for this study. Chapter four will address the case study, chapter five gives an overview of the data and data conditions used in this research. Chapter six presents the results that had been found. Chapter 7 gives the conclusion and discusses the results and chapter 8 provides recommendations for further research and the praxis.
2 Literature review

In this study, we seek to assess the relationship between commercial property prices and the existence of a BID. Therefore, several concepts in literature have been examined to find possible relations (c.q. hypotheses) that later can be tested. In this literature review, different existing theories have been addressed in an attempt to generate an overview in which approaches of different levels are combined. Before finding possible relations, it is important to understand why there should be possible relations between the existence of BIDs and commercial property values. This literature review therefore starts with scientific theories which explain why BIDs occur, then explains the working of BIDs and ends with the reasoning of testing the effectiveness of BIDs by using commercial property values. It then seeks for relations between BIDs and commercial property values.

2.1 Market failure

Ellen e.a. (2007) state that the success of BIDs depends upon the existence of market or government failure in the provision of public services. Under-provided goods such as street-cleaning and security in certain neighbourhoods need supplemental services, unless governmental organizations choose to provide services unevenly across neighbourhoods – which rarely happens (p. 3). Still, the existence of neighbourhoods with a higher demand for public services is not uncommon and this inequality has even increased due to the end of the social welfare era. It is most likely, according to Ellen e.a., that BIDs have a positive impact in these higher demand neighbourhoods in which private or individual volunteering for supplemental services has not succeeded.

One of the main scholars behind the idea of market failure is Pigou. In his “Economics of Welfare”, he argues that ‘if the conditions were not those required for optimal allocative efficiency, then it was the task of the state to correct for those market failures in such a way that the allocative efficiency would be better than the market itself would achieve under the ‘imperfect conditions’. These so-called state corrections involve taxes, subsidies, restraints or state coordination (Needham, 2006, p. 55). The financial problem of public goods, is their limited potential to commercialize and, consequently, to be financially profitable. The Pigovian correction involves a state correction, to maximize the enjoyment of public goods without actually having benefits – and to avoid market failure (Needham, 2006).

A state correction, according to Pigou, can also has to do with lack of coordination. A run-down area requires a state correction in which the government should take the role of neutral coordinator. If one resident in a run-down area, as used as an example by Needham (2007), is considering improving his/her house, the value of his/her house would not increase as much as if other houses in the street would do the same. The role of coordinator could help supporting, to end up with a street that has become more attractive and more valuable. Pigou states that this correction can only be done by the state, because of their neutral and trustworthy role (Needham, 2007).

Related to BIDs, the Pigovian theory has proven to be wrong. As Ellen e.a. (2007) argued, BIDs will mainly be successful in those areas in which state corrections are not sufficient. According to Pigou, run-down areas need state-corrections in order to maximize the enjoyment of public goods without having benefits. However, BIDs prove that run-down areas do not necessary need state corrections to maximize the enjoyment of public goods. Individuals – members - in a BID area can perfectly correct the lack of public goods without having state corrections. BIDs create state corrections themselves by letting members pay levies to correct the lack of state corrections (mostly) without the coordination of the state.
The theory of Pigou leads us to the more appropriate concept of government failure, firstly introduced by Coase (1960). The Coase theorem states that when conflicting property rights occur, the parties will find an efficient outcome regardless of which party is awarded the property rights. Transaction costs must be negligible. In short: those who benefits most will pay (Needham, 2006). According to this theory, the market will pay when services are no longer sufficient but still needed due to its gains for retailers and businesses.

The concept of government failure is appropriate in the case of BIDs, regarding that members of BIDs feel a stronger need to solve the conflict of insufficient level of services provided than the city council does. The owner of the public realm (the city council) and the user of the public council (retailers/businesses) have conflicting interests in the public realm. BIDs seem an efficient way to solve this conflict and matches the criteria of those who benefits more pays – the market in this case. The Coase theorem is especially appropriate in the current situation in which municipalities are looking for new ways of financing public costs. According to this, BIDs seem an effective way of solving the conflict of public costs. Because of this, it is very likely that BIDs are effective in public-led countries too.

2.2 Self-organising

In times of government failure, cities become more and more self-organising. The well-known publication of 'The Tragedy of the Commons” of Hardin (1968) can be seen as a fundamental basis for theoretical frameworks about the self-organising land concept. Hardin's point of view is often criticized by other scientists who do believe in the self-organising concept in the public realm. He believed that individuals would always maximize their own immediate short-term, material benefits. Consequently, in terms of fishery or harvesting, overharvesting of non-privately owned land is unavoidable, according to Hardin. This prediction was widely accepted due to the consistency with many other economic models in that time. These models assumed that individuals would rather choose short-term benefits instead of finding a way of cooperating and end up with a feasible higher result.

Another model related to Hardin's “Tragedy of the Commons” is the also well-known "Prisoners Dilemma", in which attempting to cooperate would give the best possible result if both players do. Instead of cooperating, individuals handle rational and try to maximize their own achievements (Olson, 1965). “The Tragedy of the Commons”, the “Prisoners Dilemma”, and other collective action models all know the basic assumption of the existence of the free rider. As demonstrated by many policy analysts, only an external actor is perceived as having the capabilities of changing the structure of situations that lead to undesirable outcomes. The assumption of the free rider is based on the basic assumption of human beings are being driven by basically selfish motives. Whenever one person cannot be excluded from the benefits that others could provide, each person is tempted not to contribute to the joint effort and to “free ride” on the efforts of others. If all individuals decide to free ride, the collective benefit cannot be achieved.

According to Ostrom (2010), it is paradoxical to ignore the human capacity for self-reflective thought and social artisanship in an era when human rationality is thought of in terms that involve almost superhuman capabilities (p. 316). Solutions to the Hardin's “Tragedy of the Commons” have always been distinguished in two approaches: regulation or privatization of the so-called common pool resources (non-privately owned land). Ostrom (1990) designed principles in her 'Governing the Commons', in which she demonstrated that there is more than the simple dichotomy of state and market. The third approach, Ostrom's approach, is the design of durable cooperative institutions that are organized and governed by the resource users themselves.
Translated to the BIDs strategy, this means that individuals are able to organize themselves to obtain joint benefits when all face temptations to free-ride. Ostrom states that the collective action models like the “Tragedy of the Commons” and the “Prisoners Dilemma” are not necessarily wrong, but inadequate. The conditions in which these models actually apply are very particular. The free-rider problem – in which free-riders are those who benefit from goods, do not pay for them - only exists when involvers have little mutual trust, no capacity to communicate or to enter into binding agreements, according to Ostrom (1990).

Two assumptions can be learned from what was stated before:

1. Costs for insufficient goods will be paid by those who can and will do most efficiently (Coase)
2. The free-rider’s problem will come up when involvers cannot face temptations (Ostrom)

The example by Needham (2007) that was given before showed that a coordinator is needed when an area needs to become more attractive and more valuable - because if one single person only improves his/her property, the effect would be less than when everyone would do. To achieve this, additional services such as coordination and support are needed. Pigou has stated that the government should be the corrector in this. In the case of BIDs, however, other parties might benefit more and will thus coordinate and – perhaps even more importantly – pay. This outcome can be linked to the Coase theorem.

The second assumption can be related to the effectiveness of BIDs as well. Ostrom’s idea behind the free-rider’s problem has not proven wrong in the case of city management, although agreements turn out to be required. By the 1990s, Town Centre Management in the UK came up to counter inner cities declination. The shift from TCM to BID that happened in the UK was, according to Cook (2007), a result of the free-rider problem that had occurred in many TCM corporations. Agreements were desired to avoid involvers that only benefitted (this shift is further outlined in Chapter 4). Concluding, coordination and agreements in order to affect the quality of urban space might have an impact on property values, regarding to Needham’s example.

2.3 BID adoption and management

As mentioned before, the potential value of learning from neighbouring experiences has been acknowledged (Mossberger & Wolman, 2003). The BIDs strategy originated in Canada in the 1970s and was quickly adopted by the United States. Especially in changing times, copying successful approaches can be most efficient and can minimize any potential mistakes. However, policy transfer is not as simple as just copying, due to institutional differences – or, in other words: the effects of policy transferring might not be that intended and largely because differences in context may not be taken into account (Peel & Lloyd, 2010). Nevertheless, some worldwide advantageous assumptions of the BID strategy can be summed:

- They harness a degree of entrepreneurialism and innovation, since business interests are involved in addressing problems and determining solutions;
- They involve the creation of a dedicated and secure source of funding, with a mechanism for preventing the problem of free-riding;
- They create a unified voice and bring improvements efficiently (Lloyd e.a., 2003).

Despite this summing, a universal definition cannot be given due to the flexibility BIDs need to serve the desiring of members involved (Hoyt, 2005). Fundamentally, a BID is governed by cities but managed by a private, non-profit organization. Local authorities basically collect levies to
develop projects or provide extra services – on top of local government services - to add value to the business environment. Basically, BIDs are managed by a board consisting of stakeholders such as business/retail owners, property owners, public officials and non-profit representatives (Ha & Gunwall, 2014).

However, as stated earlier, the exact implementation differs among BIDs. Levy (2001) tried to explain differences among BIDs. He distinguishes four important variables: city size, magnitude of BID budget, the scope, competence and preference of local government and the ‘architecture’ of the city's business organizations. The strategy also varies internationally in terms of mission, Hoyt (2005) has found out that worldwide differences in budget spending occur. In South Africa, for example, nearly three-quarters of BID budgets is spent on security services while BIDs in Canada, the United States and New-Zealand rather spend their budgets on marketing. Besides the earlier mentioned variables, a fifth variable can be distinguished according to Gross (2005) and Ellen e.a. (2007): the size of BIDs. Small BIDs attend to physical maintenance, mid-sized BIDs on marketing and large BIDs on the entire range of services, including capital improvements. Also, large BIDs seem to play a more proactive role in governance – as a consequence of their unified voice. As stated by Ellen e.a. (2007): ‘their level of political influence should shape the magnitude of impacts’. It is thus likely that BIDs governed by large, corporate interests might have more influence.

2.4 Effectiveness

The aim of BIDs is, according to Levy (2001), to compete against other areas, since businesses and tourists have a wide range of choice nowadays. To pull them, and thus to be attractive, experiences, options and amenities must be best. Given the fact that the origin of BIDs is, according to Lloyd e.a. (2003) and Adair e.a. (2001), linked to the wider problem of under-investment in regeneration, and that the principal reason for non-investment in urban regeneration involves the perception of bureaucratic grant regimes, negative image of the environment and lack of capital appreciation or rental growth, the BIDs strategy may attempt to aim for increasing property and rental values.

In any case, levels of property value have been proven as an effective measurement to measure the effectiveness of BIDs, as BIDs fundamentally aim for improving the level and quality of their zone. The money invested in a BID, directly turns back as an investment to the BID area – which is not always the case with taxes. Schwartz e.a. (2007) mention that BID impacts may not always be positive, if the desired public goods and services fail to deliver or turn out to be less valuable as expected. Other critical notes about the effectiveness of BIDs have been made by Lloyd e.a. (2003) and Hoyt (2005), as they argue that BIDs could function as a concentration of property and business owners that have been given the power to manage the public space. Critics say that benefits are just contributed to that certain ‘club’ of managers, while their former neighbourhood problems displace to outside the boundaries of the BID.

As a response to these critics, one could argue that the public space would not have become a better place without investments at all. Translated to the Coase theorem, the ‘club’ of managers achieve greater benefits than the owner of the public realm does. Because of that, they are willing to invest in the area. The public realm still belongs to the owner, who is just not the main investor any longer. A problem-shift would only occur when the problem does not specifically belong to that area. In my opinion, that argument is only valid in case of crime rates. The same would have happened when the owner (city council) of the public realm would have invested in the area – which make the problem-shift argument invalid. In all other cases (such as infrastructural problems, cleaning issues etc.), the BID only solves problems that would not have
been solved without the establishment of the BID. As a result of government failure, the power of managing public space has just shifted, not replaced.

Other scientists as Ellen e.a. (2007), Hoyt & Gopal-Agge (2007) and Sutton (2014) say that it is reasonable to expect that, in the boundaries of a BID, retailers benefit from the formation as the tax is a ‘pass-through’. It is likewise that property owners benefit from improvements, noticing that BID helps businesses to enrich the commercial environment. Mitchell (2008) even declares that the self-financing structure and autonomous governance of BIDs coupled with targeted place-based investment can be characterized as a local economic development innovation. Although, Gross (2005) warns that: “despite diffusion of the BID model to neighborhood retail strips, the lessons large downtown BIDs offer for local economic development professionals with weaker resource bases situated in poorer neighbourhoods are limited.”

2.5 Impacts on property value

The mechanism has become widely popular among policy makers and scholars during the years, although not much quantitative research has been done to measure the effects of BIDs. Only a few scholars have examined the direct effect of BIDs. Sutton (2014) shows that there has not been a significant impact on either sales or employment for small and medium-size BIDs in New York City, disregarding the existence of physical, social and economic effects. Lloyd e.a. (2003) examined the impact on property values in a qualitative way. In their UK and LA study, property owners state that they do believe in property value increases due to BIDs. They reported this as a key reason to join the strategy.

Ellen e.a. (2007) found that BIDs indeed generate positive impacts on commercial property values, compared to properties outside the BID boundaries. Although variation can be found in BID sizes and allocation of budgets. Large BIDs tend to have a larger impact, whilst smaller BIDs that mostly include retail or industrial space appear to have a smaller impact. An explanation can be found in the mixture of members. Ellen e.a. specifies large BIDs as those with an annual assessment greater than $1,2 million, mid-size BIDs are those between $263.000 and $1.200.000 and small BIDs those until an annual assessment of $263.000. In their study, large BIDs mainly involved office spaces (Ellen e.a., 2007). Office spaces mainly exists in high-rise buildings and thus the costs of improvements are more spread across the number of businesses and therefore contributions may be cheaper compared to the effect it generates (Schwartz e.a. 2007).

Another likeliness for the fact that larger BIDs (defined by annual assessments) tend to be more successful might be found in collective action. It is more likely that the impact and effectiveness of BIDs is greater when many businesses expect a small benefit instead of a small number of large businesses that would expect large benefits – which often might be the case with retailers. Yet, the contribution/benefit ratio is smaller in the last group. Eventually, a large group of businesses would have more difficulties with setting up any form of voluntary organisations than a small group of large tenants (Ellen e.a., 2007).

2.6 Other effects on property values

Even though the focus of this study is on BIDs, other variables may also affect property values – obviously. Therefore, other components that may affect commercial property values needs to be examined. Dobson & Goddard developed a model of determinants of commercial property prices in 1992. To understand the commercial property market, and thus the determinations of commercial property prices, it is, according to Dobson & Goddard, ‘necessary to recognize the dual role of commercial property both as a factor of production, and as an asset which serves as store of value’ (Dobson & Goddard, 1992, p. 320). In other words, there is a difference between users (owner-occupiers and tenants) and owners (owner-occupiers and landlords). Nevertheless, the decision to buy or rent is affected by the market, which in return is affected by
several factors. Dobson & Goddard therefore developed a theoretical model in which the following theoretical relationships seem to exist:

1. Employment change: a positive determinant in industrial property;
2. Real interest rates: negative relationship in industrial property and offices;
3. Residential property values: strongly positive effect on rents for all types of property (Dobson & Goddard, 1992).

The residential property value determinant suggests that commercial property values follow developments in the residential property market (housing). In other research, several determinants of the housing markets have been outlined. Since this study does not aim for this overview itself and is limited by time, the most important variables for this study have been picked. Please note, however, that the outlining of determinants for the housing market can be endless. Variables that possibly affect the real estate market according to Ellen e.a. might be (2007):

Building characteristics:
- Square feet
- Number of floors
- Environment (geographical location)
- Building purposes
  - Retail
  - Office

As mentioned, these variables are not all variables that might influence property values. The recent economic depression showed us the massive impact of banking on real estate, for instance. Ellen e.a. (2007) used more variables in their research, such as: shape of building, age of unit, number of buildings on the same lot. They also examined the impact of BIDs on residential properties. This study, however, is not an exact copy of their research as it focusses on all properties in two BIDs instead of a few properties (namely those sold within a certain period) in a greater number of BIDs. The variables pinpointed above will appropriate represent the independent variable ‘building characteristics’.
2.7 Conceptual model
Several theoretical concepts have been examined in this literature overview. As a result, a conceptual model has been drafted. This conceptual model is a simple representation of the theoretical framework. The theoretical framework consists of one dependent variable: the commercial property values, and two independent variables: building characteristics and the Business Improvement District. The main objective of this study is to examine whether BIDs are of impact on commercial property values. In this literature review, a theoretical prove has been given by reviewing theories related to BIDs. To further test the assumptions made in this review, an empirical research based on this conceptual model will be conducted.
3 Methods

To find a solid and valid answer to the research questions, it is important to set up a reliable methodological framework. Methodological choices being made, are based on the nature of the research objective and questions. In this chapter, the methodological framework of this research will be explained by describing the research strategy, the methods for data collection and the data analysis.

3.1 Research strategy & method

Two methods of reasoning exist: a deductive and an inductive approach (Saunders e.a., 2015). Exploring the Liverpool BIDs to gain more insights into the broader concept and effectiveness of BIDs is a deductive way of reasoning, as it tries to add knowledge and confirm the existing theory that BIDs add value to the (business) environment. This study starts with a broader theory that will be statistically tested, this process of narrowing down refers to the deductive approach. The hypotheses are based on a case study in Liverpool. Within this case study, two type of methods will be conducted: qualitative (interviews) and quantitative (evaluating property values).

3.1.1 Case study research

Case study research has been proven as a useful method to investigate a phenomenon within its real-life context (Yin, 2003). The theory (or hypothesis) that BIDs have an impact on property values is a theoretical concept that can be tested in detail by case study research. Case study research is often viewed as a basis for the development of 'more structured' tools, however the extent of detail available is of great value. Case study research address to answer 'how'- and 'why'-questions, and is thus a useful tool for gathering specific knowledge (Rowley, 2002). Another surplus of case study research is the possibility to use both quantitative and qualitative research tools. In this study, interviews support the outcome of the property value evaluation. A disadvantage of case study research is the limited generalisability as the population in the case study cannot be seen as the population at large. Even though this study alone will not be generalizable, it still adds value to the generalisability of the bigger picture.

The Liverpool BIDs have been selected as a case study, considering that previous research was mainly focused on American based BIDs. As mentioned before, a few West European countries struggle with a governmental shift after and since the economic crisis of 2008. In the UK, BIDs have been adopted since 2003 and thus have experienced BIDs for several years now. Liverpool has two BIDs, from which the first BID was established in 2005. The 12-year old City Central BID can be compared to the more recent Commercial District BID (2011). The fact that these two BIDs are comparable due its same environmental conditions - yet so different, makes them a perfect study case. Further details will be outlined in Chapter 4.

3.1.2 Generalisability and transferability

The deductive approach usually aims for generalisability, which can be defined as "the extension of research findings and conclusions from a study conducted on a sample population to the population at large" (Colorado State University, 2016). In this study, this single case study cannot be seen as a sample population to the population at large. One of the side effects of case study research is the seemingly lack of generalisability. Flyvbjerg (2006) states this side effect as one of the misunderstandings about case study research, as one single case can still be a of great value and thus contribute to scientific development. This study can be a part of the greater research about the concept of Business Improvement Districts – as well as the study of Ellen e.a. is. Although this research is not designed for its generalisability, it determines the generalisability of the model conducted by Ellen e.a. (2007). The model will be used in a different environment but it should generate the same findings – according to the deductive
approach. Nevertheless, the outcomes in this study cannot be generalised to the population of all BIDs at large as it focuses on the specific case of Liverpool.

Another misunderstanding, according to Flyvbjerg, is that case study research is not useful for hypotheses testing and theory building, but rather for generating hypotheses. Nonetheless, this study is hypotheses-based as it examines hypotheses formed by previous research. This research allows to make comparisons between the situation in the United States and the situation in the United Kingdom. The possibility of transferability contributes to scientific development in the field of Business Improvement Districts.

3.1.3 Triangulation and validity
An important aspect of case study research is the validity-check of variables and data to make sure that the right type of data and variables are used for measuring what you want to measure. The validity-check of the data in this study is carried out by using mixed methods. Mixed methods research can be defined by conducting research that involves both quantitative and qualitative research, to provide a better understanding of the research problem or – in this study – to cross-checking the data from multiple sources to search for regularities (Saunders e.a., 2015).

The so-called data triangulation – a term to indicate that several methods are used to check the validity - is especially necessary in case study research due to validity problem that is often questioned. In Ellen e.a.'s study, data from sold properties was used as an indicator for property values in each BID (more than 40 in total). In this study, all property values of all building part of the population have been analysed, by using rateable values. Consequently, this study is more in-depth but only consists two cases. Therefore, the outcome is not generalizable, as was mentioned before. Gathering in-depth data is more reliable, but also means that less variables could be tested due to the lack of availability of data at property level. Besides, it is very time-consuming to gather data at property level. In this research, gathering in-depth data was more important than generalising results. Consequently, a validity cross-check of variables is necessary. The examined variables in Ellen’s e.a. New York City model have been explored in the literature review as part of the desk research. To check whether these variables are valid for the Liverpool case, an interview was held. Needless to say, institutional differences might influence the validity of the variables.

3.2 Data collection and data analysis
As mentioned previously, this study involves mixed methods in order to meet shortcomings in case study research like generalisability and validity. The data collection obtains primary and secondary data and was gathered as part of the desk research, interviews and the property value evaluation.

3.2.1 Desk research
Part of answering the research questions is desk research, to gather information and findings that already exist. Desk research has helped in easily gaining insight into the process of BIDs. Firstly, desk research is an easy way to help clarify what needs to be done – it helps at a prior stage to find out what exactly is of relevance. Moreover, secondary data can answer parts of the research questions. In this study, the first sub question can partly be answered by secondary data. And lastly, secondary data helps in conducting the primary research due to the possibility to learn from other primary data collection. Therefore, desk research has helped in designing this study’s framework (Saunders e.a., 2015).
3.2.2 Interviews

As part of the mixed methods, interviews have been held. The first interview has been held with Minze Walvius, who is member of the Dutch Business Improvement District association. Minze Walvius has visited many BID conferences worldwide. This interview was of explorative nature to understand differences between BIDs worldwide and to learn about the history and development of BIDs. The goal of this interview was, as said, explorative and has helped in narrowing down the research objective and -questions.

Prior to the property value evaluation, an interview with the BID Company was conducted. The interview was held with Andy Herring, Development Manager of the Liverpool BID Company. Andy Herring is in charge of development of the two BIDs in Liverpool and keeps in touch with members in order to keep improving the organisation. He is a good representative for this research, as he knows the working of BIDs in Liverpool from both the inside (company) as well as the outside (members). The goal of this interview was to understand local conditions that might be relevant, in order to run the analysis on valid variables and indicators. This interview was also part of answering the first sub question in which underlying mechanisms and elements are subject of research. The understanding of the mechanisms and elements that exist in Liverpool helps in the use of accurate and well-founded variables and indicators, to take care of validity.

A disadvantage of these interviews is the fact that the quality of the validity-check is dependent on two experts. The quality of interview data in general is heavily dependent on the knowledge of individuals. Secondly, misunderstanding and misinterpretation are hard to prevent and lastly the analysis of interview data is very time consuming due to its quantity. Interviews in this research were part of the validity-check and therefore only two interviews had been held. However, the persons interviewed are both experts in the field, so in-depth information had been gathered. Nevertheless, in terms of validity, it would have been better when more interviews had been held. A suggestion for further research could be to conduct questionnaires instead of, or next to, interviews. An advantage of questionnaires is the greater volume of data, as it is easier to reach people and to analyse the data (Saunders e.a., 2015). In this study, however, in-depth data was preferred to gain a better understanding.

3.2.3 Property value evaluation

The model used in this study explains the rateable value of a property as a function of its structural characteristics (building characteristics and BID characteristics) and its neighbourhood location. This is conducted by a property value comparison among properties in BID boundaries and comparable properties outside BID boundaries, over time. Then this study examines whether value differences are a result of the BID formation. At last, a closer comparison between the two BIDs in Liverpool is examined – to measure certain (BID or non-BID) effects.

The quantitative data analysis of this research had been conducted based on commercial property prices. Property prices were provided by the BID Company and the Valuation Office Agency and include the non-domestic rateable values over the years (when available). A non-domestic valuation is based on annual open market rental values and used by the city council to calculate rate bills. The business rateable value depends on the locality, size of property and its usage (Valuation Office Agency, 2017). The Valuation Office Agency offers a wide range of rateable value data (over years) and since it is based on annual open market rental values, it is a very accurate variable for further measurements.

The independent variables consist of building characteristics and BID characteristics. BID data will be further outlined in Chapter 4. In the model, the indicator for BID characteristics is
summarised in the indicator ‘levy’. Paid levies indicate how much was invested and are property dependent. Building characteristics influence overall transaction prices too, as was found in the literature framework. The building characteristics in this study are:

- Geographical location
- Purpose of building
- Parcel size
- Number of floors

Building data was collected via the Valuation Office Agency. Building purposes are subdivided into retail, office or other. The geographical location consists the postal code of each property. Compared to the study of Ellen e.a. (2007), less variables are examined. Considering that this dataset of property values is more precisely – it has values of all properties, not only those that had been sold -, and it also involves the effects of building characteristics since it is based on market values, a less enhanced building characteristics dataset is taken for granted.

### 3.2.3.1 Regression model

A comprehensive method for measuring impacts on property values is the hedonic regression analysis. The hedonic pricing model can be used to measure the influencing effect of characteristics on the overall market price (value of property), or as described in an equation:

\[
\text{Market price} = f (\text{tangible and intangible building characteristics, other influencing factors})
\]

This valuation method is widely used under developers, real estate groups and owners to determine which characteristics add significant value. Results provide very detailed information on which decisions can be based. An advantage is the flexibility of the method, as each can decide which characteristics are important to measure. The hedonic regression analysis usually involves standard building characteristics such as building age, size of buildings, geographic location and on, and the to-be analysed characteristics that differs among the aim of the usage of the method (Monson, 2009). In this study, BID characteristics will be analysed: budgets (income and expenditures), allocation of budget, size of the BID and such. Furthermore, transaction prices over the years are needed to measure the impact on it.

The hedonic regression model makes use of regression analysis. Regression analysis is a statistical technique used to determine correlation between different variables (Monson, 2009). In this study, the effect of BID variables (independent variables) on the dependent variable property value is measured. As was explained before, it is most likely that BIDs are formed in areas that stand problems. This directly means that BID areas might be systematically different from other neighbourhoods. To measure the effect of BIDs, properties in and out boundaries will be compared. The comparison area is defined by the postcode areas in which the BIDs are in – L1, L2 and L3. It is likely that most properties in the same postcode area face the same neighbourhood problems. Ellen e.a. (2007) argue that they exclude the immediate vicinity of the BID, as there might be a spill over effect. In this study, the vicinity of the BID is part of the comparison area as BID managers mention that BID boundaries are clearly visible (e.g. maintenance/cleaning and security effects).

A general overview of the collected quantitative data will be given in Chapter 5.
4 Case study topic

4.1 Business Improvement Districts in the UK

The BID strategy had quickly been adopted by other countries than Canada – where it first started - and the USA. Nevertheless, as mentioned before, the policy transfer differs per country. In this study, the focus is on Business Improvement Districts in the UK, more precisely in Liverpool. Business Improvement Districts in more public-led countries such as the Netherlands, Germany and the UK are relatively new compared to Canada and the USA. Previous research on the effectiveness of the BID strategy was mainly focused on countries in which the institutional context is considered as liberal. In this study, Liverpool will therefore stand as an example for the transfer of the BID strategy towards less liberal countries.

In the UK, several urban struggles have led to new initiatives in urban planning. These initiatives were mainly established as a form of public-private partnership in order to bring together key interests. Peel & Lloyd (2008) state that besides urban struggles such as decentralisation, urban restructuring and socio-economic changes, there was a growing support for new forms of urban management that more actively involved the private sector. Until then, the public sector has been responsible for managing the public space and delivering public services. A neo-liberal influence and a stronger believe in a market-led world, had led to the idea that town centre decline was attributed to the ‘institutional inertia and neglect’ by local government.

One of the new initiatives that had been implemented was the TCM partnerships (Town Centre Management). This experimentation and the study of BIDs in the USA led to the implementation of the BID strategy in 2003 (Justice & Skelcher, 2009). The aim of TCM partnerships was as ‘easy’ as making their centres more economically competitive and attract higher footfall, spending and investment, related to the neo-liberal reflection that was going on in the 1990s. By the late 1990s, even though it had indeed played a role in increased consumer spending’s, a free-riders discussion came up. Private donations turned out to be problematic as a few businesses had decided to not contribute financially but still enjoyed the benefits of TCM. Private contributions were modest and came from a very small minority. This led to a lack of long-term possibilities for the services provided by TCM (Cook, 2007).

By 1996, policy makers and TCM members held an in-depth discussion about the successfulness and weaknesses of BIDs in the USA at a UK city management conference. This conference confirmed the need for a similar system, especially for the financial fund of TCM goals. In 2005, the first official BID in the UK was established after a period of designing legislation and regulation (Cook, 2007; Justice & Skelcher, 2009). Since then, more than 180 BIDs have been created in the UK. TCM partnerships could either evolve into a BID or co-exist as separate institutions. Yet the UK BID strategy was inspired by BIDs in the USA, a different design of the strategy and context was derived (Justice & Skelcher, 2009).

4.2 Case study Liverpool

Under the Local Government Finance Act, a 5-year scheme pilot project was designed in 2003. BID pilots had been set up, mainly in London. All pilot BIDs were successful in re-balloths, which showed the successfulness. As a result, by 2007 around 40 BIDs had been established and/or proposed in England, Wales and Scotland. One of them was the City Central BID in Liverpool, with its inception in 2005. In 2011, the Commercial District BID became the second BID in Liverpool (see Map 1). Both the Commercial District and the City Central are managed and coordinated by the BID Company Liverpool (BID Company, 2016).

Although Liverpool City Region’s long term GVA growth remained very strong over the years, Liverpool’s GVA growth of 2014 (3.4% since 2013) was lower than in comparator areas (Core
 Cities: 3.6%, UK’s average: 4.6%). Liverpool’s GVA per head (22.092 pound in 2014) is below the UK average (24.958 pound in 2014) with below average growth over the past year (2.9% compared to 3.4% UK average). Despite this, Liverpool is still one of the UK’s top five visitor destinations and has massively changed the past 15 years. Liverpool’s history had left the city centre with regeneration issues which resulted in one of the biggest urban regenerations of the past decade. Nowadays, Liverpool City accounts for 37% of the GVA produced in the Merseyside Region (Liverpool City Council, 2016).

Most businesses and retailers want to remain one of the biggest economies in the UK. To remain this position in the future and to compete with other major centres in the region, both the City Central BID and the Commercial District want to keep attractive and thus invest in a strong and diverse city. According to the Commercial District Business plan 2016-2021: “the Liverpool BID company will ensure that investments can be leveraged, change can be co-ordinated and place making can be championed [...] not just for the District but for the city region itself” (BID Company, 2016a).

4.2.1 City Central BID
The first BID established in Liverpool is the City Central BID, with its inception in 2005. The City Central BID represents 650 businesses and covers 35 acres, mainly in retail and leisure (Figure 1). The City Central BID is focused on safety, environment, animation and marketing. Considering that the City Central BID lies in the leisure and retail heart of Liverpool – and thus their members are mostly retailers - their key aim is to make the city centre a safer and more welcoming place for visitors and businesses to invest, work and play in (BID Company, 2013).
Other aims are providing a voice for all members to ‘ensure that City Central BID is a key part of the strategic, decision-making processes affecting the city centre’ and to work in partnership to “ensure that the retail and leisure offer matches the demands of the customers and that the infrastructure of the city centre makes visitor access and movement as easy as possible’. All businesses in the City Central District pay 1.2% of their rateable value to provide the core BID levy funding to deliver the aims. In return, ratepayers get a vote for ballots. Ratepayers and thus voters in the City Central BID are mainly renters of properties but in the case of an empty hereditament, property owners or current leaseholders will be liable to vote. Levies are mandatory above a rateable value of £10,000 (BID Company, 2013).

![Image](image1)

**Figure 2: Income City Central BID 2015/2016 – percentage distribution (BID Company, 2016b)**

Besides the BID levy, the BID gains income through Liverpool City Council (in-kind), commercial pitch hire, sponsorships and other incomes such as bank interest. Another noteworthy income is the property owner contributions (Figure 2). Property owner contributions are not mandatory – levies are – but do account for £25,000 annually. The total 2015/2016 BID income (including £363,542 for contingency funds) accounted for £1,131,210 (BID Company, 2016b).

![Image](image2)

**Figure 3: Expenditures City Central BID 2015/2016 – percentage distribution (BID Company, 2016b)**
The total expenditure (including £495,658 as contingency funds) for 2015/2016 was equal to the income: £1,131,210. As Figure 3 shows, expenditures were almost equally divided among the four focus areas. Another £107,590 was reserved for operations costs.

4.2.2 Commercial District BID
Just as the City Central BID, the Commercial District was successful in a reballot for another five-year term. The Commercial District BID covers 85 acres in an area between Liverpool’s waterfront and the retail core. Despite the fact that the district covers a bigger area than the City Central BID, it represents 550 members – which is less than the City Central BID. The Commercial District BID has the largest concentration of businesses in the city region, which results in a professional based member base (Figure 4). Other members can partly be found in leisure and partly in retail (BID Company, 2017).

![Figure 4 Commercial District Members – percentage distribution (BID Company, 2017)](image)

Besides differences in member base, the income distribution is slightly different from the City Central BID as well (Figure 5). The total income in 2015/2016 was £1,746,969 (including contingency funds), compared to a £1,131,210 total income of the City Central BID. The BID levies accounted for ± £618,000 of the income at both the City Central BID and the Commercial District BID, even though the City Central BID represents more members. Moreover, the Commercial District levy system is equal, this acknowledges that properties in Commercial District BID are accounting for a higher rateable value. However, the Commercial District included £1,074,184 contingency fund in the year 2015/2016 (BID Company, 2016c). Apart
from the contingency funds, it is remarkable that the Commercial District is mainly based on BID levies (92%) whilst the City Central BID found other income sources (80%).

![EXPENDITURES COMMERCIAL DISTRICT 2015-2016](image)

**Figure 6 Expenditures Commercial District BID 2015/2016 – percentage distribution (BID Company, 2016c)**

The expenditures show another distinction between the two BIDs in Liverpool. While the City Central BID is mainly primarily focused on marketing, animation, environment and safety, the Commercial District BID had spent £920,875 on capital projects, such as infrastructural improvements. Other expenditures are on animation & marketing, environment & security, development & investment and transport & access (Figure 6). As listed in the Business Plan 2016-2021, the Commercial District BID is focussing on (BID Company, 2016a, p. 11):

- "A cleaner and safer District – more greenery and sophisticated lighting schemes;
- A busier District – more events and less vacant units;
- A better-connected District – intelligent solutions to transport and IT issues;
- A healthier District – one that supports business growth and employee skills."

These focus areas are a result of the voice of BID members. Even though both BIDs aim for a stronger and more diverse city, aims and objectives turn out to be BID specific. The City Central BID and the Commercial District BID both aim for common improvements in provided services such as safety and cleaning. The Commercial District however spends a significant amount in capital projects (53%), whilst the City Central BID does not spend budget on capital projects at all. Consequently, allocation of the budget might have an impact on the effect on property values.

4.3 Other investments in Liverpool

Liverpool, in general, has become one of UK’s favourite cities to invest in recent years. Rental yields are relatively high while risks are low, compared to other popular regions in the UK – due to lower property values. Liverpool has also been subject to major investments such as Liverpool ONE and the Dock areas. This not only attracts visitors, but has attracted major property and business investors into the city as well (Aspen Woolf, 2016). By 2014, for example, Liverpool had the fourth highest net increase of stores in the UK – with more business opening than closing (Liverpool City Council, 2014). This recent popularity might have had its effect on the average property values in the Liverpool City Centre region. Therefore, the scope of this study cannot only be on the Business Improvement District regions.
4.3.1 Retail

The Liverpool retail centre region can be bounded by Elliot Street, Church Street/Clayton Square, Brythen Street/Williamson Square, Whitechapel, Paradise Street and Bold Street – all in the L1 postcode area. Liverpool’s retail area is often defined by the Liverpool ONE area (L1 8) and its surroundings. Streets in the Liverpool ONE area are Paradise Street (main boulevard), Lord Street, South John Street and a part of Hannover Street. The Liverpool ONE area generates a high monthly footfall due to the presence of popular retailers such as New Look, Waterstones, ZARA and John Lewis. The other main shopping area in Liverpool can be found in and around Church Street, in which retailers such as Primark, Marks & Spencer and Forever 21 are situated. Historically seen, Church Street has always been the retail core of Liverpool. Since 2008, however, the Liverpool ONE area is a huge competitor.

Since 1981, Liverpool has been undergoing huge regeneration programmes such as the Waterfront regeneration, the Office quarter and Liverpool ONE. A Cushman & Wakefield’s study warned the City Council in 1998 that Liverpool’s reputation as a shopping centre was under threat. As a result, the City Council started the Paradise Street Project, now known as the Liverpool ONE. The Liverpool ONE programme involved a redevelopment of 42 acres mainly focussed on retail and leisure facilities and had finished by 2008, with a total investment value of £920 million. Nowadays, a total number of 169 stores are situated in Liverpool ONE (Liverpool ONE, 2017).

According to the Main Retail Area Review of 2014, conducted by Mayor of Liverpool, The Liverpool ONE area manages year-on-year increases since its opening in 2008, despite the general trend of downfallen footfalls in the UK (11% compared to 23% sales rise in Liverpool ONE). It has also been said that the Liverpool ONE area lifted the total local economy by functioning as a motor for further developments and investments in the area. Besides, other units outside Liverpool ONE benefit of the higher footfall as well, considering that sales of businesses outside Liverpool ONE were higher than UK average (7.4% in Liverpool and 1.8% UK average) (Liverpool City Council, 2014).

Despite the successes of the Liverpool ONE area, the most attractive street for new businesses turned out to be Bold Street, which mainly attracts independent retailers. In 2014, the vacancy rate was about 5% (12.1% in the Main Retail Area).

4.3.2 Businesses

While the retail sector in Liverpool had slightly recovered after the economic depression of 2008, the office supply had fallen with 9.3% in 2016. In 2016, the overall office take-up was 523,456 square feet in the Liverpool City Region – the lowest take-up in the past years. Although, the commercial property market remains on a positive trend despite falling supply: especially in the Commercial District, that accounted for 62% of the transactions in 2016 (Property Group Liverpool, 2016).

The Commercial District is the main supplier of office units and levels an average £20,50 per square feet price for A category units and an average £13,50 square feet price for B category units. Rents of units outside the Commercial District boundaries range from £9,50 until £11,50. The Commercial District area remains the most popular office district, considering the 1.3 million square feet investment transactions in 2016. These investments involved large deals for several buildings in the Commercial District BID (Property Group Liverpool, 2016).
5 Data

In this chapter, a data overview will be given in order to validate the concepts that have been outlined earlier in this study. This chapter can be seen as a translation or ‘bridge’ towards the Results chapter and is needed to understand what is examined and for what reason. An important aspect of research is the generalisability and transferability of the study; this overview will support the repetition by outlining the conditions that apply in this study. As part of bridging, this chapter starts with the hypotheses that are a result of previous sections and will be tested in the analysis.

5.1 Hypotheses

The objective of this thesis is to evaluate changes in commercial property values over years to discuss the effectiveness of BIDs in Liverpool. The following central question has been formulated to meet this objective:

**To what extent did the formation of Liverpool’s City Central Business Improvement District and the formation of Liverpool’s Commercial District BID led to changes in commercial property values?**

The central research question will be distinguished by the following sub questions:

- What are underlying mechanisms and elements through which BIDs influence commercial property values?
- To what extent is there a significant difference between property values in and outside the BID boundaries?
- To what extent is there a significant difference between property values in the City Central BID and the Commercial District BID?
- Can the Liverpool BID strategy be seen as a successful tool for local economic development?

The objective is narrowed down for the Liverpool case in the central question, sub questions and hypotheses. The hypotheses have been identified as a result of what is suggested by previous scholars and are then applied to the Liverpool case. This has led to the following hypotheses:

1. There is a significant difference between the property value of commercial properties inside the BID boundaries and outside the BID boundaries.
   a. Prior date of establishment, it is expected that commercial properties in the BID boundaries have a significant lower property value than commercial properties outside the BID boundaries.
   b. After date of establishment, a significant property value increasement is expected for commercial properties inside BID boundaries.

2. There is a significant difference between commercial properties values in the City Central BID and commercial property values in the Commercial District BID.
   a. Based on the date of establishment, it is expected that commercial property values in the City Central BID have increased relatively more than commercial property values in the Commercial District BID.
b. Based on the allocation of budgets, it is expected that commercial property values in the Commercial District BID have increased relatively more than commercial property values in the City Central BID.

These hypotheses will act as a guideline to for the next chapter in which the analysis results are discussed. The hypotheses do not include years, but tests will be conducted for several years, to measure the longitudinal effect of the establishments of BIDs.

5.2 Data conditions

The quality of the research depends on the way data has been collected. In this study, several choices have been made in order to set up the dataset, which means that several conditions appear and need to be taken into account to understand the outcome of the analysis. The data choices being made will be illustrated and explained below.

5.2.1 Description of data

In this study, a total number of 1900 cases have been examined. The City Central BID represents 650 members from which 595 properties are part of the dataset. The Commercial District BID represents 550 members but apparently covers 852 properties – the number of properties in this dataset. This can be explained by the fact that some members might manage more than one property, according to the Valuation Office Agency. Another reason might be found in the fact that the Valuation Office Agency sometimes splits buildings into more than one property. For example: building X contains 4 floors that are all counted separately, this makes that building X counts for 4 properties. Nevertheless, a correction would be hard to make as one does not know which property belongs to which member, according to the Valuation Office Agency system.

Another deviation might exist due to the fact that certain chain stores have no data details available for anonymity reasons. This effect occurred for all three subject areas and it is therefore not expected that this deviation affects the quality of the data. A goodness-of-fit test has not been carried out, as the data from the BID Company is divided into a different member distribution (Retail, Professional, Leisure and Other). This distribution does not match the Valuation Office Agency distribution (Office, Retail and Other). However, the dataset (table 1) shows a similar distribution in which the City Central BID mainly involves retail members and the Commercial District office members. Furthermore, seeing the fact that all commercial addresses inside the BID boundaries are part of the dataset, there is no reason to doubt the fitness of the dataset.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Office</th>
<th>Retail</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Central BID</td>
<td>595</td>
<td>73 (12%)</td>
<td>519 (87%)</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>Commercial District BID</td>
<td>852</td>
<td>668 (79%)</td>
<td>156 (18%)</td>
<td>28 (3%)</td>
</tr>
<tr>
<td>Non-BID area</td>
<td>453</td>
<td>195 (43%)</td>
<td>248 (55%)</td>
<td>10 (2%)</td>
</tr>
</tbody>
</table>

Table 1: Distribution of building purposes in empirical data (VAO, 2017)

5.2.2 Conditions dependent variable

The dependent variable in this study is based on the rateable value. A non-domestic valuation is based on annual open market rental values and is used by the city council to calculate rate bills. Business rates are charged on most non-domestic properties (shops, offices, pubs, warehouses etc.). Since rateable values are based on annual open market rental values, the value depends on the locality, size of property and its usage. Rateable values are available for almost all properties and thus form an accurate representation of the average property value per area. In the study of Ellen e.a. (2007), sales prices have been used to represent property values. However, in this study only 2 BIDs are part of the analysis compared to 44 BIDs in the NYC study of Ellen e.a.
For this reason, a more comprehensive and representative representation of property values is wanted as only a few properties have been sold in the past era.

Rateable values may be a more appropriate way of measuring in this single case study, although a few limitations came up. Rateable values are not available for each property each year for various reasons. At first, as was mentioned before, chain stores sometimes successfully hide their rateable values. Secondly, revaluation usually happens every 5 years with a 2-year delay (2010 data is based on 2008 rental values). Rateable values of properties will be adjusted to reflect changes in the property market. The oldest data year available is 2005, other years that contain data of almost all properties (except for newly built buildings) are 2008, 2010, 2016 and 2017. At the moment of writing, the 2017 data is draft data and not confirmed. In some cases, data is available for other years between 2005 and 2017.

The years of importance in this study are 2005, 2008 and 2011 because of the designation of BIDs in 2005 and 2011 and the economic crisis of 2008 that had had its impact on property values. Due to the 2-year delay in the Valuation Office Agency data, one can say that 2005 data represents open market rental values of 2003. The actual data range in this study is therefore 2003 until 2014 (and a 2015 estimation). This range offers the opportunity to measure the effects of property values prior BID formation. The estimated property value trend will mainly be based on 2005, 2008, 2010 and 2016 rateable value data, because most cases are covered by these years and match with the years of importance in this study (considering the 2-year delay).

5.2.3 Conditions independent variables

All independent variables are a result of what was theoretically concluded and mainly based on what Ellen e.a. (2007) found. The variables they used were validated by the BID Company in an interview, in which the circumstances and elements that might have an impact on property values in BID areas were tested. The variables are not just a copy and paste of what was stated by Ellen e.a. (2007), also because of the different design of the research (44 BIDs in Ellen's e.a. study versus 2 BIDs in this study). This was explained and grounded in the Chapter 3. The interview with the BID Company (Andi Herring, December 2016) has helped in constructing the dataset and validating the variables for the Liverpool case. Another welcome effect of the interview was the insight it gave into the operation process of BIDs in Liverpool; this might help in explaining the findings and is of help in understanding the data.

As was previously mentioned in the Chapter 3, the independent variables are separated into two categories: BID characteristics and building characteristics (table 2). The BID characteristics are not case specific, but BID specific: each case in the same BID holds the same value for BID variables. The building characteristics, however, are at property level. The variable building purposes is based on Valuation Office Agency data and can also be used to measure distinctions among BID members (retail vs office). Some properties have a combined office/retail function, in these cases the purpose that accounts for more than 50% of the total square metre counts. The category other involves factories and car parks.
Independent variables

BID characteristics
- Geographical location (postcode and address details)
- Date of establishment (year)
- Size of the budget (in pounds)
- Breakdown of services provided
- Allocation of the budget
- Size of annual total assessment

Building characteristics
- Geographical location (postcode)
- Purpose of building (retail, office or other)
- Parcel size (in square meters)
- Number of floors

Table 2: List of independent variables

5.2.4 Other statistical conditions

All variables are a result of a careful validation process in order to make sure that the outcome of tests is matching the objective of this study. Besides the variable conditions, other statistical conditions apply and might be of influence of the outcome: missing values, normal distribution and the requirements of the comparison area.

The alternative comparison area has been designed for verification arguments; the property values outside BID boundaries give an insight into average commercial property values in Liverpool as well as it functions as a control variable. The comparison area marks the trends of other properties that are comparable to the properties in the BID boundaries. To make sure the properties in the comparison area are indeed comparable, a few requirements have been drawn. The properties in the comparison area satisfy the following requirements:

1. Properties meet a rateable value of at least 10,000 pound in 2016. All properties in BID boundaries that are part of the dataset match this requirement, as members of BIDs are those who rent a property with a rateable value of at least 10,000 pound. The paid levy is set at 1.2% of the rateable value. The year 2016 had been set as a starting point to collect the BIDs property data.

2. Properties have a commercial purpose. In this study, only commercial properties are carried out since Liverpool BIDs are established for commercial purposes. Even though there might also be an effect for residential properties (as was suggested by Ellen e.a. 2007), the focus in this study is on commercial impacts. BID members of the Liverpool BID Company are non-occupied tenants of commercial properties.

3. Properties are in the same postcode areas as the BID properties. Several scholars stated that it is most likely that BIDs are designated in areas that need extra investments. It is reasonable to argue that properties in the same postcode area face the same urban struggles. Other retail centres or commercial districts enjoy or combat different spatial conditions, which then need to be considered. The postcode areas in this research are L1, L2 and L3.

4. Data is available for at least 2005 or 2008 and 2016. To guarantee that the alternative area data is of use for this study, it is required that rateable values are available for at least two years of interest. Considering that 2016 was used as a starting point for collecting rateable values in BID boundaries, the same starting year was required in setting up the alternative comparison area. All cases in the dataset therefore have a value for the variable ‘rateable value 2016’. In order to study longitudinal trends, the best-case
scenario would involve cases that contain data over all years. However, since the Valuation Office Agency usually revaluates every 5 years, this was not possible for the alternative comparison area either. Nevertheless, data is available for the years 2005 and/or 2008 – years that can be considered as years of interests and are helpful for measuring trends over years.

In total, 453 properties were selected for the alternative comparison area. These properties are equally divided amongst the three postcode zones (L1, L2, L3). For the alternative comparison area, the same limitations came up as for the two BID areas. As a result of the limitations, the dataset faces a few missing values, mainly for variables in years that have not been revaluated by the Valuation Office Agency. These missing values, however, will not affect the quality of the dataset since these missing value years were not marked as year of importance in this study. In some cases, years that have not been comprehensively revaluated still contain values (for example when businesses make an appellation). In 90 cases (out of 1900) values for the variables ‘building purpose’ and ‘number of floors’ are missing because of privacy reasons. There are no other missing values in the dataset, due to the total number of cases (1900) the few limitations are taken for granted.

The last important statistical acknowledgement is the normal distribution test. The dependent variable ‘rateable value’ turned out to be not normally distributed. Therefore, consequently, choices had to be made as it affects the quality of the analysis. An explanation of the distribution may be found in the pattern that exists in the dependent variable commercial property value. After all, there might be a correlation between values in a certain area, since geographical location is assumed to be a determinant of commercial property values. Consequently, commercial property values might not be normally distributed as it turns out that a pattern exists. This pattern, however, is easily to explain by the fact that commercial property values is a clustered variable due to its determinants.

Still, the quality of the tests and thus the results may be affected by the non-normally distributed data when using a number of statistical tests such as ANOVA and regression models (De Vocht, 2014, Saunders e.a., 2015). These tests require normally distributed data. Some practitioners therefore decide to transform the data (log the data for instance). In this study, however, the dataset contains data of the whole population, namely all properties in BIDs. Hence, in this case it was preferred to use the ‘pure’ data instead of transformed data. Even though the data is not normally distributed, the results does give us information about the case itself without data being transformed.
6 Results

The objective of this thesis is to evaluate changes in commercial property values over years to discuss the effectiveness of BIDs in Liverpool. To examine this objective, it is useful to start with descriptive statistics to see changes in average prices of commercial properties in Liverpool’s areas of interest prior and after formation of the City Central BID and the Commercial District BID. Later, the averages will be compared to evaluate changes and differences between the BIDs and the alternative comparison area over years. The last part of the results chapter is the outcome of the regression analysis, in which predictors of commercial property values were tested to see to what extent BIDs have an impact on commercial property values.

6.1 Average commercial property values

The average rateable values of properties in the City Central BID and the Commercial District BID do not tend to show a trend at first: table 3 shows a summary of average rateable values for the years 2005, 2010 and 2016. The first column illustrates that rental prices in the City Central BID area seem the most expensive: more than double than rental prices of properties in the Commercial District BID and the alternative comparison area. In the year 2010, however, properties seem to have the lowest average rental price in the City Central BID area. The most recent and confirmed data (2016) shows the same distribution of property values as in 2005 again.

<table>
<thead>
<tr>
<th></th>
<th>Average RV 2005</th>
<th>Average RV 2010</th>
<th>Average RV 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Central BID</td>
<td>84,732,80</td>
<td>101,765,02</td>
<td>90,8876,05</td>
</tr>
<tr>
<td>Commercial District BID</td>
<td>41,056,78</td>
<td>108,592,39</td>
<td>69,844,01</td>
</tr>
<tr>
<td>Non-BID area</td>
<td>36,236,68</td>
<td>134,375,47</td>
<td>80,802,87</td>
</tr>
</tbody>
</table>

*Table 3: Average rateable values in 2005, 2010 and 2016 (source: VAO, 2017)*

Especially the City Central BID breakdown (compared to other properties in the population area) of 2010 is remarkable, considering the formation of the City Central BID in 2005. The 2010 row, however, can be seen as the start of the economic crisis considering the 2-year delay of rateable value data on the actual open market rental prices. This effect might have occurred at first for properties in the retail sector. Still, the average rateable value had impressively increased since 2005, for all study areas. The 2016 row shows a decrease of rateable values, compared to the year 2010.

*Figure 7: Average commercial property values (total values) for selected years (source: VAO, 2017)*
Figure 7 shows a more detailed comparison of commercial property values. In this figure, a delay-correction has been made and data therefore actually match with the open market rental price. A general decrease can be seen in the years 2014 and 2015. It also seems that property values in the Commercial District BID show a down falling trend over the years, since its increasement of the year 2006.

![Figure 8: Average commercial property values per square meter in pounds (source: VAO, 2017)](image)

Nonetheless, when rateable value data is transformed into square meter prices, a different trend can be seen (Figure 8). A warning must be given: figure 8 does not actually show a trend over years since it does not contain data over all years. The average rental prices per square meter have been slightly increased in all study areas, especially in the City Central BID area. At first sight, rental prices per square meter in the City Central BID area seem to be on their way back after its 2006 downfall (and even above the 2003 level). Another remarkable fact is the increasement of rental prices in the alternative comparison area, in the year 2006. This can partly be explained by the investments in the Liverpool ONE area, in which newly built properties probably caused an increasement effect on the average value.

Square meter prices offer the opportunity to compare rental prices, even though the average square meters per property are not extremely different (City Central BID: 538 m², Commercial District BID: 550 m², alternative comparison area: 605 m²). There is a significant difference between the average rateable value per square meter of properties inside the BID boundaries and outside the BID boundaries in 2005 and 2008. In the years 2010, 2016 and 2017, however, the average property value per square meter of properties in BIDs are at the same level as properties in the alternative comparison area. As further can be seen in Figure 8, and is tested on significance, rateable values per square meter of properties in the City Central BID significantly differ from rateable values per square meter of properties in the Commercial District BID.

An interesting finding is the fact that, when cases that do not have values for the variable ‘rateable value 2005’ are left out, the average property values per square metre in all years are significant higher in BID areas. It is most likely that this fact has to do with newly built properties in the alternative comparison area, these cases obviously had no value in 2005. It is interesting, as this might show the impact of other investments in the Liverpool retail and business area that has had its impact on commercial property values as well.
6.2 Commercial property values trend

Until now, statements about changes over years could not be made as the data did not show trends but rather moments. Figure 9 shows trends over years for the City Central BID area, Commercial District BID area and the total area at large (all areas combined). The dotted parts of the lines represent expectations since no or less data was available for these years. General trends that can be found are the decreasing's after 2008 and the rise of rental prices after 2012 and on. The City Central line shows fluctuations over the years, while the Commercial District line seems to steadily increase after 2012 – compared to the constant average rental prices per square meter until then.

![Average trend commercial property values](image)

The City Central BID was undergoing a falling down of rental prices until 2005, after 2005 two periods of increase can be discovered. The City Central BID was designated in 2005. The highest average rental price peak has been reached in 2015: the average rental price per square meter was 635 pounds. In 2006, at rock-bottom, the average square meter price was 289 pounds. This average rental price per square metre is still significantly higher than the highest peak average rental price of the Commercial District BID in 2014: 254 pounds per square meter. It can be stated that property rental prices in the City Central BID are higher than average. An explanation can be found in the fact that the City Central BID is situated in the inner-city retail centre.

The Commercial District BID has officially been established in 2011, it cannot be stated that a significant increase has taken place since then – based on Figure 9. A t-test, however, proved there is a significant difference between the average property rental value of 2003 (131 pounds per square meter) and the average property rental value of 2014 (254 pounds per square meter). This significant difference cannot only be related to the establishment of the BID, as property values increases are impacted by several other factors (such as inflation, local economic development etc.).

6.3 Local geographical trends

Other interesting findings can be found when analysing the increases over years in percentages. Between 2003 and 2014, average rental values in the alternative comparison area have increased with 70%. Properties in the BID boundaries with 27%, a significant difference.
Another significant difference can be found between 2008 and 2014 (BID: 21% and non BID: 90%). These percentages suggest that designations of BIDs do not have an impact at all, considering that properties values in the alternative comparison area have extremely increased compared to properties in BID areas.

A closer look illustrates the strong appearance of local differences (see Map 2).

**Increasment property values 2003 - 2006**

Map 3 and Map 4). As was examined earlier in this section, other investments in the Liverpool retail and business area has probably had its effect on commercial property values as well. This impact might be proven when having a closer look at the L1 8 district, which experienced an increase greater than 89% in the years 2003 until 2014 (brightest green area, Map 2). The L1 8 district is also known as the Liverpool ONE area that has undergone a massive development in the past era. The district with the rental values that increased the most besides the L1 8 district is the L1 1 district, partly in the City Central BID (blue line).
Ellen’s e.a. (2007) discovered in their study that property values had increased much in the year’s prior designation of BIDs. Therefore, it is interesting to have a closer look at the properties in the City Central BID since 2003, when the BID
was not designated but planned. As Map 3 shows, this effect cannot be found for properties in the City Central BID. All rental values in the postal zone areas of the City Central BID were decreasing in the years around designation. The City Central BID, however, was the first one to be established in Liverpool. It also might even have been a turn on to stop the further going decreasing's – taking that commercial property values could be an indicator of the downfall of urban quality in an area. As Ellen e.a. have stated that BIDs usually are established in areas that need improvements – the level of public services was no longer sufficient for that area (Ellen e.a., 2007).
In 2014, the City Central BID area (L1 1 district) shows the highest increase of rental prices (>30%) since 2008. In the same period, the Commercial Business BID has been established (Map 4). It is remarkable that roughly all districts in the Commercial Business BID show a decrease of property values since 2008. Most properties in the Commercial Business area are office related, an explanation could possibly be found in this fact. All areas that show property value increase are namely situated in Liverpool’s retail area. Yet, it can be stated that Ellen’s e.a. statement about a pre-BID effect did not work out for Liverpool. Nevertheless, legitimate explanations cannot be given without further research.
6.4 Impact of BIDs on commercial property values

Until now, statements about the impact of BIDs could not be made as the analysis was mainly focused on differences between BID areas and the alternative comparison area. To test whether BIDs have (had) an impact on commercial property values in Liverpool, other statistical tests are needed. Even though statements about the impact of BIDs on commercial property values cannot be made without a more comprehensive dataset that includes a broader range of variables (such as employment rate as an indicator for economic development), regression models can actually give an insight into the possibility of the impact. The data set does not contain other variables than BID variables and building characteristics due to availability (it requires data at property/area level) and lack of time (data could have been made suitable for the boundaries set in this study, however, this would be very time consuming). Please also note
the notes made in the Chapter 5 about normal distribution. The following results can therefore be seen as a ‘foretaste’, but cannot be read as true statement.

6.4.1 Models of 2005
The regression model has been conducted 3 times to see changes over years: 2005, 2010 and 2014. The City Central BID formation was in 2005, but levies could not have had an impact as 2005 was the first year that levies were collected. The same variables for all properties (N=1900) could therefore be used. The regression model was split for the three areas: the City Central BID, the Commercial District BID and the alternative comparison area. The variables in the first running were: number of floors, building purpose (dummy retail/office/other) and square meter. These variables can all be seen as building characteristics. No other variables were part of the first running as BID variables would not make sense at this point.

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Sig.</td>
</tr>
<tr>
<td>City Central BID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Number of floors</td>
<td>36026,772</td>
<td>9584,856</td>
<td>.000</td>
</tr>
<tr>
<td>- Square meter</td>
<td>648,752</td>
<td>3998,808</td>
<td>.871</td>
</tr>
<tr>
<td>- Dummy office</td>
<td>124,068</td>
<td>3,347</td>
<td>.000</td>
</tr>
<tr>
<td>- Dummy other</td>
<td>-35010,834</td>
<td>13493,007</td>
<td>.010</td>
</tr>
<tr>
<td>Commercial District BID</td>
<td>-6845,311</td>
<td>6997,032</td>
<td>.328</td>
</tr>
<tr>
<td>- Number of floors</td>
<td>12852,670</td>
<td>2798,395</td>
<td>.000</td>
</tr>
<tr>
<td>- Square meter</td>
<td>82,233</td>
<td>2,194</td>
<td>.000</td>
</tr>
<tr>
<td>- Dummy office</td>
<td>12872,591</td>
<td>6255,371</td>
<td>.040</td>
</tr>
<tr>
<td>- Dummy other</td>
<td>47273,046</td>
<td>13466,075</td>
<td>.000</td>
</tr>
<tr>
<td>Alternative comparison area</td>
<td>44716,976</td>
<td>10580,050</td>
<td>.000</td>
</tr>
<tr>
<td>- Number of floors</td>
<td>5588,763</td>
<td>4326,673</td>
<td>.197</td>
</tr>
<tr>
<td>- Square meter</td>
<td>70,875</td>
<td>3,316</td>
<td>.000</td>
</tr>
<tr>
<td>- Dummy office</td>
<td>-38235,273</td>
<td>10889,145</td>
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</tr>
<tr>
<td>- Dummy other</td>
<td>-70677,764</td>
<td>36384,130</td>
<td>.053</td>
</tr>
</tbody>
</table>

Table 4: Outcome regression models 2005

The building characteristics seem to be a predictor of the dependent variable commercial rental price for all areas of research. The City Central BID can be predicted by 73,8% with these variables, the Commercial District BID by 78,4% and the alternative comparison area by 55,3%. Nonetheless, not all variables are significant. The City Central BID commercial rental price can be predicted by square meter, property prices in the Commercial District BID by all variables (number of floors, square meter, dummy office and dummy other) and the alternative comparison area rental price by square meter and the dummy variable office (Table 4). The predictor square meter seems an important predictor for all cases. The high percentages of prediction can be explained by the very few variables in this running. The percentage would not be as high when other variables that affect commercial property values would be part of the model too. Although, BID variables were not part of these first models which therefore perfectly function as a blanc ‘zero’ point to see how several variables predict commercial property values without the impact of BIDs.

6.4.2 Models of 2010
In 2010, the City Central BID had been up and running for 5 years already. In the second running of regression models, the BID variable ‘levy’ had thus been added as new independent variable. The values of the levy variable are 0 for all cases (properties) in the Commercial District BID and
the alternative comparison, as no money was invested by the BID Company. Properties in the City Central BID had paid levies for 5 years. The levy can be seen as a ‘personal investment’ in the area, which makes it an appropriate variable for measuring the impact of BIDs on commercial property values.

In the second running, all constants of the models seem not to be significant. More important, the independent variable square meter is not significant in the BID areas either, while it was of significance in the previous regression models. In all cases, the newly added variable ‘levy’ is of significance (Table 5). This is remarkable, as the values for the cases in the Commercial District BID and the alternative comparison area are 0 (no paid levy). On the other hand, an explanation can be found in the fact that a correlation exists. The levy is based on the rateable value, which functions as dependent variable in this model.

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Sig.</td>
</tr>
<tr>
<td>City Central BID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of floors</td>
<td>-2232,358</td>
<td>2225,971</td>
<td>.317</td>
</tr>
<tr>
<td>Square meter</td>
<td>-1004,586</td>
<td>956,934</td>
<td>.295</td>
</tr>
<tr>
<td>Dummy office</td>
<td>2829,534</td>
<td>3721,933</td>
<td>.448</td>
</tr>
<tr>
<td>Dummy other</td>
<td>32555,711</td>
<td>12448,830</td>
<td>.009</td>
</tr>
<tr>
<td>Levy</td>
<td>82,000</td>
<td>1,182</td>
<td>.000</td>
</tr>
<tr>
<td>Commercial District BID</td>
<td>-8448,404</td>
<td>5704,980</td>
<td>.140</td>
</tr>
<tr>
<td>Number of floors</td>
<td>8519,901</td>
<td>2033,310</td>
<td>.000</td>
</tr>
<tr>
<td>Square meter</td>
<td>-426</td>
<td>5,693</td>
<td>.940</td>
</tr>
<tr>
<td>Dummy office</td>
<td>6760,548</td>
<td>5446,002</td>
<td>.216</td>
</tr>
<tr>
<td>Dummy other</td>
<td>6850,627</td>
<td>12441,795</td>
<td>.582</td>
</tr>
<tr>
<td>Levy</td>
<td>67,952</td>
<td>3,288</td>
<td>.000</td>
</tr>
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<td>Alternative comparison area</td>
<td>8353,960</td>
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<td>.060</td>
</tr>
<tr>
<td>Number of floors</td>
<td>-280,373</td>
<td>1754,709</td>
<td>.873</td>
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<tr>
<td>Square meter</td>
<td>14,132</td>
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<td>.000</td>
</tr>
<tr>
<td>Dummy office</td>
<td>-8978,128</td>
<td>4585,528</td>
<td>.052</td>
</tr>
<tr>
<td>Dummy other</td>
<td>-11463,423</td>
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<td>.520</td>
</tr>
<tr>
<td>Levy</td>
<td>67,775</td>
<td>1,432</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 5: Outcome regression models 2010
6.4.3 Model of 2014

In the last running, for the year 2014, the only significant model is the regression model for the Commercial District BID. The BID was established a few years earlier in 2011, so the variable 'levy' functions as a BID variable in this model. The model would be as follow:

*Commercial rental price 2014 in Commercial District BID = 10639 - 3445 * number of floors + 16 * square meter - 11097 * office + 38595 * other building purpose + 102 * levy*

Again, the impact of the square meter variable is less than in the first model (Table 4 and 6). This proves the assumption that the model would change when more variables are part of the model – which is the case in real. Nevertheless, the levy variable in this model is of significant positive impact although it is small. The levy variable in the City Central BID model has a small significant positive effect as well. The levy value 0 in the alternative comparison model is a significant predictor too, which shows the weakness of the BID variable in this model.

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>City Central BID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of floors</td>
<td>-67,446</td>
<td>4026,837</td>
<td>.987</td>
</tr>
<tr>
<td>Square meter</td>
<td>-172,836</td>
<td>1595,389</td>
<td>.914</td>
</tr>
<tr>
<td>Dummy office</td>
<td>26,067</td>
<td>4,171</td>
<td>.000</td>
</tr>
<tr>
<td>Dummy other</td>
<td>-495,760</td>
<td>5893,917</td>
<td>.933</td>
</tr>
<tr>
<td>Levy</td>
<td>38615,262</td>
<td>17236,826</td>
<td>.026</td>
</tr>
<tr>
<td></td>
<td></td>
<td>82,114</td>
<td>2,325</td>
</tr>
<tr>
<td>Commercial District BID</td>
<td>10639,308</td>
<td>4349,194</td>
<td>.016</td>
</tr>
<tr>
<td>Number of floors</td>
<td>-3445,804</td>
<td>1620,705</td>
<td>.035</td>
</tr>
<tr>
<td>Square meter</td>
<td>16,800</td>
<td>5,869</td>
<td>.005</td>
</tr>
<tr>
<td>Dummy office</td>
<td>-11097,493</td>
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<td>Dummy other</td>
<td>38595,974</td>
<td>10091,202</td>
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<tr>
<td>Levy</td>
<td>102,980</td>
<td>4,352</td>
<td>.000</td>
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<tr>
<td>Alternative comparison area</td>
<td>4260,416</td>
<td>4717,850</td>
<td>.368</td>
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<tr>
<td>Number of floors</td>
<td>2640,098</td>
<td>1708,041</td>
<td>.125</td>
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<tr>
<td>Square meter</td>
<td>-12,306</td>
<td>5,440</td>
<td>.025</td>
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<tr>
<td>Dummy office</td>
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</tr>
<tr>
<td>Dummy other</td>
<td>-3341,386</td>
<td>25953,981</td>
<td>.898</td>
</tr>
<tr>
<td>Levy</td>
<td>105,988</td>
<td>3,601</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 6: Outcome regression models 2014

6.5 Empirical conclusion

The empirical section showed several differences between commercial property values in the three cases: City Central BID, Commercial District BID and the alternative comparison area. Some differences may be caused by the existence of a BID, but the regression models showed the small and uncertain predictability of the BID variable for the dependent variable commercial property value. The effectiveness of BIDs in Liverpool can therefore not be proven by this research only. Nevertheless, the increases in property values in the City Central BID since its establishment are at least remarkable.
7 Conclusion

This chapter contains the conclusion of this research. Firstly, a short recap will be given as an introduction to the findings in this research. Then, based on the findings, an answer to the main question will be presented. In the discussion section, answers to sub questions will be given and reflected.

7.1 Recap

In a changing planning world, new mechanisms and strategies are developed worldwide. Cities worldwide counter regeneration issues and inner city decline. In 1970, the BID strategy was first established in Canada. Nowadays, the concept of BIDs has spread throughout the world. As a result of the policy transfer, BIDs differ nationally and internationally. In the UK, BIDs were a result of failing Town Centre Management. Since 2005, BIDs can officially been founded after several pilots had been evaluated. Even the two BIDs in Liverpool differ in terms of aims, expenditures and member base.

The City Central District is mainly focussed on retail as 60% of their member is in the retail sector. The expenditures of the City Central BID are equally divided among four focus areas: safety, environment, marketing and animation. The Commercial District BID expenditures show a different focus: mainly on capital projects (53%). The type of member in the Commercial District BID is different as well: mainly professional (70%). Interviews and conversations with experts and desk research learned that the allocation of budget and the size of BIDs (annual assessment) are of indirect impact on the commercial property value and therefore can be seen as elements through which BIDs influence commercial property values.

7.2 Conclusion

Changes in commercial property prices always occur as an effect of several factors. This research tried to assess the relationship between the formation of BIDs and the changes in commercial property prices. The main question in this research was:

To what extent did the formation of Liverpool’s City Central Business Improvement District and the formation of Liverpool’s Commercial District BID led to changes in commercial property values?

The evaluation of changes in commercial property values led to different outcomes for both BIDs. The Commercial District BID was established in 2011 and a visible effect on commercial property values cannot been observed yet, while commercial property values in the City Central BID show a more impressing change since its formation in 2005. Both BIDs show rising commercial property prices after the formation, which may be because of the formation and investments related to this. It also can be seen as the reason for formation, as BIDs are most successful in areas that need extra investments. A down fall of commercial property values, that happened in both districts, can be a sign of this.

Overall, the difference between the two BIDs is easily to explain due to the differences in date of establishment and the kind of investments. More remarkable is the fact that property values from properties that existed in 2005 outside the BID boundaries have risen significantly less than properties in the BID boundaries. This can be seen as a prove of the effectiveness of investments in BID areas. Nonetheless, it cannot be stated that this increasement is ascribed with certainty to BIDs only – considering that property values are impacted by several factors which were not all part of this study. Based on the evidence proved, further research should prove the impact of BIDs on commercial property values by measuring all factors.
7.3 Discussion

The sub questions were designed to help answering the main question. The questions will be answered one by one in order to reflect on the answer given in the conclusion.

1. **What are underlying mechanisms and elements through which BIDs influence commercial property values?**

First of all, members of BIDs in Liverpool do not aim for commercial property value rises, since members are mostly tenants. Elements through which BID influence commercial property values are because of the existence of a BID and the effectiveness of BIDs, not because they aim for it. Effectiveness of BIDs can differ due to differences in size, annual income, the allocation of budgets and aims. These can be seen as elements through which BIDs influence commercial property values. The size of both BIDs was quite similar (±£1.500.000 annual income and ±600 members), the allocation of the budget however has been different over the years since its formations. The City Central BID is mainly focussed on short term investments to attract a higher footfall, while the Commercial District BID invested in long term capital projects such as infrastructural changes.

In previous research, a pre-formation effect also influenced the commercial property values. This effect had not taken place in Liverpool's BIDs. This may have to do because of the fact that the concept of BIDs is relatively new in the UK. Another explanation can be found in the fact that BIDs in Liverpool were not established because of a lack of public investments, but rather a need of competition with other areas in town. Government failure is more common in liberal countries such as the United States. The formation of a BID could therefore easily have led to changes in commercial property values, since the level of investment in the public realm is lower in general in some areas.

2. **To what extent is there a significant difference between commercial property values in and outside the BID boundaries?**

First of all, the case study should have contained more BIDs in order to study the impact of BIDs. In the study of Ellen e.a. (2007), more than 40 BIDs are part of the scope and thus a comparison between BIDs was possible. In their study, several aspects of BIDs could easily be compared. In this study, only two BIDs have been examined - one of them was established in 2011. Nevertheless, differences between property values could be examined.

The past few years, there was no significant difference between property values (per square meter) in the BID boundaries and outside the BID boundaries. However, an interesting finding is the fact that, when properties that did not exist in 2005 are left out, the average property values per square metre in all years are significant higher in BID areas. It is most likely that this fact has to do with newly built properties in the alternative comparison area. It is interesting, as this might show the impact of other investments in the Liverpool retail and business area that has had its impact on commercial property values as well.

In addition to this, it is likely that private investments such as the Liverpool ONE investment generate a bigger impact on property values as was seen in the map analysis. The Liverpool ONE investment had cost £920 million and it may be that this investment has had an impact on Liverpool’s retail centre as a whole. Liverpool ONE is the biggest open air shopping mall in the UK, which makes it plausible that Liverpool attracts more visitors in general and therefore a spill-over effect to other retail areas is very likely.
3. To what extent is there a significant difference between commercial property values in the City Central BID and the Commercial District BID?

A significant difference between commercial property values in the City Central BID and the Commercial District BID occurs – property values in the City Central BID are significant higher. An explanation can be found in the fact that retail properties are more expensive per square meter in general – properties in the City Central BID are mainly purposed for retail. However, there also is a significant difference between the rise of commercial property values, as was illustrated in the maps. Property values in the City Central BID had risen significantly more in the past years. This might have to do with differences in BIDs. The BIDs differ in the allocation of the budgets and the date of formation. The expenditures of the Commercial Districts are mainly on capital projects; effects of these investments are not visible yet. In the City Central BID investments are aimed at attracting more visitors by hiring extra security and cleaners, for instance. The effect of creating a safer and cleaner retail centre is more visible on a shorter term. This can be seen in the outcome of this study, in which commercial property values seemed to increase after a period of down falling prices.

As was mentioned in the literature review, unlimited factors can possibly affect the price of commercial properties (inflation, local economic development at large, etc.). It would have added value to the study when the data set was more comprehensive. The population in this study is big (N=1900), but not much variables could be tested. This is for two reasons. First, the availability of data was limited. To evaluate the effect over a longer period (prior BID formation), more data over years was needed. Unfortunately, data was available from the year 2005 and on. Also, other variables such as age of unit were not available at all at property level. Secondly, since this study is part of a Master’s, time issues made me decide to not search for variables till endless.

Continuing, the regression model conducted in this study is quite limited. Not only more variables could have been tested and added – also different correlations could have been examined. For example, the maps created in this study showed us that private investments in Liverpool may be of great impact on commercial property values. This fact, however, could possibly affect the commercial property values in other areas that had not been invested as well (spill over effect). The local economic development (in which BIDs are part) and the commercial property market is way more complex than was shown in this limited study.

4. Can the Liverpool BID strategy be seen as a successful tool for local economic development?

Related to what was stated in sub question 3, such statements cannot be made based on this research. Yet, a few indications show a possible positive impact on local economic development. First of all, reballots prove the successfulness of BIDs in Liverpool. Secondly, members of BIDs pay an annual levy of about £1000 which is, compared to million/billion private investments, quite a small amount but still can have big impact since 600 members pay levies in an area that covers about 85 acres. The power of BIDs may not only be measured by the effectiveness examined by impact on property values since it is not all about the effectiveness of investments. BIDs are also a mechanism in which members try to connect to each other and their district and therefore have a stronger voice towards public powers. In this era of private investments in public realms, it is important to stand together. In the annual report of the City Central BID, it was described that it is important to compete not only nationally and regionally but more and more locally as well.
This brings us back to where I started: cities counter inner city decline and regeneration issues. Even though this study cannot prove the effectiveness of BIDs as a strategy against these planning issues, I do believe in the power of BIDs. The arrival of private malls and thus local competitions is not only an issue in Liverpool. Competition forces players to compete which, in the end, will influence the quality of the public realm. In an era in which local authorities have less steering power, this development may not be too bad – not in the least because all members in a BID are forced to join and investments are efficiently invested back into their own district.

7.4 Further limitations
Leaving out other possible variables and correlations for several reasons, has had its effect on the outcome of this study. The objective of this research was to gain a better understanding of the effect of BID formations on commercial property values by evaluating rental prices over years in and outside the BID boundaries. Yet, this objective gives us the idea that there is an effect on commercial property values anyway. But, commercial property value increasement can never be ascribed with certainty to BIDs only. In this study, the effect was studied in the light of assumptions and prejudices of other studies. The danger of this objective and the leaving out of variables is a confirmation bias. In other words, there might be a rise in commercial property values since the formation of BIDs but this might not only be due to the formation of BIDs. In this context, the results should be read carefully and critically. In order to avoid wrong assumptions, it was tried to describe the results rather than make statements.
8 Recommendations
This last chapter contains a few recommendations for further research and praxis.

8.1 Further research
In the previous chapter, a few recommendations for further research had already been given related to the short-comings and limitations of this study. In this section, suggestions for further research will be summed:

I. To prove the effectiveness of BIDs by measuring the impact on commercial property values, it is important to measure the effect of BIDs over a longer period and a greater number of BIDs – like Ellen e.a. (2007) did. A more comprehensive dataset in which variables that also affect commercial property prices is needed. Further research could continue in this.

II. This study gave insight into the effectiveness of BIDs, even though it did not actually prove it. It could be interesting to examine the effect of BIDs on the local economic development at large, since BIDs are possibly a part of the local economic development.

III. In this study, two different kind of BIDs were examined. It is interesting to further examine the impact of different kind of BIDs, relating to different aims and expenditures. Different investments lead to different outcomes. Further research could focus on the relationship between aims and effectiveness.

8.2 Recommendations for praxis
Since I like to end with the positive, I would like to give a few recommendations for praxis that came up in my mind while working on this dissertation.

I. Members of the Liverpool BIDs are tenants of commercial properties. They will never aim for an impact on their property value since that will affect their rateable value and thus their billing values. In Liverpool, a few property owners pay non-mandatory contributions which can be seen as an indication of their interest in the BID strategy. BIDs can also be established with property owners, who will aim for increase of property values. It is likely that property owners are therefore willing to directly invest in the public realm and pay higher levies as that will increase the impact on the property values. A few BIDs are based on property owners-members only. Since this are all assumptions, it could be interesting to examine the effect of BIDs in which property owners are the main group of members.

II. In Liverpool, the size of BIDs was quite big as both BIDs have about 600 members. The levy is based on 1,2% of their rateable value which means about £1000 per member per year (on average). This amount is quite small while it can still have a great impact all together when it is invested wisely. As a recommendation, I would say that bigger BIDs will have a greater impact even though it is harder to manage. The levy of smaller BIDs must be way higher to reach the same impact and the ‘voice’ will not be as strong and united towards other players in the field of urban planning.
References


BID Company (2016a), Business Plan Liverpool Commercial District BID. Continuing the Success 2016 -2021.


Colorado State University (2016). Generalizability and transferability. Guide. writing.colostate.edu/guides


Hardin, G. (1968), The Tragedy of the Commons. Science 162, pp. 1243 – 1248


Liverpool City Council (2014), Main retail area review: Liverpool City Centre. Liverpool City Council

Liverpool City Council (2016), Market Review: Liverpool City Region commercial office 2016. Liverpool City Council

Liverpool ONE (2016), Liverpool ONE Explore. www.liverpool-one.com


Needham, B. (2006), Planning, Law & Economics; the rules we make for using land. Routledge, Oxon


Peel, D. & Lloyd, M. (2008), Re-generating learning in the public realm: evidence-based policy making and Business Improvement Districts in the UK. Public Policy and Administration 23 (2), pp. 189-205

50
Peel, D. & G. Lloyd (2010), Wrestling with the value added of Business Improvement Districts. Public Performance & Management 33 (3), pp. 488 – 508


Property Group Liverpool (2016), Liverpool Economic Briefing 2016. Liverpool City Council


