Successful determinants for solving vacant office buildings the Netherlands and Amsterdam.

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Summary

The recent economic crisis left some scars in the Dutch office market, what reflected in record high vacancy rates. Vacancy directly affects the landlord and indirectly affects the society due to deterioration. This research aims to find an answer on what the successful determinants are for solving office vacancy in the Netherlands as well in Amsterdam. Their relation is elaborated. This research is completely based on secondary data and consults the content analysis. It connects academic concepts with practical implications as described in governmental- and real estate agencies reports. The high amount of vacancy was predominantly reached through non-transparency and speculative building. Both markets show reductions in the amount of vacancy. The Netherlands recovers gradually, while Amsterdam recovers quickly due to urbanization. This recovering indicates the third phase of the office cycle, where the oversupply is adjusting to the demand. By complete adjustment, the next phase starts and indicates an equilibrium market. A determinant for solving vacancy is by implementing a spatial policy on government level, which concerns: restricting building projects, stimulate transformations, creating transparency and more flexibility in zoning plans. The Netherlands acted on vacancy by oblige procedures for new construction projects and setting up the consultancy “expert team office transformation”, what contributed to limit and eventually reduce vacancy. Amsterdam implemented a freezing for new construction projects and stimulated transformations. Due to the crisis, lessons are learned and both markets emerge only stronger.

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1. Introduction

1.1 Background

In the Netherlands, due to the economic crisis in 2008-2016, many companies went bankrupt (Janssen-Jansen & Mulders, 2012). This affected the real estate market and the office vacancy increased rapidly. It went to a record of 17.5 percent in 2015 and almost doubled relative to 2007 (Cushman & Wakefield, 2018; PBL, 2017). Eventhough this rate is high, it is important to know the relative height as Sanderson et al. (2006) indicate. Namely, it is normal to have a certain amount of vacancy, otherwise companies have no possibility to move to another location.This gives a deeper understanding of the actual vacancy. Furthermore, as Remøy & Van der Voordt (2007) mention, the real estate market is characterized for being non-transparent and unpredictable. Due to the long construction time of offices, the market cannot adjust to the demand. The real estate market is therefore sensitive for changes, what leads to an alternating effect between strong oversupply and scarcity of office (Remøy & Van der Voordt, 2007). High scarcity of offices, indicates that the market cannot fit the desired demand, wherefore rent prices go up and vice versa (Wheaton & Torto, 1988). The real estate market is also characterized by the office cycle, which has different phases (Brouwer, 2014). This cycle explains how the real estate market reacts in periods of changing supply and demand. By identifying the current phase of the office cycle, the future phase can be determined. This gives insight on how to anticipate on the real estate market in terms of the development of office buildings. A common solution for solving vacancy is by using transformations. Hereby, the function of the building will be changed and the shell of the building will be renovated or renewed in order to improve the aesthetic quality (Dynamis, 2017). Transformation contributes to improvement of the quality of buildings and makes surrounding buildings therefore more valuable (Remøy & Van der Voordt, 2014). Especially in periods of recession, this is a suitable method, since the process is relatively short (Remøy & Van der Voordt, 2007). The construction is already built and therefore saves construction time.

1.2 Research problem

There is a large oversupply of offices and the demand for offices is minimal. Therefore, the excess of offices cannot meet the requirements of the market and will therefore remain vacant. Vacancy directly affects the landlord, who does not generate income from tenants. Indirectly, vacancy affects the surrounding area by deterioration and eventually the society for not contributing to it (Remøy & Van der Voordt, 2014). The aim of this research is to establish the successful determinants for solving the problem of high vacancy rates among office buildings in the Netherlands, with Amsterdam used as case study and to reflect upon. The main research question therefore is:

"What are successful determinants for solving the problem of high vacancy rates among office buildings in the Netherlands and how does this relate to Amsterdam?"

The sub-questions to support the main question:

- How has the current vacancy been developed and how does this relate to the natural vacancy for the Netherlands and Amsterdam?

- What is the current phase of the office cycle for the Netherlands and Amsterdam and what does this mean?
- How could future vacancy be solved and how is this organized in the Netherlands and Amsterdam?

This research contributes to the scientific literature since it connects academic concepts like the “natural vacancy rate”, “office cycle”, “vacancy cycle” and transformable offices to practical implications. These practical implications are applied to the Netherlands and Amsterdam and found in governmental and real estate agencies reports. This connection has not been made before. It therefore gives new insight in the Dutch and Amsterdam real estate market and reveals the connections between those markets. With the aim for finding successful determinants for solving the high amount of office vacancy.

1.3 Structure

The following section of this research starts with the theoretical framework. Here, the desirable friction rates will be discussed, the different cycles which characterizes the real estate market are described and the transformation process of offices is written out. The next section consists of the methodology, which addresses the data and research type, the data collection methods and ethical considerations. The next chapter contains the results, each paragraph answers one sub-question, which exists of the development of vacancy, the office cycle and strategies for solving vacancy. Finally, the conclusion and discussion of this research are described in the last part.

2. Theoretical framework

2.1 Natural vacancy rate

The first step to determine the development of the current vacancy, is to understand office vacancy. Namely, it is common to have a certain amount of vacancy. A hundred percent match between supply and demand of offices does not exist, otherwise there would be no possibility for companies to move to another location. Thereby, the real estate market is characterized by decentralisation, frictions and ineffectiveness (Sanderson et al., 2006). To find a desirable vacancy rate, those authors reflected upon the natural vacancy rate (NVR) and estimated this rate for different metropole cities all over the world. This rate helps to understand the future path of rental growth, but also the underlying behaviour and dynamics of the market. For the determination of the NVR, responsivity and elasticity of demand and supply in economic shocks are analysed. In an elastic market, demand is hard to predict on long-terrm. Adjusting supply to expected demand is therefore hard, what will lead to a higher NVR. For an inelastic market vice versa. The real estate market is hard to predict, has an uncertain future demand and building projects could not react fast on the demand. Hence there is need for friction, what indicates a higher NVR. Furthermore, Grenadier (1995) conducted research to the U.S. office market over 30 years and mentioned that heterogeneity of buildings influences the NVR as well. The more heterogeneity on a market, the more difficult the process of matching between buildings and tenants will be. This raises the NVR. Because of this theory, it could be stated, that the market is in equilibrium, when the actual vacancy rate matches the NVR. The difference between the actual vacancy rate and NVR, is the deviation that the market has to overcome, to become in a state of equilibrium.

Sanderson et al. (2006) calculated that the NVR for Amsterdam amounts 8.6 percent. This rate is not provided for the Dutch market as a whole and cannot be calculated for this research due to the complex calculation methods. To provide a reliable and comparable measurable number for vacancy, the frictional vacancy rate (FVR) is consulted. This rate stands for the percentage of vacancy that is also desirable to have and aims towards an equilibrium market. In such a manner that companies have possibilities to move and can sufficiently relocate or find a new office (Van der Heijden, 1986). The two rates are thus comparable, only the NVR is more complex and looks specifically to economic shocks, while the FVR measures the desirable vacancy upon the market in general. The FVR that is determined for the Dutch market is five percent (Buitelaar et al., 2017; Dynamis, 2017; EIB, 2010). For Amsterdam the FVR is determined at eight percent, which is close to the established NVR (Gemeente Amsterdam, 2017). This percentage for the Netherlands is lower than for Amsterdam. This can be explained due to the fact that the level of equilibrium is predominately determined by local factors, rather than national factors (Grenadier, 1995). Local factors are the degree of economic diversification, properties of employment growth, demographics and zoning laws. National factors are macro factors and affect all office markets in the Netherlands, which are tax laws, overall business climate, interest rates and inflation.

2.2 Real estate cycles

The fluctuations in the real estate market are equivalent to the so-called “varkenscyclus” (literally: pig cycle) (EIB, 2010). This cycle derives from the trend which occurs by pigs, which is characterised by

alternating of high scarcity and oversupply. With high demand, many stock farmers start holding pigs. After a certain period, the pigs are full-grown and ready for consumption. All the stock farmers produce their meat at the same time on the market what results in an oversupply and price decreases. This cycle reflects the real estate market. The real estate market is characterized for having almost no transparency, the business cycles are sensitive and offices have a long construction time (Remøy & Van der Voordt, 2007). Therefore, in high economic prosperity, many buildings are developed and sometimes even speculative. Due to the long construction time, the demand could get saturated in the period of construction. The construction cannot be paused or demolished, since this will lead to high costs and loss-making projects. Therefore, constructions have to be completed, what results in high oversupply of office stock (EIB, 2010; Remøy & Van der Voordt, 2007; Zuidema & van Elp, 2010). This will therefore result in strong fluctuations of shortage and oversupply of office space. Spaans et al. (2011) and Janssen-Jansen & Mulders (2012) investigated the vacancy rates of the Dutch market in the economic recession. They found that the main factor causing such high vacancy rates was over-optimism by developers, the ambitions were extremely high and there was a lot of trust between involved actors of construction projects. This is in accordance with the speculative building.

The office market is also characterized the office cycle, introduced by Brouwer (2014). This cycle describes the process of an office building and how this is related to the vacancy rate. This aligns the "varkenscyclus" and gives a deeper understanding of how the market reacts. There are four phases in the office cycle. The first phase, business upturn, is when there is a strong demand for offices in the market, which leads to higher rent prices. Due to the large demand, there are not a lot of offices available for tenants. Therefore, tenants are quicker delighted and less critical and will occupy the offices, regardless the quality, location and/or age. Especially when comparing this in periods with an oversupply of offices. The second phase is overbuilding and downturn, where demand decreases, but new construction projects still come to the market. As aforementioned, the real estate market is a rigid market and cannot react fast on demand. Subsequently, the vacancy rates will increase and there are falters in rent prices. The third phase is adjustment and slump. Here, the amount of vacancy is still higher than desirable, wherefore the rents are lower. To reduce this excess of vacancy, these vacant office buildings must be adjusted to the demand. The least attractive offices would therefore remain vacant. These buildings could contribute to society again when they are redeveloped. The last phase is when demand related to employment growth starts to rise. The excess of vacant offices is hereby adjusted to the demand. Subsequently, the demand for new offices starts to rise again. Altogether, this forms the office cycle. Important to note is that two markets are separated by going through this process, a market with attractive and unattractive offices (Zuidema & van Elp, 2010). The unattractive offices are filtered out of the market, for not fitting the desires of the tenants. These buildings are therefore needed to be redeveloped or demolished for newer buildings, in order to contribute to society again.

There is thus an alternating effect between the first phase, low vacancy with high rent prices, and the third phase, high vacancy with low rent prices. This correlation is investigated in the U.S. market by Wheaton and Torto (1988) in the period 1968-1986. They found a statistical significance and quantitative strong relationship that vacancy affects real rents (rent adjusted to the inflation) and called this the rent-vacancy cycle. This alternating of vacancy and rent is shown in Figure 1.

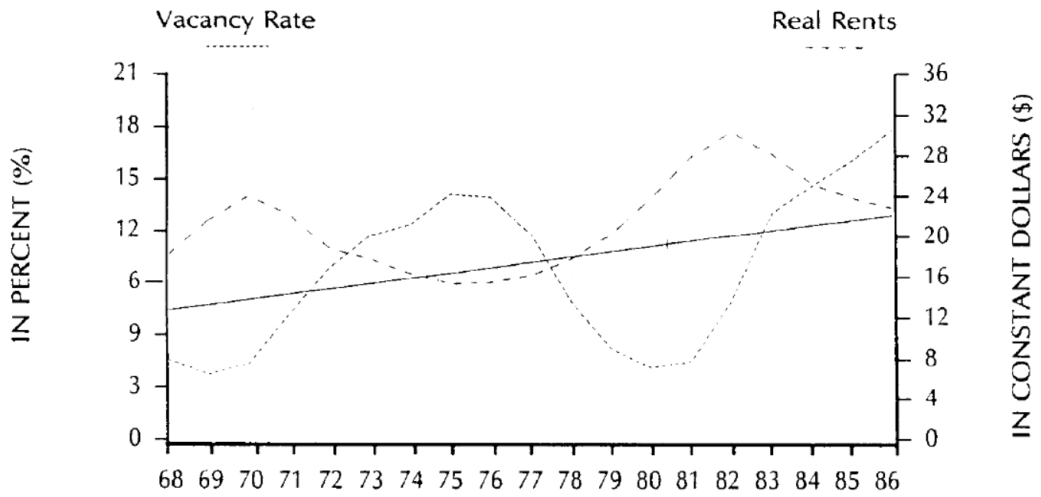

Figure 1: The rent-vacancy cycle (Wheaton & Torto, 1988, p.433)

2.3 Transformation

A relevant aspect that took great progression since the recession with its high vacancy rates is the transformation of offices into another function. As mentioned in "1.1 Background", the shell of the building is renovated or renewed in order to improve the aesthetic quality (Dynamis, 2017). Transformation contributes to improvement of the quality of buildings and makes surrounding buildings more valuable (Remøy & Van der Voordt, 2014). Transformation could therefore lift deteriorated neighbourhoods in an upward spiral and improve the quality of a whole neighbourhood. This contributes to a neighbourhood with lower risks of vandalism and a safe feeling (Remøy & Van der Voordt, 2014; Wilson & Kelling, 1982).

Transformation is especially successful in periods of recession (Remøy & Van der Voordt, 2007). Namely, the process is relatively short, due to the fact that the construction is already built and therefore saves building time. These authors also note that transformation does not involve buying new land and provides solutions in attractive locations, where new land is scarce. For that reason, transformation did not occur often before the crisis, since it was not essential to solve vacancy (Remøy et al., 2011). The process of transformation is therefore relatively unknown and differs from traditional methods. This forms a greater risk for involved parties, since there are no guidelines offered. This requires more integration and attention of the involved actors, which are the landlord, the municipality and the developer (Gelinck & Baptiste Benraad, 2011). This impedes a fluent process of realizing the transformation.

A vacant office building also has to meet some requirements for transformation. There are a few triggers and obstacles for transformation as mentioned by Remøy & Van der Voordt (2014). A building could have too many physical decay, which decreases the feasibility of a project. The transformation must fit in the current economic situation and thereby fit the municipality aims. Also, the transformation must be able to fit to the changing demand in the real estate market. The buildings structure is not always suitable for transformation into other functions. Furthermore, buildings are often located in mono-functional and distant office locations and not suitable for other functions, like housing, this is also supported by Remøy & Van der Voordt (2007) and Remøy et al. (2011). Thereby,

the profit of transformation is in general considerably lower than new construction projects, what bears more risks as Remøy & Van der Voordt (2014) further noticed as obstacle. For municipalities, this process is also quite unknowm, what creates a non-flexible character of municipalities as stated by Remøy & Van der Voordt (2007). The procedure which has to be ran is therefore seen as a risk. These authors and Remøy et al. (2011) also state that the zoning plans in the Netherlands are often restricting and not flexible, what impedes building opportunities and greater profit.

2.4 Conceptual model

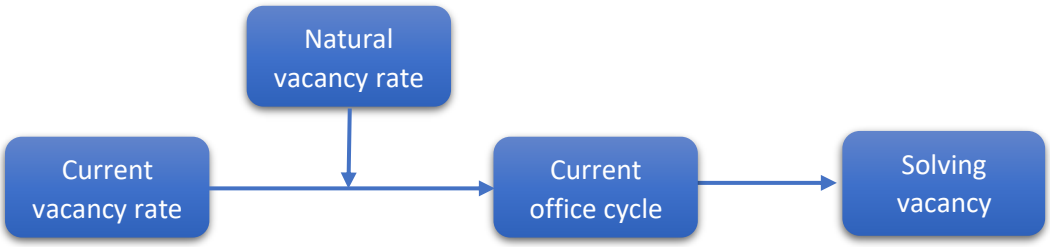

Figure 2: Conceptual model

In this conceptual model, all the blue lines stand for a causal relationship between the boxes. The first part is determining the establishment of the current vacancy. To know if the vacancy rate is high, the natural vacancy rate must be consulted and will be refuted against the current vacancy rate. Then it could be determined how relatively high the vacancy rate truly is. The next step is to determine the current office cycle, which gives a deeper understanding of the office market with its corresponding vacancy. The office cycle also shows what the characteristics of the commercial market are, which is helpful to determine the next step for offering a solution for vacancy.

3. Methodology

The conducted research entirely consists of secondary data. This gathered data is all qualitative and seeks to understand the context of how economic, social and political factors influence vacancy. The data is as well academic as grey literature. To guarantee trustworthiness of this research, reports only originate from governmental agencies, municipalities and well known real estate agencies. Simultaneously this increases validity, because these institutions form accurate and correct findings. The published reports are focussed on the Netherlands, with the chosen case study Amsterdam. Here is reflected upon. This city is chosen because it has the highest office rents in the Netherlands, which has a strong correlation with vacancy. Therefore, this could be an interesting aspect to investigate and see how this relates. Al these published reports have a relation with office vacancy in the Netherlands and are defined in three categories: the development of office vacancy, the current office vacancy and the strategies for solving office vacancy. Due to the specific chosen documents, it is an purposive sample, which are chosen for answering the research questions. Based on these samples, generalisations, comparisons and summaries about the population (the Netherlands and Amsterdam) will be made.

To structure and organize the data, a relational content analysis is consulted (Busch et al., 1994-2012). This type of research seeks to find the actual presence of the different concepts by quantifying and counting how often the concepts occur. Then they can be categorized in multiple concepts for examination. This fits this research since there is need to define the aforementioned categories. Many qualitative researches are focussed on interviews and are therefore directly excluded. A comparative research comes close, despite this research only focusses on comparing cases. Therefore, the content analysis is more suitable, since it seeks to examine concepts, which could be compared afterwards. The content analysis is applied in this research by scanning the reports as given in “Appendix 1”. They are first analysed and the usable parts are briefly written out in a separate document. The coding is applied in this document by identifying the three concepts and by giving them different colours. This forms an overview of the different concepts and relationship of multiple sources within a concept can simply be formed. Due to the fact that the concepts exist of the different sub-questions, this is helpful for forming answers to the research questions in a well-structured manner. It therefore helps to strengthen reliability, since it offers guidelines for categorizing the concepts.

3.1 Ethical considerations

All the conducted information is originated from databases which are available for public use. Ethical considerations what have to be taken in account are therefore limited. The only aspect is the correct citing of consulted sources. Otherwise statements of other researchers could be interpreted as statements of the researcher himself, which is stealing someone’s ideas. With respect to the actual researcher, this is not ethical and could be punishable. Furthermore, the researcher has to be consistent in analysing documents for preventing biases and handling procedures for categorizing and coding rigorous to preserve reliability.

4. Results

4.1 The development of vacancy

To apply the vacancy rates on the Dutch office market, the past with the associated vacancy rate of offices is consulted and shown in Figure 3. This illustrates how the vacancy rate fluctuated over the past 27 years and gives an indication of how the vacancy rate acted in different economic situations.

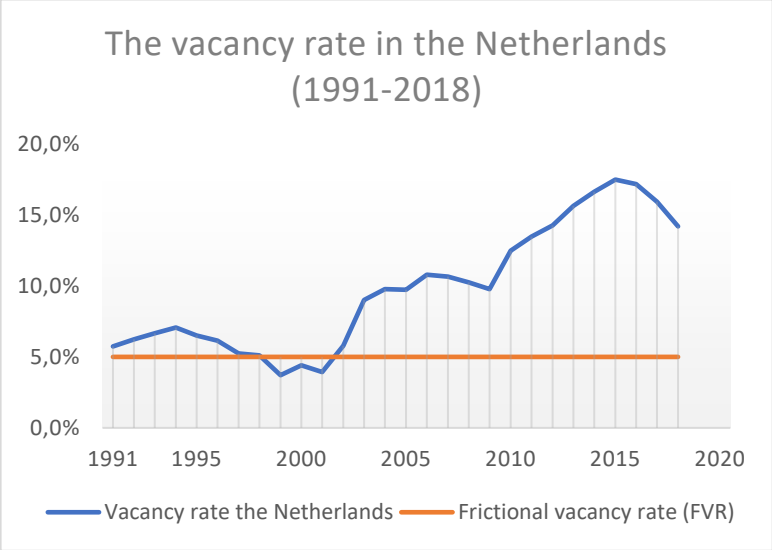

Figure 3: Vacancy rate of offices in the Netherlands in 1990-2018 (Source: PBL, 2017)

The period of 1990-2002 indicates a relatively low amount of vacancy. It fluctuated between the four and seven percent, which is around the FVR for the Netherlands, what implies a market close to the equilibrium. The welfare of the Netherlands was thereby going well and there was a high demand for offices, what characterizes an upcoming "varkenscyclus" (Spaans et al., 2011). In 2001 the vacancy rate rose steeply from four to ten percent in only three years. This proves the non-transparency and uncertainty of predicting the real estate market, what correlates with the higher elasticity.

After this period, the trust in the market rose again and the demand for offices returned. Figure 3 shows stabilization of the vacancy rate around ten percent in the years 2004-2009. Thereby, the demand was strongly emerging again. There was a wave of foreign investors, there was competitive bidding and there were record-high investment volumes. Though, the new building projects were realised with a greater degree for criticism than it was before (CBRE, 2018). Eventually, new offices were developed and new constructions were brought into the market. Again, due to the high demand, buildings were developed speculative and were not created on demand (Janssen-Jansen & Mulders, 2012; Spaans et al., 2011). This took place while the oversupply of the former fall in the economy was not recovered at all. Consequently, this had major impact on the real estate market when the economic regression stroke. The vacancy was raising even more. In 2009, where the vacancy rate was 10 percent, the vacancy rate rose constantly till the year 2015, where the record percentage of 17.5 was reached among offices.

When achieving vacancy rates that high, solving vacancy is only harder, because it strengthens the so-called "prisoners dilemma". The situation where every party wants to benefit from the situation, at the expense of the other party or otherwise, making profit of the situation due to costs incurred by other parties (EIB, 2010; Zuidema & van Elp, 2010). In the perspective of economic benefits, municipalities want new construction projects for their municipality instead of the surrounding municipalities. This, in order to create a more attractive municipality than others and decrease competition. Eventually, this will lead to the problem that developed buildings become vacanct. This

is due to the principle that the buildings are not built on demand, but for the benefits for the municipality (EIB, 2010; Janssen-Jansen & Mulders, 2012). This increasing amount of vacancy contributed to the strong increase of vacancy since the beginning of the recession. For investors this will lead to a prisoners dilemma as well. The situation will occur that no one wants to be the first to invest in a bad neighbourhood. Namely, the first buildings that will be redeveloped in a neighbourhood, will bear the heaviest costs. Eventually, other buildings will raise in value, because of quality improvements of the location. Other investors could therefore profit from the situation, without making any costs by themselves (EIB, 2010; Zuidema & van Elp, 2010). The prisoners dilemma therefore leaves a trail on the continuously increasing vacancy rate during this period.

The vacancy rate in January 2018 is slightly above 14 percent (Asselbergs et al., 2018). Comparing this with the frictional vacancy rate of five percent, the Netherlands still has a long way to go before achieving this percentage. Although, since 2015, the vacancy is decreasing, and decreased with three percent in three years (Buitelaar, 2017). This implicates that the Netherlands gradually recovers.

4.1.1 Relation to Amsterdam

An interesting aspect is that Amsterdam, the city with the highest rent prices for as well housing as offices in the Netherlands, shows a different trend (Cushman & Wakefield, 2018; JLL, 2016). Due to the phenomennon urbanization, larger cities are chosen over smaller cities (CBS, 2016). Since Amsterdam is the largest city in the Netherlands, it is preferred above all other cities and experiences the largest growth of citizens, which will increase only more (CBRE, 2018). An increase of 15 percent of inhabitants is prognosed in the years 2015-2030. In comparison, the most of the medium sized cities (cities with more than 100,000 inhabitants) will experience a growth of 10 percent. Smaller and especially periphery located cities will shrink (Kooiman et al., 2016). Therefore, the gap between small and large-sized cities will enlarge.

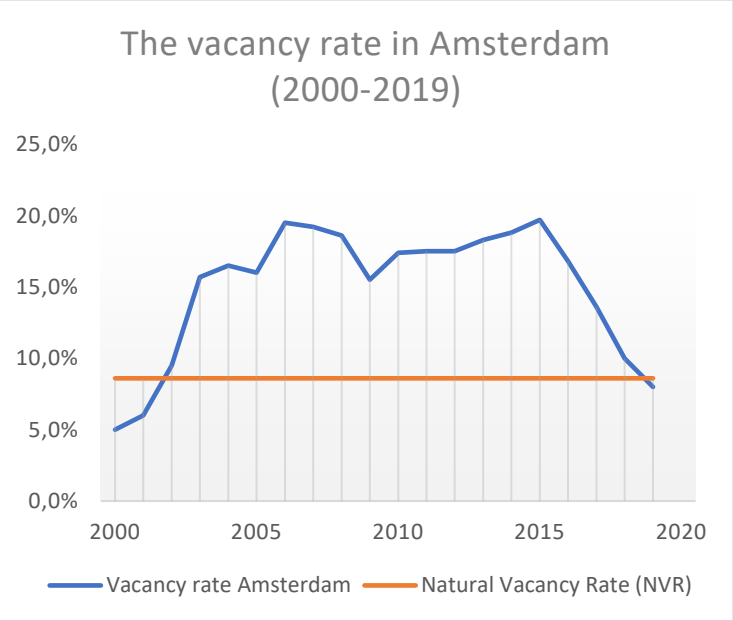

Figure 4: Vacancy rate of offices in Amsterdam in 2001-2019 (source: Gemeente Amsterdam, 2017; PBL, 2017)

Due to the urbanization, the office market is also affected by this trend. The business climate is also highly attractive and preferred above all other cities (CBRE, 2018). This is clearly identifiable in the decreasing amount of available office space, where Amsterdam took the great progression as Figure 4 indicates (NVM Business, 2017). Due to this trend, Amsterdam is expected to achieve the NVR by January 2019 (Gemeente Amsterdam, 2017). Amsterdam will therefore be the first city in the Netherlands that is completely recovered from the economic recession and will achieve equilibrium. This is where the NVR and actual vacancy rate cross as the figure indicates.

To give an impression of the office vacancy in the Netherlands, see Figure 5. The office vacancy on 1 January 2017 are shown for Amsterdam, the Randstad (the four largest cities of the Netherlands:

Amsterdam, Rotterdam, The Hague and Utrecht) and the Netherlands. In 2015, the highest vacancy rates were achieved (NL Real Estate, 2017; PBL, 2017). The vacancy on 1 January 2015 is therefore taken as starting point and relatively measured against the vacancy on 1 January 2017. This indicates the progression in those two years. Remarkably in those two years is that the vacancy of Amsterdam recovered twice as fast relative to the average in the Randstad and three times faster than the Dutch average. This indicates the high attractiveness of Amsterdam and correlates with the urbanization.

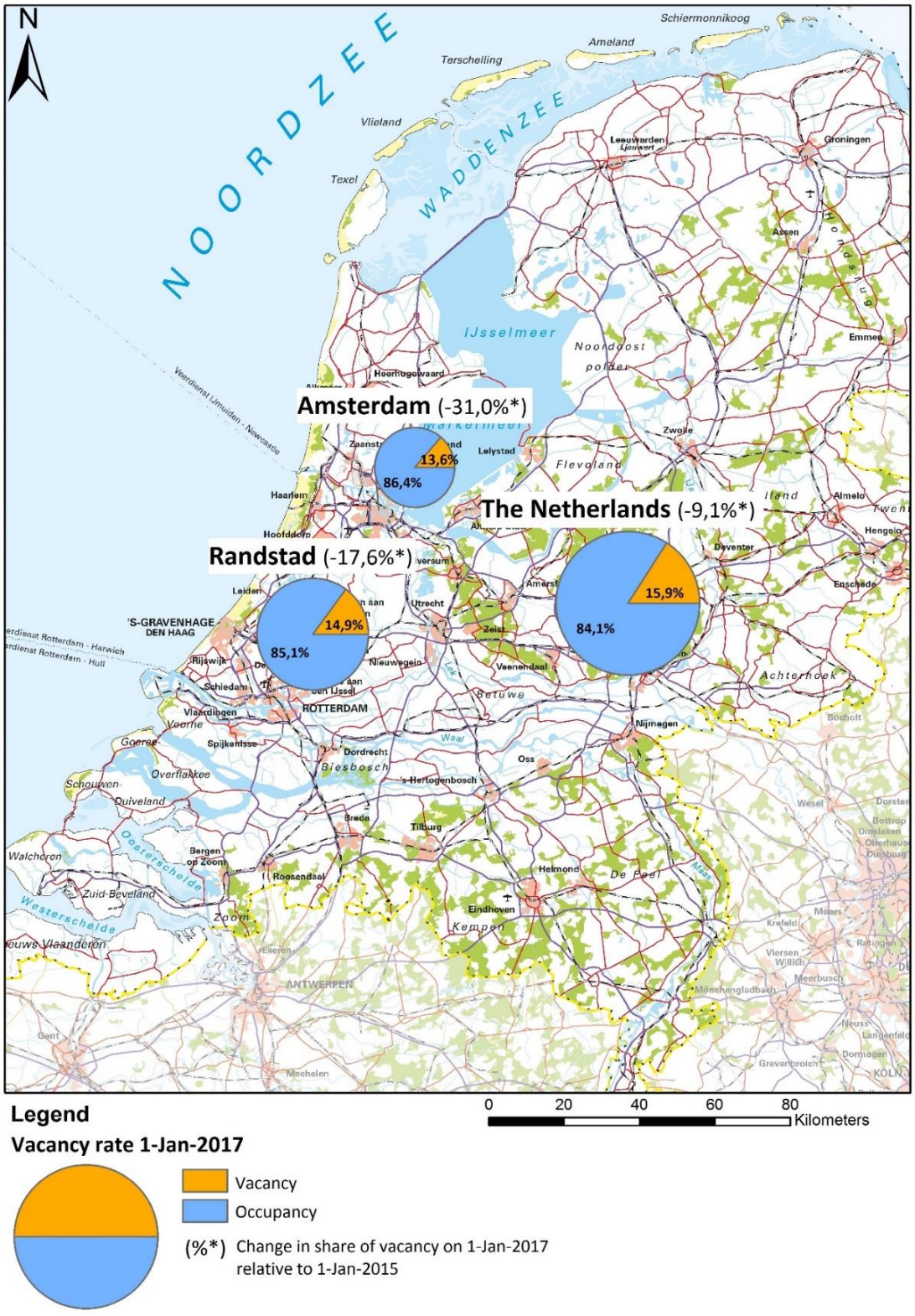

Figure 5: Vacancy rate on 1 January 2017 for Amsterdam, Randstad and the Netherlands (PDOK, 2018)

4.2 The office cycle

The first phase, where a cyclical upturn is recognizable, occured in the years 1999-2001 and 2005-2007 (CBRE, 2018). In Figure 3 on page 11, this is recognizable due to the stabilizing of the vacancy rate. In these periods, the market was functioning well and the borrowing funds were favourable (Brouwer, 2014). This caused an increasing business activity, a tightening of the office market and therefore a reduction of available office spaces. This phase reflects these periods well and matches the period before the economic recession. The second phase forms the first defects leading to the occurring crisis. This is also in accordance with the speculative building. This caused a strong reaction of the office cycle and caused high fluctuations (Zuidema & van Elp, 2010). This strengthened the "varkenscyclus" and declares why the vacancy rate could have reached a height of 17.5 percent in 2015, while the frictional vacancy rate is only five percent. The third phase, adjustment and slump, is the current phase of the economy, relatively short after the economic recession. Tenants have many possibilities for choosing an office building due to oversupply, rent prices are low and are therefore attracted to the offices with the best quality, location and/or age. This adjusting process has already started in 2015, where the peak of vacancy was achieved and started to decrease. The vacancy rate eventually will be equal to the frictional vacancy rate, what forms an equilibrium market. Hereby, the least attractive buildings are filtered out of the market by demolishing and new built or transformations. This process is likely to take many years for recovering, due to the extremely high vacancy. The next phase, demand related to employment growth starts to rise, is the future phase. All the oversupply is adjusted to demand and therefore demand starts to rise again. Due to the economic recession, wise lessons must be learned. When demand starts to rise again, regulations for preventing high oversupply must be taken (Remøy & Van der Voordt, 2014). "4.3 Vacancy solutions" describes these aspects more in depth.

4.2.1 Relation to Amsterdam

The Netherlands as a whole is currently in the third phase as mentioned above. Amsterdam despite, has almost outgrown this phase. It will achieve the last phase by January 2019, where the demand is adjusted till the natural vacancy rate and demand related to employment growth starts to rise (Gemeente Amsterdam, 2017). This is shown in Figure 4 on page 12, where the lines cross. The employment is outgrowing the national trend as shown in the Figure 6. It also visualizes that in the end period of the economic recession, there already was growth in Amsterdam relative to the national trend (Cushman & Wakefield, 2018). This in accordance with the last phase of the office cycle. This contains that Amsterdam will be the first city that will achieve the complete cycle in this century.

Figure 6: Industry-sector jobs index in Amsterdam 2010-2016 (Cushman & Wakefield, 2018, p.45)

4.3 Vacancy solutions

4.3.1 Policy

A sufficient way for solving vacancy is to implement a policy in order to regulate the vacancy issue (Gelinck & Baptiste Benraad, 2011). This policy has to control the aspects that influenced the vacancy rate during the crisis, for preventing the same mistakes in a future state. The scale of this policy is essential. It has to be implemented on regional or even more preferable on national scale by the government (Janssen-Jansen & Mulders, 2012). This will prevent the aforementioned prisoners dilemma. The most obvious aspect to control in this policy, is not increasing the amount of office stock, this would lead to more vacancy. Therefore, the amount of new construction projects must be limited or office space has to be withdrawn of the office market (Buitelaar, 2017). This withdrawal of offices perfectly fits the transformation process as mentioned in "2.3 Transformation".

For limiting the amount of new construction projects, municipalities need to be instructed by the provinces or government. This serves as a guideline for municipalities and only allows them to realise a maximum amount of office space in a certain time path according to Janssen-Jansen & Mulders (2012). A total restriction is not sufficient and space for new developments is essential in highly attractive areas. Otherwise it will obstruct the economic prosperity of that area. In order to still realise new building projects, the solution is found in transformations of buildings. This is found to be the most successful strategy for solving the high amount of vacancy in periods of recession (Remøy & Van der Voordt, 2007). Despite, creating a policy concerning vacancy is hard to establish. Namely, each vacant building has different aspects, regions differ strongly from each other and each vacant building has different spatial benefits according to EIB (2010). Therefore, this author states that a policy concerning spatial quality, that offers guidelines for municipalities, would fit better.

This spatial policy has to exist out of certain aspects. As mentioned in "4.1 The development of vacancy", the real estate market is not transparent. Creating more transparency on the real estate market is therefore an essential aspect for implementing the policy (Remøy & Van der Voordt, 2007; Spaans et al., 2011). This is possible by more knowledge exchange, what eventually creates more financial and economically feasible projects and benefits each actor on the market. Thereby, accordance need to be accomplished about realistic schedules, realism of the developed projects and trust between the municipalities for preventing the prisoners dilemma (Janssen-Jansen & Mulders, 2012; Remøy & Van der Voordt, 2007). Municipalities therefore need to interact with the province to inform frequently about their developments. The prisoners dilemma for investors, could be prevented by introducing a benefit tax. This avoids free ride behaviour and makes sure that everyone pays the same price (EIB, 2010).

Furthermore, the municipalities are known for their non-flexible character regarding transformations. This impedes the transformation process and it would therefore help to settle clear agreements with the municipality before starting a transformation (Janssen-Jansen & Mulders, 2012; Remøy & Van der Voordt, 2007). Therefore, stimulating transformations is an important aspect. Since this option offers possibilities for new building projects, without adding new office space and office space could even be withdrawn. In order to generate more options regarding transformations, a more flexible zoning plan would fit. This creates opportunities for buildings which could otherwise not have been transformed, due to restrictions. Thereby, it offers more options for developers and creates more possibilities for financial realizable projects (Remøy et al., 2011).

4.3.2 Practical opportunities

In response to the changing demand in the real estate market, it is important to develop buildings that will fit the demand and future tenants. Spaans et al. (2011) mentioned the market-oriented approach, which states that by knowing the demand, offices will fit the market, what counteracts vacancy. For accomplishing this, it is helpful to attain more involvement in the process before the construction starts. This will lead to a more successful project (Janssen-Jansen & Mulders, 2012). To fit the desires of tenants in the further future, buildings must be constructed in such a way that they are suitable for transformations in a later phase. This is possible by developing easy transformable buildings, what will benefit the process by need for transformation (Remøy et al., 2011). At the same time, this contributes to a sustainable built environment and will benefit the society on long-term. Stimulating easily transformable buildings would therefore be a tactic choice, which could be done by financial rewards, given by the government (Remøy et al., 2011).

4.3.3 The Netherlands

For counteracting vacancy, the WRO (Spatial Planning Act), offered procedures which had to be followed in the context of spatial quality. Municipality guidelines for qualitative aspects are given such as culture, history, parking, the needed demand and sustainable use of space (RVO, 2016). They also generated the so-called “ladder for sustainable urbanization”, which is a selective procedure for allowing new building projects or redevelopments and must be followed by municipalities.

In 2010, the VNG (Association of Dutch Municipalities) considered to put a levy or taxation on vacant offices (EIB, 2010). This would lead to the redevelopment of buildings in an earlier phase, what increases the quality of buildings in general. Real estate owners are in this way forced to undertake action, even before vacancy would occur. On the other hand, it has also a negative side. The taxes make the already vacant offices more expensive to redevelop. Subsequently, this makes it harder to solve vacancy on the short-term. After taken into consideation, those taxes are not applied, due to the high priority of solving vacancy on short-term (EIB, 2010).

Since 2012, the government offered guidelines for the municipalities concerning transformation. They set up the “expert team (office) transformation” (RVO, 2016). They serve as a consultancy for municipalities for aspects like project organization, building legislation and regulations, financing options, fiscal and judicial possibilities, ground map and classification concepts and the matching between real estate owners and potential customers (RVO, 2018). To manage this, the expert team transformation provides knowledge concerning transformations based upon previous experiences. The expert team transformation is responsible for delivering quality and liveability. Eventually, the municipalities have to form the policy by themselves, which is different for each region and situation (RVO, 2016). Due to this consultancy, all the aspects regarding vacancy are included by this governmental institution. This offers great support in solving the vacancy issue in the Netherlands.

The most influential aspect for solving vacancy is by transformations. Before the crisis, the amount of transformations was considerably low. Since the beginning of the crisis, the transformation process took great progress. This was due to the fact that the high vacancy created a pressure for restricting new building projects (Dynamis, 2017). Transformations with the expert team transformation instead, offered a solution. Figure 7 shows the increase of transformations over time, which mainly concern transformations of offices into housing. Since the expert team transformation emerged in 2012, the amount of transformations considerably enlarged. Since 2014, the transformation process was

becoming more familiar and more real estate owners dared to take the step towards transformation (RVO, 2014).

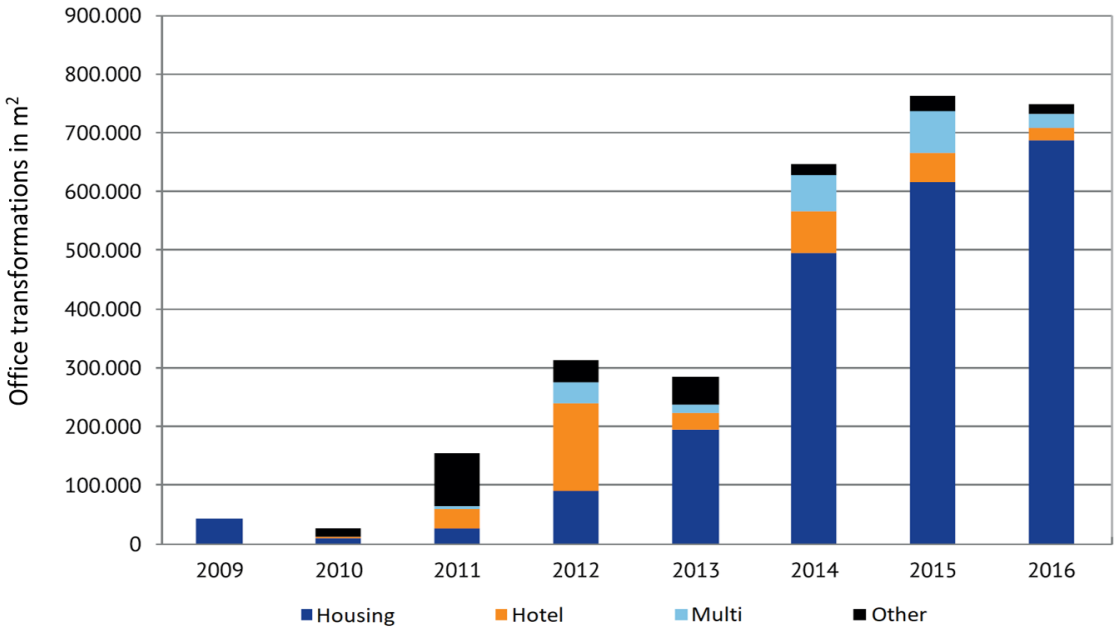

Figure 7: Transformations in the Netherlands in 2009-2016 (Dynamis, 2017, p8)

The total office stock is decreasing gradually since 2015 (Buitelaar, 2017). This is possible due to a large amount of transformations, wherefore a lot of space is withdrawn from the office market. See Figure 8. The amount of new added office space also greatly reduced, due to restrictions of new building projects. This trend is desirable and the vacancy is therefore decreasing gradually. Since the economic recession is over, it is essential to continue this trend, till the frictional vacancy rate of five percent is achieved. In that case, the next phase of the office cycle can be entered, what all contributes to the filtering down process (Brouwer, 2014). This comes down to a new and fresh start of the real estate market. Lessons must be learned from the recession and these mistakes must be controlled in order to prevent these in the future. Therefore, the Dutch and Amsterdam market only emerge stronger from the crisis than they have ever been before.

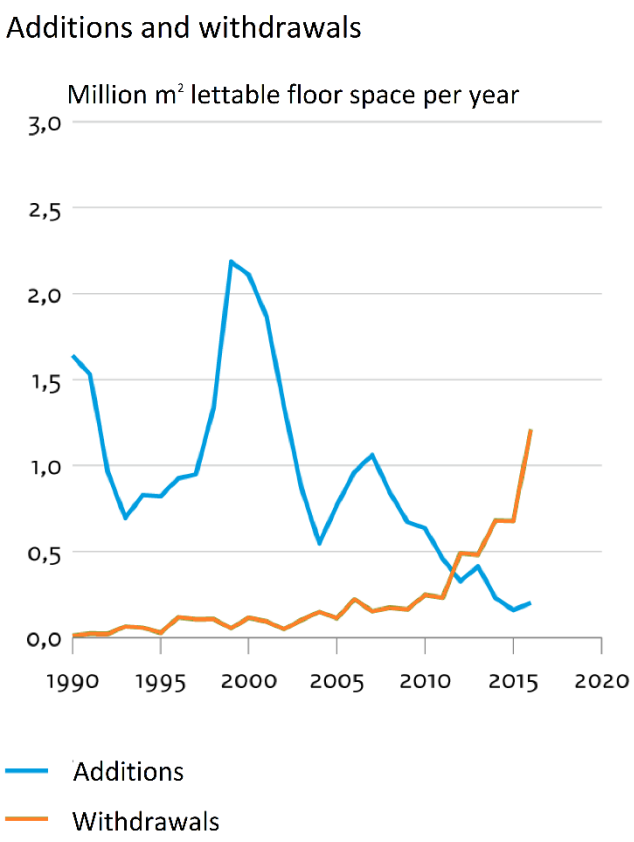

Figure 8: Additions and withdrawals on the Dutch office market in 1990-2017 (Buitelaar, 2017, p.28)

4.3.4 Amsterdam

For counteracting vacancy, Amsterdam implemented a freezing of new construction projects in 2010-2017 (NVM Business, 2017; Gemeente Amsterdam, 2016). During this freezing, new construction projects were regulated and restricted allowed. Thereby, there were a lot of withdrawals of office space from the market due to transformations (Gemeente Amsterdam, 2017). This is partly stimulated by the policy of the WRO as aforementioned. Figure 9, displays this trend and shows that the supply and take-ups are converging (NVM Business, 2017). The amount of take-ups means the amount of available office space that is occupied by companies. Amsterdam is leader in the amount of transformations and is extremely suitable for transformations of offices into housing due to the urbanization (Dynamis, 2017). Therefore the amount of available office space is decreasing fast since 2014, what correlates with Figure 8. Amsterdam also shows that companies are getting more trust into the market, wherefore the amount of take-ups increases (Cushman & Wakefield, 2018; NVM Business, 2017). As aforementioned, Amsterdam will be the first city for achieving equilibrium and thus the first city that could start a new phase. This will create more feasible projects and buildings can be developed according to the desires of the tenants. It will therefore fit into the market and by lessons learned from the recession, it will sustainably contribute to the future real estate market.

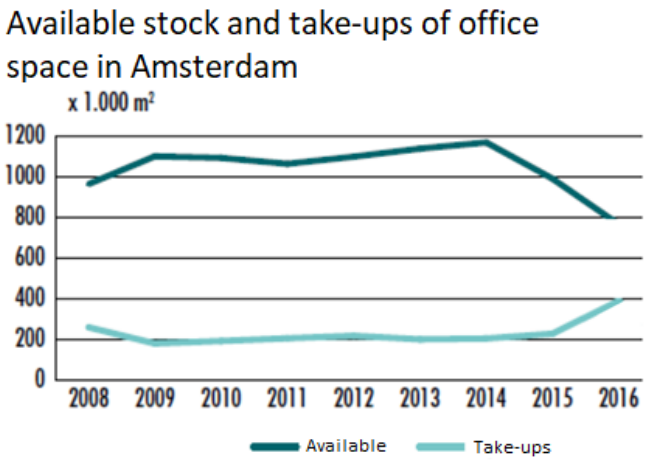

Figure 8: Supply and take-ups of office space in Amsterdam (NVM Business, 2017, p.3)

5. Conclusion

The conclusion gives an answer on the main question:

"What are successful determinants for solving the problem of high vacancy rates among office buildings in the Netherlands and how does this relate to Amsterdam?"

The real estate market is non-transparent, unpredictable and characterized by decentralisation, frictions and ineffectiveness. Therefore, each market has a desirable vacancy rate, which for the Netherlands is determined on five percent. This was achieved in 1990-2000 were the market was in equilibrium. In 2000, due to high demand for offices, buildings were developed speculative. When the demand decreased, the building projects were still under construction, what caused an oversupply of offices. While the market was not recovered at all, the demand for offices rose again in 2005 and new offices were built. Subsequently, the economic recession hit the market, wherefore the impact was even harder and the vacancy rate rose till 17.5 percent in 2015 in the Netherlands. Amsterdam showed a different trend. During the end of the crisis, Amsterdam was already recovered quickly due to urbanization and will achieve their desirable vacancy rate of 8.6 percent by January 2019.

Furthermore, the Netherlands is currently in the third phase of the office cycle. This implies that the Dutch market has an oversupply of offices, that the least attractive buildings remain vacant and this oversupply has to be adjusted to the demand. Amsterdam will enter the last phase by achieving their desirable vacancy rate in January 2019. The least attractive offices are therefore filtered out of the market and the demand for offices will rise again. This characterizes a healthy and in equilibrium real estate market. This shows that Amsterdam operates as a separate market in the Netherlands, which is in high contrast with cities that still deal with high and increasing office vacancy.

A successful strategy for solving vacancy, is by implementing a policy concerning spatial quality for controlling mistakes made during the crisis. This has to be on government level to prevent prisoners dilemmas. This policy provides guidelines for municipalities for how to deal with the high amount of vacancy, which concern: restricting new building projects, stimulate transformations, creating transparency and create more flexibility in zoning plans. Practical opportunities for involved actors are developing on demand and developing transformable offices, what contributes to a sustainable future built environment. The Netherlands reacted during the recession by introducing procedures which has to be followed by new building projects and set up an expert team office transformation. This contributed to vacancy by not enlarging it and is currently gradually recovering. Although, Amsterdam is recovering quick. Due to freezing of new construction projects, many transformations and urbanization, the vacancy rate decreased from 18 to 10 percent in only three years. Both markets will eventually achieve their desired vacancy rate. The problems accompanied by the high vacancy are then processed and solved. This leaves the real estate market with a fresh new start. Buildings can be developed on demand and projects will be more financial feasible. Taken into account, the lessons learned from the recession, both markets will emerge only stronger as a results of the recession. This will give more freedom and creativity, what benefit the market.

6. Discussion

Due to the used method, purposive sampling is used. Thereby, the analysing of the results was completely depending on the researcher. The procedures were followed according to the research type and selecting results is scrupulously taken into consideration. The research is therefore conducted in the highest possible reliability. Although, it could have formed biases by selecting or excluding wrong aspects, without the researcher being aware of this. Besides this, the used reports are valid, due to trustworthy origin of the sources, wherefore biases should be highly limited.

The process of gathering reports related to vacancy went well, due to the accessibility and the large amount of publications. Simultaneously, this was forming limitations, since the research type, secondary data analysis, is time-consuming. The first intentions were to analyse the four largest cities and compare them to the Netherlands. By analysing the Dutch market, it soon became clear that the expectation of analysing all cities could not have been achieved within the given time frame. Therefore, only Amsterdam was chosen as case study and reflected against the Netherlands. Although, given the large amount of data of the Netherlands, the research would have been suitable for only the Netherlands itself. This would have led to more detailed analysis of the Netherlands. A broader part of the policy would then have been implemented.

For further research it is recommended to bring the four largest cities into consideration by using the same research questions. Analyse how those four markets operate and make the connection to the Netherlands. In this way, trends and developments can be examined and compared. This could help to understand how cities operate and deal with vacancy, what gives a deeper understanding of the functioning of the market and eventually for solving vacancy.

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8. Appendix

- Appendix 1: Used documents for content analysis

Appendix 1: Analysed documents

1.1 For the Netherlands

Asselbergs, K., Bak, R., & Raven, G. (2018). *Stand van zaken: Commercieel Vastgoed 2017. De Nederlandse markt voor kantoren, bedrijfsruimten en winkels.* Nieuwegein: NVM Business.

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