The profitable influence of lease incentives for new office developments

A research on the phenomenon of office real estate developments (out)competing existing assets on effective rent levels without loss of quality
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Management summary

Introduction
There is reason to believe that Dutch developers have somehow been able to outcompete the owners of existing office space on rental pricing. If a tenant can move more inexpensively to newly proposed (not yet existent) office space than to remain where they are, or move to another, existing office space, it hints to something being not just at odds with common sense but something far more socially expensive: that a lot of existing office space, awaiting occupancy, might never be rented. If this be true it forebodes financial disaster for its owners and, more generally, for the surrounding society and its use of available resources. It has led to a growing public concern and press coverage (KPMG en de lege kantoorkolos, 2012; PropertyNL, 2012). How can this common-sense defying situation be effectively understood?

It is a question broadly asked throughout society yet it has not yet received a satisfactory answer. A number of researchers have mentioned the subject to be occurring (Korteweg, 2002; Zuidema & Elp, 2010; Zuidema & Elp, 2010), and stated that lease incentives were used (Brown, 1995; Hordijk, 2005; Swagerman, 2010), none have laid bare the essence of how this works and why? This research’ effort seeks to do just this.

Problem statement
With all else being equal, developers are able to sign lease contracts with tenants for yet-to-be developed office space with effective rent levels equal to, or even lower, than effective rent levels of existing office space. This is under the assumption of “an arm’s length transaction and rented out to the highest bidder” (Lusht, 2001). The use of lease incentives is suspected to be of influence.

Problem analysis
Chosen is to compare on the basis of effective rents. Effective rent is defined as “the contract rent yearly paid, corrected for [lease] incentives (in € per m2 LFA per year). In the calculation expected inflation is included.” (Gool, 2011). This research thereby assumes that the contract rent level is build up from the effective rent level including incentive value\(^1\). The effective rent level is corrected for lease incentives. Literature describes that somehow lease incentives are thought to be of influence in the occurrence of the phenomenon. Correcting for lease incentives seems to go against that expectation. However, the expectation exists that incentives can also influence the effective rent level to be lowered. Lease incentives thereby form the main subject for this research.

“A lease incentive is any factor (financial or nonfinancial) -apart from the contract rent and general asset quality- that enables or motivates a particular housing decision.”(altered from (Muijsson, 2010)). This definition purposely does not make a difference between lease incentives and tenant improvements, as these terms are often used.

\(^1\) In practice this is commonly the other way around: incentives define the effective rent level from the contract rent level
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interchangeably. The purpose of lease incentives is by this definition obvious: to ease real estate negotiations between the property owner(s) (the letter) and the potential inhabitant (renter) (Swagerman, 2010).

The problem statement comparison is on the basis of pre-contracting. Developers and tenants thereby agree to a rental contract long before the building is completed. Such tenants clearly are not under time pressure to move to this new office space.

A step is made to classic economic theory to understand the underlying implications of the phenomenon. Economic theory on depreciation states that existing versions of a product are of lower value than the to-be-produced versions of that same\(^2\) product: the existing versions will have aged\(^3\). The law of supply and demand states that in order to stay competitive older versions of the product will drop their value related prices as soon as newer products do too. However, this implies an efficient marketplace. In practice marketplaces are less efficient: smoothing and lagging are aspects bound to occur\(^4\). Lagging could well be thought to allow the existing version of a product to temporarily have a higher pricing than the to-be-produced product. However, lagging does imply a change in pricing to have occurred. For the phenomenon it means that the to-be-produced product has somehow been able to provide a lower price. Assuming the product to still be economically feasible, it means that the product can only have obtained a lower price when it can be produced more cheaply. Combined lagging and lower production costs form the basis for the phenomenon to exist.

![Figure 2: Reasons for the phenomenon to occur as identified by economic theory](image)

Related to real estate products the following is found:

- Development prices (and value)\(^5\) are characterized of behaving delayed (lagging) to new market information (Hordijk, 2005).
- Real estate products can also be easily associated with lower production costs also known as lower development costs. The real estate market is known to relate to economic tendencies (Hordijk, 2005). It can be well imagined that products can be produced more cheaply in an economic low. Another reason lies in the highly technical nature of real estate products (Winch, 2010; Baum, 1993). New techniques are developed every day trying to ease production process and costs.

\(^2\) Quality equal

\(^3\) Utility decreases with the passage of time (Baum, 1993)

\(^4\) Smoothing described prices to not react on extremes due to taxation methods; Lagging describes prices to response delayed to exogenous shocks and new market information in general (Hordijk, 2005; Zuidema & Eip, 2010)

\(^5\) Land value cannot depreciate. It is merely influenced to increase or decrease in value as a result of a complex series of factors (Baum, 1993).
Research aim
This research will focus on the side of the developer’s lowered production costs for trying to identify reasons for the phenomenon to occur. Lease incentives are thought to be of influence. In short this research is set out to prove existence and form an overall explanation of a not-yet researched phenomenon. In no way will this research discuss any moral hazard or social values, in order to refrain from personal affiliation (bias) to stand in the way of determining market mechanisms allowing the phenomenon to occur.

Main research questions
- How can lease incentives affect effective rent levels of yet-to-be-developed office buildings?
- How does this enable developers to offer lower effective rent levels for yet-to-be-developed office buildings, than the effective rent levels offered by investors for comparable existing office buildings?

Research delimitations and limitations
This research is limited to real estate developments in the Dutch office asset market. Analyzed is on the basis of the most typical actors active in the Dutch office development segment. Calculation methods will be limited to those as well.

Research design
The research is set-up being a multi-method research as it combines methodologies. However, it did not target to function as triangulation, but was moreover complementary. Literature and expert interviews created the basis of a theory, which was reflected upon by key-actor interviews. From these conclusions dataset analysis and sensitivity analysis were performed.
Determining the effective rent of a development
The minimum feasible effective rent level is determined by the development costs (including a certain markup/profit) needed for obtaining the quality level that the tenant requires. This is generally known as cost-plus-pricing or markup pricing. In essence it means that development costs equal asset value. However, especially in the real estate market, this does not always apply. It could well be that the asset value is higher than the development costs, enabling margin to be created. This margin can then be applied by the developer to lower the effective rent level of the tenant. This would be done on the basis of foresight: a future expected margin allows for the developer to offer a lower effective rent level. Concluded can be that apart from the lower development costs (as identified by economic theory), margin also allows for lower effective rent levels to be created. The need for a better competitive position is the most probable reason for developers to share margin. This is most likely occurring in periods of high competition and/or low demand for office space.

Reasons for the creation of margin and lower production costs will have to be identified. Inherent to the phenomenon one aspect can already be identified. Furthermore literature describes incentives to be possibly of influence. Both will be addressed.

The rationale of pre-contracting a tenant
The phenomenon’s existence inherently describes the developer to pre-contract. Pre-contracting for developers is valuable: for the developer pre-contracting a tenant will enable a higher selling price. In addition a number of other aspects also turn to the developers favor. A pre-contracted tenant: 1) lowers financing costs, 2) lowers land value and 3) lowers risk premiums. Sometimes municipalities have even demanded a pre-contracted tenant to be present. Amsterdam has done so since 2003. So pre-contracting enables developers to obtain lower development costs and possibly create margin. So inherent to the phenomenon’s existence certain decreases in development costs and possible margin creation can already be found.

Lease incentives explained
In essence incentives help smoothing over the tenant to move (Hordijk, 2005). A moving exercise is quite costly and time strenuous (Muijsson, 2010): transaction costs are high. Obtaining capital to do so can be quite problematic. The landlord will offer the tenant to pay for the above costs (or take care of the whole operation) as an incentive gift. Thereby the threshold for moving is lowered. Lease incentives may appear as free gifts, but in fact the tenant pays a higher contract rent in return.

For investors another purpose is known as well. Incentives are used as rent fluctuation buffer (Zuidema & Elp, 2010; Muijsson, 2010). Real estate prices are known to fluctuate according to the economic tendencies. For investors this is impractical as fluctuating investments are worth less than stable ones. In addition real estate investments are often done with the use of borrowed capital on the basis of a mortgage loan. When sharply loaned, a decrease in value would thereby mean that the financier would need to be paid back (in cash). For these temporal decreases a constant liquidity buffer would have to be retained. Instead incentives are given. As a result the contract rent will remain fixed and so will asset value (Zuidema & Elp, 2010). The fund’s outlook will remain stable and the financier doesn’t demand the investor to pay up. Surely the incentive value needs to be paid for by the investor, but now the provision of incentives will be calculated as a one-time loss on the liquidity of the investor (Zuidema & Elp, 2010) and not as a loss on the fund.
Lease incentives influence on the contract rent level
By providing lease incentives contract rents increase, while effective rents remain stable (see the figure below). Incentives can lead to a proportional and disproportional increase in contract rent value. When applying disproportional reimbursements the value of the increase in contract rent does not equal the value of the incentives that has been given. It is up to the tenant to make sure incentives are proportionally negotiated. However, determining incentive value can be rather difficult, especially for non-financial incentives like tenant improvements.

Lease incentives influence on asset value distribution
Incentives influence the contract rent level. Does that also mean that incentives enable a higher asset value? In most cases it does. If so, the developer acquires an increase in its absolute profits. In addition a number of reasons is found out in which the use of incentives allows for margin to be created. The use of the normative residual land value method, might allow for margin to be created. It depends on the averages on which the normative residual land value method determines the land value on. If no incentives are given on average, giving incentives will surely allow for margin to be created. Take note however that if on average incentives are given, the corresponding normative residual land value will be higher, leaving less margin to be created. Other reasons for margin creation exists when the buying investor is unaware or indifferent to given incentives. It leads to disproportional value increases and ergo creation of margin.

Lease incentives’ effect on the effective rent level
The use of incentives by the marketplace might have distorting effects on market analysis. It might thereby allow for lower production costs and/or margin to be created. Face rents are more than often mistaken for market rent levels. When these are used for the determination of asset values and others, results will be erroneous. The more incentives the marketplace gives on average, the higher these erroneous results will be. Like market rent analysis, development costs analysis might be distorted too. Incentives lead to higher development costs for the developer to make. In essence it means that market development costs might be partly build up by incentive values as well. However, no literature could be found substantiating the development costs distortion. Additional research is required.

Apart from market analysis distortion, another way has been identified for incentives to influence the effective rent level. The sharing of profit between tenant and developer is considered to be an incentive. A major difference exists between the profit sharing incentive compared to other incentives. Other incentives enable the developer to increase the contract rent, while profit sharing directly lowers the (contract/effective) rent level of the tenant. Earlier is described that on the basis of foreseen margin the developer might offer the tenant a lower effective rent

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6) Be aware that in practice effective rents are calculated from contract rents. The contract rent remains free from negotiations; only incentive height will be discussed (KohsieK, 2006).
level. However, the decrease of the linked contract rent level would lead to the selling price being lowered as well, in return leading to a decrease in possible margin to be shared (as can be seen in the picture below).

![Figure 6: Using the margin to realize a lower effective rent](image)

Through another possibility the developer can share the margin to its full amount. The link between effective rent level and contract rent level needs to be broken. By giving the tenant a discount in the form of incentives\(^7\), the contract rent level will stay equal, while the effective rent level decreases. Effect is that the asset value remains equal, and therefore so will the shared margin. Literature describes the use of this method: Lease incentives were used to “keep the contract rent at a high level but at the same time offering [...] lease incentives so that the effective rent paid by the tenant was much lower” (Brown, 1995). The figure below provides an explanation.

![Figure 7: Profit sharing by the use of incentives](image)

This phenomenon is known in the Netherlands as the ‘hoog-laag constructie’ (transl. ‘High-low construction’)\(^8\). The high-low method requires a difference between lease term and investor horizon: this will create the additional margin. Apart from the requirement for a difference between yield and lease term, the method only works when the investor does not correct for the contract rent increase.

Concluded can be that incentives have an amplifying effect to the sharing of the margin. Thereby the use of incentives might proof to be quite valuable for developers to be able to compete at effective rent levels of existing

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\(^7\) There are number of ways in which profit is shared. Some examples have been given where the profit is used to pay off the not-yet-expired rent contract of the tenant’s current building (Swagerman, 2010; Hordijk, 2005). Another example shows the phenomenon where the developer profit is simply paid out to the tenant. If this then led to a company profit, the partners could earn from moving the company (KPMG en de lege kantoorkolos, 2012). Other options include paying for incentives that haven’t been already given

\(^8\) The name for this method is not described in literature but was put to use after being mentioned in an interview.
assets. Precondition is that the developer remains unaware or indifferent to incentives. Another precondition is the need of margin. Next the reasons for margin to be created will be discussed.

Creators of Margin and/or Lower Development Costs as identified by literature
Some margin creating and/or Lower Development Costs aspects have already been identified. Literature allowed for a further identification of aspects of influence as shown in the figure below.

In essence the use of the normative residual land value allows for margin to exist. In addition a number of other explanations has been found (from the past) which might provide margin to be created:

1) Land value:
   a) the leverage effect (averages): since the normative residual land value is based on averages, performing slightly better than average will lead to an exponential increase in margin.
   b) price lagging: land values react delayed to new market information, allowing for margin to be created and land prices to be lower
   c) municipal competition: competition between municipalities might have decreased land costs
   d) data selection: using erroneous datasets might have enabled land values to be lower than what would be expected on the basis of the land value method
   e) incentive influence: relates to the influence incentives might have to the previously mentioned aspect. On the basis of the previous, developers’ use of incentives might lead to lower land costs

2) Labor & Material costs did not proof to be somehow lowered.

3) Additional costs:
   a) developer competition: In order to obtain a better competitive position risk premiums by developers might have been lowered.
   b) pre-contracting: pre-contracting has proven to lower additional costs of both financing costs and profit.
   c) wall of money: financing costs were temporarily lowered due to the wall of money.

4) Asset value:
   a) incentive indifference: investors had often not corrected for incentives due to being unaware of the market’s use of incentives or indifference.
b) yield compression: asset value increased significantly in the period between 2004-2006 due to unprecedentedly low GIY’s.

c) high-low method: combined with investors being unknown/indifferent to incentives and yield compression the developer’s use of the described high-low method led to an even further increase in selling price and *ergo* margin to be created.

If the phenomenon could still exist remains unclear.

Comparing Creators of Margin and/or Lower Development Costs as identified by literature with interviews Thirteen interviews were performed to elaborate on the phenomenon’s existence, according to an in-depth semi-open structure interview set-up. The selection for interviewees consists of all actors as described to be of influence in the development process. Experts were explicitly asked to elaborate as much as they could on the phenomenon in order to make a qualitative dive into the research matter. Interviews were performed as much as possible in the native language of the interviewee. All interviews were audio recorded. However, it was told explicitly that the recordings would be for own use, in order to make sure interviewees would not be hesitant to openly discuss the phenomenon’s existence. On the basis of selective transcripts results were categorized and discussed.

Since literature and interviews ran side by side, conclusions were likely to match. However, since interview questions as a result also developed over time, earlier interviewed actors did not have a chance to comment on all found theory. A questionnaire was set up, which would thereby validate the outcomes of the research. In theorems the conclusions are presented to the participant, asking him to either agree or disagree with the theorem. If needed, comments could be written down. Results of the received questionnaires were transformed. True was replaced by a 1 and false by a 0. The percentage of *true*’s compared to the total amount of answers was determined. In some questionnaires not all questions had been answered, or both true and false had been answered. For the former the answer was replaced by a ? and not included in the total amount of answers. For the latter 0.5 was inputted. By analyzing the answers of the questionnaire, some of the answers (3) were not included in the calculations, others were altered (1).

Of the 13 interviewees 8 handed in a questionnaire. 4 were unable to fill in the questionnaire. One did not respond at all. Percentages above 70% are considered high. Percentages beneath 30% are considered low. In the overview below the percentage outcomes have been included. Clearly lagging of the residual land value, the wall of money and yield compression are the aspects most associated with the phenomenon’s occurrence.

![Figure 9: Literature conclusion overview compared to interview results and questionnaire results](image_url)
On the basis of these outcomes decided was to perform 1) a dataset analysis on land values to check if margin had been created and 2) a sensitivity analysis for analyzing if yield compression and incentive indifference could have led to the phenomenon’s occurrence.

Residual land value validation

The dataset research’ goal was to see whether or not realized residual land values by the municipality of Amsterdam allowed for margins to be created. If margin was created this could allow for profit to be shared. The expected selling price as determined by the municipality for their residual land value calculation was compared to the actual selling price as realized sometime after between developer and investor.

On the basis of both literature and interview conclusions a selection for assets has been made. Yield compression defined the need for low risk assets (single tenant, large assets, with a large and stable pre-contracted tenant). The conclusions on land value distortion identified relatively new locations which land value had been proven to increase significantly. Furthermore the selection of ‘out-of-the-ordinary’ assets was chosen, since as a result proper land value determination is difficult.

The expected selling price determined by OGA was obtained. For most assets these assumptions were present, for some small assumptions had to be made on the basis of comparable assets. The realized selling price (excluding VAT and turnover tax) per asset was obtained from the deed of transfer. For three cases the deed of transfer could not be obtained. On the basis of Vastgoedmarkt.nl (2012), these selling prices were obtained. However here probably VAT and turnover tax was applied to, which was corrected for.

A number is calculated that shows the possible correction that could be applied over the contract rent when all margin is shared to the tenant. The margin however is distributed to GFA instead of LFA. This is due to the lack of information on LFA. Furthermore the created margin is not discounted either. This is due to the lack of information on GIY levels. Making too much assumptions would not lead to any valid result. Thereby the determined figure functions merely as a highly insecure indication for the influence of margin on the contract rent level.

The selection consists of 13 cases with an average total GFA of 27 023 m2, consisting of 25 955 m2 GFA pure office space. Total realized land price consisted of 325 mio euro’s, whereas 343 mio euro’s was advised (5,3% difference). However one case is solely responsible for 3% of that difference. Average realized selling price was just above 100 million euro’s. Six of the assets are multi-tenant; seven are (mainly) single tenant. On average the margin between expected asset value and realized asset value is 21% high. Especially assets sold in the period between 2005-2007 seem to perform extremely well, also in terms of euro/m2. This looks to reflect earlier conclusions on the yield compression period. Clearly the margin might be used to create lower effective rent levels. Calculated is that on average 70 euros of the initial contract rent might be corrected. Furthermore for the assets created in the 2005-2007 period the initial contract rent correction is as high as 127 euro’s.

Sensitivity analysis

On the basis of earlier obtained case-study data a sensitivity analysis was performed. Using this prior obtained data is thought to increase the analysis’ outcomes’ validity. Goal was to compare possible existing assets effective rent levels with the developments effective rent level in order to determine under which conditions the phenomenon might have been able to occur. However, the tenant had been unable to find proper existing assets for his company to be housed in. Therefore was decided to compare the former tenant’s asset with the current tenant’s asset.

The model’s input data is obtained from the two described interviews -with the tenant and the former building’s spokesperson-, municipal data and scenario parameters. From the former building’s spokesperson the former contract rent and service costs could be obtained. Also an uncertain notion of a two-year-rent-free incentive was
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given. The latter info was put to use to determine the effective rent level of the previous asset. From the interview with the tenant two essential statements were used. One statement was about the contract rent being only slightly above current market average. The rent level is determined at a +8% increase to the current face rent level. Another statement was that -combined with lower service costs- the effective rent would be about equal to the effective rent including service costs of the former asset’s lease contract.

Two scenarios were set up containing a small difference in input data concerning LFA/GFA efficiency and all-in construction costs: one on the basis of the municipal’s assumptions and one on the basis of an increased performance by the developer compared to the average. Assumptions led to a 4% absolute increase in LFA/GFA and 4% relative decrease in all-in construction costs, fed by the aspects of pre-contracting assumptions (financing costs -2%; and developer risk premium -2%).

The asset value is determined on the basis of the rent capitalization method (GIY). All-in construction costs and land costs are then subtracted. What remains is a margin, which is shared back to its full amount with the tenant. The margin is discounted to obtain the effective rent level. The formula used is the following:

\[ a = \sum_{k=0}^{n} a^r \frac{1 - r}{(1 - r^{n+1})} \]

Result (a) is the annually corrected and discounted incentive value. By dividing this number by the LFA the annual incentive contact rent correction value / m² LFA can be obtained. No additional VAT corrections have been applied. Results are shown below.

<table>
<thead>
<tr>
<th>Situation 1</th>
<th>Situation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract rent increase</td>
<td>Municipality</td>
</tr>
<tr>
<td>Yield decrease 1%</td>
<td>-19%</td>
</tr>
<tr>
<td>Yield decrease 1% &amp; Rent increase</td>
<td>-33%</td>
</tr>
<tr>
<td>Yield decrease 1.5%</td>
<td>-46%</td>
</tr>
<tr>
<td>Yield decrease 1.5% &amp; +8% limit</td>
<td>-46%</td>
</tr>
<tr>
<td>GIY needed when +8% limit</td>
<td></td>
</tr>
</tbody>
</table>

By playing with the variables GIY and contract rent, was tried to find out when the developer would be able to obtain an effective rent of the former asset. However on the basis of the assumptions of the municipality (scenario 1) a decrease of around 1.5% was needed in comparison to the GIY assumed for calculating the land value. Combined with blowing up the contract rent level by the use of incentives with 8%, the GIY increase needed was around 1%. Both situations seem rare to occur. Though between 2004 and 2005 such a decrease has actually happened (CBRE, 2010).

When the developer has been able to perform slightly better than average, for example by pre-contracting tenant and investor (-4% all-in construction costs) and/or increase LFA/GFA efficiency (+4% absolute), the decrease in combination with the GIY and blown up contract rents might have had a much higher impact. Decreasing the GIY by 0.75 and increasing contract rent levels by 8% would allow for the tenant to effectively gain a same effective rent level. Between 2004 & 2005, and in 2010 such a decrease has actually happened (CBRE, 2012). Clearly situations might exist in which a developer is able to realize an effective rent level lower than the effective rent level of an existing asset. The GIY expectation is the main factor of influence. Combined with the blowing up of contract rent levels, impact on the effective rent level are shown to be severe. Still though the changes needed
compared the normative residual land value assumptions look to be quite high. Preliminary conclusions seem to point in the direction of economic/market bubbles.

Conclusions

- **How can lease incentives affect effective rent levels of yet-to-be-developed office buildings?**

In general incentives affect the contract rent of an asset: the more incentives are given, the higher the contract rent will be (Swagerman, 2010; Muijssen, 2010). This research has shown that incentives can also affect the effective rent levels. This can be done in two ways: directly and indirectly. The sharing in developer profit forms the direct way, while the indirect way is caused by the market’s use of incentives distorting market analysis.

Sharing in developer profit is defined to be an incentive (Gool, 2011). It enables the developer to offer a part of his profit to a tenant, which effectively leads to a lower effective rent for the tenant. Two conditions are essential for profit sharing to function:

- **Profit;** an essential factor for profit sharing to work is the existence of profit. Without profit to be shared, the effect on the effective rent level is zero.
- **Tenant;** Furthermore a pre-contracted tenant is essential.

The sharing of profit is only useful when the developer is able to obtain profits. The difference with simply offering a lower contract rent is that this would lower the asset’s selling price. Instead the incentive of profit sharing is used to keep the contract rent high and *ergo* keep the selling price high.

A pre-contracted tenant is a precondition. Without tenant the developer isn’t able to provide incentives in the first place. Both statements are reflected by literature, interviews and sensitivity analysis.

The high-low method (Dutch: Hoog-laag constructie) enables the developer to maximize the use of profit sharing. By blowing up contract rents with the use of incentives an extremely high selling price is obtained. Two aspects are of importance:

- Investors should be unaware/indifferent of incentives to be given
- A large difference in lease term and investor horizon enlarges the effect

The market’s use of incentives can distort market analysis. Two aspects can be influenced by incentives being face rent and all-in construction costs: both are ought to increase when an incentive is given. There is no clear evidence for the all-in construction costs being influenced by incentives. Although rationally proven, no literature or interview could either concur or decline.

The distorted market analyses outcomes can lead to both asset value and land value being distorted as well. If the investor calculates on the basis of face rents the asset value would be way higher than actual. The high-low method was set up using this latter statement as requirement. For the residual land value both aspects are of importance. The all-in construction costs factor is thought to weigh heavier on the residual land value determination than the face rent level, due to data selection criteria. The market’s use of incentives would thereby decrease land values. Although the effect on asset value is acknowledged by both literature and interviews, the effect on land value remains unproven.

- **How does this enable developers to offer lower effective rent levels for yet-to-be-developed office buildings, than the effective rent levels offered by investors for comparable existing office buildings?**
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The previous paragraph showed that the effective rent could be influenced by incentives. By sharing developer profit the developer is able to provide lower effective rent levels. The high-low method even strengthens the sharing of profit. Market analysis distortion enabled further incentive influence on the effective rent level. So how does this lower effective rent level enable the phenomenon to occur? Part of the answer to this question was already explicated on in the problem analysis of this paper: somehow the effective rent levels of the existing assets are lagging behind. If then developers are somehow able to provide lower effective rent levels or higher selling prices, this would explain the phenomenon to occur. Answer 1 has shown that incentives have provided in doing so.

However, a number of preconditions was set. These preconditions should somehow have been able to occur through certain market situations or market mechanisms. Profit sharing inherently requires profit to be shared. Below the identified aspects are shown.

In order to be able to obtain any additional profit the residual land value should not be functioning as it’s supposed to. The additional margin would else have led to an increase in the residual land value. All sources agree to this. The use of the normative residual land value shows to be the main reason. The dataset analysis showed that average the land value was off by 21% to the actual value it should have obtained. Also the residual land value study showed that especially assets sold in the period between 2005-2007 have realized high profits. This looks to reflect the yield compression period. It is calculated that the initial contract rent correction is as high as 127 euro’s/m² GFA (not discounted). It clearly shows the possibility for profit to be created and shared to the tenant.

In order for the land value to lag behind, some changes must be present for the land value to lag behind to. The following temporary market aspect is thought to have had the biggest influence: yield compression/wall of money. Literature, interviews/questionnaire, residual land value research and sensitivity analysis showed the Dutch market’s yield compression to be the main aspect for margin to be created. The Dutch market was characterized of yield compression between 2002-2008 (Zuidema & Elp, 2010). Possibly overconfidence in the asset value increase contributed to the disregard of incentives. In addition the growing difference between lease term and investor horizon - a prime requisite for the high low method to work - enabled even further profits to be obtained and shared. The sharing of profit was a result of the decreasing tenant demand. The sensitivity analysis has shown that all factors combined, the developer could have indeed signed a contract with a tenant on the basis of an effective rent level equal to effective rent level of their previous asset. Comparing the profits needed to do so, the identified
(potential) profits of the small land value research showed that for all the assets being developed around the years 2004-2008 the effective rent level has probably been quite low. It shows that with the use of profit sharing, the high-low method, the normative residual land value method and yield compression the developer might be able to offer effective rent levels equal to those of existing assets.

Still though the existence of the phenomenon in practice remains unproven: no case data could be described. Also whether or not the phenomenon could still exist today remains unclear. Literature and interviews agree that due to the stricter lending conditions it has become less likely for the phenomenon to exist. Also due to the decrease in yields the margin isn’t as large as it used to. Furthermore interviews state that incentives are now widely factored in, making the profit sharing aspect less useful. Tenants are also more and more aware that their choice to move to a new development might have a severe impact on their company’s image. Furthermore tenants have started to become increasingly aware of the possible disadvantages of incentives.

Still some reasons might enable the phenomenon to keep on existing. Most actors do agree that owners of existing assets might continue to be unable to lower their effective rent level, although this may be quickly countered by assets being sold for bottom prices. When finding a very reliable and large tenant, to be positioned at the South Axis, while the municipality lowers its land value, the phenomenon might still continue to exist.
Preface

With great pleasure I present this research paper. The final year of the Master Real Estate & Housing at the faculty of Architecture and Building sciences of the Technical University Delft is concentrated around one thing only: graduation. One year has passed since the startup in September and although choosing one of the many topics I had in mind was difficult, it’s my believe to have chosen the most interesting: a highly complex, sensitive and topical issue, that has been in the public mind for some time now.

“Work expands so as to fill the time available for its completion” – Parkinson’s law states. An unbelievable amount of time and effort is put into this graduation process, making it so important to me that the final result reflects this. Moreover since this document will be part of a public online database for years to come, and since my name is written on it, the harder it is for me to let go and be pleased with what is accomplished. No document is ever finished. Nevertheless here it is, my graduation paper in its final version, lying in front of you the reader. Enjoy!

It has been an informative period. Although the subject is linked to the teachings of the engineering Master’s courses, in depth knowledge about the financial underlay of the Real Estate market was not earlier obtained. It was great to finally have the time to read so much interesting literature. The research topic also brought the possibility to speak with a range of real estate experts, active in the roles of developer, investor, tenant, financier and municipality. This brought great insights into their individual goals and wishes and was particularly meaningful for broadening my personal knowledge. These talks -with so many enthusiastic and driven people- inspired me to do my upmost best in delivering this research paper and contribute to the real estate knowledge base. My recognition goes out to you.

The opportunity to produce my thesis at the municipality of Amsterdam enabled me to get a highly valuable insight into the functioning of this poorly understood market actor. Not only did the internship provide in the necessary land value data for the empirical part of this research, it too gave me a very pleasant work environment for a period of 7 months, with many interested colleagues eager in helping me whenever I asked. The contribution I got from these people, through talks, discussions, guidance, company relations and data delivery was encouraging.

To my mentors Hilde and Philip I give my recognition. In the few meetings we had over the year you were able to provide essential feedback and criticism. After each talk the path that needed walking became clearer, while it would also provide me with the realization that I had to work harder and more efficient. This has definitely improved the quality of this research!

A number of people from my inner circle I would like to thank. To my uncle Bob: thank you so much for all your help and guidance in determining a better structure for this document. It was a great and fun weekend; something we should do more often. I’m sure that combined we could have taken the quality of this document several steps further, but unfortunately we hadn’t had time to do so. We’ll have to focus on solving and understanding other mind-blowing topics. I’m looking forward to do so! To my parents and my sister thank you for all your support and love, helping me get through the last stages of this project. I know you’re very proud and so am I! Finally I want to thank especially my girlfriend Regina. You have always helped me get through the tougher periods by delighting me with your ever enthusiastic and high-energy presence. Thank you so much sunshine!

Amsterdam, October 2012

Bram T. Harding
Readers’ guide
This research paper is divided into four parts:

1. Research introduction
2. Theoretical framework
3. Empirical analysis
4. Comparisons, Conclusions, Reflections and Recommendations

First off will be Part I with an introduction to the chosen research topic. The research’ relevancy, the research problem, research products and research design will be described. A thorough problem analysis will lay out the basis for the research.

Part II elaborates on the theoretical framework of this research. It will consist of a reflection of the exploratory literature study as to major findings and conclusions.

Part III describes the results of the done empirical analysis, including interviews, a small dataset analysis and sensitivity analysis.

Part IV compares the results of theory with the results of practice, followed by conclusions, reflections and recommendations.
Definitions

Additional costs = “Costs like advisor fees, financing costs, overhead, profit (incl. risk premiums)”

All-in construction costs = “Construction costs + additional costs”

Asset (for this specific research) = “Real estate object (targeted of) being part of an investment portfolio”

Asset Value = “Present value of future cash flows during investment horizon + Present value of cash flows after investment horizon (exit value)” (Copeland, 2000)

Construction costs = “Costs made for constructing an asset including labor and material costs”

Contract rent (in € per m² LFA per year) = “the gross yearly rent, which is contractually agreed to be paid, without incentive correction” (Gool, 2011)

Development costs = “Production costs of an asset (including construction costs, land costs and additional costs)”

Effective rent (in € per m² LFA per year) = “the contract rent yearly paid, corrected for incentives. In the calculation expected inflation is included” (Gool, 2011)

Face rent = “the rents published in media. Face rents are often mistaken for market rents.”

Investor horizon (in years) = 100% / GIY

Lease incentive = “A lease incentive is any factor (financial or nonfinancial) -apart from the contract rent and general asset quality- that enables or motivates a particular housing decision” altered from (Muijsson, 2010)

Market rent (value) = “the expected gross yearly rent excluding VAT and service costs for the specified real property space in the current marketplace assuming an optimal marketing, a willing market and rented out to the highest bidder.” (Gool, 2011)

Pre-contracted lease = “An office space lease that is contracted prior to actual completion of the office space it refers to”

Pre-contracted tenant = “A tenant with whom the developer signed a pre-contracted lease”

Production costs = “All costs made for producing a product”

Yield = “one part of the total return of holding a security. A higher yield allows the owner to recoup his investment sooner, and so lessens risk” (Wikipedia, 2012)
### Abbreviations

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>English</th>
<th>Dutch</th>
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<tr>
<td>GFA</td>
<td>Gross Floor Area</td>
<td>Bruto vloeroppervlak</td>
</tr>
<tr>
<td>LFA</td>
<td>Lettable Floor Area</td>
<td>Verhuurbaar vloeroppervlak</td>
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<tr>
<td>GIY</td>
<td>Gross Initial Yield</td>
<td>Bruto aanvangsrendement</td>
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<tr>
<td>NIY</td>
<td>Net Initial Yield</td>
<td>Netto aanvangsrendement</td>
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<tr>
<td>IRR</td>
<td>Internal Rate of Return</td>
<td>Interne rentevoet</td>
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<tr>
<td>LTV</td>
<td>Loan-To-Value</td>
<td>Lening/objectwaarde ratio</td>
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<tr>
<td>LTC</td>
<td>Loan-To-Costs</td>
<td>Lening/productiekosten ratio</td>
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Part I – Research introduction
1. Definition or Research Topic and Approach

Introduction
One day a landlord got a telephone call by the municipality stating that one of its tenants was offered to move to a new-to-be-developed office building by a developer. The municipality was hoping to avoid tenants to move yet-to-be-developed office buildings, when these could be perfectly well fitted in existing buildings.

In order for the existing building to be competitive, the municipality asked the landlord to lower its rent prices. After doing the financial calculations, the company came to the conclusion that the rent price offered by the developer was so low, that it would be impossible to make a competitive offer. The situation was send back to the municipality: the competing developer was able to offer lower rent prices for his new to be constructed office building, than the investor owning an existing building could! Even in these times of high office vacancy.

How can this common-sense defying situation be effectively understood?

It is a question broadly asked throughout society yet it has not yet received a satisfactory answer. It is an interesting question, of clear relevance, and, given office space developers are heavy users of the skills I have developed during my studies, of personal professional interest. Thanks to my previous employer I was also provided a point of focus: developers use of Lease Incentives.

While this gave something of a focus it was, in itself, far too broad to really be of real utility as a research topic. The quest for more focus led, as could be expected, to yet more questions. Robust development of new office space could have causes external to the supply-and-demand dynamic of the Netherlands market. If so, how and to what degree? While many explanations seem possible the situation does not seem all that unusual. The fact, however, that Dutch developers can outcompete the owners of existing office space on rental pricing seems to defy common sense and begs answering. This provides the focus sharpening required. Thus, adjunct to the question already highlighted, can be added:

How do developers of future office space outcompete owners of existing office space in the Netherlands: what gives them competitive advantage? And, if these be Lease Incentives, how might they work?

With some loosely formulated ideas, suspicions really, the mental wheels went on overdrive.

Relevance
Currently there are record levels of unoccupied (existent) office space available in Netherlands yet this absurd imbalance for long looked to become only worse (Hendrikx, 2012). Although insiders know that the development pipeline has dried up, the ongoing construction works of certain developments has led to a growing public concern and press coverage (KPMG en de lege kantoorkolos, 2012).

Clearly, in a healthy supply-and-demand market, the supply of decent office space should be just slightly ahead of the market’s demand. Why then, this runaway oversupply? And if there be an oversupply, would it not be reasonable to expect market mechanisms would come into play to establish a more healthy balance? From this would it not be expected that new developments would cease until available space was largely consumed? In normal times, and under normal conditions, maybe, but not in the Netherlands of late. It appears the law of supply and demand has somehow been repealed or, at least, suspended.
The profitable influence of lease incentives for new office developments

If a tenant can move more inexpensively to newly proposed (not yet existent) office space than to remain where they are, or move to another, existing office space, it hints to something being not just at odds with common sense but something far more socially expensive: that a lot of existing office space, awaiting occupancy, might never be rented. If this be true it forebodes financial disaster for its owners and, more generally, for the surrounding society and its use of available resources.

As melodramatic as this may sound it is in fact here, now, as evidenced one of but many examples; the controversy surrounding Capgemini’s new office space under development in Leidsche Rijn:

Capgemini wasn’t particularly focused on moving from their current facilities (Papendorp Utecht), but when the time neared for lease renewal, the tenant received such a ‘bad’ offer from owner CBRE Dutch Office Fund, that they decided to seek alternatives. Capgemini states to have developed an own proposal for staying on the current location, but that this was rejected by CBRE. ‘Staying in the current office should be cheaper than [moving to] a new-to-be developed office, but the offer of CBRE showed differently.’

(PropertyNL, 2012)

In essence, then, this anecdote adds testimony to the problem thesis topic.

Given there are powerful forces at work here to induce tenants to want newly proposed, yet unbuilt office space, it prompts a look at the motivations involved. Hendrikx (2012) describes numerous motives for tenants to move to another asset & location: how they are outfitted (networks, HVAC, etc.), architectural qualities, sustainability and rent, to name but the most obvious. If all these be at least equal to where you now reside, would not the prospect of paying a lower rent alone be enough to induce a move?

Such bizarre market phenomena need to be better understood. While a number of researchers have touched upon this (Korteweg, 2002; Zuidema & Elp, 2010; Zuidema & Elp, 2010), and stated that lease incentives were used (Brown, 1995; Hordijk, 2005; Swagerman, 2010), none have laid bare the essence of how this works and why? This research’ effort seeks to do just this.

Problem statement

With all else being equal, developers are able to sign lease contracts with tenants for yet-to-be developed office space with effective rent levels equal to, or even lower, than effective rent levels of existing office space. This is under the assumption of “an arm’s length transaction and rented out to the highest bidder” (Lusht, 2001). The use of lease incentives is suspected to be of influence.

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Figure 11: conceptual drawing of the problem statement comparison

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9 as stated by Hans Scholten, Vice President of Cap Gemini in an interview with PropertyNL (2012)
Problem analysis
Implicit in the problem statement lies the nature of the research intended for its answering. To this point some limits have been established for inquiry, as have some statements about scope. The following make these more specific:

- Two variants of the office space product are considered: existent, immediately available office space and office space in need of design and construction (future office space)
- The office space product (commodity) is normally leased by its owner to a tenant (Zuidema & Elp, 2010) at an agreed rental price. For existent space the owner is a real estate investor. Future office space is owned by its developer. In either case, the renter is the tenant.
- Developers of future office space can enter a rental agreement with a tenant long before the building is completed. Such a rental agreement is named pre-contracted lease. Such tenants clearly are not under time pressure to move to this new office space and, since the space is in the design stage, the potential is present for them to influence its design quality, features and amenities.
- The words “without sacrificing on initial quality” simply mean that the building quality standards of an existing space in which a tenant resides are comparable to those of the soon-to-be-completed future space to which (s)he intends to occupy. In practice, however, it usually means the newer space is of substantially better than the old.
- For existing and future office spaces to be truly competitive this study assumes they are of comparable size and quality. It thus ignores situation of obvious incompatibility.
- “…an arm’s length transaction and rented out to the highest bidder […] precludes transactions under duress forced sale and so on” (Lusht, 2001). The phenomenon is a result of market mechanisms.

The next two aspects are less obvious and have their origin in the basic thesis of this study.

Effective rent levels
When comparing rent levels in office space under development with those already existing care has to be exercised as to exactly what rental levels are being employed.

When wanting to rent existing office space tenants will usually try to reference the market rent level; which is nothing more than what the current market sets as the price for a given space, in a given location, of a particular quality level. With this yardstick tenants can search and compare offers from various landlords. More formally it is defined as “the expected gross yearly rent (in € per m² LFA per year) excluding VAT and service costs for the specified real property space in the current marketplace assuming an optimal marketing, a willing market and rented out to the highest bidder.” (Gool, 2011) Landlords, however, may apply a different yardstick; that of the contract rent level. The contract rent level is also commonly used and further confuses what might be meant when loosely using the term market rent level. The contract rent level is defined as: “the gross yearly rent (in € per m² LFA per year), which is contractually agreed to be paid, without [lease] incentive correction” (Gool, 2011). If the contract rent is projected into rental and other financial dealings it too can lead to misinterpretation of the actual cost of rental due to given lease incentives. Here enters yet another easily misunderstood yet powerful word, lease incentives, into the business lexicon. Lease incentives may take the simple form of a onetime gift: sometimes small and trivial, other times large and substantial. These are offered to entice a tenant over the business threshold, usually to commit to a rental agreement. Often they will be seen as something over and above the business at hand, a freebie, but in actual fact their cost shall be paid back by the tenant over the duration of tenancy. As such

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90% of the Dutch office stock is owned by investors (Zuidema & Elp, 2010)
lease incentives of this type serve to raise the contract rental rate above the level it might otherwise be. The contract rent corrected for lease incentives is named effective rent. This is defined as "the contract rent yearly paid, corrected for [lease] incentives (in € per m2 LFA per year). In the calculation expected inflation is included." (Gool, 2011)

There is yet another form of rent level, the face rental level. The rent paid by a tenant from month to month is specified in their lease contract and is thus the contract rental rate. If a developer has a new tenant under contract (s)he may broadcast this fact in the media as a means to attract yet additional future tenants. A face rental rate may be used for this purpose that may not be the same as the already procured contract rental rate. The reasons for this may be manifold but the most obvious is to create an advantageous negotiating position in anticipated transactions. Face rent is defined as: "the rent published in media and/or asking price rent."

The problem statement comparison is explicitly not based on contract rent levels, due to the following: The Dutch market is characterized by the common use of lease incentives by both developers and investors (Muijsson, 2010; Swagerman, 2010). Contract rent increases when lease incentives are given. It means that the face rent is increased due to the markets use of giving lease incentives. We’re Amsterdam (2011) shows that in the Amsterdam office market on average around 20% of the contract rent level is due to given lease incentives. That said, if the developer would then decide to give no lease incentives at all, its contract rent would therefore be lower: around 20%. This can easily explain why developers would be able to give lower contract rent levels than their competing investors would. No further research would have to be necessary.

Instead is therefore chosen to compare on the basis of effective rents. The effective rent level is corrected for lease incentives. Earlier was stated that somehow lease incentives were thought to be of influence in the occurrence of the phenomenon. Correcting for lease incentives seems to go against that expectation: if the effective rent level is corrected for incentives, how could incentives then have an influence? The answer is that the expectation exists that incentives can also influence the effective rent level to be lowered. Incentives thereby form the main subject for this research. For further comprehending it is essential to define what is meant with lease incentives.

Lease incentives defined
Incentives are defined according to Sullivan (2003) to be the following: "An incentive is any factor (financial or nonfinancial) that enables or motivates a particular course of action, or counts as a reason for preferring one choice over alternatives. It is an expectation that encourages people to behave in a certain way."

An incentive plays a role similar to that of a catalyst in a chemical reaction: while not an inherent ingredient it triggers a reaction toward a desired end, which usually is that of influencing the making of one choice in preference to alternatives on offer. When offered an incentive may appear as an extra bonus, something special and for nothing, while in fact the customer will pay for them further down the road. The best known incentive is the incentive of getting a free mobile phone when applying for a new mobile phone contract. Applied to the real estate market, lease incentives are defined by Muijsson (2010) as "[...] a factor (financial or nonfinancial) which enables or stimulates a certain housing decision."

Defined in this way rent level can also be considered an incentive. As could be the quality of the building. Although this is not necessarily incorrect, the definition encompasses much more than what in the real estate market is commonly meant by incentives. This is better reflected by the term lease incentive.

Non-financial incentives will in practice always be calculated in terms of money (Gool, 2011)
A lease incentive is any factor (financial or nonfinancial) -apart from the contract rent and general asset quality- that enables or motivates a particular housing decision

This definition purposely does not make a difference between lease incentives and tenant improvements, as these terms are often used interchangeably. Both are now considered to be lease incentives. The lease incentive definition stated above will be used throughout the remainder of this analysis. A further analysis of incentives will be given on later in this research. The purpose of lease incentives is by this definition obvious: to ease real estate negotiations between the property owner(s) (the letter) and the potential inhabitant (renter) (Swagerman, 2010).

Underlying implications according to classic economic theory
A step will be made to classic economic theory to understand the underlying implications of the phenomenon. It forms the stepping stone towards the research aim.

The comparison in the problem statement comprises two products: one existing and one to-be-produced. For the purpose of this analysis assumed is for now that the two products are homogeneous and not leased out. Remarks must be made to both assumptions.

With respect to the former assumption: real estate products are known to be far from homogeneous (Lusht, 2001), however when the comparison can already be explained when products are homogeneous, this will then most certainly be the case when products are heterogeneous.

With respect to the latter assumption: the products not being leased out means that the products will therefore be compared on value instead of rent.

Economic theory on depreciation states that existing versions of a product are of lower value than the to-be-produced versions of that same product: the existing versions will have aged. The law of supply and demand states that in order to stay competitive older versions of the product will drop their value related prices as soon as newer products do too. However, this implies an efficient marketplace. In practice marketplaces are less efficient: smoothing and lagging are aspects bound to occur. Products’ prices can lag behind, meaning that the product’s price needs time in order to change to new market information. Lagging could well be thought to allow the existing version of a product to temporarily have a higher pricing than the to-be-produced product. However, lagging does imply a change in pricing to have occurred. For the phenomenon it means that the to-be-produced product has somehow been able to provide a lower price. Assumed may be the product to still be economically feasible. This means that the product can only have obtained a lower price when it can be produced more cheaply.

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12 Quality equal
13 Utility decreases with the passage of time (Baum, 1993)
14 Smoothing described prices to not react on extremes due to taxation methods; Lagging describes prices to response delayed to exogenous shocks and new market information in general (Hordijk, 2005; Zuidema & Elp, 2010)
Combined lagging and lower production costs form the basis for the phenomenon to exist. Related to real estate products the following is found:

- Development prices (and value)\(^{15}\) (including land\(^{15}\)) are characterized of behaving delayed (lagging) to new market information (Hordijk, 2005). Main reasons are the product’s characteristics of being a particular capital extensive and heterogeneous product (Lusht, 2001).
- Real estate products can also be easily associated with lower production costs also known as lower development costs. The real estate market is known to relate to economic tendencies (Hordijk, 2005). It can be well imagined that products can be produced more cheaply in an economic low. Another reason lies in the highly technical nature of real estate products (Winch, 2010; Baum, 1993). New techniques are developed every day trying to ease production process and costs.

So the real estate product indeed reflects the classic economic theory aspects for the phenomenon to occur. However, the problem statement does not compare building prices, but rent levels. How do these match? A product’s price is closely related to a product’s value. In efficient markets the two are alike. A rentable product’s value is determined by the total of expected net future rent income discounted to today’s value using a certain yield requirement\(^{16}\) (Vlek, et al., 2011). Yield requirements equal it means that the product’s rent is directly related to the product’s price. Therefore the same classic economic theory can be more or less applied. The identified aspects of lagging and lower development costs are therefore the underlying reasons for the phenomenon to occur. Certainly this is under the assumption of efficient markets and equal yields. How this translates into the real estate market’s mechanisms and characteristics will be explained as this paper develops.

**Conclusion**

From an economic theoretical point-of-view the phenomenon can be explained: lagging and lower development costs are underlying reasons for the phenomenon to exist. However, identifying explanations for both aspects cannot be done within this research’ time frame without loss of in-depth quality. Instead this research will only focus on the lower development costs aspect. It means that only the developer’s side of things will be handled\(^{17}\). Determining explanations for the lower development costs will be the main focus. One explanation is thought to be the use of incentives. A clear link between incentives and lower development costs will have to be made.

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\(^{15}\) Land value cannot depreciate. It is merely influenced to increase or decrease in value as a result of a complex series of factors (Baum, 1993).

\(^{16}\) In addition the expected asset’s value change is often factored in (Vlek, et al., 2011)

\(^{17}\) For research on existing asset price lagging see: (Zuidema & Elp, 2010)
The profitable influence of lease incentives for new office developments

Research Aim

Figure 13: The research aim focuses on the reasons on the development side for the phenomenon to occur

The aim of this research is to shed light on the phenomenon as described in the problem statement. Thereby the focus will be on the side of the developer, trying to explain what market aspects have enabled lower development costs in recent years and especially focusing on the influence of incentives. This thesis is explicitly not set out to find explanations for the lagging of price levels of existing assets, due to time limitations. Price lagging has been assumed to be a precondition.

Furthermore the goal will be too to prove whether or not the phenomenon has existed and might still exist today.

In short this research is set out to prove existence and form an overall explanation of a not-yet researched phenomenon. In no way will this research discuss any moral hazard or social values, in order to refrain from personal affiliation (bias) to stand in the way of determining market mechanisms allowing the phenomenon to occur.

Main research questions

Derived from descriptions above, two main research questions have been formulated with corresponding sub questions. Although the answers to these questions will be given in the concluding chapter of this thesis (Chapter 6), the sub questions will be answered in the chapters before.

- How can lease incentives affect effective rent levels of yet-to-be-developed office buildings?
  - What process forms the basis for setting a to-be-developed building’s effective rent level? (Chapter 2)
  - In what ways can lease incentives be of influence on this process? (Chapter 3)
  - What forms the rationale of providing lease incentives? (Chapter 3)
- How does this enable developers to offer lower effective rent levels for yet-to-be-developed office buildings, than the effective rent levels offered by investors for comparable existing office buildings?
  - Which temporary market conditions could have enabled lower development costs? (Chapter 4/5)
  - How could incentives even further amplify these production cost differences? (Chapter 4/5)
  - What are the conditions of this phenomenon happening? (Chapter 4/5)
  - Did this phenomenon exist in practice? (Chapter 5)
  - Could the phenomenon still occur in the current market situation? (Chapter 5)

Hypothesis

In order to get a new development idea rolling developers, in practice, will need to have a prospective tenant under contract to occupy office space in that new building for a long term and at a demonstrable rental price. With this in hand developers can contact the usual business colleagues that help realize this new building idea.

The initial hypothesis in this study was that developers by the use of incentives had room to misrepresent the
The profitable influence of lease incentives for new office developments

critical first tenant’s rental figure to process colleagues and by this enable high profits to be shared with that tenant, effectively leading to a lower effective rent level.

![Diagram](image)

Figure 14: Initial hypothesis

**Research delimitations and limitations**

This research is limited to real estate developments in the Dutch office asset market. Thereby per involved actor a certain actor type is selected on the basis of its most typical presence in the Dutch office development segment. E.g. the landowner is represented by the municipality only\(^{18}\). Calculation methods will be limited to the ones most commonly used by these typical actors. E.g. the residual\(^{19}\) land value method is used for the landowner\(^{20}\).

For the empirical studies a split is made. Interviews are done with involved actors of companies active throughout the Dutch country. Case studies on the other hand are selected to take place within the municipal borders of Amsterdam, since the Ontwikkelingsbedrijf Gemeente Amsterdam (OGA; trans.: municipal development department of Amsterdam) allowed for the use of their land value data.

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\(^{18}\) Vilsteren (2008) describes municipalities to be the main landowner in the Netherlands.

\(^{19}\) Also known as the backward pricing (Vilsteren, 2008)

\(^{20}\) Vilsteren (2008) describes the residual land value method the be the most commonly used method (comp. Zuidema & Elp, 2010)
Research concept

Above the research concept is displayed. It is based on the final stages of this research. A number of aspects are presented that will be identified in the next chapters to come. As is clear, the phenomenon forms the main drive of this research. The aim lies in identifying aspects for the phenomenon’s existence from the side of the developer/development. As can be seen, this is due to production costs decrease and/or margin increase. Incentives are thought to be of influence on both aspects. In addition exogenous influences might also affect both aspects. On which segments both incentives and exogenous influences have effect, will have to be researched. In addition it shows that by the use of profit sharing, the margin has something to do with the rent level of the development. All will become clear in the chapters to come.

The research method

The research set forth here is seated in the real world and its practices so, by its nature, its empirical. Empirical researches can be normative, positive or a mixture of both. Although this research is carried out in a normative setting (technical design) it is positive in nature: its objective is to find the pertinent variables of a given phenomenon and find out how they work in their underlying context: i.e. to make sense about how a phenomenon works. No attempt is made to try and solve the problem.

The hypothesis and the theater in which it is played out is exceptionally varied, complex, and more often takes place behind closed doors. None of these qualities easily lend themselves to research. For these reasons this research design was to be carried forward in a qualitative manner. In addition it was fed by the following research characteristics: 1) the focus is on acquiring a theory for understanding, 2) the data sought is highly sensitive and generally unavailable (confidential), 3) the lack of a theory base on the phenomenon’s occurrence, 4) the aim of
identifying multiple critical factors that describe the phenomenon and 5) the lack of statistical data. Apart from these exploratory goals a few focused more on finding proof: 1) to prove the existence of the phenomenon and 2) to discuss if the phenomenon could still exist today.

The research is set-up being a multi-method research as it combines methodologies. However, it did not target to function as triangulation, but was moreover complementary. One result from both literature and captains of industry interviews was tested for validity, to see if the identified aspect had indeed behaved the way the research theory had set it would. In essence, this research is both confirmatory and exploratory: confirmatory because it sets forth a preconceived idea of what is going on; exploratory because it then sets out get verification to get external verification: then back again to confirmatory to upgrade its initial ideas.

A first, fairly rudimentary model (top box, diagram) was sketched. This sketch graphically illustrated how the hypothesized process (lease incentives leading to competitive advantage) might work. The validity of this tentative model of course needed verification, for which there were two possibilities: established literature and from those involved in the business itself: the latter invoking the need for candidate selection and their interviews. Work on both fronts served to enrich, broaden and validate the basic hypothesis and, of course, add to the complexity of the story the research would eventually tell.

The last thing to note about the figure above is the existence of a feedback loop. It was one thing to have an early sketch of ones ideas, conduct extensive interviews, and draw one’s own conclusions about the refined, complete model. It is quite another to cross check that one has done so correctly. Toward this purpose a questionnaire was developed, based upon enriched model and the study’s conclusions, to the interviewees help requested for either their concurrence or disagreement. These results were then, of course, evaluated: enriching and adding confidence in the veracity of the results.

Five types of sources were used being 1) literature, 2) interviews with field experts, 3) interviews with market actors, 4) analysis on a dataset, 5) a sensitivity analysis 6) questionnaire.

**Literature**

The literature study is used for three reasons, being to broaden and connect existing studies, to adjust and further sharpen the stated theory with acquired knowledge from this literature study (exploratory), and to understand the background of the research questions thereby also forming the theoretical framework (Groat & Wang, 2002). From this study hypotheses were formed, which are later tested based on empirical research (confirmatory).
Acquiring literature.

Literature has been acquired from the TU Delft library as well as the ASRE library. Since the Real Estate & Housing domain is relatively new, many papers have been used from the ASRE, which are found on the web (Amsterdam School of Real Estate, 2012). Moreover Google Scholar is used for identifying further literature.

Interviews

In general the use of interviews is chosen, because of the qualitative character of the research. All interviews are in-depth in order to figure out the details that influence the stated phenomenon of the use of incentives in the development process. In-depth interviews are characterized by trying to let the expert use the full potential of his knowledge to elaborate on aspects the interviewer might not have thought about (Baarda & Goede, 2001). Pre-set questions were made in order to keep the conversation going, and to be certain all aspects had been handled: semi-structured. Two types of interviews are done: captains of industry interviews and expert interviews.

The lack of certain literature gave the motivation for doing two expert interviews. One was conducted with a municipal normative residual land value expert, while the other was done with a costs expert. Results from both interviews are processed throughout the text, as opposed to the results of the market actors.

The second type of interview tested the outcomes of the literature study. Using interviews fourteen key market experts have responded on the stated theory as for literature had supplied that far. For this interview a key informant interview will be used. These decision makers have the theoretical and practical knowledge to comment on the theory supplied.

Questionnaire

Since the topic is characterized of being sensitive, the results of this research will be presented to the interviewees to check for validity. The questionnaire will consist of true/false questions relating to posed theorems, which are based on the results of this research.

Analyses

Two analyses have been done. The small dataset analysis reflected on one of the results from the research that the land value had not always shown to give the residual land value. By doing a small dataset research was determined if the developer had indeed always obtained a higher price than the municipality had anticipated. Further descriptions will be given at the corresponding chapter. The second analysis is a sensitivity analysis, which analyzed what effect the results from theory would have on the existence of the phenomenon –if any. The analysis was based on a real life case, in order to be sure validity would remain high.

Limited accessibility of data

Incentive information is considered to be confidential information. Same often applies to realized rent levels, realized yields and realized selling prices. Obtaining this information for a research is therefore difficult. In order to make use of this information, agreed is to keep this information private. Since every graduation project is ought to be made public, the acquired data has not been displayed in this report. Though, general conclusions from this confidential data can be drawn and are allowed to be shown. In order to check if made conclusions on this data has been done properly; both research mentors have (had) access to this information as well, as it is provided in a confidential appendix.
Part II – Theoretical framework & literature study
2. **Applying economic theory to real estate**

In the first part of this research the thorough problem analysis already discussed some underlying aspects of the existence of the phenomenon. However certain aspects have not yet been discussed which are essential for understanding the phenomenon’s occurrence. This chapter will provide so.

Economic theory showed lower development costs enable the developer to outcompete existing assets. However, this theory was on the basis of efficient markets and equal GIY. The market is known to behave otherwise (Lusht, 2001). Therefore a further explanation is in place. Understanding how effective rent level for developments are determined and set is thereby essential. In addition another aspect will be handled. The developer’s job in general is to develop assets, not to contract tenants. In the sketched phenomenon however the developer is clearly contracting tenants. An explanation will be given as to why developers would want to contract tenants, and what this does to the phenomenon’s occurrence.

**Determining the effective rent of a development**

The effective rent level is in practice determined by subtracting incentive value from the contract rent level. However this research assumes that real estate actors base their calculations on an effective rent level\(^{21}\), from which by the use of incentives, a contract rent level is determined.

The minimum feasible effective rent level is determined by the development costs (including a certain markup/profit) needed for obtaining the quality level that the tenant requires. This is generally known as cost-plus-pricing or markup pricing as shown in the figure below.

![Figure 17 Cost-plus-pricing and the relation to the net rent income](image)

In essence it means that development costs (land costs + construction costs + additional costs) equals the asset’s value. The asset’s value is determined on the basis of a an effective\(^{22}\) rent level and a certain GIY. Here is where the relationship between development costs and rent level pops in. If somehow development costs would be lowered it would enable the developer to offer a lower effective rent level. This reflects earlier defined economic theory.

However, especially in the real estate market, the shown equation does not always apply. It could well be that the asset value is higher than the development costs, enabling margin to be created. The figure below explains.

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\(^{21}\) One could state this effective rent to be equal to the market rent. In chapter 3 a more thorough analysis on this theory will be given.

\(^{22}\) In practice the asset’s value is determined on the basis of contract rent and market rent, but for explanatory reasons the effective rent level has been used.
GIY and future value changes are the main reasons for margin creation. When due to exogenous influence for example the GIY decreases –effective rent level equal- the asset’s selling price would increase. A margin might then be created between development costs and asset value. If development costs react quickly to the new market information, the margin will be claimed by an increase in development costs. However among others 23 price lagging might be the reason for margin to continue to exist. This margin can then be used by the developer as additional profit or could be used to lower the effective rent level of the tenant. The latter would then be done on the basis of a foreseen or prospected margin to be created. Underneath figure explains.

A certain effective rent level (1), leads to a certain value (2), which -after development costs are deducted- leaves a certain margin (3). This margin is then put to use to offer the tenant a lower effective rent (4). In effect the lower effective rent makes the asset’s value drop (5), resulting in a lower margin and ergo less of a decrease for the effective rent level. But a certain equilibrium can be found in which a lower effective rent level exactly reflects the increase in asset value due to the decrease in GIY.

Providing a lower effective rent level on the foreseen margin creation is risky though. If the margin is not created the decreased effective rent level will not be able to compensate the made development costs. Pre-contracting the investor on a fixed purchase price would eliminate this risk.

23 Other reasons will be discussed in chapter 4.
Apart from the GIY decrease, margin can also be created when the future value change is predicted to be more positive.

Concluded can be that apart from the lower development costs (as identified by economic theory), margin also allows for lower effective rent levels to be created. However question remains why a developer would want to use the margin for enabling a lower rent level for the tenant? In essence the margin is used to make a better offer. This allows the developer to gain a better competitive position. The need for a better competitive position is most probably occurring in periods of high competition and/or low demand for office space. On the other hand, for margin to be created no clear period can be identified: it might be during highs of the asset market, due to exogenous influences or perhaps even through the use of incentives. This will be discussed more detailed in chapter 4.

However, as stated before in the introduction of this chapter, a developer offering a tenant an effective rent level, let alone offering him a lower effective rent level on the basis of foreseen margin, requires the developer to step off his normal range of tasks. The developer is contracting a tenant! The rationale for doing so will be explained in the next paragraph.

The rationale of pre-contracting a tenant

The value of a real estate office asset in general is determined by its capability to provide cash flow (Vlek, et al., 2011; Huizinga, 2010). The higher the possible cash flow is and the more certain it is that this cash flow will be earned and will continue to do so, the higher the asset’s value. An asset’s cash flow is determined by its future predicted rent income and value increase subtracted by its future predicted operational costs and maintenance costs. Prediction is the key word. Determining a real estate asset’s value comprises the determination of cash flows years from now. This is highly risky.

It is also why an asset with a contracted tenant is appraised to be of higher value than an asset without a contracted tenant (Zuidema & Elp, 2010): for the occupied asset’s rent income no prediction has to be made. In effect it means that the risk is lower that the total cash flow will differ from what was expected. Less risk means less risk provisions, which means that the investor is willing to pay more. Hence the reason for an occupied asset to have a higher asset value.

This also forms also the explanation why pre-contracting for developers is valuable: for the developer pre-contracting a tenant will enable a higher selling price! In addition a number of other aspects also turn to the developers favor:

- Financiers estimate the risk of not being able to sell the development (sales risk) once completed much lower when a pre-contracted tenant is present (Wild, 2010; Huisman, 2007). It means that not only financing costs decrease, it might even allow for a higher sum of capital to be loaned.
- Municipalities are more quickly willing to issue land and might even lower their land value (Vilsteren, 2008). Sometimes municipalities even demand a pre-contracted tenant to be present (Zuidema & Elp, 2010) for land to be given out.
- Between the phase in which the developer determines its financial outline for the development and actual development sale, a timespan of sometimes 10 years might pass. In the meantime macroeconomic fluctuations might have caused changes that affect the financial outline of the development: for example the selling price might have been altered to what the developer had anticipated. This forms a major risk. By pre-contracting the investor too, the market risk that is caused by macroeconomic fluctuations can be
The profitable influence of lease incentives for new office developments

completely avoided (Dijk, 2006). However, this might result in a lower selling price, since risk is transferred from the developer to the investor.

- All the previously described items will give the developer a higher degree of certainty. The risk premiums that would normally correspond to each individual risk, can thereby be lowered or even dropped. In effect all-in construction costs would be lower too.

Disadvantages exist as well. Having signed a pre-contracted lease the developer commits himself to developing the asset and within the agreed period of time. Furthermore if the developer is unable to sell the asset to an investor, he will remain obliged to operate and maintain the asset for as long as it takes. It can also greatly undermine the developer’s negotiation position with investors. If the demand for assets is low, the investors will surely want to release the developer of his obligations in exchange for a low price.

In general it can be stated that especially in times of low demand in space market and/or asset market, pre-contracting is the only way to go. Investors might not buy without a pre-contracted tenant; loans and land too might not be given out. However, this does not mean that pre-contracting is limited to these periods. In high developer market conditions pre-contracting tenants might be done as well.

Pre-contracting thereby shows to decrease development costs (due to the lower financing costs, lower land value and lower risk premiums) and increase asset value. Combined with the conclusions made earlier in this chapter, it shows that inherent to the phenomenon’s existence certain decreases in development costs and room for the creation of margin can be found.

Conclusion

Although in practice contract rent levels are used for calculations, this research assumes developers to use effective rent levels. The minimum effective rent level the developer wants to acquire is determined by cost-plus-pricing. It determines that for the existence of the phenomenon two explanations can be given. If development costs are somehow lowered, this would surely lead to a lower effective rent level for the tenant. However, as identified earlier, development costs decrease would have to be temporary, as else lagging would not be able to occur. In addition the outlook of margin creation might also lead to a decrease in effective rent level. But, margin will only be shared if the developer faces high competition or when demand for office space is on the low. Reasons for the creation of margin and the period in which these occur remain unclear. it might be during highs of the asset market, due to exogenous influences or perhaps even through the use of incentives.

The phenomenon’s existence inherently describes the developer to pre-contract. Pre-contracting enables developers to obtain lower development costs and possibly create margin. So inherent to the phenomenon’s existence certain decreases in development costs and possible margin creation can already be found. Continued will be with the introduction of incentives. As has been described incentives are thought to have influence on the effective rent level. It means that somehow incentives allow for lower development costs. Since incentives are a difficult subject a more broad delineation will be given in the next chapter.
3. **Lease incentives explained**

In the previous chapter has been explained how effective rent levels for pre-contracted leases are determined. Clear is that development costs and a higher margin determine the minimum effective rent level.

In the problem analysis was described that lease incentives were also thought to be of influence. This chapter will elaborate on that. First will be explicated on the rationale for accepting/providing lease incentives for other actors. Then will be focused on the rationale for developers to supply lease incentives. The effect of incentives on the contract rent level and asset value distribution will be given, which will identify already some of the benefits of the use of incentives for the developer. Afterwards the incentive influence on the effective rent level will be explained, which will give answer to the role of lease incentives in the phenomenon’s occurrence.

Two expert interviews have been used to broaden the information from literature on two aspects: the normative residual land value (Ooms, 2012) and development costs (Hamstra, 2012).

**Other actors’ rationale for providing lease incentives**

There are two (general known) rationales for providing lease incentives. One applies to the tenant, while the other applies to the investor.

**Tenant**

A moving exercise is quite costly and time strenuous (Muijsson, 2010): transaction costs are high. Obtaining capital to do so can be quite problematic. The tenant will need to have enough liquidity. If not, loan capital will have to be obtained, which costs additional capital and might sometimes not even be possible. It shows the hurdle tenants need to take in order to move.

Lease incentives provide a solution (Muijsson, 2010). The landlord will offer the tenant to pay for the above costs (or take care of the whole operation) as an incentive gift. Thereby the threshold for moving is lowered. In essence incentives help smoothing over the tenant to move (Hordijk, 2005).

Incentives may appear as free gifts, while in fact the customer will pay these itself further down the road. In office real estate it means that the tenant pays a higher contract rent. Although this might sound sneaky, it can be quite rewarding for the tenant. It effectively enables him to loan the capital for his moving costs over the period of his lease contract from the landlord. Thereby it is not a one-time loss, but a general expense. Some even state that the costs for this loan might even be lower than if the tenant had loaned the capital at a bank (Swagerman, 2010).

The above does assume that the increase in contract rent is in proportion to the given incentive value. When disproportionately compensated the tenant will pay a higher contract rent than the value reimbursed by incentives. The tenant should decide if the amount of incentives offered is representative to the offered contract rent. Market knowledge of the tenant is thereby essential. However, determining the proportional increase of the contract rent level on the basis of an incentive value might be quite difficult, as will be explained further on.

**Investor**

As stated lease incentives help in smoothing over a tenant to move. For investors another purpose is known as well. Incentives are used as rent fluctuation buffer (Zuidema & Elp, 2010; Muijsson, 2010).

Real estate values are known to fluctuate, to the dislike of investors. This has two reasons.

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24 For the definition of lease incentives is referred back to the problem analysis
1) In general investors want to invest in objects that are known for a steady value increase. It means that the more stable the real estate value develops, the more valuable the investment is. In addition, the combining of stable real estate assets in real estate fund will make the real estate fund stable as well. This will surely attract more investors to participate (Zuidema & Elp, 2010).

2) Most real estate investments are done with the use of borrowed capital on the basis of a mortgage loan. When sharply loaned, a decrease in value would thereby mean that the financier would need to be paid back (in cash). For these temporal decreases in value, every investor would thereby need a constant liquidity buffer. Investors would rather use this capital for investing.

Lease incentives provide a solution by generating stable rents\(^{25}\), as explained by the figure below.

![Figure 21: use of incentives: buffering the difference between market rent and contract rent](image)

An example: an asset’s value is determined at the top of the market. In return the investor expects the rent height to be continued to be earned in the future. However, the market rent drops. In order to attract (or maintain) tenants the investor will need to lower its rent. However, doing so would decrease the asset’s value.

Instead incentives are given. Thereby the contract rent will remain fixed, while the tenant pays a lower effective rent. Surely the incentive value needs to be paid for by the investor, but now the provision of incentives will be calculated as a one-time loss on the liquidity of the investor (Zuidema & Elp, 2010) and not as a loss on the fund. Effect is that the asset’s value will remain stable and so will the fund’s outlook (Zuidema & Elp, 2010). The financier too doesn’t need to be paid back.

In general investors will only supply incentives in times of low space demand (Zuidema & Elp, 2010). In addition incentive rent buffering will only be applied by investors when outlooks are positive. The paid for incentives value will need to be earned back. It means that the negative value changes are ought to be temporarily (Zuidema & Elp, 2010). Furthermore the use of this method requires investors to keep private how much incentives have been given. If publicly shared it would cancel out all advantages of the incentive buffer: it would lower their funds certitude and allow financiers to demand payment earlier. It would allow tenants to obtain a better negotiation position being able to decide how much incentives he would be entitled to. Therefore public lease incentive information is very scarce and qualified as being sensitive and confidential information.

**Developer’s rationale of providing lease incentives**

For the developer incentives might be useful too. Possibilities will now be discussed. Therefore the effect of incentives on both contract rent levels, asset value distribution and effective rent levels will be given. In order to do so first an overview of the different types of incentives will be described.

There are multiple types of lease incentives used in the real estate market. Van Gool (2011) describes 14 of the

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\(^{25}\) Although imaginable incentives might also be used to buffer upward value fluctuations. However this research has no knowledge of any occurrence in which this has happened.
most common incentive types, as shown in the figure below. In bold are the most common lease incentives as used by investors and real estate brokers (not: developers) (Muijsson, 2010).

Table 2: Summary of types of (lease) incentives (Gool, 2011)

<table>
<thead>
<tr>
<th>Incentive Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Physical alterations of the rented space on request of the (potential) tenant (tenant improvements)</td>
</tr>
<tr>
<td>b.</td>
<td>One or multiple rent free periods. Normally this occurs at the start of the rent contract (e.g. first two years). Sometimes the rent free period is spread out over the first half of the contract period (e.g. until year five, every January is free of rent), but also later (e.g. when there is no break option in the tenant contract)</td>
</tr>
<tr>
<td>c.</td>
<td>Rent discounts e.g. in the first few years and stepped rents.</td>
</tr>
<tr>
<td>d.</td>
<td>A reimbursement of the tenant’s fitting-out costs and/or delivering the building turn-key.</td>
</tr>
<tr>
<td>e.</td>
<td>A reimbursement of the tenant’s move/relocation costs</td>
</tr>
<tr>
<td>f.</td>
<td>Signing bonus or money for spending freely (cash incentive / lump sum)</td>
</tr>
<tr>
<td>g.</td>
<td>Reducing/capping the contractual rent indexation, including not indexing first year’s rent</td>
</tr>
<tr>
<td>h.</td>
<td>(Additional) Break options in the rent contract (escape clauses)</td>
</tr>
<tr>
<td>i.</td>
<td>Capping service costs</td>
</tr>
<tr>
<td>j.</td>
<td>Sharing the developer’s profit after the developer has sold the building to an investor</td>
</tr>
<tr>
<td>k.</td>
<td>Charging rent for a smaller floor area than actually used by the tenant</td>
</tr>
<tr>
<td>l.</td>
<td>Agreeing that on moving out, tenant improvements don’t have to be removed, and/or that the building doesn’t need to be brought back to its hull condition (take-back of existing premises/build-out allowance)</td>
</tr>
<tr>
<td>m.</td>
<td>Additional services (like shuttle buses)</td>
</tr>
<tr>
<td>n.</td>
<td>Other incentives like: adopting the former lease contract of new tenant; including extra flexibility in the rent contract (renting more/less space); exclusive signage or advertising rights.</td>
</tr>
</tbody>
</table>

Note 1: in **BOLD** are the most common incentives as given by investors and seen by brokers. It’s unclear how many respondents participated in the questionnaire, and how the questionnaire was set up. Tenants and project developers were not included in the target group.

Note 2: the stated incentives **INCLUDE** situations where an agreement is counterweighed by a proportional increase in the rent level. For example doing a tenant improvement, in exchange for a proportional rent increment, is considered to be an incentive. This is in contrast to van Gool (2011)

Note 3: Physical adaptions to the building hull (Dutch: casco) are not considered to be incentives, unless it would limit asset flexibility to house other tenants. Any other adaptions are considered tenant improvements and thereby fall into the category of incentives.

Note 4: For a further description of these incentives referred is to Muijsson (2011), Swagerman (2010) and van Gool (2011).

Note 5: Incentives are usually mentioned in the lease contracts of tenants. However in some cases the agreed incentives are part of a (hidden) side-letter contract. Side-letters are side-contracts in which parties sometimes agree on aspects that are supplementary to another contract, but which are purposely not enclosed in that contract. Effectively these supplemental aspects often remain hidden.

In general, lease incentives can only be given to tenants. It shows that incentives therefore can only be applied by developers when (pre-)contracting tenants. Incentives don’t lead to an increase in asset quality, except for tenant improvements (interior).

Most of the lease incentives can be supplied by both investors and developers. Only the ‘sharing in developer profit’ incentive can solely be given by the developer, as is obvious. The ‘delivering turn-key’ incentive and the ‘adopting the former lease contract’ incentive are thought to be more commonly given by developers. Keep these three incentive types in mind, as they play quite a role later on. In addition, for some of the stated incentives the developer, instead of reimbursing costs, can decide to take in the additional work to be part of the construction works. In essence he does not pay the tenant to hire someone to do these works, but he hires these companies himself directly. For the developer this is an advantage since due to his expertise he’s likely to gain a more advantageous deal.

In general can be stated that compared to the investor, the variety of incentives that a developer can give is larger. However, here is where conclusions on the differences between developers and investors on supplying incentives...
end. There is no data - to the knowledge of this research - on how often incentives are given by developers and of what combined values. In addition it remains unclear what type of incentives are most commonly given by developers. Remember that in the table above the incentives have been marked which are commonly given according to the information of investors and brokers. Neither developers nor tenants did participate.

No conclusions can be made on the market situations in which developers give incentives, nor can anything be stated on developers offering incentives more often than investors. Known is that in almost every investor transaction incentives are used. As stated earlier often is negotiated only on incentives, while the contract rent level remains free from discussion (Kohsiek, 2006). Researchers agree that the use of incentives is deeply interwoven in the real estate market and that it’s unlikely of it ever leaving the market again (Muijssson, 2010; Swagerman, 2010).

Next will be explained how incentives might influence the contract rent level.

**Lease incentives' effect on contract rent levels**

Muijssson (2010) made a distinction between ‘financial lease incentives’ and ‘non-financial lease incentives’. Non-financial lease incentives are physical reimbursements, while financial lease incentives are non-physical/virtual reimbursements, representing money value. The non-financial lease incentives include tenant improvements, build-out allowances and turnkey delivery. Financial lease incentives are cash lease incentives, rent-free periods, etc. On the basis of this distinction the direct influence of lease incentives on contract rent levels will be shown. A cash flow scheme for a tenant having a 10 year contract will be used as an underlay to clarify the different effects of financial and non-financial incentives. The change in (contract) rent level is based on a proportional increase compared to the given incentive value in all examples. The cash flow figures are from the point of view of a tenant. Furthermore the arrows are not scaled according to the actual cash flow. The arrows only function to give an impression of what lease incentives could do to a tenant’s cash flow.

**Case 0: No Lease Incentive**

To establish a baseline for looking at how lease incentives influence the setting of the basic rent level we shall start with a situation in which no Lease Incentive is applied.

<table>
<thead>
<tr>
<th>No incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Effective rent</td>
</tr>
<tr>
<td>Fitting-out costs</td>
</tr>
<tr>
<td>Moving costs</td>
</tr>
<tr>
<td>Contract rent</td>
</tr>
<tr>
<td>Build-out costs</td>
</tr>
</tbody>
</table>

In the picture above a tenant cash flow scheme is illustrated. The smaller recurring arrows represent the contract rent that is paid for yearly. In the case of no incentives, the tenant will have to make an investment at the

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26 Be aware that the split between financial and nonfinancial lease incentives has nothing to do with the difference in the non-application of VAT (Dutch: BTW). Certain financial lease incentives (e.g. rent-free periods and rent discounts), as well as certain non-financial lease incentives (landlord owned free fit outs) are subject to VAT. Revenue neutral lease incentives are tax exempt, meaning non-cash, non-convertible benefits. For example if the tenant fit out is built by the landlord and then remains in the possession of the landlord VAT doesn't need to be applied. But if the fit out is handed over to be property of the tenant, VAT must be applied. Cash lease incentives are also subject to VAT.
beginning of its lease for moving and fitting out, and an investment at the end of its lease term for build-out works. The investments are represented by the arrows under the rent arrows. For this case only -since no incentives have been given- the contract rent is equal to the effective rent.

Case 1: Non-Financial Lease Incentive
The next case is where a Non-Financial Lease Incentive is introduced. In this case the Non-Financial Lease Incentive is formed by a reimbursement of both fitting-out and build-out works: the turnkey delivery.

Figure 23: Tenant Cash Flow Scheme: Non-Financial Lease Incentive: Turn-Key delivery

In case one only the moving costs remain for the tenant to pay. The fitting out and build-out are paid for/executed by the developer. In essence this is known as the turnkey delivery. In effect the given incentive value will be compensated by a proportional increase in contract rent level, spread out over the total rent term. This is represented by the black arrows. Notice that the effective rent level remains equal. Effectively the tenant is lending capital for its fitting out costs and build-out costs from the landlord.

Case 2: Financial Lease Incentive #1
The next case is where a Financial Lease Incentive, in the form of a one-time cash payment is on offer.

Figure 24: Tenant Cash Flow Scheme: One-Time Cash Payment Lease Incentive

In case two, the developer provides a one-time cash payment incentive for the tenant to decide on what to spend on. In return the contract rent level will increase.

The capital injection might be used by the tenant to pay of moving costs, fitting-out costs and build-out allowances. Sometimes contract clauses even demand the capital to be spent on these types of aspects (Muijsson, 2010).

Difference with case 1 is that over cash incentives VAT does have to be applied, which means that compared to the non-financial incentive capital is lost to taxes.
Case 3: Financial Lease Incentive #2
The next case consists of a Financial Lease Incentive, in the form of a Rent-Free Period.

![Figure 25: Tenant Cash Flow Scheme: Rent-Free Period](image)

In case of the rent free period incentive, the tenant is exempted from having to pay rent over a certain period. It actually means that in the remaining period the tenant will pay a proportionally higher rent level. The picture shows a four year rent free period. The pay out of these years is moved and spread out over the remaining contract period.

Comparing case 2 and 3: VAT doesn’t have to be applied in case 3, since there is no transaction in cash; the rent is only transferred.

Case 4: Hybrid of Incentives #1
Combining both financial and nonfinancial lease incentives (hybrids) can lead to more complex situations. The following hybrid offer includes a rent-free period, reimbursement of the tenant’s moving costs, and turn-key delivery.

![Figure 26: Cash flow scheme: Hybrid of Incentives #1](image)

The tenant will be freed of any investment to be made the first 4 years. The result is an even higher rent level than in the previous cases. Again no VAT needs to be applied.

Case 5: Hybrid of incentives #2
Last but not least a Hybrid Lease Incentive of a special, particularly interesting type can be offered comprised of a very high financial cash offer plus a number of non-financial inducements.
Case five shows another situation: a cash incentive is combined with a non-financial incentive. The tenant will pay a higher rent, in order to get a one-time cash incentive at the beginning of its lease (instead of a rent free period like in case 4). VAT does need to be applied on the cash incentive.

Combined these incentives can be such that the contracted tenant is relieved of all incidental costs surrounding moving in to the new building, outfitting it for use, and even moving out, while he obtains in addition a highly valuable cash incentive. In essence the company is lending a high amount of capital, which is paid out at the beginning of the lease.

Reasons for a tenant to agree with this form of incentive vary. If a company is in high need of capital, this could be an easy way of obtaining it. Another reason might have to do with the tenant’s company having a structure of partners or shareholders. The one-time capital injection can be seen as a one-time profit, which then flows through to both partners and/or shareholders.

**Sub conclusion**

Clear is that lease incentives influence contract rent levels. By providing lease incentives contract rents increase, while effective rents remain stable (see the figure below). Be aware that in practice effective rents are calculated from contract rents. The contract rent remains free from negotiations: only incentive height will be discussed (Kohsiek, 2006).

A variation of combinations can be made by the use of incentives. Take note that in the cases supplied above was assumed that the value of the given lease incentives was proportionally reimbursed in a higher contract rent level. This doesn’t necessarily have to be so. Using disproportional reimbursements is to the benefit of the developer. It is up to the tenant to make sure incentives are proportionally negotiated. However, determining the proportional
increase of the contract rent level on the basis of an incentive value might be quite difficult. In general, aspects like among others tenant improvements, break options and capping of inflation/service costs are difficult to express in value. In the case of a non-financial incentives the developer might be able to obtain a much better deal for these works than the tenant would, but it is hard to define what deal this could be. It clearly shows that disproportional increase might easily exist, which is to the benefit of the developer.

No difference to the tenant’s cash flow exists between the giving out of financial incentives versus non-financial incentives. No clear link has been made for the developer of providing incentives except from smoothing over a tenant. By providing non-financial incentives the developer might be able to obtain a better deal for the works than the tenant would. In return some additional profit might be created. So incentives influence the contract rent level. Does that also mean that incentives enable a higher asset value? This will be explained next.

**Lease incentives’ influence on asset value distribution**

The asset value of an asset is determined by its future net income stream (Vlek, et al., 2011). Involved development actors will compete over the distribution of the resulting asset value as shown in the picture below.

![Figure 29: Cost-plus-pricing](image)

What exact part every actor obtains, depends on a number of aspects i.e. negotiations. Incentives too are thought to have an influence on this asset value distribution. In accordance to the incentive cases described earlier, this influence will be explained. First however an explanation of market land value determination is essential.

**Land value determination**

As stated earlier, this research limits its focus on municipalities owning land, and then particularly on the municipality of Amsterdam. For calculating land values the residual land value method is most commonly used (Vilsteren, 2008). The residual land value is determined by subtracting all-in construction costs (construction costs and additional costs) from asset value. It is the margin between costs and income that is for the land value to claim. In essence this means that in theory no margin between development costs and asset value could remain: the land value is determined on the basis of laying claim to this margin.

However theory and practice differ. This is due to the use of the normative residual land value method instead of actual residual land value (OGA, 2011). Normative means that the land value isn’t decided on the basis of calculations of the individual asset, but on the basis of averages within a certain set area (see picture below). These averages are found on the basis of market analysis (OGA, 2011).

![Figure 30: Normative Residual Land Value](image)

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27 As discussed before the sum of all categories doesn’t necessarily add up to the asset’s value. Sometimes a margin remains.
Since actual residual land values between different types, sizes and quality of assets can differ significantly the municipality defines corresponding average normative land values per function per GFA. This means that if an asset consists of 100 m² GFA retail and 200 m² GFA offices, the land value would consist of 100 times the normative residual land value for retail and 200 times the normative residual land value for offices. Other distinctions are made according to the amount of floors (-10, 10-15 and 15+ stories) and levels of quality (standard, deluxe, high-end) (Ooms, 2012)). These defined normative land values then apply for all the land within a particular by the municipality defined area.

It shows that the residual land value isn’t as residual as one might believe: within a developer’s business case it is a fixed price, set on the basis of other similar assets close by. If the developer is able to perform better than these assets the land value will not react: margin can thereby be created. Combined with the general asset value distribution the influence of incentives will be explained. In general any margin that is created would normally be claimed by the land value. Take note however that this assumes the normative residual land value method averages to not include any incentives to be given.

**Case 0: No Lease Incentive**

Again case 0 forms the baseline. For this case only -since no incentives have been given- the contract rent is equal to the effective rent.

![Figure 31: Asset value distribution scheme: No Lease Incentives](image)

The asset’s value is built up by developer costs and margin. In this case no lease incentives are given; no changes are made to this distribution and no margin is created: it forms the base case.

**Case 1: Non-Financial Lease Incentive: Turn-Key Delivery**

In this case the non-financial incentive is formed by the turnkey delivery.

![Figure 32: Asset value distribution scheme: Non-Financial Lease Incentive: Turn-Key Delivery (aware)](image)

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28 Municipalities are prescribed to do so by the Dutch spatial planning act (WRO).
29 A certain defined negotiation bandwidth (Ooms, 2012) allows for the municipalities to negotiate.
30 In addition for urban development’s including a mixture of functions lump sum agreements can be made (Ooms, 2012). These provide for a fixed land price a programmatic bandwidth which enables the developer to optimize its program according to its needs and wishes.
In case of the turnkey delivery, like in the other cases, the contract rent value increases as shown before. However, the turn-key delivery allows for the asset value to increase as well (black). Basically what happens is that the developer claims a bigger part of the total housing costs of the tenant. Instead of only leasing the asset, the tenant will now also lease the interior for the duration of its lease.

As a result of the turn-key delivery works, development costs increase as well. Construction costs increase (black) and so will additional costs (black). In return the developer obtains a higher absolute profit. In the normal residual land value situation, the increase in asset value would also lead to an increase in land value. However, the normative residual land value does not react since it is based on averages: a margin is thereby created. So the turnkey delivery incentive leads to a higher absolute profit and the creation of margin. How this margin is then put to use, depends on the developer. If this margin is applied by the developer as additional profit, the supply of the turn-key delivery leads to a relative increase of the developers profit as well.

In addition something else might happen as well. The fitting-out incentive might lead to a disproportional increase in asset value. Most tenants don’t want to use the fitting-out of a previous tenant. It means that the fitting-out is worthless at the end of the tenant’s lease. In essence therefore the fitting out should be amortized over the tenant’s lease period. In effect the increase in contract rent level should therefore only be applied over the first tenant’s lease term. If however the investor is somehow unaware of or indifferent to an incentive being given, the contract rent might also be factored in for the second lease term, leading to an enormous erroneous increase in asset value (see the figure below).
If the erroneous transaction price would be analyzed, it would be impossible to know if indeed margin was created or that simply development costs would have been very high. It shows the possibility of the distortional effect incentives might have on development costs research/analyses.

**Case 2: Financial Lease Incentive #1**
The next case constitutes a one-time cash payment.

![Figure 35: Asset value distribution scheme: one-time cash payment lease incentives #1 (aware)](image)

In this case the financial cash incentive is given by the developer. The financial cash incentive enables a higher contract rent level. The asset value also reacts: the higher contract rent level will be paid for the remainder of the lease. Compared to the previous case assuming both incentives have the same value (and not corrected for VAT), this would lead to the exact same asset value. Although the incentive is not a physical object, it still represent a certain development cost. Therefore the development costs will remain equal compared to the previous case.

Also here, if the higher contract rent is calculated to be paid longer than the remainder of the lease, margin is created (as can be seen in the picture below).

![Figure 36: Asset value distribution scheme: one-time cash payment lease incentives #2 (unaware)](image)

**Case 3: Financial Lease Incentive #2**
Case 3 constitutes a Rent-Free Period.

![Figure 37: Asset value distribution scheme: Rent-Free Period #1 (aware)](image)
In this case the financial rent free period incentive is given. The overall asset turnover remains equal: the rent of the remaining period is increased to compensate for the lost income due to the rent free period. In essence the overall asset turnover is equal to case 0. This means that the asset value should remain equal as well. Development costs too. Furthermore the investor might again be unaware or indifferent of the incentive to have been given. The asset value thereby might increase significantly just as it would in the previous case.

Case 4: Hybrid of Incentives #1
The following hybrid offer includes a rent-free period, reimbursement of the tenant’s moving costs, and turn-key delivery.

Again, one can see that the development costs have increased, and so has the asset value. The asset value will have increased due to the turnkey delivery and reimbursement of moving costs. The rent free period will not have an impact on the asset value. The market land value again doesn’t react. The developer will continue to make a higher absolute profit and margin.

Again if the investor is unaware or indifferent of the incentive being given, the investor value (compare: asset value) will be much higher. The figure below shows the results.
Case 5: Hybrid of Incentives #2
A special, particularly interesting type can be offered comprised of a very high financial cash offer plus a number of non-financial inducements.

Figure 41: Asset value distribution scheme: Hybrid #2.1 (aware)

Case 5 shows the situation of the turnkey delivery, movement costs reimbursement and cash incentive. The total asset turnover of the asset will rise, and so will all-in development costs. The developer profit rises as well. The tenant agrees to a raise in rent, so that at the beginning of the lease he gets a one-time payout. Again if the investor expects the rent to remain at this height after the tenant contract has ended, the increase in asset value will be enormous and so will the developer profit be.

Figure 42: Asset value distribution scheme: Hybrid #2.2 (unaware)

Sub conclusion
In almost all shown situations that lease incentives are given the developer acquires an increase in its absolute profits. In addition the creation of margin due to the use of the normative residual land value method might be created. Any margin that is created might be applied by the developer as additional profit (leading to an increase in relative profit) or used to lower the tenant’s contract rent level (as shown in Figure 19).

Take note however that the above cases presumed that the average of the normative residual land value method does not comprise any incentives to be given on average. If on average incentives are given, the corresponding normative residual land value will be higher, leaving less margin to be created.

Other reasons for margin creation exists when the buying investor doesn’t pay attention to given incentives, which would lead to disproportional value increase. Like it is hard for tenants to determine proportional contract rent level increase for given incentive value, investors face the same difficulties for determining their asset value increase. The created margin could be claimed by the normal residual land value method, but again -since the normative residual land value method is applied- the margin is for the developer’s taking.

There are no clear differences between the outcomes of the supply of financial lease incentives over non-financial lease incentives. In essence the asset value reacts to all discussed incentives except for the rent-free period and/or
rent discounts. Other non-discussed incentives like break options and rent capping are thought not to influence the asset value positively and remain therefore non-discussed.

As shown the supply of incentives leads to higher development costs for the developer. When the asset value distribution is analyzed for research or market analysis, any margin that is created might mistakenly be determined to be development costs as well. It shows that development costs analyses are subject to possible distortion of lease incentives.

The next paragraph will show how these conclusions combined can lead to lower effective rent levels.

**Lease incentives’ effect on effective rent levels**

In the previous paragraph was shown that it is difficult to determine the proportional increase of both contract rent and asset value. In general, it is thought that the market’s use of incentives might distort market analysis. In the sub-conclusions described above, is shown that development costs analyses are possibly subject to distortion of lease incentives. This and other market analysis distortion effects will be described first.

Afterwards profit sharing will be discussed. Described earlier was that incentives may increase both development value and development costs. However, due to the use of the normative residual land value method and due to investor unawareness, it might be that the increases in both aspects are not proportionally: the increase in development value might be higher than the increase in development costs. As a result margin is created. It is on the basis of this margin that incentives lead to lower effective rent levels. The margin is put to use to lower the effective rent level of the tenant. This is also called profit sharing.

**Market analysis distortion by incentives**

Most of the negotiation demands of the development actors are backed up by market analysis. These market analyses are used for determining suitable rent levels, yields, development costs and land costs (NEPROM, 2010). From these aspects investors determine selling price, developers determine development costs, municipalities determine land price and financiers determine funding costs (NEPROM, 2010). Question now is if these market analyses can be influenced by lease incentives too.

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**Market rent analysis**

Since in general both investors and developers use lease incentives (Zuidema & Elp, 2010) all the published contract rents levels will at least be partly built up by incentive values (Swagerman, 2010). Even if the given lease incentive values can be quantified, the incentive values remain unpublished (Zuidema & Elp, 2010). Therefore it is unclear to what extend the face rent levels are formed by lease incentives, and to what extend it consists of market rent. Swagerman (2010) shows what influence lease incentives could have on face rent.

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**Figure 43: Example of the influence lease incentives could have on face rents (Swagerman, 2010)**

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31 Determining incentive values can be quite difficult (Gool, 2011)
The figure above shows a hypothetical progress of an average face rent over time (Swagerman, 2010). As can be seen the face rent has increased slightly from 150 to 160 euro/m². The market rent however has been steadily decreasing. Lease incentives have been given to buffer the change in rent value. So although the market rent has been steadily decreasing, lease incentives have been increasing, thereby face rents have remained equal.

When actors confuse face rents for market rents for their calculations on contract rent determination, asset value determination and others, results will be erroneous. The more incentives the marketplace gives on average, the higher these erroneous results will be. Researchers have advised market analysis to therefore be corrected for incentives (Swagerman, 2010; Hordijk, 2005; Muijsson, 2010). However determining the market incentive value is quite hard, if not impossible, since the data remains unpublished (Zuidema & Elp, 2010).

Another result of actors confusing face rents for market rent is that due to the stable face rent level it will look as if the market is very stable as well. A stable market rent level is a sign of a stable market, meaning that this market is good to invest in. However, in fact incentives are used to buffer for changes in rent levels.

**Market development costs analysis**

Like market rent value analysis, development cost analysis can be influenced by lease incentives too. Earlier was described that development costs increase due to the supply of incentives. It means that developers tend to put incentive costs in their development costs as well. Result is that incentives possibly blur development cost data as well.

Like with market rent analysis, correcting development costs data for incentives is impossible. Some state that by calculating back incentive costs might be determined. However when calculating back from selling price and land costs, development costs are that what remain. It remains unclear what these development costs consist of in detail. In general development costs consist of construction costs (labor and material), additional costs (advisor fees, capital costs, inflation, overheads and incentives) and profit (NEPROM, 2010). Construction costs are usually easy to obtain and resulting data isn’t varying too much either (Hamstra, 2012). However additional costs can vary (Hamstra, 2012). Apart from the 5% fluctuation due to overhead, profit and capital costs changes (Hamstra, 2012), the non-transparent lease incentives will only increase variation.

It shows that when using market analysis on development costs, one should be aware that these costs too might be influenced by lease incentives. Like with the possible datasets distortion, no literature could be found substantiating this. Additional research is required.

**Profit sharing**

The sharing of profit between tenant and developer is considered to be an incentive, as can be seen in the earlier shown Figure 5. Like all incentives its main purpose is to smooth over possible hurdles for the tenant to move. However a major difference exists between the profit sharing incentive compared to other incentives. Other incentives enable the developer to increase the contract rent, while profit sharing directly lowers the (contract/effective) rent level of the tenant.

In chapter 2 a situation was already described in which the developer would up front share the foreseen margin with the tenant by offering a lower contract rent level. In essence the developer thereby shared a part of his possible profit/margin with the tenant.
In the earlier situation the decrease of the contract rent level, led to the selling price being lowered as well, in return leading to a decrease in possible margin to be shared (as can be seen in the picture above). However another possibility exists in which the developer uses the margin to lower the effective rent level of the tenant. Profit sharing, instead of giving a discount in the contract rent level, gives the tenant a discount in the form of incentives. Thereby the effective rent level is decreased while the contract rent level will remain equal. Effect is that the asset value remains equal, and therefore so will the shared margin. The figure below provides an explanation.

A certain effective rent level (1) is equal to a certain contract rent level (2), leading to a certain asset value (3), leading to a certain margin (4). The margin is then put to use to lower the effective rent level of the tenant by providing incentives (5). In effect the contract rent level will remain equal and so will the asset’s value. In effect the margin will also stay equal, thereby really allowing for the whole margin to be shared. Concluded can be that incentives have an amplifying effect to the sharing of the margin. Thereby the use of incentives might proof to be quite valuable for developers to be able to compete at effective rent levels of existing assets. Precondition is that the developer remains unaware or indifferent to incentives.

In literature the use of this method has been described. Lease incentives were used to “keep the contract rent at a high level but at the same time offering [...] lease incentives so that the effective rent paid by the tenant was much

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32 There are number of ways in which profit is shared. Some examples have been given where the profit is used to pay off the not-yet-expired rent contract of the tenant’s current building (Swagerman, 2010; Hordijk, 2005). Another example shows the phenomenon where the developer profit is simply paid out to the tenant. If this then led to a company profit, the partners could earn from moving the company (KPMG en de lege kantoorkolos, 2012). Other options include paying for incentives that haven’t been already given.
lower” (Brown, 1995). This phenomenon is known in the Netherlands as the ‘hoog-laag constructie’ (transl. ‘High-low construction’). The name for this method is not described in literature but was put to use after being mentioned in an interview.

In the table below the high low method is increased in performance by adding more incentives to raise the contract rent level (far) above face rent levels. Thereby the selling price will be increased even more, leading to an even lower effective rent level.

<table>
<thead>
<tr>
<th>Contract rent</th>
<th>Municipal Assumptions</th>
<th>Developer realization 10 year lease</th>
<th>Municipal Assumptions</th>
<th>Developer realization 10 year lease</th>
<th>Municipal Assumptions</th>
<th>Developer realization 5 year lease</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIY</td>
<td>10,00%</td>
<td>10,00%</td>
<td>6,50%</td>
<td>6,50%</td>
<td>6,50%</td>
<td>6,50%</td>
</tr>
<tr>
<td>Asset value</td>
<td>€3000</td>
<td>€3500</td>
<td>€4615</td>
<td>€5385</td>
<td>€4615</td>
<td>€5385</td>
</tr>
<tr>
<td>All-in construction costs</td>
<td>€2500</td>
<td>€2500</td>
<td>€2500</td>
<td>€2500</td>
<td>€2500</td>
<td>€2500</td>
</tr>
<tr>
<td>Land costs</td>
<td>€200</td>
<td>€200</td>
<td>€1654</td>
<td>€1654</td>
<td>€1654</td>
<td>€1654</td>
</tr>
<tr>
<td>Profit</td>
<td>€300</td>
<td>€800</td>
<td>€462</td>
<td>€1231</td>
<td>€462</td>
<td>€1231</td>
</tr>
<tr>
<td>Effective rent</td>
<td>€300</td>
<td>€318,63</td>
<td>€300</td>
<td>€293,00</td>
<td>€300</td>
<td>€214,90</td>
</tr>
</tbody>
</table>

The high-low method requires a difference between lease term and investor horizon: this will create the additional margin. In the table above this has been pointed out. Contract rent has been increased. The effective rent is calculated back on the basis of the additional profit and a 10-year contract discounted by the GIY. As can be seen in the situation of an equal investment horizon (1/GIY) and tenant lease term, blowing up the contract rent isn’t advantageous. However, when the difference is set to be bigger (GIY: 6,5%) so does the effect of blowing up the contract rent level: the effective rent is lower than the contract rent. When the contract lease term is then shortened the effect is even bigger. The sensitivity analysis of chapter 5 will show how the high-low method further functions.

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13 The effective rent level is calculated by discounting the additional profit (800-300) over the lease term according to the GIY.
Apart from the requirement for a difference between yield and lease term, the method only works when the investor does not correct for the contract rent increase.

### Table 4: Investor correcting asset value for higher contract rent

<table>
<thead>
<tr>
<th></th>
<th>Municipal Assumptions</th>
<th>Developer realization 5 year lease</th>
<th>Investor calculation 5 year lease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract rent</td>
<td>300</td>
<td>350</td>
<td>300 &amp; 350*</td>
</tr>
<tr>
<td>GIY</td>
<td>6,50%</td>
<td>6,50%</td>
<td>6,50%</td>
</tr>
<tr>
<td>Asset value</td>
<td>4615</td>
<td>5385</td>
<td>4865,386</td>
</tr>
<tr>
<td>All-in construction costs</td>
<td>2500</td>
<td>2500</td>
<td>2500</td>
</tr>
<tr>
<td>Land costs</td>
<td>1654</td>
<td>1654</td>
<td>1654</td>
</tr>
<tr>
<td>Profit</td>
<td>462</td>
<td>1231</td>
<td>712</td>
</tr>
<tr>
<td>Effective rent</td>
<td>300</td>
<td>214,90</td>
<td>306,09</td>
</tr>
</tbody>
</table>

In the table above the investor has calculated with (*) a 5 year lease of 350 euro’s and a 10,36\(^{34}\) years lease of 300. The result is that the contract rent is still higher than the face rent level of 300 as determined by the municipality. Only if somehow a major difference between the municipal market assumptions and the investor market assumptions would come to existence in terms of yield, the contract rent could effectively be lower than market rent levels.

### Conclusion

The use of incentives is known to be deeply interwoven in the real estate market. Clear is that incentives don’t lead to an increase in overall asset quality. Only in terms of tenant specific quality incentives do have influence (Swagerman, 2010; Muijsson, 2010). Lease incentives influence contract rent levels, while thereby effective rent levels remain stable. In practice however effective rents are usually calculated from contract rents: contract rent levels thereby stay equal, while the effective rent levels fluctuate (Kohsiek, 2006). Incentives are financial factored in as an increase in development costs.

Lease incentives do form quite the useful tool for tenants, investors and developers. For tenants lease incentives can be a relatively cheap and accessible funding source for aspects like movement costs, fit-out costs, build-out costs etc. (Swagerman, 2010). Thereby incentives are generally used to help smooth over tenants (Hordijk, 2005). For investors lease incentives can be used to buffer (temporary)(negative) asset value fluctuations (Muijsson, 2010). For developers too incentives are rewarding. In general developers can only apply incentives when pre-contracting a tenant. However there is no data on how often, which types, of what value and when incentives are given by developers. Nor can anything be stated on developers offering incentives more often than investors.

Developers are able to give more types of incentives than investors. The ‘sharing in developer profit’ incentive is solely a developer incentive. ‘Delivering turn-key’ and the ‘adopting the former lease contract’ incentive are thought to also be most commonly supplied by developers only.

For the developer giving lease incentives is a very beneficial option: it has a direct relation with its profit. In almost all shown lease incentives cases the developer acquires an increase in its absolute profits. In addition incentives

\[ \frac{1}{GIY \times 6.5\%} = 15.36 \text{ years}; 15.36 – 5 \text{ year contract} = 10.36 \text{ years} \]
might possibly lead to the creation of margin. This margin might than be applied as additional profit or used otherwise.

Normally any margin would be claimed by the residual land value method, but due to its normative use it doesn’t react as residually as its theoretically supposed to. Margin creation can thereby exist. In addition if the average data on which the normative residual land value is determined does not comprise any incentives to be given, any supply of incentives will lead to the creation of margin. Take note however that if on average incentives are given, the corresponding normative residual land value will be higher, leaving less margin to be created.

Incentives can also create margin when other parties (tenants and investors) don’t properly factor in incentives (disproportional increase in contract rent value and/or asset value). Determining proportional incentive increases can be quite difficult. Furthermore the indirect influence of the market’s use of incentives might affect market rent analysis and development costs analysis. In effect this distorts calculations possibly leading to lower developments costs or the creation of margin.

As shown incentives cause development costs to increase. When the asset value distribution is analyzed for research or market analysis, any margin that is created might mistakenly be determined to be development costs as well. It shows that development costs analysis too might be distorted by lease incentives.

The created margin might be used to lower the contract and/or effective rent level of the tenant. Lowering the contract rent level however, will—as shown in Figure 44—lower the asset value and in return decrease the effect of the shared margin on the contract rent level. Instead by sharing the margin using incentives, the effective rent level decreases, while the contract rent level will remain the same. Thereby incentives have an amplifying effect to the sharing of the margin. This is known as the High-Low method.

The High-Low method only works when investors do not correct for incentives. In addition the more difference exists between investor horizon (1/GIY) and lease term, the better the High-Low method works. In addition applying incentives to blow up the contract rent levels, will results in even higher selling prices. This will amplify the effect of the High-Low method.

Still the sharing of margin only has effect when, like in the case of chapter 2 margin has been created. The next chapter will describe possible margin creators and possible decreases to development costs, in order to understand what conditions could enable the phenomenon to exist.
4. Determining key aspects for the phenomenon’s theoretical existence

Up till now this research has described the reasons for the phenomenon to exist to be (temporal) decreases in development costs and/or the creation of margin between development costs and asset value. Inherent to the phenomenon is the condition of pre-contracting. Pre-contracting tenants in itself leads to lower development costs, as explained in chapter 2. In the previous chapter the role of incentives has been clarified. In essence incentives create margin and amplify the sharing of it.

This chapter will further elaborate on aspects that enabled lower development costs and margin creators. Both literature and market figures will be discussed. First however some literature proof of the sharing of margin will be explicated on.

Literature on the sharing of margin

Chapter 3 described that incentives have an amplifying effect on the sharing of profit/margin. Still profit sharing only has effect when margin is (to be) created. In addition the developer will only share profit whenever the demand for office space is low. In his thesis Swagerman (2010) describes such a combination of events to have happened:

“The margins for developers/constructors were of such heights (driven by low [development] costs in combination with a good investor market and low interest) that a part of that margin could be shared back to the tenant in form of lease incentives.” (Swagerman, 2010)

The more margin is shared, the lower the effective rent is and thus the higher chances are the tenant will come over. In order for the yet-to-be-developed asset to be able to offer an effective rent level at the same height as an existing asset it would look like extreme margins would have to be made.

These margins are obtained from the deals the developer makes with the other development actors. Somehow in these negotiations an extreme margin is created for the developer to profit from. Of course negotiation results can vary from case to case and actor to actor, however it is unlikely that only on the basis of good or bad negotiations extreme margin will be made. Other conditions are likely to be occurring.

Zuidema & Elp (2010) confirm this. In 2002 the margin between selling price and development costs has increased. The previous quote of Swagerman (2010) already showed some aspects which might enable margin to be created: low development costs combined with certain conditions in both asset market (“good”) and capital market (“low interest”). Zuidema & Elp (2010) state the lower financing costs to be of influence (as well). Compared to much earlier research by Korteweg (2002) about the same factors are mentioned: “The activities of developers were possible through financiers and investors to supply resources royally (Brouwer 1994a; Blokhuis 1995; compare Fainstein 1994)”

Most naturally the effectiveness of profit sharing depends on the amount of profit that can be shared. As can be seen from the quotations, factors existed which enabled margins to be created. The next paragraph will dive deeper into the reasons for the margin to be created, while simultaneously looking for changes leading to lower production costs.

35 Also compare: (Hordijk, 2005)
The profitable influence of lease incentives for new office developments

Theoretical aspects for the creation of margin and/or lower development costs

In essence the creation of margin and/or lower construction costs is enabled somewhere in the four categories of the equation shown below.

![Figure 47: Cost-plus-pricing: possible margin and/or lower construction costs creation](image)

Land costs, labor & material costs (construction costs) and additional costs form the total of development costs. If production costs would have been decreasing, it would have happened in one or a combination of these development costs segments. Margin could be created in the situations that a difference would exist between development costs and asset value: 1) development costs decreased, while asset value remained stable or decreased not as much, or 2) development costs remained stable or increased not as much, while asset value increased, or 3) development costs decreased, while asset value increased.

In order to analyze all possible scenario’s every segment shown in the picture above will be handled. From the previous chapters a number of identified aspects has already been identified, shown below. These will only be named in their corresponding segments:

1. **The use of the normative residual land value**
   A discrepancy in the residual land value is essential for any additional margin to exist. If not, additional margin would directly be claimed by it.

2. **Market Analysis distortion by incentives.**
   An indirect influence of incentives. The market’s use of incentives might influence market analysis. If not corrected correctly for incentives market analysis might be distorted.

3. **Blowing up contract rents by the use of incentives**
   Blowing up contract rents by the use of incentives might further enable high profits to be obtained. Requirement would be investors not minding incentives.

Segments will be handled on historic data (2000-2008). Afterwards a comparison to current market situations will be given.

**Land costs**

As described before in chapter 3, the *normative* residual land value method determines land value based on averages. In essence it means that the land value is less responsive to economic fluctuations as shown below.

![Figure 48: The Normative Residual Land value buffers economic tendencies (Vilsteren, 2008)(edited)](image)
The profitable influence of lease incentives for new office developments

Not only does it allow for margin to be created, in addition if a development is only slightly off the average this has an exponential effect: the leveraging effect (Wigmans, 2002) as shown in the example below.

Example 1: Leveraging effect of the normative residual land value

A developer realizes a yield 0,5% lower compared to what the municipality predicted, his profit thereby raises 83%. If the land value would be calculated residually per asset, the profit boost of the developer would be 8%.

<table>
<thead>
<tr>
<th>Municipal Assumptions</th>
<th>Developer realization</th>
<th>% difference</th>
<th>Developer realization if corrected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract rent</td>
<td>€300</td>
<td>€300</td>
<td>€300</td>
</tr>
<tr>
<td>GIY</td>
<td>6,50%</td>
<td>6,00%</td>
<td>-7,69%</td>
</tr>
<tr>
<td>Asset value</td>
<td>€4615</td>
<td>€5000</td>
<td>8,33%</td>
</tr>
<tr>
<td>Foundation costs</td>
<td>€2500</td>
<td>€2500</td>
<td></td>
</tr>
<tr>
<td>Land costs</td>
<td>€1654</td>
<td>€1654</td>
<td></td>
</tr>
<tr>
<td>Profit</td>
<td>€462</td>
<td>€846</td>
<td>83,33%</td>
</tr>
</tbody>
</table>

Shown above is the situation of a developer performing better than average. The land value assumptions as determined by the municipality is displayed in the left column. After determination the land costs are fixed. For the developer they form part of his development costs. In case the developer performs better than the averages, there is an increase in margin, which for now is defined to be additional profit.

In general a decrease in GIY will lead to significantly higher profits. This doesn’t necessarily have to do with land values being based on averages. The increase in profit due to the land value not being calculated per asset, is in this case 69,2% (846/500)! Depending on how far off the average the developer will realize its asset, the higher this profit percentage will grow to be.

Doing better than average can happen fairly quickly. For example the development costs can vary much from project to project, especially in the additional costs part. Overheads, profit and capital costs combined can easily vary 5% (Hamstra, 2012), depending on market situation, number of competitors, number of jobs, type of financing etc. This great variation of additional costs forms a problematic aspect of the residual land value method: what to define as average additional costs? Other situations which would enable developers to step of the average: 1) developers all of a sudden change from developing at risk to developing with a pre-contracted tenant and/or 2) with a pre-contracted investor and/or pre-contracted financier, thereby decreasing investor risk and financing costs enabling higher profits and lower costs 3) lease terms suddenly increase beyond average, this means the investor is certain of longer stable cash flows, and thus a decrease in risk, 4) the market might suddenly be willing to pay more for higher quality and 5) developing a building turn-key enables higher asset values to be obtained. Also in a development area’s where not many comparable assets are available yet, this creates room for exponential margins to be created more easily.

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36 The increase in yield distorts the results, since it is in itself a multiplier. If instead foundation costs or contract rent are lowered with the same percentage profit is 41,7% resp. 76,9%
Lagging

Land value lagging means that it takes time for the residual land value to adapt to new market information. There are three reasons for the normative residual land value to lag behind:

- The *normative* residual land value is determined only once a year (Ooms, 2012; Vilsteren, 2008). This could allow for lagging to occur. It shows that when selling prices are going up, the residual land value will not react as quickly, leaving margin for the developer to obtain. But the opposite could also happen. Developers would then be unable to develop, as the land value would be too high to create new assets with a reasonable profit.

- The time gap between the land sale and asset sale can be up to 5-10 years. It implies that in the meantime the economic climate can change and that thereby margin is created. In times of economic upswing the developer will be able to sell his asset for a much higher price than the municipality had anticipated on in their residual land value. Again, the other way around could also happen (Ooms, 2012). However, in the situation that developers share their profit the developer will try to reduce risks by contracting tenant, municipality and investor almost simultaneously. A time gap of 5-10 years would then be nonsense.

- The residual land value is based on current data. So although the outlooks of a location are positive no value increase is factored in (Ooms, 2012). If the investor does calculate a value increase to happen, margin could easily be created even if contracts are signed almost simultaneously.

Especially the current data aspects is thought to have a high influence on margin creation and lower production costs.

**Method: (in)comparable data sets**

Another aspect that plays part is that the residual land value is calculated on many different market data aspects: face rent levels, market GIY levels and market all-in construction costs. The latter two are obviously based on development projects, while for the former aspect data can be both from developments and existing assets. If these datasets don’t match this might result in erroneous residual land value results.

<table>
<thead>
<tr>
<th>DATA</th>
<th>EXISTING</th>
<th>DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>land</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>labor &amp; material</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>+ additional costs</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>+ Profit Financing Overheads</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

37 Recalculations afterwards are unlikely to be done (Ooms, 2012).
38 According to Ooms this is not necessary since the municipality will actualize the land value after 50 years.
39 In determining average contract rent levels, often average face rent levels are used instead. Contract rents are often difficult to acquire. (Ooms, 2012). This means that the usual higher asking prices are used and not the lower realized prices. This is to the advantage of the land value.
The profitable influence of lease incentives for new office developments

The figure above shows that the average asset value factor is determined on data from both existing assets and developments. Since there are usually far more existing assets than developments, this means that the average asset value factor will at most react minor on development information (if at all). The all-in construction costs on the other hand are determined primarily on recently constructed developments. Assuming that newer assets in general are able to realize higher rent levels (and yields) than existing buildings have (shown in the picture below), and assuming that all-in construction costs generally keep increasing (also picture below) this thereby means that the developer will always obtain higher margin than the residual land value ought him to obtain. Although this is unfounded, it clearly shows that possibility for error when not making use of comparable data sets. However, no literature is found describing the (in)comparable dataset situation. Additional research would be required.

Under influence of incentives further land value discrepancy might occur. In general providing lease incentives increases the asset value, but also the development costs, since incentives are calculated to be part of the development costs. The increase due to incentives in both rent and development costs on a macro scale would thereby theoretically cancel each other out (Hamstra, 2012), thereby having no impact on the normative residual land value. However when the normative residual factors of average asset value and average all-in construction costs are calculated on differing datasets, the increase due to incentives in both rent and development costs don’t cancel each other out. On the basis of Figure 49, if on a macro scale developers supply more lease incentives, the increase in the average all-in construction costs factor will be higher than the increase in the average asset value factor. Thereby the higher the supply of incentives by developers, the lower the residual land value would become. Again, this theory is only based on rational thinking. Additional research is advised.

Municipal competition

Municipalities compete over major tenants to be accommodated within their city limits (Vilsteren, 2008; Zuidema & Elp, 2010). The tenants that the municipalities compete over, enable an increase in both company related employment as well as construction employment for the municipality it will house in (Zuidema & Elp, 2010). Furthermore, the capital gained from these projects by selling/renting out the lands and by earning property tax, form a significant income for municipalities (Zuidema & Elp, 2010).

In order to attract/maintain these high value tenants, municipalities are willing to lower their rent value (Zuidema & Elp, 2010). Result is that part of the residual land value is handed over to the developer. It does not necessarily
mean that the tenant will obtain part of this land value. Only if the developer decides to share, or when the tenant is demanding a share, will the lowered land value flow to the tenant.

Vilsteren (2008) showed that in theory the normative residual land value method was supposed to be uninfluenced by the economic tendency. However, in times of low land take-outs, municipalities due lower their land values in order to keep up the land income stream. Result is the figure shown above.

**Conclusion**

As can be seen quite some reasons exist for the residual land value method to leave margin for the developer to be obtained: 1) it uses averages for determining land value (Wigmans, 2002), 2) it might react delayed (lagging) due to being set only once a year and not factoring in future asset value foresights, 3) it possibly uses bad dataset selection for determining land value and 4) it might be lowered due to competition between municipalities (Zuidema & Elp, 2010)).

In addition, in the period between 2002 and 2006 the market was known for high selling prices. Land values did not react as much as would be expected (Zuidema & Elp, 2010; RentReview, 2012).

**Construction costs**

Data shows that no lower development costs might have been enabled through lower construction costs: construction costs increased quicker than CPI. According to CBS (2012) the CPI increase from 2003 (=100) to 2012 was 18.5, while the picture below shows a construction costs increase of 22.
Additional costs
Additional costs aspects are fees, financing costs and profit. No data can be found on fees already reacting on lower supply. Financing costs and profit on the other hand have been decreasing. Financing costs have been described to be decreasing in paragraph Yield compression. On profit some additional remarks can be made.

Developing a building is a high risk operation. Anyone willing to take this risk is therefore compensated by a high profit. The high profit could be named to be a risk buffer. For office buildings the risk buffer is commonly set around 8-10% of the development’s expected selling price (Vlek, et al., 2011; NEPROM, 2010). If the developer believes the risk of a development to be low, he could decide to reduce his ordinary risk buffer (ergo his profit) in return. Thereby development costs would decrease and this would allow the developer to offer the tenant a lower rent level. The developer thereby obtains a better competitive position. Surely, the developer should be cautious in doing so, since diminishing risk buffers could have catastrophic consequences.

Although this might all sound as common sense, it helps in understanding that in times of pre-contracting tenants the developer’s job situation might be so bad that he sees no other option than to lower his risk compensation in order to survive. Combined the above shows that by lowering his own profit, the developer is able to force lower development costs as well.

Asset value
In order for margin to be created, the asset value should somehow have increased. Two aspects have been identified that might explain this increase: yield compression and asset value distortion.

Yield compression
Yield compression is a market state, in which yields drop due to temporary exogenous influences. In some way it is comparable to the creation of bubbles. In essence market yields drop to rates that are too low in comparison to the taken risks. Yield compressions can exist due to overconfidence in the market and/or combined with a ‘wall-of-money’ (Zuidema & Elp, 2010; Vlist, 2009; Huisman, 2007; ABN Amro, 2011)).

In case of overconfidence in a marketplace, the risk of the market’s products is commonly misjudged to be lower than it actually is. Reasons for this overconfidence might for example be the common idea that the future will only continue to be better: asset values will continue to increase (Zuidema & Elp, 2010; RentReview, 2012). Thereby the risk premium and/or risk free rate drops to a low, enabling investors to buy at much lower yields and banks to offer greater loans with lower capital costs (Zuidema & Elp, 2010).

A ‘wall-of-money’ is a period in which banks and investors have so much capital that they have trouble finding enough reliable investments to invest that money in. Competition between both banks and investors rises, thereby increasing both purchase prices of reliable investments and increasing loan amounts for reliable investments (Zuidema & Elp, 2010).

Figure 53: Prime Yield Development Amsterdam (Jones Lang LaSalle, 2012) & New developments of office space to size (LFA) (Bak, 2011)
In the real estate market, the two combined enabled GIY and loan interests to reach unprecedentedly low values (<5,00%) between 2002-2007 (Zuidema & Elp, 2010; ABN Amro, 2011; Gool, 2009; Huisman, 2007; Vlist, 2009; Jones Lang LaSalle, 2012). Especially Prime Yields dropped between 2004 and 2006 as can be seen in the picture above. In the same period the amount of newly developed assets 10 000+ m² increased severely. Surely some relation exists between the yield compression and this great increase in developments.

The availability of cheap capital, through on the one side low capital interest and on the other side the low risk estimation of investing in real estate, has caused high investments to keep being made despite of the rising vacancy levels (Zuidema & Elp, 2010; Vlist, 2009; Mierlo, 2010; RentReview, 2012). Also the amount of external capital that might be borrowed increased. The low yields created a margin between the asset value and the development costs (Zuidema & Elp, 2010), but this could only have occurred simultaneously to land price lagging.

Asset value distortion

As described earlier incentives can cause asset value distortion. Especially when the investor does not correct the contract/face rent levels for incentives.

Investors base their purchase price on a target rent level and a required yield. When purchasing an asset a thorough due diligence on the signed tenant contract generally makes clear what financial incentives have been given. But this only applies for these specific lease contracts and only for the duration of that lease. Other tenants are bound to be signed somewhere along the way too, which means that the investor will also have to determine the income that he will gain from these future signed contracts. If he then bases those future contract rent levels on the current average contract rents, incentives again cause distortion as shown below.

![Figure 54: Determining the asset value on rent income](image)

If the investor then calculates the asset value on the basis of the contract rent level, the determined asset value will be too high.

Current market conditions

Up to now, market conditions have been shown that were present in the past. These conditions might have enabled the phenomenon to exist. This chapter will analyze current market conditions, in order to shed a light whether or not the phenomenon can still exist today. The most notable changes which have been identified by literature will be handled next.

Stricter lending

Especially due to the international credit crunch and the current European crisis, there is a growing uncertainty in the capital markets. Due to new regulations like Solvency II and Basel III (Dekker, 2011; Jones Lang LaSalle, 2011; RentReview, 2012) financiers need to recapitalize. Both aspects have influence on the development loan. Financiers are demanding higher risk premiums, due to the above, the decrease in competition between financiers and also

40 though the value of non-financial incentives remains hard to determine (Gool, 2011)
under influence by the high vacancy rate (Mierlo, 2010). Moreover financiers will structurally want developers and investors to add substantially more private capital in real estate projects. LTV’s will be 60-70% at max, whereby developers will have to bring in 10% by themselves (Mierlo, 2010). Apart from the higher financing costs, there is simply less capital to be shared.

On the other hand van Oostrom (OVG) states that acquiring funds for developments in which a tenant is present and the location at hand, is relatively straightforward (FRESH, 2011). This shows that the phenomenon might still be existing.

**Yield compression for top class assets**

Although many agree that the wall-of-money won’t return anytime soon (Mierlo, 2010) it still looks like something similar is going on in the top class asset market. Although GIY’s on average have increased, for top class assets less and less GIY is demanded: some are at the low of before the credit crunch (Zuidema & Elp, 2010). Financing costs too have never been lower.

**Changes in law**

More and more voices are raised which plead for banning side letters (CBRE, 2011). The AFM has also given new guidelines which calls for companies to show which lease incentives have been given. Without the use of lease incentives developers won’t be able to offer lower effective rent levels. This is concluded on the results of the sensitivity analysis that will be presented later on.

**Conclusion**

Margin and lower development costs can be created through a number of aspects, which are shown below.

![Figure 55: Literature conclusion overview](image)

In essence the residual land value would normally correct for the difference in selling price and development costs, as described in the previous chapter. In addition a number of other explanations has been found which might provide margin to be created: 1) the leverage effect (averages), 2) price lagging, 3) municipal competition, 4) data selection and 5) incentive influence. Additional data on land values over time was not available. Labor & Material costs did not proof to be somehow lowered. Additional costs on the other hand have decreased. In order to obtain a better competitive position risk premiums by developers might have been lowered. Pre-contracting in general has proven to lower additional costs of both financing costs and profit. In addition financing costs were temporarily lowered due to the wall of money. Due to this same aspect, asset value increased significantly as well. Especially in the period between 2004-2006 unprecedentedly low GIY’s were noticed, leading to an increase in asset values.
Combined with investors being unknown/indifferent to incentives and the developer’s use of the high-low method led to an increase in selling price and ergo margin to be created.

If the phenomenon could still exists remains unclear. Stricter lending conditions will surely have an impact, although perhaps on AAA-locations these conditions apply less severely. Therefore no decisive conclusion on the current existence of the phenomenon can be given.
Part III – Empirical Input
5. **Empirical input**

So far, this research has assumed that the phenomenon indeed exists. Chapters 2 has shown that the phenomenon exists due to lower production costs or margin. In addition it was addressed that pre-contacting allows for lowers production costs and the creation of margin. Chapter 3 elaborated on lease incentives describing how incentives can have influence on the rent levels of assets. Chapter 4 has shown explanations for margin creation and lower development costs. But still up so far, the described phenomenon’s existence remains unproven.

In this chapter a comparison between theory and real life is made. This will be done through several ways. First will be started with describing the results of the interviews held with 13 experts. The results of the questionnaire will reflect on these findings, adding a validity level to the interview conclusions. On the basis of earlier conclusions that the normative residual land value allows for margin to be created, a small dataset analysis will follow up. For a number of projects it compares the expected selling price used for determining the residual land value with the realized selling price between developer and investor later on. If margins were indeed created this will be shown here. Hereafter the sensitivity analysis will be described, in which is determined under what conditions the phenomenon might exist.

**Interviews**

In this research interviews were used for a couple of purposes. First off an interview was used to reflect on the preliminary results of the literature study. It allowed for a further demarcation of the research framework. The literature study continued on the results of this interview, but soon further reflection was needed. From that point on literature and interviews ran side by side. The statements of the interviews were compared with newly obtained literature. Interview questions therefore also developed along the way.

**Methodology**

The interviews were performed based on a pre-determined question list. However, this list merely functioned to check if all pre-thought of aspects had been addressed. Experts were explicitly asked to elaborate as much as they could on the phenomenon in order to allow for a qualitative dive into the research matter to be made. This corresponds to the in-depth semi-open structure of interview methodology.

Figure 14 has been used in every interview. It formed the preliminary hypothesis of this research on how developers would be able to generate lower effective rent levels. Although this picture turns out to be incorrect, the picture gave a good starting point on the method’s functioning for the interviewees to elaborate on.

**Selection**

For the selection of interviewees is chosen to include all decision making actors involved in the development process. Goal was to get multiple interviews per actor role. Underneath the selection is shown.

- Investor: 5
- Developer: 3
- Municipality: 1
- Financier: 2
- Market expert: 2

The actors was asked to speak primarily from the perspective of their own role. Some questions however were posed from a more overall market viewpoint. However chances existed these market viewpoints would to be influenced by the actors’ own agenda. Therefore two market experts were interviewed to further validate the data.
The investors consisted primarily of institutional investors, one is a private investor. Two of the investors are based in Holland, three in Germany. The latter consisted primarily of investors having private participants in their funds. One interview was done in English, due to the interviewee being German. Interviewees consisted of a commercial director, a managing director, and three asset managers.

The developer selection was diverse. One developer is specialized in the office segment; Another developer was more specialized on multi-functional inner-city area developments; A third developer active in reviving existing assets into mixed use. The private investor described earlier develops mainly for own portfolio and is specialized in developing both offices and dwellings. Interviewees consisted of three directors.

The municipal interview was held with the commercial director of the South Axis development.

Both financiers were active in 1) the real estate segment and 2) in more than only office assets and on both sides of the development phases: both construction and investment are funded by these financiers. The interviewees consisted of a head research and a relationship manager.

The market experts consisted of two actors, both with job experience at developer and investor sides.

Data handling
Underneath the results of the interviews will be discussed. Interviews were performed as much as possible in the native language of the interviewee. All interviews were audio recorded. Doing so might create a setting in which the interviewee is cautious to respond, instead of telling the whole reality. However, it was told explicitly that the recordings would be for own use. Quotes would be anonymous. All of these actions were done in order to create a setting in which the interviewees would be able to talk broadly and without restraint on the sensitive subject.

The recordings were listened back and quotes on important aspects were written down (selective transcripts). Chosen was not to write full transcripts, since this would not only take too much time, but also due to the interview setup: interviewees were asked to describe as much as possible what was going on. This could lead to very long descriptions on specific aspects, comparing own experience etc. From the 19 hrs. of recording 43 pp. of quotes were generated. The quotes were categorized per aspect and discussed.

Results
In the interviews many actors automatically made a clear separation between previous market conditions and current market conditions. The results have been separated accordingly.

**Questioning the phenomenon’s existence**

Some interviewees answered that a misinterpretation of the words ‘lower rent’ might be the answer to the phenomenon’s existence. A couple of examples: the building’s effectiveness was mentioned: “when the building is more effective, the tenant [...] needs less area. The overall rent will therefore be lower.” This is true indeed. Hereby the total rent costs of an asset is indeed lowered. However, it does not affect the effective rent level (per m2) of an asset. Thereby it does not explain the phenomenon’s occurrence. It does however give explanation to certain news articles claiming lower rents (per m2) are being paid, while in fact the total costs of lease is lowered.

Sustainability is mentioned as well: “If the building is more sustainable, [the tenant] pays less service costs, so the overall rent might be lower as well.” This research expects that the higher sustainability will in the end be paid for by the tenant as well: higher sustainability therefore means higher contract rents. Combined the lower service costs and higher contract rent will match the rent of a building with higher service costs and proportionally lower contract rent level. Again this does not provide in an explanation for the phenomenon’s occurrence.
Previous existence
With respect to the existence of the phenomenon on the basis of contract rent levels interviewees concur. Some question however if the phenomenon could also have existed in light of effective rents. On the other hand others state it has most certainly been able. Some state that it is a commonly known phenomenon within the office market. Two actors name periods in which the phenomenon to surely have occurred: 2002-2010 cons. 2004-2008. Although some have experienced so at first hand, others have either heard this from within their network or felt this to be true.

Reason for existing asset’s rent prices to lag behind
In the beginning of this research the phenomenon of existing assets’ to lag behind was merely accepted as underlying assumption, but not explicated on further. However, many interviewees did relate to and why investors owning existing assets were limited in lowering their effective rent levels. Mortgages were said to be of importance.

Mortgages are based on book value: “When the rent is going down -appraised is on the basis of rent flow- the rent flow decreases, the [asset’s book] value decreases, the LTV [ratio] worsens, and if it’s more than 70% [an agreed ratio] you’ll have to pay off [the financier].”

However, there is some margin before the financier starts knocking on the door: “It can be that the value of the asset decreases and that the LTV thereby increases, […] but if there is enough room for interest and repayment to be made than this doesn’t necessarily have to be problematic.” So only if the asset is very sharply financed, problems might occur.

Even then additional securities are told to solve the problem. So question remains as to how far the mortgage really limits the investor in lowering his rent.

For the cases that are indeed sharply financed and not able to provide additional securities, incentives are used. If the book value doesn’t change the financier doesn’t need to be paid back: “If we want to obtain the book value, you’ll have to be creative in keeping up the rent rate. That rate is sacred since it forms the basis for all the math.” “It depends on what the books state. The strange thing about high book values is that the mistake has already been made. Everybody should lower their book value, but it’s left at the high value it is.”

Instead incentives are used: “Investors are eager to keep amortization at a low rate and use incentives instead to offer lower rents, because else they need to take a huge loss at once.”

Incentives should have an effect on asset value, but up to now they haven’t: “Everybody thought that [incentive presence] would be temporary, but since it has been going on for ten years already….” Incentives can only continue to be given by investors when they have enough private capital to do so. “Funds with high leverage generally have no liquidity because they’re so sharply financed. So in the negotiations they’re often unable to give incentives.” If no money is left to spend this can have serious consequences: “The cash flow of investors decreases, banks demand higher amortization, investors have no capital left to do maintenance and then the tenant is pulled away.” “There are many funds which have too little capital to bring their assets up-to-date, or which don’t have a financier to do so.” It shows that liquidity of the investor is determining the amount of incentives that can be given. This doesn’t necessarily mean that all investors are unable to provide incentives.

Incentives and lower effective rent levels
Next the relation between incentives and lower effective rent levels will be explained according to the answers of the interviewees.
High-low method
Again all actors know of the method’s existence, although the method’s name is unknown to most. This can be explained by the name being taken over by this research from an early interview. “High-low method, as it is named: high stands for the higher contract rent and low stands for [the lower effective rent due to] the given discount.”

Some don’t consider it to be a method, but moreover the way in which the market functions, or has been functioning. All actors state the picture as a whole to be incorrect, but parts of it to reflect reality indeed. In most interviews the following description can be more or less found. “Incentives were used as a trick for developers to pimp selling prices”. “A rent with incentives led to a higher asset value, than a rent without incentives”. “When the yields started to drop to the low, incentives were used to pimp the market [face (!)] rent to great heights.” Especially foreign investors were unaware of these incentives and therefore didn’t correct for them. An actor even states that the investor could not know: “Even when [investors] would ask a broker he would state this to be the market rent [instead of face rent], as his fee depended on the selling price of the asset.”

Reason’s for profit sharing: competition & low tenant demand.
Sharing back the additional margin wasn’t the goal at all at first. “Earlier the margin just went to the developer as profit.” However, “with eye on competitors, this margin could also be used to offer the tenant a lower rent.” “It depends on competition and the current workload of the developer. If there are many [job] chances with high yields, than [the developer is] not going to fight to the bone on projects where [the developer will] be financially stripped naked.” The developer decided “[...] to share a part of the margin with the tenant and thereby settle for a lower risk increment.” “The developer thought, there is so much margin... [let’s share it with the tenant].”

Only one actor mentioned this aspect. Tenant’s started to become rare around the year 2000. The tenants that were willing to pay more for a new development were already contracted. The only way in which new developments could be made was by dropping price of new to be developed office space to levels of the same or lower than existing assets.

Pre-contracting results
Financiers were able to offer lower financing costs, since the sales risk was minimized: “capital costs are much lower when investors [agree to] pay up front.”

Obtaining a tenant prior to development enabled the developer to obtain even cheaper funding, and thus led to a lower development risk. “Every risk that was canceled out, allowed for a further margin to be shared.”

Effect of profit sharing: buying out tenants
Thereby tenants were pulled away from existing offices in prospect of a lower effective rent. “[Developers] can only obtain the tenant by telling him that he’s able to pay less. [Developers] don’t pull him on qualitative grounds, but on financial grounds. [...] Some even bought over the existing tenant’s contract.”

Lower Development Costs aspects & Margin Creators
A number of aspects was identified by the interviewees that led to lower development costs or margin to be created. All will be discussed next.

Incentive market analysis distortion
Interviewees were asked if incentives would have caused market analysis distortion and thereby enabled margin to be created.

On the question if land value setting could have been distorted by incentives, most interviewees declined. With respect to asset value setting all actors agreed that there was a time in which especially foreign investors didn’t know about incentives, but that currently all actors are aware of incentives to be given. “Incentives are now
known by investors and financiers. In former times incentives were taken for granted, but not anymore.”

Therefore incentives are not thought to be disadvantageous for the investor. As long as he correct for incentives, it doesn’t matter if the tenant gives cash up front. “That is something between tenant and developer.” The developer pays for it.

Most actors agree that incentives are factored to be part of the development costs. But it is not spoken out clearly that in effect incentives might distort construction costs.

On the question if developers give more incentives than investors answers differ. Some think developers are always giving more incentives -“Certainly incentives are given more for new built than for existing offices”-, while others state it depends on the market situation.

Most actors state the average incentive value in general to be around two years rent-free on a ten year contract. But the average is not thought to be very representative for the whole. Some actors state to know that an idea of incentive heights, but not exactly, while others state to know exactly how much incentives are given.

Agreed is that incentives create non-transparency: “In the end however both tenant and investor don’t know the true value of the given incentive. Perhaps the developer was able to build it for much less construction costs than you’d think. Incentives of developers vary more often and are often higher as well”. “In contracts is never mentioned exactly what is considered to be an incentive. So how high the average given incentive really is...” “There are many types of incentives, from well hidden side letters to the payment of the carpet. That does cloud the whole thing.” “Sometimes the contract rent was much higher compared to the realized rents in close proximity. But sometimes the investor then built turn-key.”

Difference between asset value and land costs

The margin is created by a difference in expected selling price of the investor, and the actual realized selling price of the investor. “So either the land is sold for too little, or the investor doesn’t perform his market analysis well enough.”

The land price is thought to be the factor of influence. However on the question if the investor would, on the analysis of the land being sold cheap, lower its selling price most interviews answer negatively: “the investor buys on yield. When the yield is thought to be good, [...] the investor is content.” “The investor’s goal is to invest capital responsibly, [...] and not to gain a part of the developer’s profit.” Reasons for the land price to be too low are discussed next.

land price lagging

Some actors mentioned the residual land value to lag behind. “Through lagging of the ground component, the developer is able to create more profit, which in times of poor market can then be shared back to the tenant.” “It is my believe that the municipality has underpriced its own land for years. A municipality can never act as quickly as the market.” A number of reasons are mentioned:

- Historic data and real estate value increase: “There are always delaying factors. E.G. when the land value is established on the basis of data from the past, while the potential real estate value increases, margin is created.”
- Time difference: “Time will pass between negotiations which can easily explain the big differences in yields [between realized selling yields and municipal anticipated selling yield].”
- Both create room for margin, but only when the market is going up! “But then again: it could also work the other way around. That is the noise and the margin on which risk is taken and money is earned.”

off the (land) average

When asked if the fact that land value is based on averages could have a meaning, interviewee’s agree. If a developer is able to step of this average an exponential effect takes place: either the developer makes an exponential profit “due to the multiplier”, or it works the other way around.
erroneous dataset selection
Interviewees mention that data selection for doing the residual land value is essential, but prone to errors:
1) market segmentation - “Real estate is very local. There are many sub segments with their own characteristics.” “These form the borders of the residual land valuation method”.

land price compression
Land compression was also mentioned by the interviewees. A couple of reasons come forward: competition between municipalities, the fact that municipalities earn a lot on the sale of land, and the fact that more aspects play part for municipalities to get tenants to a specific location. The municipality is thought to have a great incentive on selling land. Not only directly does it allow for much needed funds, indirectly it leads to an increase in employment and thus income from the living of the employees that are attracted.
Furthermore municipalities are thought to have calculated with certain profits from land sale prior to actual sales, which is why they need land to be continuously sold. Some even state that when a developer has a tenant, quicker ways are suddenly available to come to a quick landing of the tenant.
Financial gaps between developer and municipality are mentioned to be bridged by the municipality more than once. All might lead to lower land values than one might expect on the basis of the residual land value method.

Yield compression
All interviewees pointed out yield compression. “The phenomenon [was] perhaps possible due to declining cap rates”. Yields were decreasing up to 5%, which led to a great increase in asset value/purchase prices.

wall of money
A wall of money formed the main principle for the yield compression. Both financiers and investors were hit. Financiers needed to invest their capital. “Financiers were literally in line. Sometimes funds were given of up to a 100% of the development costs.” “Money was cheap. Even while the investor was contracted prior to construction, still a bank was asked to finance.” The financial lever enabled lower yields: “German investors could go lower than Dutch investors, as they deposited their products at German banks.” “Even if the yield was 4,8%, it was much more [than putting that same money at a savings account].” An interviewee stated that in Germany investors by fiscal law needed to invest their capital, and the Dutch market was to them very interesting.

competition/scarcity
Competition then further decreased yields. “Competition indeed heightens the selling price, and lowers the yield (cap rate)”. “Germans bought for yields, against which the Dutch [investors] could not compete. Not because of the better interest, but too due to fiscal [demands].” “It was a battle in Germany to show financiers and private investors...[the sharp yields that were being made].” Investors started competing over the few assets that were in line with their demands. “Everyone wanted the same product. A new product, rented out with a ten year lease, [solid tenant,] at a public transport node, sufficient parking places, floors bigger than 1000 m² and sustainable. And those were scarce. And that causes the GIY to drop.” “Back then [the investor] had to process 1 project every week. [Investors] really had to obtain it, no matter the costs. Threatening calls came in: why [assets] still hadn’t [been] bought.”

quality neglect
As a result of the high competition (sellers’ market), quality was becoming less and less important. “If you don’t buy, somebody else will” “And then you start buying at a completely different manner.” “Now [investors] wouldn’t pay for incentives, but when competition is fierce...” “One was happy with a three year lease already.” “The question was no longer what will the market look like in 10 years, but what yields can we make tomorrow?” As long as the financial product was good investors would buy: “Real estate was seen too much as a financial product” Investors started to buy assets up front. “Competition was so high that [investors] did not even need a discount for the higher taken risk: the asset value would rise anyway.” “When there is scarcity in the market, people buy at the most bizarre yields.” “The assets were bought for too high prices”. “The GIY
The profitable influence of lease incentives for new office developments

were way too low. We overshoot. Focused was too much on the short term. There was so much money. Volume was of importance not the yield. Everybody wanted to invest, both private capital and debt capital.”

turnover bonus
Some mentioned the fact that certain actors had an incentive to realize the highest possible selling prices, due to their fee being a percentage of that selling price. Interviewees both mentioned real estate roles like the broker, but also managers. “Most managers at investors work there for four years and then leave off to a next employee. When your bonus is then set on the basis of your portfolio value, and you’re able to blow up the value using incentives....[a bonus is easily made]”

overconfidence
Yields dropped partly due to a decrease in risk perception. Interviewees state that there was a feeling of “endless continuous economic growth”. It didn’t matter if incentives would be in the rental contracts, because the asset value would increase anyway. “In old-time models everybody knew that assets would grow old and in the long run would decrease in value: amortize. But somewhere during the 90’s we collectively started to think that everything would increase in value.”

Risk assessment
In the interviews with investors and financiers was described that sometimes a new-to-be-developed buildings was determined to have a lower risk level than an existing building. On top of operational risks that existing assets experience, developments face development risks: the chance that something goes wrong during the development process.

However from the interviews can be concluded that the total risks for developments (development risks and operational risks combined) is lower than the operational risks for existing assets: “By definition existing offices have a higher risk, because an existing office has aged. That will reflect in appearance, elevators and HVAC. Furthermore within 5 years some investments will have to be made. Floor layouts and grid sizes too develop in time. These risks are higher than for developments. Sustainability also plays part.” “Developments have a lower risk level because less [unforeseen] maintenance is to be expected and because an increase in quality will always be made. So in the end for new developments will be paid more than for existing offices.” “The risk of not obtaining a new tenant for an existing asset is high. [...] New developments are preferred over re-developments. New built is leading.”

Additional costs
However, financing costs for developments are generally higher than financing costs for existing assets. “If you finance an existing asset as investor, you’ll have the rental stream, while when you finance a development...[you don’t].” “[Financing to-be-developed assets] is much more risky for [financiers] than [financing] existing assets. [...] A construction financing, the risks that play part i.e. the contractor goes bankrupt and [the financier is] obliged to take over the whole process, is much more risky.”

Though still it depends on certain aspects: “once is known that the construction can commence, and is known who will lease it [-tenant-] and who will buy it [-investor-], than that is more easily fundable than a project [...] [in which these aspects are not yet known].”

It shows that financing costs vary depending on risks, and that if the developer has eliminated certain of these risks he will obtain a better proposition. “If the tenant contract and purchase contract are signed –so no [sales] risk- the only risk that remains is risk of production.”

“In particular the sales risk is important. If the asset is sold to an [investor upfront] than the financing will only be for the duration of construction. Then [the financier] will know for sure that that the [purchase price] will pay back the whole loan at once.”

B. T. Harding – October 2012
Current existence
All interviewees agree that it had become less and less likely that the phenomenon would still exist today. The margin isn’t as large as it used to. Main reasons are that the GIY’s have started to increase and that the market’s use of incentives is now widely factored in. Still some reasons might enable the phenomenon to keep on existing.

Incentives acknowledgement
Investors have started to correct the contract rents for incentives: “Investors know what lease incentives have been given, because the market rent and contract rent is known.” “Investors usually do a substantial due diligence, whereby if incentives are found is directly calculated with market rent.” “The effective rent is used nowadays.” This means that rents cannot be blown up as they used too. If developers now give incentives “[investors] state to the developer: you pay these incentives!” The fact that the Authority Financial Markets (AFM) has started to demand companies to show the amount of incentives that have been given in their annual reports, further disallows the use for excessive use of incentives.

Yield decompression
GIY’s have started to increase. “[The method] works only if the investor is able to pay such a [low] yield. These have increased.” “[If the investor is unwilling to pay these high amounts, the developer cannot give back as much to the tenant.” “There is little chance that you could now share part of your profit big enough [to tempt a tenant to move].” A number of reasons is given for the GIY’s to have increased:

The wall of money has disappeared, mainly due to the credit crunch. Therefore financing has become much more expensive for both investor and developer: “the increment on top of the Euribor has increased.” Also the increment for real estate risk has increased. Reason for the increase in finance costs is that “banks are taking provisions on their risk exposure. Loans that have been set out are now reviewed to have higher risk levels.” “Basel 3 and other legislation for banks makes that there currently is less credit.” Thus “Attracting money has become much more expensive. That forms the defect. While earlier a loan could be taken at a 3.75-4.25% rate [for an investor], this currently is 5-5.5%.” This affects the number of participants to real estate funds and thus the amount of money that needs investing: “Then [as investor] you’re unable to pass on a good yield to your clients. It’s all about supplying the client the promised rent he wants.”

In effect there is less competition between investors. Less competition means less demand in the asset market. Less demand, with equal supply, means lower purchase prices. There are a number of other aspects that also influence the difference between supply and demand:

- “It is simply very hard to obtain loans at all.” “The whole capital market is quiet, even in the existing asset market.” Financiers realize that “when [financiers] add to the vacancy levels by financing [new-built assets], [his] other loans [for existing assets] will start performing worse”, which is why less and less developments are financed. “Banks state: if you don’t have an end-investor, we’re not sure if we’ll finance. […] Lease terms of 2-3 years used to be enough, but now even 10 year leases aren’t sufficient.”
- Even if new (construction and investment) loans are issued “banks only loan 50-60% of the total investment costs, instead of 80-110%”, which means that both developer and investor need to lay-in (additional) private equity. Additionally financiers demand loans to be paid off.
- Investors behave more cautious due to the market’s current vacancy condition -“Investors too look at what the market is going to do. Therefore there are almost no investor transactions.” - and the amount of investors active in the Dutch market has decreased: “Many funds with much capital don’t want to invest in the Netherlands any longer due to the high vacancy rates.” “Even if [German parties] buy, yields have increased. And then the method becomes less and less feasible.”
- Also the rules of the game have changed: “Forward acquisition is out of the question.” “The investors that remain are end-investors. These do not participate upfront and will only purchase when the asset is income producing.”
year contract used to be enough to obtain a loan and sell the asset. Now a 10 year lease is already problematic.”

“Investors don’t look any longer to indirect return, but to direct return. That means longer lease terms.”

All show that the amount of investors willing and capable to invest has decreased. This thereby could explain the increase in yields.

Quality
Due to the decreased competition between investor, the asset’s quality has increased in importance. Instead of only looking at the financials, investors now also look at the quality of an asset. “Two, three years ago the location didn’t really matter, only the tenant did. Nowadays this is different.” “Homework has become increasingly important and more people are watching over your shoulder”. “Now [investors] look at the quality of the asset: what is the re-leasing potential. [...] What is the chance that in ten years I will be able to get another tenant for the same rent. [...] Investors have started steering on it: lease guarantees and certain quality demands.” This could mean that therefore yields have started to better represent the quality these assets possess.

Existing assets’ price lagging
Still most actors agree that owners of existing assets might continue to be unable to lower their effective rent level. However due to the latest developments in which many funds are on the bound to be (or: have been) liquidated: their portfolio’s assets are offered for bottom prices, giving opportunity for new investors to start renting these assets out for much lower rent levels. “There is a wave of supply coming [to the asset market], which will lead to lower prices.” Furthermore book values are definitely starting to decrease, but slowly: “How quickly that goes is the question. There are people that have put their savings in it, so it’s bound to go slowly.”

Social awareness
Another aspect has increased in significance. Social awareness. Due to the high amount of vacancy in the Dutch market the social opinion questions any new development being made. Tenants are more and more aware that their choice to move to a new development might have a severe impact on their company’s image. “Now you need a darn good story if you’d want to move to a new development. Because everybody’s thinking: there is yet another greedy bastard.”

Tenant awareness
Even tenants have started becoming more and more aware of the possible disadvantages of incentives. “Tenants have started to demand bank guarantees for the lessor, in order to know for sure that the asset will continue to be maintained.” For the tenant the sharing of profit can be a risk as well. “When a developer offers a two year [rent free] incentive, the asset first has to be sold in order for the developer to give the incentive. Professional tenants pay attention to this.”

Discussion
Not all interviewees always agree. Listed here are the statements that did not agree with earlier made statements. Remarks have been made about almost all previously described aspects.

For example: according to one interviewee financing costs have currently not increased, since for banks it has become increasingly cheaper to lend money. Banks even have much more savings capital than before. Thereby a wall of money could again be created. Furthermore particularly low risk products are still much in favor.

Another states that the market is going to change to turnkey agreements, operational lease or workspace leases. This will further blur land value determination, probable leaving space for margin to be created.

Some interviewees too doubt if the AFM is able to enforce its incentive rule. The definition for incentives alone is already thought to be quite problematic: what do you define to be an incentive. And furthermore by law a commercial party is entitled to give incentives. Only if somehow incentives are used to bypass taxes might incentives indeed be forced to be made public.
Furthermore the whole market system is built on developing new assets. Investors want new assets with tenants since these costs less time and risk. If this creates vacancy at a competitor “he should have paid more attention”. Municipalities want to continue giving out land, since much money can be earned.

Exceptions
Still most interviewees do sketch some possibilities for the phenomenon to continue existing. “If you have a good tenant, who will stay for long [15 yrs.], a good location, but with equal interest costs and equal financing possibilities [it might still be possible]” and/or “when the land price is decreased, or the developer decreases its own margin.”

Below possible exceptions have been combined and listed.

- Phenomenon: “Perhaps that on the South Axis it is still possible. There [investors] might still believe in it [the market], that is better explainable.”
- Loan: “Only on the South Axis obtaining a loan is possible, but still it’s hard.” “Transactions still occur on the top locations. […] Financiers] still invest on locations like the South Axis, but not against every price.” “It might still occur that a financier disburses 100% of the total development costs: if a development is sold up front to an institutional investor, without escape clauses.” Furthermore the financier is active at the developer, contractor and investor sides. This means that if is agreed that these actors take their loan from the same financier, the chance is high that the financier will fund the full development costs to the developer.
- Land price: “Land price has decreased from 1600 back to 1300, so there is certainly some fallback. […] Due to increasing quality demands construction costs have increased. So the land price is decreasing.” “Amsterdam only issues land to tenants, not to developers. […] For companies already located in Amsterdam, land prices will not be lowered.” “Competition between municipalities is ongoing.”
- Construction costs: “Construction costs are now more positive: increment rates have decreased. Contractors are willing to settle with less.”
- Developer margin: “The developer can still share parts of his profits”
- Investor: “In Rotterdam, Utrecht, Den Hague and Amsterdam good yields are still offered. Does depend majorly on the location. So only AAA locations.”
- Yield compression (on AAA locations) “Yes there is, but only slightly.” “But then again there are less investors in the market.”
- Contract rent higher than market rent “The investor will have to have a provision in the form of higher quality etc., but then it is possible”
- Sustainability: “Through increasing energy prices, the lessee’s additional costs are increasing. […] Through better [HVAC] systems [this can be minimized]”
- Tenants: “The tenant market on AAA-locations is good.”

Interview conclusions and comparisons
Interviewees agree that the primary reason for existing assets to lag behind is due to sharp mortgages. Still incentives could be applied to be able to offer lower effective rent levels. Only investors that have no liquidity available, are unable to provide incentives. For these investors’ asset’s effective rent levels will lag behind.

Although the high-low method’s name is unknown to most interviewees, the way it functions is not. The reason for profit sharing was that competition between developers was rising, and tenants looking for new developments became scarce. By sharing back the additional obtained margin the developer was able to obtain a better competitive position. Pre-contracting in general enabled the developer to secure tenants, while secondly it provided in security on sales risk and decrease in financing costs. This also allowed for margin to be created. Apart from the increase in margin due to pre-contracting, as described the yield compression and lagging land values allowed for even greater margins to be created. Furthermore investor demands were diminishing. Low
leases were enabled. Combined with the low yields effect was that “the investor would buy for 18 times the [higher contract] rent. [Developers] only had to pay ten times for the tenant contract, which discounted is eight times rent, which left eight to ten times rent for profit.” A great margin was created. In the end so much margin could be shared that developers were able to outcompete existing assets, pulling away tenants from existing assets to be housed in new developments.

With respect to the existence of the phenomenon most interviewees agree, but most do still question if the phenomenon would exist on the basis of the effective rent level. If the phenomenon indeed existed it most probably occurred between: 2002-2010.

lower development costs & margin in the past
For the creation of lower development costs and margin, the interviewees mentioned in particular land price and selling price to be the driving factors. Land prices were thought to behave delayed (price lagging), while in addition municipal competition drove land values down. Asset prices were thought to have increased temporarily due to yield compression. The yield compression led to lower financing costs and lower yields (higher asset value), meaning that it led to both lower development costs and an increase in margin. Furthermore investor demands were diminishing in terms of quality due to the high competition. It enabled the sales of assets with short lease terms. Combined with the low yields effect was that “the investor would buy for 18 times the [higher contract] rent. [Developers] only had to pay ten times for the tenant contract, which discounted is eight times rent, which left eight to ten times rent for profit.” Thereby great margins were created.

In general developments are thought to be of much lower risks than existing assets. This could also explain why developments are able to provide lower effective rent levels.

Finally was asked what influence incentives were thought to have on market analysis. All actors agreed that face rent levels were influenced by incentive value. However, land values were not thought to be influenced, neither could anyone state if incentives would also influence development costs analysis.

A more thorough margin overview has been used for comparing literature results with interview results.

current existence
All interviewees agree that it had become less and less likely that the phenomenon would still exist today. The margin isn’t as large as it used to. Main reasons are that the GIY’s have started to increase and that the market’s use of incentives is now widely factored in. The wall of money has disappeared. In effect there is less competition between investors. Due to the decreased competition, the asset’s quality has become of more importance.

Tenants are more and more aware that their choice to move to a new development might have a severe impact on their company’s image. Furthermore tenants have started to become increasingly aware of the possible disadvantages of incentives.

Still some reasons might enable the phenomenon to keep on existing. When finding a very reliable and large tenant, to be positioned at the South Axis, while the municipality lowers its land value. Most actors also agree that owners of existing assets might continue to be unable to lower their effective rent level.

Comparing literature and interviews
Below the overview of conclusions from literature has been shown. It is compared to the conclusions from the done interviews. As can be seen only the incomparable dataset conclusion and the conclusion of the possible effect incentives could have through it, remain unproven. Underneath a more thorough explanation of all the described aspects is given.
The profitable influence of lease incentives for new office developments

Figure 56: Literature conclusion overview compared to interview results

- Incentives: Especially foreign investors didn’t know of the market’s use of incentives, or didn’t care for that matter. Most actors agree that incentives are factored to be part of the development costs. No clear statement has been made on construction costs distortion. On the question if land value setting could have been distorted by incentives, most interviewees declined. However agreed is that incentives do create non-transparency.

- Margin existence: the land price is thought to be the factor of influence. The land price is lagging behind. It does not calculate future value changes. Furthermore time might pass between land sale and asset sale, possibly creating margins. Only one actor confirmed the off the average advantage a developer can obtain. However, interviews did mention that correct datasets are essential for land value calculations. Land price compression was acknowledged to exist. Interviews identify investors to be indifferent as well for checking on actual development costs, this also enables the margin to be created.

- Yield compression has been occurring. On the basis lies a wall of money. Combined with competition and asset market scarcity it led to low yields and the neglecting of quality. Incentives were not of interest partly due to turnover bonuses and perhaps overconfidence in ever growing asset values.

- New developments usually obtain lower yields even though they also have the additional risk of needing to be produced. Financing costs can be quite low as well if especially the investor has been pre-contracted. A tenant helps as well.

- Asset market demand was high, while margins were too. Pre-contracting tenants was essential for obtaining land. One interviewee mentioned that tenant’s already started to be scarce around the year 2000. Only solution was offering lower effective rent levels. Tenants were drawn out of existing assets.

- Use of the high-low method allowed for contract rents and selling prices to be increased even further. A difference between investor horizon (1/GIY) and lease term enabled even more profit to be shared, having extreme influence on the effective rent level of the tenant.

Questionnaire
In addition to the interviews a questionnaire has been applied. It is filled in by the same people that were interviewed. Reason for doing so is that the questionnaires main function was to validate the conclusions of interviews and literature.

Methodology
As described interview questions developed as time went along. Combined with the group of interviewees being rather small, and this research’ topic being quite sensitive, this decreased validity up to a point that it needed checking. Posing the unaddressed questions to all interviewees was thought to take too much time and effort. Instead a questionnaire was set up on the basis of the conclusions of both literature and interviews (see Appendix II).
Set up
In theorems the conclusions are presented to the participant, asking him to either agree or disagree with the theorem. If needed, the participant can leave a comment per question too. The questionnaire was set up in excel. By using the lock function all cells except for the to be filled in ones were locked to prevent any alteration. The questionnaire was send by mail to the interviewees. Two reminders were sent after.

Data processing
Results of the received questionnaires were combined and put into one excel sheet. True was replaced by a 1 and false by a 0. The percentage of true’s compared to the total amount of answers was determined. In some questionnaires not all questions had been answered, or both true and false had been answered. For the former the answer was replaced by a ? and not included in the total amount of answers. For the latter 0.5 was inputted. Thereby the total amount would increase with 1, while the percentage of true’s would increase only by 0.5. By analyzing the answers of the questionnaire, some of the answers were not included in the calculations (RED background). One questionnaire e.g. had clearly given some answers on a different period than the asked 2002-2008. Therefore these answers were ignored. One answer was corrected, since from the comment clearly a different answer was meant (ORANGE background).

In addition to the percentage of True’s compared to the total amount answered, results of this research were compared to the average conclusions. On the basis of these two figures results will be shown.

Results
Of the 13 interviewees 8 handed in a questionnaire. 4 were unable to fill in the questionnaire. One did not respond at all. Percentages above 70% are considered high. Percentages beneath 30% are considered low.

In “Appendix III: Questionnaire results” shown in bold are the theorems that have a high approval rate. Three theorems are shown in red. These theorems have shown to be multi-interpretable. Thereby no real conclusion can be drawn from these results.

The 87 theorem results will not be discussed one by one. Only the most accepted theorems will be discussed.

Clearly profit sharing is thought to be of influence for the phenomenon’s existence (86%). Profit sharing is agreed to have an effect on the effective rent level (86%). In order to share profit, profit is needed (100%). This profit is thought to be obtained primarily due to a difference between development costs and selling price (100%). How this profit is thought primarily to have happened due to an increase in selling prices (71%). A comment states that the asset markets does not look at development costs, but only at asset market value. This could indeed partly explain margin to be created. However, no clear answer is given as to how this increase in selling price was established. Although land prices are not on average thought to have an influence (57%), land prices are thought to react delayed to new market information (88%). Although development costs are thought by half of the participants to have had influence (57%), agreed is that development costs have not shown any decrease (83% resp. 100%). These statements seem contradicting. Also when looking at the influence of decreased additional costs (57%), all mentioned additional costs changes are thought to have occurred (88%, 71%, 71%, 83%): low financing costs; fees did not decrease (significantly); the developer was content with a smaller profit percentage; incentives were factored in under additional costs. A comment notes that not only due to low financing costs, but also due to larger loans (LTC up to 100%) additional costs could decrease. Another comment states that although the developer needed a lower profit, the yield would decrease so much during construction that it would resolve the decrease in profit. Although earlier yield decrease was not thought to be a major influence (63%), the underlying reasons almost all apply: 1) financing costs decreased for investors, enabling lower GIY’s (88%). A comment states that also a decrease in expected risk led to a decrease in GIY’s. 2) foreign investors suddenly had to invest high amounts of
capital (100%). With the comment that those were not only foreign investors. 3) Strong competition led to lower GIY’s (88%). 4) Strong competition led to the asset’s quality to be often neglected (75%). 5) A strong common believe of continues asset value growth led to the acceptance of low GIY’s (94%). In relation to incentives, incentives are thought to perhaps have a little influence on land value (71%). Compared to the current market situation most actors agree that the wall of money has disappeared (88%) and that investors have become aware of incentives correction and asset quality control (100%). Land values are thought to currently be to high instead of too low (71%). In general the conclusion is that the phenomenon exists due to the land value not following the contract rent development (79%). Two aspects stand out for being completely different from what this research had concluded as far: land prices are thought to be too high and the developer accepting less profit is thought to be of influence as well.

In the overview below the percentage outcomes have been included. Clearly lagging of the residual land value, the wall of money and yield compression are the aspects most associated with the phenomenon’s occurrence.

![Figure 57: Literature conclusion overview compared to interview results and questionnaire results](image)

**Residual land value dataset analysis**

For this small dataset the research goal was to see whether or not realized residual land values by the municipality of Amsterdam allowed for margins to be created. Based on the outcomes of the interviews a selection of cases was made.

**Goal**

Goal was to compare the expected selling price as determined by the municipality for their residual land value calculation and the actual selling price as realized sometime after between developer and investor. If margin was created this could allow for margin to be shared. In addition the goal was to identify what impact the sharing of the margin would have had on the effective rent level.

**Selection criteria**

On the basis of both literature and interview conclusions a selection for assets has been made. It is shown below. Take note especially on the aspects 1) low risk assets, 2) relatively new locations/out-of-the-ordinary assets. From the interviews was concluded that yield compression existed especially for low risk assets. Low risk assets were identified to be single tenant, large assets, with a large and stable pre-contracted tenant. Aspect 2 was identified on the basis of the conclusions on land value distortion. The land value is based on current data and does not include foreseen value increases of the location. So for relatively new locations which turned out to be quite prosperous land value is expected to be off. With ‘out-of-the-ordinary’ assets is meant assets that due to their size and function are completely different from their surrounding assets. As a result there is a lack of comparisons, disabling a proper land value to be determined.
The profitable influence of lease incentives for new office developments

- office assets
- both single tenant as multi-tenant assets; preferably single tenant
- new development, no redevelopment
- low risk assets; finest of the finest (most probable to be influenced by yield compression)
- relatively new locations: South Axis, Riekerpolder, and some out-of-the-ordinary assets (few comparables; niche)
- created between 2000-2012 (yield compression)
- total land value bigger than €4.000.000 (due to database)
- Developer: is developer pur sang and will therefore sell the asset
- Tenant: present at initiative: building was not developed at risk
- Tenant: large and stable firm.
- 10 000+ m² GFA assets were picked

Data acquiring

Underneath is described how the various data has been obtained.

**Expected selling price**

Per asset the expected selling price has to be determined. Land price Consultancy (GPA) of the municipality advises per asset internally to Project Management Bureau (PMB) per asset’s function what land value per GFA should be obtained. For doing so GPA determines per asset function the average expected selling price per GFA [€/GFA], consisting of a rent level [€/yr.], a yield level [%] and an efficiency assumption (LFA/GFA)[%]. The resulting expected selling price is in €/m² GFA excluding VAT and excluding turnover tax.

Per function the average expected selling price per GFA [€/GFA] will then need to be multiplied by the realized GFA, to come to the expected selling price per function [€]. All the different total expected selling prices of all the functions are then added up to obtain the expected selling price of the whole function.

Since land price negotiations are done prior to actual development completion, it might be that the functional program has changed compared to what was agreed on in the land price negotiations. The municipality checks for these alterations by performing an after-calculation on realized functional program. In this document the actual realized functional program of the asset is found.

Combined, this enables to obtain a highly correct expected selling price made by the municipality. The expected selling price does include developer profit.

**Realized selling price**

For obtaining the realized selling price per asset the public register has been consulted. From the deed of transfer the realized selling price has been obtained. Selling prices exclude VAT and turnover tax.

Data processing

**Expected selling price**

For some assets no individual expected selling price calculation was done. Instead on the basis of surrounding assets assumptions were made.

For other functions (amenities) no data at all was available on expected selling price. These have therefore been estimated to have an expected selling price of zero. This could be done without harming results, due to 1) the ignored area consisted of 0.03%, 3.45% and 12.18% of the total asset area, 2) in addition the ignored functions included recreational or retail area, which usually has a significantly lower land value than office space.
Furthermore for one of these cases no prices could be found for parking spots either. Parking spots values in the near region were used instead. Possible value differences are therefore considered to be of no importance. Finally it has happened that expected selling prices for internal parking places were unavailable. Instead an assumption on the basis of expected selling prices of parking places of asset’s close by has been used. This has been done for three cases, of which one had ignored area.

**Realized selling price**

For three assets no deed of transfer could be acquired. One of these cases matched the exceptional cases described above. The one case was excluded from the selection, which also represented the 0,03% case and a case of parking place selling price assumption, to obtain a more stable dataset. For two of these cases only a combined selling price could be found. The two assets were bought in one transaction. The individual selling prices was based on data from Vastgoedmarkt.nl (2012). However it remained unclear whether or not VAT and turnover tax was applied. Assumed is that has indeed been the case. Percentage wise these values have been corrected to their actual selling price, making sure the two combined values matched the selling price of the deed of transfer.

**Comparing expected and realized selling prices**

Expected and realized selling prices already have the same denominator. The realized selling price was simply divided by the expected selling price in order to see how far they differ percentagewise. However inflation might need to be corrected. This has been done on the basis of Global rates.com.

**Calculating the effective rent**

In order to calculate what the effect of the created margin [€] might be on the effective rent level [€/m² LFA/yr. discounted], the margin is spread out on the basis of a 10 year contract [$/yr.], divided by the amount of office space in GFA [$/m²]. The resulting number is the possible correction that could be applied over the contract rent when all margin is shared to the tenant. As one might have noticed, the margin was discounted to GFA instead of LFA. This is due to the lack of information on LFA. Furthermore the created margin is not discounted either. This is due to the lack of information on GIY levels. Making too much assumptions would not lead to any valid result. Thereby the determined figure functions merely as a highly insecure indication for the influence of margin on the contract rent level.

Applying the incentive advantage only over the office space is done since in other real estate functions incentives are not commonly supplied. An additional factor should be corrected for: the incentive advantage is divided on the basis of GFA and not LFA. It means that the impact on LFA might even be bigger. However, as stated earlier on cash incentives VAT must be applied. Although not all incentives will be given in the form of a cash incentive, it will certainly have some negative influence.

**Data description**

The described selection consists of 13 cases with an average GFA of 27 023 m², consisting of 25 955 m² GFA office space. All assets are bigger than 10 000 m² GFA. Totally 34 877 m² of other functions was included, having a total number of 3 498 parking places. Total realized land price consisted of 325 mio euro’s, whereas 343 mio euro’s was advised (5,3% difference). However one case is solely responsible for 3% of that difference. Realized land ratio on average is 25%, with the extremes being 5% and 36%. The average realized selling price was just above 100 million euro’s. Most land negotiations started in 1998. Six took place somewhere between 2000 and 2006. Only one negotiation took place at a later period. For two cases the selling of the asset happened within two years from land value
negotiations. For seven cases the difference was up to five years. In one case it took eleven years. In ten of the cases the investor was contracted prior to development completion. In three cases at the moment of delivery and in one case afterwards. This information is relevant since it shows that in some cases a reasonable amount of time has passed before the asset was sold. However, when the asset is sold simultaneously to the development’s completion date, most likely the developer and investor had agreed to the sale prior to construction.

For the determination of expected selling prices used efficiency levels are around 81-85%. Rent levels used were between 150 euro’s/m² LFA to 295 euro’s/m² LFA. GIY assumptions were around 7% on average.

Six of the assets are multi-tenant; seven are (mainly) single tenant.

### Results

<table>
<thead>
<tr>
<th>Difference from land advice</th>
<th>Year of negotiations</th>
<th>Euro/m² LFA</th>
<th>Land Ratio</th>
<th>Difference with realized selling price</th>
<th>Inflation Corrected</th>
<th>Effective rent corrected for incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td></td>
<td>€ 4029,54</td>
<td>+25%</td>
<td>+36%</td>
<td>+21%</td>
<td>€ 82,94</td>
</tr>
<tr>
<td>1</td>
<td>+0%</td>
<td>2005</td>
<td>€ 5330</td>
<td>20%</td>
<td>+53%</td>
<td>+50%</td>
</tr>
<tr>
<td>2</td>
<td>-2%</td>
<td>2007</td>
<td>€ 1911</td>
<td>42%</td>
<td>+55%</td>
<td>+28%</td>
</tr>
<tr>
<td>3</td>
<td>+0%</td>
<td>2002</td>
<td>€ 3111</td>
<td>35%</td>
<td>+1%</td>
<td>-10%</td>
</tr>
<tr>
<td>4</td>
<td>+0%</td>
<td>2002</td>
<td>€ 3741</td>
<td>28%</td>
<td>+16%</td>
<td>4%</td>
</tr>
<tr>
<td>5</td>
<td>-28%</td>
<td>2006</td>
<td>€ 1883</td>
<td>22%</td>
<td>+31%</td>
<td>+20%</td>
</tr>
<tr>
<td>6</td>
<td>-2%</td>
<td>2007</td>
<td>€ 3741</td>
<td>22%</td>
<td>+71%</td>
<td>+41%</td>
</tr>
<tr>
<td>7</td>
<td>-2%</td>
<td>2007</td>
<td>€ 1655</td>
<td>35%</td>
<td>+51%</td>
<td>+25%</td>
</tr>
<tr>
<td>8</td>
<td>+0%</td>
<td>2003</td>
<td>€ 3893</td>
<td>28%</td>
<td>+26%</td>
<td>11%</td>
</tr>
<tr>
<td>9</td>
<td>+0%</td>
<td>2003</td>
<td>€ 3888</td>
<td>31%</td>
<td>+8%</td>
<td>4%</td>
</tr>
<tr>
<td>10</td>
<td>-5%</td>
<td>2010</td>
<td>€ 3129</td>
<td>36%</td>
<td>+3%</td>
<td>0%</td>
</tr>
<tr>
<td>11</td>
<td>+0%</td>
<td>2008</td>
<td>€ 3032</td>
<td>31%</td>
<td>+11%</td>
<td>5%</td>
</tr>
<tr>
<td>12</td>
<td>+2%</td>
<td>2007</td>
<td>€ 3974</td>
<td>20%</td>
<td>+66%</td>
<td>+63%</td>
</tr>
<tr>
<td>13</td>
<td>-235%</td>
<td>2012</td>
<td>€ 2584</td>
<td>5%</td>
<td>+69%</td>
<td>+52%</td>
</tr>
</tbody>
</table>

Results show that the realized selling price on average was around 21% higher than estimated by the municipality (corrected for inflation). The two combined bought assets together realized the only negative outcome compared to what the municipality expected. Four assets obtained an up to 11% higher selling price. Six assets realized a 25% higher selling price than estimated. The highest difference realized a 63% additional selling price compared to the expected selling price.

When looking at the effect the shared margin might have on the effective rent level, the following is found. For the margin corrected for inflation: on average the possible correction on contract rent level would be 70 euro’s. Seven cases could realize a higher effect, of which four realize a 125+ euro effect. It shows that when the contract rent levels are currently at 300 euro’s, effective rents of 200- euros could have been realized. Again: this would mean that all additional profit is shared back with the tenant.
Looking at the selling year, assets sold between 2005 and 2007 clearly realize higher margins. Also the highest value for €/m² that the investor pays for lies in the period 2005-2007. It looks to reflect the period of yield compression. Contract rent could be effectively reduced with 127 euro’s on average for the assets created in this timeframe. Looking at the assets that were able to obtain the highest rent margin, the top four consists of single tenant assets. The top two assets are realized at locations which lack good comparables. Behind the top four, three multi-tenant assets follow up. Looking at the assets that were able to obtain the highest contract rent difference, the top three consists of single tenant assets. The dataset is too small however to make any sound conclusions on these differences.

**Conclusion**

On the basis of these 13 cases is shown that on average the margin between expected asset value and realized asset value is 21% high. Especially assets sold in the period between 2005-2007 seem to perform extremely well, also in terms of euro/m². This looks to reflect earlier conclusions on the yield compression period. Clearly the margin might be used to create lower effective rent levels. Calculated is that on average 70 euros of the initial contract rent might be corrected. Furthermore for the assets created in the 2005-2007 period the initial contract rent correction is as high as 127 euro’s.

One remark can be made to the outcomes of this small dataset study: a higher quality would also have to be represented by higher development costs. However, the municipality differentiates its land values on the basis of different quality levels. An internal research done by Deloitte (2011) showed that development costs were -rather than being too low- too high compared to the information Deloitte uses.

**Sensitivity analysis**

In the preliminary phase of this research goal was to do two case-studies. The selected cases both consisted of developments who supposedly had won over tenants by offering effective rent levels equal to effective rent levels of existing assets. However, obtaining the required information proved to be extremely difficult. The effort was futile. Decided was to drop the case-study analysis.

So no proof could be obtained of the existence and functioning of the phenomenon in practice. Instead was decided to do a sensitivity analysis. Results would show -on the basis of the found theory sketched earlier- what financial preconditions would be needed for the phenomenon to exist.

For one case of the terminated case-study analysis much (financial) data was already obtained. This case-study data was put to use as input for the sensitivity analysis. Thereby the sensitivity analysis would be on the grounds of an actual existing case, making the analysis outcomes more valid.

From an interview with the tenant was found that the former premises were not fit for the tenant’s organization any longer\(^{41}\). The tenant searched for both development and existing locations, however no existing asset could be found for the tenant to be housed in physically. The tenant moved to a development location instead. Since the goal of the sensitivity analysis was to show the conditions for the existence of the phenomenon, a comparison would have to be made between the development and existing assets. However, the tenant had been unable to find proper existing assets for his company to be housed in. Therefore a proper comparison for the sensitivity analysis to base its conclusions on could not be made.

\(^{41}\) For the sake of the tenant’s anonymity additional reasons are not mentioned.
Instead was decided to compare the former tenant’s asset with the current tenant’s asset. In the interview the tenant described that the effective rent level of the development was about equal to the previously paid effective rent level, including service costs. Thereby the input data was thought to be sufficient for obtaining proper results from the sensitivity analysis. Through a spokesperson of the former premises both previously paid contract rent level and service costs could be obtained.

**Method**
The sensitivity analysis is performed in excel. Goal is to determine the outlines of certain market situations under which the development is able to outcompete the existing asset in terms of effective rent levels. It compares two feasibility calculations: the developer calculations and the former asset’s calculations. For these aspects the effective rent level is calculated. In essence the asset value minus all-in construction costs and land value determine a certain margin. That margin is shared back to enable a lower effective rent level of the tenant. Municipal calculations have been included to show what the market’s face rent level would be according to the calculations of the municipality.

The effective rent level will be compared to both previous asset’s effective rent level and face rent level. The former comparison is to show the conditions for the new asset to be able to realize an effective rent level of the tenant’s former asset. The latter comparison is to show what the effects are when the developer is able to perform better than the averages on which the residual land value is based.

On the basis of a number of scenarios the outline for the phenomenon’s existence is researched.

**Input data**
The model’s input data is obtained from the two described interviews -with the tenant and the former building’s spokesperson-, municipal data and scenario parameters.

The municipal data allowed for gaining the exact program of the development in terms of GFA and parking places. Parameters of the municipality for deciding the normative residual land value -which are based on market averages- enabled the acquisition of the face rent level, market GIY, market LFA/GFA efficiency and market all-in construction costs per GFA. For parking places all-in construction costs and returns were gathered as well. Finally of course the actual land value was acquired. Some deviation with the advised land value was noticed: minus 13,2%.

From the former building’s spokesperson the former contract rent and service costs could be obtained. Also an uncertain notion of a two-year-rent-free incentive was given. The latter info was put to use to determine the effective rent level of the previous asset.

From the interview with the tenant two essential statements were used. One statement was about the contract rent being only slightly above current market average. The rent level is determined at a +8% increase to the current face rent level. Another statement was that -combined with lower service costs- the effective rent would be about equal to the effective rent including service costs of the former asset’s lease contract. Combined both statements would form the basis of the model: finding out how many incentives should have been given in order to make sure that the former building of the tenant had an effective rent (including service costs) as high as the effective rent (including service costs) of the new asset.

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42 Note that the municipal’s all-in construction costs assumption includes a 7% profit rate for the developer.
43 The municipality usually calculates parking place costs and returns separately from the asset.
Two scenarios were set up containing a small difference in input data concerning LFA/GFA efficiency and all-in construction costs. For the first scenario the two aspects were based on the municipal’s parameters for determining the normative residual land value. In the second scenario however, certain assumptions were done as to the increased performance of the developer compared to the average.

Assumptions led to a 4% absolute increase in LFA/GFA and 4% relative decrease in all-in construction costs. The former assumption is based on pre-contracting assumptions: both tenant and investor are signed prior to construction. In effect financing costs have decreased (-2%) and so has the risk premium of the developer (-2%). For the sake of the argument is assumed that the municipal calculated assumptions do not include situations of pre-contracting.

The latter assumption is based on the fact that the developer is known to build more efficient than average. A 4% absolute efficiency increase has been thought to be reasonable.

Both scenarios are compared side by side, in which every time a certain parameter will be altered. The two altered parameters are the GIY and contract rent level of the tenant’s development. Changes are listed below.

1. Yield decrease 1%
2. Yield decrease 1% & Contract Rent increase
3. Yield decrease 1.5%
4. Yield decrease 1.5% & +8% Contract Rent increase
5. +8% Contract Rent increase & Yield decrease

Aspects two and five are set to determine what contract rent increase cons. what yield decrease is needed to obtain an effective rent level equal to the former asset’s effective rent level.

Assumptions

Certain data was unable to be found, mainly in relation to the development: 1) actual given incentive information, 2) actual contract rent, 3) actual all-in construction costs (both asset and parking), 4) actual service costs and market service costs, 5) actual used GIY (both asset and parking), and 6) actual efficiency.

The factors contract rent, efficiency level and GIY of the asset, have been selected as variables. Incentives will be calculated on the basis of the created margin, as described earlier. Assumed is that this margin is shared back to its full amount with the tenant, enabling the calculation of the effective rent level. For these factors therefore no assumptions had to be made.

For the remaining aspects assumptions did have to be made. For the all-in construction costs of the development and parking, the municipality’s estimates are used. So is the GIY of the parking garage, which will remain equal. For service costs a 21% decrease is set for the development compared to the existing asset.

Data Processing

The asset value is determined on the basis of the rent capitalization method (GIY). All-in construction costs and land costs are then subtracted. What remains is a margin, which is shared back to its full amount with the tenant. The margin thereby forms the incentive value.

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44 In case of scenario 2 a certain discount is applied to these all-in construction costs as described earlier
45 Based on the Jones Lang LaSalle service costs’ data for the specific asset (Jones Lang LaSalle, 2011) divided by the known service costs of the former asset
In order to determine the effective rent level (€/m² LFA/year), the contract rent level (€/m² LFA/year) including service costs should be subtracted by a transformed incentive value (€). In order to do so the incentive value (€) should be divided over the rent term annually (/year) and divided by the amount of LFA (/m² LFA). In addition it should be discounted for expected inflation or required yield (Gool, 2011).

The formula used for this is based on rewriting the regular function for summing up a geometric series from first result to n’th result:

\[
\sum_{k=0}^{n} ar^k = \frac{a(1-r^{n+1})}{1-r}.
\]

Where \( r = \text{expected average inflation or required yield percentage} \times 100 + 1; n = \text{lease term length in years} - 1; \) and \( a = \text{the annual incentive result}; \) The result of the formula (S) would be the total incentive value. By transcribing the formula, the annual incentive result \( a \) can be calculated with the following formula:

\[
a = \sum_{k=0}^{n} ar^k \cdot \frac{1-r}{1-r^{n+1}}.
\]

Result \( a \) is the annually corrected and discounted incentive value. By dividing this number by the LFA the annual incentive contact rent correction value / m² LFA can be obtained. No additional VAT corrections have been applied.

**Setting the base model**

After filling in the obtained data and assumptions the first thing that strikes out is that the municipal input, based on market data, already creates a margin. By using the goal seek method the margin is set to zero, which is in accordance with a GIY of 6.52%.

All aspects are filled in the base model. Started is with setting all variables of the development to reflect the assumptions of the municipality (scenario 1). After the aspects have been filled in the developer shows to have obtained quite a margin already. The described difference between advised selling price and actual selling price is the underlying reason. The aspect that justifies this difference in advised and realized land value is that the all-in construction costs are higher due to increased sustainability levels. Therefore all-in construction costs are increased with 8.95%*.

For the former asset the two-year-rent-free incentive has been calculated. According to We’re Amsterdam 2011 (Colliers, 2011) this is about average. Result is a 18% decrease in effective rent compared to the contract rent.

All together this forms the base model (Appendix III: Sensitivity Analysis Appendices: Table 8). Compared to the former asset the difference in effective rent level is 40% in advantage of the former investor. This is quite a difference. Major incentives influence will have to correct for these differences.

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46 The GIY is used in the scenario’s below
47 Random assumption.
Results
A more detailed description of the steps taken to come to the results described in the table below, referred is to Appendix II: Sensitivity Analysis Appendices

Table 6: Comparing situational results

<table>
<thead>
<tr>
<th>Situation 1</th>
<th>Situation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract rent increase</td>
<td>Municipality</td>
</tr>
<tr>
<td>Yield decrease 1%</td>
<td>-19%</td>
</tr>
<tr>
<td>Yield decrease 1% &amp; Rent increase</td>
<td>-33%</td>
</tr>
<tr>
<td>Yield decrease 1.5%</td>
<td>-46%</td>
</tr>
<tr>
<td>Yield decrease 1.5% &amp; +8% limit</td>
<td>GIY needed when +8% limit</td>
</tr>
</tbody>
</table>

Comparing the two base cases on a parallel basis, the decrease in GIY clearly has the greatest impact. This looks to reflect the earlier made assumption that the difference between investor horizon and contract lease term is essential for the phenomenon to occur.

Furthermore the contract rent influences increases when the GIY is lower. Cross comparing the two base cases it is noticed that the profits have increased, which surely is logical in sight off the lower development costs, higher efficiency and stable land costs. However the more is stepped of this average, the exponentially higher the difference will be. Again the GIY shows to be the primary factor.

Another factor which does not come forward through these scenario’s is the discount factor over which the incentive value is discounted. In the examples above every time the margin was discounted over the same GIY value as the investor was willing to pay. However, if a tenant only requires inflation to be discounted, a much higher resulting incentive value will correct the contract rent level.

Concluding
The initial model showed a margin was created already. It was compensated by an increase all-in construction costs. Thereby profit was set at zero.

By playing with the variables GIY and contract rent, was tried to find out when the developer would be able to obtain an effective rent of the former asset. However on the basis of the assumptions of the municipality (scenario 1) a decrease of around 1.5% was needed in comparison to the GIY assumed for calculating the land value. Combined with blowing up the contract rent level by the use of incentives with 8%, the GIY increase needed was around 1%. Both situations seem rare to occur. Though between 2004 and 2005 such a decrease has actually happened (CBRE, 2010).

When the developer has been able to perform slightly better than average, for example by pre-contracting tenant and investor (-4% all-in construction costs) and/or increase LFA/GFA efficiency (+4% absolute), the decrease in combination with the GIY and blown up contract rents might have had a much higher impact. Decreasing the GIY by 0.75 and increasing contract rent levels by 8% would allow for the tenant to effectively gain a same effective rent level. Between 2004 & 2005, and in 2010 such a decrease has actually happened (CBRE, 2012). Clearly situations might exist in which a developer is able to realize an effective rent level lower than the effective rent level of an existing asset. The GIY expectation is the main factor of influence. Combined with the blowing up of contract rent levels, impact on the effective rent level are shown to be severe. Still though the changes needed compared the normative residual land value assumptions look to be quite high. Preliminary conclusions seem to point in the direction of economic/market bubbles.
Overall chapter conclusion

This chapter has shown the results of the numerous interviews, the small questionnaire, the small residual land value research and the sensitivity analysis. Conclusions from interviews have shown to reflect the theory described in the previous chapter. The questionnaire shows that especially land value lagging, the wall of money and yield compression are thought to be factors of influence. The dataset analysis has shown that it is highly likely for the selected cases that the residual land value has left over margin to be created. On the basis of rough estimations the influence of the margin on the effective rent level can be quite significant. The sensitivity analysis has shown -on the basis of an actual case- when the high-low method is able to allow for the phenomenon to exist. In essence a difference of 0,75% GIY should exist between actual selling price and selling price.

Figure 58: overall chapter conclusions combined
6. Part IV – Conclusions & reflections
7. Conclusions

This research has been set up to shed light on the phenomenon of developments being able of competing -quality equal- at effective rent levels of existing assets. The goal was to prove the phenomenon’s existence and to identify crucial factors enabling the occurrence.

Three aspects have been identified as reasons for this phenomenon to occur. In any situation the existing asset’s effective rent level should be lagging to new market information. Without this assumption, the phenomenon could not exist. For this research the statement is presumed true and used as underlying assumption for the research to continue. The focus was thereby laid on the two other aspects: lower development costs and margin. Both enable the situation in which the developer is able to offer lower effective rent levels. The research continued identifying crucial factors for both aspects to occur. Incentives were expected to be of influence. Two research questions were set up:

1. How can lease incentives affect effective rent levels of yet-to-be-developed office buildings?
2. How did this enable developers to offer lower effective rent levels for yet-to-be-developed office buildings, than the effective rent levels offered by investors for comparable existing office buildings?

Both questions will now be answered.

Answer to the first research question

- How can lease incentives affect effective rent levels of yet-to-be-developed office buildings?

In general incentives affect the contract rent of an asset: the more incentives are given, the higher the contract rent will be (Swagerman, 2010; Muijsson, 2010). This research has shown that incentives can also affect the effective rent levels. This can be done in two ways: directly and indirectly. The sharing in developer profit forms the direct way. The indirect way is caused by the market’s use of incentives distorting market analysis.

Sharing of developer profit / High-low method

Sharing in developer profit is defined to be an incentive (Gool, 2011). It enables the developer to offer a part of his profit to a tenant, which effectively leads to a lower effective rent for the tenant. Two conditions are essential for profit sharing to function:

- Profit; an essential factor for profit sharing to work is the existence of profit. Without profit to be shared, the effect on the effective rent level is zero.
- Tenant; Furthermore a pre-contracted tenant is essential.

A pre-contracted tenant is a precondition for providing any form of incentive. Without a tenant the developer isn’t able to provide incentives in the first place. Both statements are reflected by literature, interviews and questionnaire.

In addition the sharing of profit is only useful when the developer is able to obtain profits. Which means that margin must be created between developer costs and the selling price.

As shown, when simply offering a lower effective rent level, the linked contract rent level will decrease as well. In effect this would lead to a lower selling price and ergo less margin to be shared. Instead the incentive of profit sharing is used to keep the contract rent level high, while lowering effective rent levels. Result is that the selling price will remain high and ergo the to-be-shared margin.
This form of profit sharing is known as The high-low method (Dutch: Hoog-laag constructie). It effectually enables the developer to maximize the use of profit sharing. In addition by blowing up contract rents with the use of incentives, an extremely high selling price can be obtained. The increase in profit/margin is then again shared with the tenant, correcting for the blown up contract rent and more. In order for the high-low method to function, two aspects are of importance:

- Investors should be unaware or indifferent to incentives being given
- A large difference in lease term and investor horizon enlarges the effect

The method assumes that through blowing up the contract rent level, the asset value/selling price will react as well. If however the investor corrects for given incentive value, the selling price won’t react ergo there is no use in blowing up the contract rent. In addition the method only works when there is a large difference in lease term and investor horizon: the additional paid for rent years are pure profit for the developer to share. The latter aspect also shows a profit creator for the sharing of profit in general. Statements made here are reflected by interviews and sensitivity analysis. Only the use of incentives for blowing up contract rents is reflected by literature.

Distorted market analysis

The market’s use of incentives can distort market analysis. Two aspects can be influenced by incentives being face rent and all-in construction costs: both are ought to increase when an incentive is given. Literature, interviewees and questionnaire agree that incentives disallow for the face rent to be used, since face rents are build up by an undefined amount of incentive value. However, both sources also agree that in the past often the face rent has been applied, and perhaps still remains to be used.

There is no clear evidence for the all-in construction costs being influenced by incentives. Although rationally proven, no literature or interview could either concur or decline. Interviewees did agree that incentives are part of the all-in construction costs.

The distorted market analyses can lead to both asset value and land value being distorted as well. If the investor calculates on the basis of face rents the asset value would be way higher than actual. The high-low method was set up using this latter statement as requirement. For the residual land value both aspects are of importance. Due to data selection criteria, the all-in construction costs factor is thought to weigh heavier on the residual land value determination than on the face rent level. The market’s use of incentives would thereby decrease land values. Although the effect on asset value is acknowledged by both literature and interviews, the effect on land value remains unproven.

The distortional effect of incentives (could) have an effect on the effective rent level. A lower land value represents lower development costs. Hence the possibility for a lower effective rent level. A higher selling price means additional profit. Thereby also a lower effective rent level might be the result. However, the lower land value is noted but remains unproven. The higher selling price does allow for additional profit to be shared.

Answer to the second research question

- How does this enable developers to offer lower effective rent levels for yet-to-be-developed office buildings, than the effective rent levels offered by investors for comparable existing office buildings?

The previous paragraph showed that the effective rent could be influenced by incentives. By sharing developer profit the developer is able to provide lower effective rent levels. The high-low method even strengthens the

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48 Both financial and non-financial
sharing of profit. Market analysis distortion enables further incentive influence on the effective rent level. So how does this lower effective rent level enable the phenomenon to occur?

Part of the answer to this question was already explicated on in the problem analysis of this thesis: somehow the effective rent levels of the existing assets are lagging behind. If then developers are somehow able to provide lower effective rent levels or higher selling prices, this would explain the phenomenon to occur. The answer on the previous research question has shown that incentives have provided in doing so.

However, a number of preconditions was set. These preconditions should somehow have been able to occur through certain market situations or market mechanisms. Profit sharing inherently requires profit to be shared. In order to be able to obtain any additional profit the residual land value should not be functioning as it's supposed to. The additional margin would else have led to an increase in the residual land value. All sources agree to this. The use of the normative residual land value shows to be the main reason. A number of aspects are identified:

- Land prices are prone to lag behind. The normative residual land value is determined only once a year. In addition time exists between land sale and asset sale, allowing for further margin to be created. (expert interview + captains of industry interviews)
- Land value is based on current data instead of future outlooks. A foreseen increase in value is not captured by the normative residual land value. (expert interview + captains of industry interviews)
- Outcomes of the land value are based on average data. Any performance better than these averages and the land value allows for exponential margin to be created: the leveraging effect. Sustainability, turn-key delivery, ‘The new way of working’ and 4-7% differences due to differences in finance costs and profits show stepping of the average is not that hard. (expert interview + captains of industry interviews + sensitivity analysis).
- Dataset selection is essential for determining the right land value. However assets are heterogeneous products allowing for margin to be surely created. Furthermore the selection for the determination of the contract rent level is thought to be based on both developments and existing assets. In effect the land value is thought to be erroneous. (unproven)
- Land price compression due to competition between municipalities disables the land value to represent its residual value (literature + interviews)

All above notions could have enabled the difference in land value compared to residual value. A small dataset research on residual land values showed that for 13 assets on average the land value was off by 21% to the actual value it should have obtained. Also the residual land value study showed that especially assets sold in the period between 2005-2007 have realized high profits. This looks to reflect earlier conclusions on the yield compression period. It is calculated that the initial contract rent correction is as high as 127 euro’s/m2 GFA (not discounted). It clearly shows the possibility for profit to be created and shared to the tenant.

In order for the land value to lag behind, some changes must be present for the land value to lag behind to. The following temporary market aspect is thought to have had the biggest influence: yield compression.

Literature, interviews, questionnaire, dataset analysis and sensitivity analysis showed yield compression to be the main aspect for margin to be created. The Dutch market was characterized of yield compression between 2002-2008 (Zuidema & Elp, 2010). Fed by a wall of money investors and financiers were desperately looking for investments. German investors were even forced by fiscal law to invest. Competition and overconfidence even further pushed the limits: quality of assets, contracts and tenants was of less importance.

The result was an absurd decrease in yields and lease terms (Literature + Interviews). The temporary decrease in yields enabled higher selling prices to be obtained than the municipality anticipated. In effect additional profit was
The profitable influence of lease incentives for new office developments

made by the developer. Overconfidence in the asset value increase contributed to the disregard of incentives. In addition the growing difference between lease term and investor horizon -a prime requisite for the high low method to work- enabled even further profits to be obtained and shared. The sharing of profit was a result of the decreasing tenant demand.

A sensitivity analysis on the basis of case study data has shown that all factors combined, the developer could have indeed signed a contract with a tenant on the basis of an effective rent level equal to effective rent level of their previous asset. A GIY difference with the municipal assumptions of 0.75% would have to be accomplished. The land value research shows that for all the assets being developed around the years 2004-2008 such a margin might indeed have been created. It shows that with the use of the high-low method, the normative residual land value method and yield compression the developer might be able to offer effective rent levels equal to those of existing assets.

Thereby it might be concluded that the phenomenon has been the result of a bubble. However, additional research would have to be done. The 0.75% yield difference might also be caused due to an increase in the asset’s location. This does not necessarily have to do with the creation of a bubble. However, it would need an investor that is either willing to pay for the prospected future value increase, or that steps in at a later period in time. In the If not the developer would have taken a great risk when contracting the tenant with the idea of profit sharing. Only if the municipal land value is low, or the tenant’s contract rent high compared to surroundings, might the phenomenon still be able to occur.

Still though the existence of the phenomenon in practice remains unproven: no case data could be described. Also whether or not the phenomenon could still exist today remains unclear. Literature and interviews agree that due to the stricter lending conditions it has become less likely for the phenomenon to exist. Also due to the decrease in yields the margin isn’t as large as it used to. Furthermore interviews state that incentives are now widely factored in, making the profit sharing aspect less useful. Tenants are also more and more aware that their choice to move to a new development might have a severe impact on their company’s image. Furthermore tenants have started to become increasingly aware of the possible disadvantages of incentives.

Still some reasons might enable the phenomenon to keep on existing. Most actors do agree that owners of existing assets might continue to be unable to lower their effective rent level, although this may be quickly countered by assets being sold for bottom prices. When finding a very reliable and large tenant, to be positioned at the South Axis, while the municipality lowers its land value, the phenomenon might still continue to exist.
8. Reflections
Up so far no other research has been done to this mind blowing phenomenon. Television programs made the phenomenon known to the public mind, but did not touch the underlying market aspects that played part. Based on literature, expert knowledge, land value data and sensitivity analysis this research has described the basic theory for understanding how the phenomenon works, and when to expect it. Thereby the results of this research look to be quite valuable. Part of the aim of this research has thereby been completed. In addition the aim was to prove the existence of the phenomenon. However, no decisive evidence has been found. On the other hand some conclusions can be drawn on the existence of the phenomenon in the current market situation and the role of the municipality in it.

Use of results
The results of this study might be used by a broad number of actors. First of all it can help the municipality to reflect on the use of the normative residual land value method. Does the municipality want to catch all created margin, or is the risk and fluctuation in land prices it involves too high for the municipality to write policy? Investors might use this paper to see what effects not correcting for incentives might have on the asset’s value and ergo the willingness for tenants to move in. Also the identification of the impact the difference in lease term and investor horizon has on the effective rent level. Tenants might use this paper to reinforce their negotiation position. Understanding the phenomenon could well help them obtain higher quality assets for lower rents. Finally the developer might use the results of this research. Although most developers are well aware of the functioning of the method, the supply of incentives might continue to be profitable on the long run.

As stated earlier this research has purposely not given any attention to moral and societal values. It is out of believe that actors will always do business within the limits that the market mechanism defines. If the market is not functioning as the society pleases, then change the market mechanism. Furthermore it remains unbelievably unclear to what extend this phenomenon can be considered moral hazard. A wide number of both advantages and disadvantages on the use of this phenomenon can be mentioned. This is also why no recommendations to any party is given: should you use it or try to deny its existence?

Applicability
Concluded might be that results from this research in general are only applicable to the office segment of the Dutch real estate market. For transposing the results to i.e. another real estate segment, or other country, three main aspects should be looked into: changes on how the effective rent level is determined (land pricing methods?); changes on how incentives are used in the marketplace; temporary changes in market conditions allowing for temporarily lower development costs.

Execution
Reflecting on how this research has been executed compared to its design a number of aspects can be stated. The design sketched a linear process of a preliminary interview being followed up by a theoretical study being followed up by two empirical ones. However halfway along the process a parallel process showed to be necessary, enabling the gaps in literature to be filled up by interview data and vice-versa. A continuing exchange between theoretical and empirical data was the result. This certainly made the whole picture more difficult to comprehend, but it was the only way possible (see the figure below).
In return this led to some difficulties. First of all the clear border between theory obtained from literature and theory obtained from interviews started to blur. Furthermore the research was executed at the municipality of Amsterdam. New data on residual land value methods was heard daily, which made it even harder to separate heard data from obtained data. This resulted in major difficulties in setting out a legitimate document structure.

Another difficulty that was the result of the parallel process was the fact that interview questions evolved. Thereby initial interviewees did not obtain the same questions as later interviewees did. Although the interview method assumes for interviewees to speak freely on their knowledge of the subject, some steering questions were thereby not discussed. Thereby certain validity methods for interviews could not be applied. Validity had to be checked in another way, certainly in relation to the social impact of this research, which was time consuming and difficult to obtain.

Reflecting on the research subject, some difficulties were noticed as well. The subject is a very precarious one. Due to a growing interest of the public opinion during the research it was particularly hard to obtain the necessary case study data. In the early going it was thought case studies seemed a promising research tool. From the press a few prominent cases were known: where tenants were induced to move from existing offices by unusually competitive pricing on offer from buildings under development. The new rule of the AFM on incentives was thought to help in convincing tenants in cooperating, though a television program made an abrupt end to that goal. Almost no tenant was willing anymore to cooperate, in side of being brought into a social spotlight. Incentives being a primary focus, real data was hard to obtain: incentives were titled sensitive.

The subject was quite broad and included knowledge on subjects which were not closely related to the teachings of the university, or to the actor’s roles. Thereby it was quite difficult to comprehend quickly. Too many aspects could play part. Many hours have thereby been spend on reading and processing literature sources, which sometimes proved not to be of importance after all. Much earlier the choice should have been made on focusing primarily on the role of the developer’s side of things. Even then so many aspects played part. This also led to some confusion in interviews. The subject was too broad to be discussed within one hour, without any proper research and mindset prior to the interview. After listening back many interviews could be heard that interviewees too were struggling in understanding exactly what could all possibly be going on. In the end though as more and more interview data was processed more straightforward interviews were taken: interview questions could be sharpened.

The excessive use of all kinds of aspects names was a particular difficult aspect to tackle. There are a number of aspects having almost the same names but complete different meanings. In effect though they’re also used interchangeably. Especially in interviews it was sometimes difficult to determine what exact aspect the interviewee
referred too. Sometimes this led to the situation in which was thought someone was constantly speaking of contract rent when using the words market rent, while at the end of the interview he used market rent for market rent.

**Research design**

Although the final research design has undergone some changes during the process, it does seem to be the best way in order to understand the phenomenon at hand. The subject was a very broad one, difficult to comprehend, with very limited access to data and without a proper written theory base, or prove of existence. The only way was to interview market actors in order to be able to get an overview of all involved aspects and their implications. Rechecking this with literature substantiated the theory. Quantitative and qualitative validity methods could not be performed: interview questions developed along the way. A questionnaire was the only way in which the stated theory could be checked on validity, and even then the timeframe of this research did not allow for a larger group of participants to be formed than the group of interviewees already was. In addition in most interviews the phenomenon proved to be quite complex, even for the involved actors. Although pre-setting up questions helped letting the interviewees identify certain aspects, doing so also decreases validity. Furthermore only a small group of people has been interviewed, of which only three developers. Result is that validity of this research might still be lacking.

In addition the subject being so broad surely has had effect on the selection of involved factors and aspects. Not every tiny detail could be properly examined. Therefore it might be that some essential aspects might still not be identified as such. Furthermore a number of identified aspects could -apart from rational ‘proof’- not be confirmed nor declined.

Proof of the phenomenon’s existence could only be given in the form of case studies with the use of the detailed financial insight into the developer’s business case. Apart from this being unlikely to happen, the selection for the right cases could not even have been made. It has been through the sensitivity analysis and small dataset analysis on residual land values that a more narrow selection can now be applied.

In relation to researcher bias a number of aspects need to be mentioned: continuously is focused on keeping societal values of the agenda. In interviews too was continuously described that the functioning of the method was the only focus of this research. Though it was quite hard for interviewees to keep these two aspects separated: the eye of the public was focused on this phenomenon! Still with the most intense care has been tried to refrain from influencing results and to describe them in the most factual and neutral way possible. Though it needs to be stated that this researcher was continuously hoping to find proof of evidence. Still I’m under the impression that researcher bias has played a non-significant part in this research. This is for others to decide.

altogether it reflection shows that results of the research give a good basis for the phenomenon’s existence. Additional qualitative and quantitative research is surely needed to improve validity, to encompass the magnitude of the phenomenon and to make sure all involved aspects are determined.
9. **Recommendations**

The research design reflection already showed some of the possibilities for future research. Additional qualitative and quantitative research can be used to improve validity, to encompass the magnitude of the phenomenon and to make sure all involved aspects are determined. A more detailed description is given below. Hereafter recommendations for the actors in practice are given.

**Future research**

The results from this research can be used as underlying basis for more thorough validity check on the phenomenon’s occurrence. Performing the same research on the basis of the lade out theory could surely lead to more fundamental conclusions. Especially the found selection criteria allow for a better focus on data selection making a quantitative study possible. Focus should thereby be set on assets that are especially out of the ordinary or where a sudden increase in locational outlook or municipal focus led to the creation of a numerous amount of developments. Especially single tenant assets with a pre-contracted large and stable tenant are expected to have a higher chance of the phenomenon’s occurrence. Higher than average contract rents can be a clear sign of the phenomenon’s occurrence as well. E.g. van Gool/Elburg (2012) have shown the average of the South Axis to be €287/m²/yr. while excesses lie at €375/m²/yr. It might be an omen to the phenomenon’s existence. However, still incentive data is off the essence. Executing the research at a real estate broker or perhaps StiVAD (an investor collective sharing all their transaction data internally) might allow for this incentive information to be obtained. Goal would thereby have to be getting quantitative data and not qualitative: focusing not on the individual cases might allow for more participants to be willing to step in. However, obtaining municipal data on expected selling price is particularly difficult. Although OGA has the most precious real estate information possible, the lack of a good information system does not allow it to be used to the extend it could. This is surely a considerable loss to the effectiveness of the organization. Therefore obtaining expected and realized land values and selling prices is a time-consuming effort.

Besides proving the phenomenon’s existence, other non-proven conclusions of this research are the influence of incentives on developer costs analysis in general and the influence it has on the residual land value. It remains unclear to what extend incentives distort the additional and construction costs analysis. A quantitative analysis should be performed on the basis of a computerized model (Monte Carlo simulations), to find out what the influence of incentives on this aspect is and to what extend this also influences the residual land value determination. Comparing the development of development costs compared to construction costs could also show some interesting results. If development costs have risen harder than construction costs, this could be partly explained by higher incentive value. Furthermore a comparison on the same aspect could be done on differences between development of housing development costs versus office development costs. Incentives are not known to be given in the housing segment; a different development could show possible incentive influence as well. Also the influence of higher development costs due to the new way of working and increase in sustainability demand could show the residual land value to lag behind yet again.

Additional research on incentives might also prove to be of importance. Still is unknown if differences exists between the provision of incentives between developers and investors in terms of value. On the basis of the noticed difference between contract rents between developments and existing assets, one could state incentives could partly have an influence. However, this is mere speculation. Also in terms of asset type, asset location and economic tendency it remains unclear what differences exist. Especially the expected incentive provision in terms of economic tendency has not been researched. Only theoretical assumptions have described the incentives only to be given during low economic tendency. Wouldn’t it be profitable for the developer to always supply incentives? In combination with this phenomenon it could help in determining the time period in which the phenomenon is most
likely to occur. This research has tried to provide in this as well, however a lack of time and knowledge retained this researcher from diving in. The influence of the yield compression has been of major importance, and as far it is unknown when these yield compressions will occur and thus when this phenomenon will occur.

**Practice**

This research’ methodology was not normative of nature, meaning that its goal was not to provide solutions for discovered problems. However, during the process some solutions were put forward and thought off that -although not properly researched- will be discussed now. Furthermore this research’ aim was to keep social discussions and the functioning of the market separated. However, doing the research has provided with a more broad perspective of the matter on which some personal words will be given here as well.

**Municipality**

One major conclusion of this research is that in theory on the basis of the residual land value method no margin can be possibly created between selling price and development costs. Would the municipality indeed applied the *normal* residual method, much more income would have been obtained from the giving out of land. In addition profit sharing would not be as effective. In contrast the municipality applied the *normative* residual land value method and has realized lower land values like the dataset analysis has shown. Might then be concluded that the municipality has failed in realizing proper land values? Or is the *normative* residual land value perhaps not the best method to apply?

Relating to the first question, the performed dataset analysis has shown that realized land prices are in accordance to the internal advices that have been given. Thereby the realized land values are conform the municipality’s *normative* policy. So the answer to the first question is negative: the municipality has handled according to its policy and has thereby not failed.

So relating to the second question: is the use of the *normative* residual land value method a wrong choice for determining land prices? Or in other words: is the municipal policy then incorrect?

From a principle point of view surely the *normative* residual land value is not the correct way to go. The residual land value is set up from the idea that land belongs to the society as a whole. Any margin that is created by the use of this land should thereby fall back to society. The *normative* residual land value surely acquires some part of this margin, but not all. It is based on averages and not on individual assets. Thereby it does not reflect the residual land value’s rational.

So then why use this *normative* residual method? The situation will be explained on the basis of the municipality of Amsterdam’s land policy. Amsterdam uses the *normative* residual land value method combined with leasehold. The latter aspect is of importance since it shows that the property of land remains in the possession of the municipality providing yearly income for the municipality’s budgets.

The current leasehold policy prescribes the leasehold to be determined on the basis of paying back the land value over a period of 50 years. Thereby the yearly payment is fixed and can only increase according to inflation.

On the prospect of this future leasehold incomes policy is written. The municipality’s aim for long term policy can only be made on the basis of a stable future cash flow. If the cash flow is too volatile, so claims the municipality, no

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49 Surely two faulty outcomes have been found, in which the realized land value is significantly off the advised land value, but their number is very limited. Furthermore additional reasons have been found which can explain these anomalies.

50 For any further theory on the land belonging to society go and read "The Wonderful Wealth Machine (Phil Grant, 1952)” It shows that it is against any human right for anyone to claim ownership of a piece of land: it and its margins should belong to all.

51 Surely the leasehold can be bought off for a period of 10,20,50 or even 100 years, but is represents a yearly cash income over this period.
sound long-term policy can be made. When the *normal* residual land value method is put to use it would be responsive to economic fluctuations. It would thereby create quite volatile cash flows.

For example. A leasehold is determined at the top of the market. It is thereby fixed for the coming 50 years. By definition the market being at its top, it means that it is bound to go down again. The landlord would see his rent income decrease, while the leasehold would remain fixed. It might lead to the situation in which the landlord is no longer able to pay for the high leasehold. For the municipality this would lead to a gap in their presumed leasehold income, and thereby cause a deficit to the execution of the policy.

Instead the municipality applies the *normative* residual land value method, as it enables a more stable incoming cash flow. As stated: it is based on averages. This means that the land value is less responsive to the fluctuating economic tendencies. The *normative* residual land value effectively buffers out excesses in the marketplace. The risk of a landlord not being able to pay his annual leasehold is thereby reduced compared to the *normal* residual land value method.

In essence this is also what the municipality now states. If the municipality would indeed follow the economic tendency more closely, this would also involve greater risk. The municipality does not want to take this risk, but prefers having a stable cash flow. Effect is that the developer is thereby able to obtain substantial higher profits (or losses for that matter) during the economic periods.

From this point of view the policy of using the *normative* residual land value makes sense. The municipality doesn’t want to take the risk, since it affects policy making. However, question remains as to how far the municipality should go in avoiding risks and in return earn less money. Fixing the rent income on the basis of a 50 year period is extremely long. No policy is ever written on the basis of that same period, let alone that the policy would make any sense trying to contain future situations that are literally a working lifetime away from now. Furthermore it is highly unlikely a relation still exists between the leasehold and current asset value whatsoever. It is one of the main reasons why many house owners are complaining about the leasehold system: homeowners are sometimes confronted with an enormous increase in yearly leasehold payments. This is why it is advised to shorten the (fixed) leasehold period.

**Government**

To the government I would advise on altering how land margins are collected and distributed. Competition between municipalities does not work to the country’s advantage. Municipalities should cooperate in order to obtain a stronger economic climate to compete on international levels. Now municipalities’ only goal is to attract large companies and try to earn on the sale of land. Huge differences are thought to exists between budgets of municipalities, due to land sale/lease income. Instead land earnings should flow directly to the state or to larger institutions like for example a Randstand municipality. This would make an end to the competition and random issuing of land.

**Social discussion**

It is safe to say that the phenomenon has led to an increase in vacancy. Tenants were pulled from their existing assets in sight of better and cheaper office space. Many media state this to be socially unacceptable. However, from my believe this is only partly true.

As is made clear in this research, the phenomenon’s primary reason for existence has to do with existing assets. If existing assets would simply lower their rent levels, the phenomenon would not have been occurring. Surely many reasons exists why the investor has been unable to lower its rent level, but the effect is that tenants thereby are
forced to rent assets at rent levels which do not correspond to the delivered quality. From that point of view it is only fair that developers offer tenant better and cheaper office space.

In the years many assets have been developed that shouldn’t have seen the light of day. There was such a high demand for office space that everything that was built, would be filled. Now this period is over, and as a result the Dutch society has gained an ugly inheritance, in which no tenant wants to house. Only by investing in the assets that have some sort of future, due to accessibility and/or the clustering of a group of offices, this inheritance can be used again. But first investors therefore have to invest additionally!

In addition the phenomenon’s occurrence is a result of market functioning. Developers thereby being able to build a new development for a tenant in a different place, is far from illegal. From the point of view of the tenant it is even highly rewarding: an asset that is fit for its use, and for a rent level that is way more feasible. Actors performed within the boundaries of the then-existing marketplace. These actors didn’t do anything illegal. Therefore I state that we should not blame the players, but blame the game! If we as a society believe that the market system is faulty, we should change the system and not blame the actors for acting conformingly.

**Recommendations for fellow graduates**

When having the opportunity for doing an exploratory research on such a societal laden subject be sure to do it. Although it will be a hell of a job in time and effort, it will allow for such an increase in knowledge and real estate related connections that it is all worth it.

Difficulty with exploratory research is in the essence the magnitude of the seemingly related subjects. Try to define as quickly as possible known theoretical models (like the hog cycle, the 4Q diagram, DAS-frame etc.) in order to connect all the aspects to their right places. This will allow not only for quicker and easier comprehending the total of influences, but will also allow you to focus on one side of the aspect. This will greatly reduce time, and will also allow for your research results to have higher meaning. Sketching and drawing on a whiteboard, and saving these drawings by use of your mobile phone will greatly help in understanding the relation of it all. Be sure to reserve time to allow you again and again to reflect and comprehend found conclusions. This research has failed in this respect. In the end a restructure of the whole report showed the need for additional text to be written and sources to be found that had not been described earlier.

In addition, this research’ literature study was to extensive for what was needed, and not intensive enough to be able to quickly use and implement found results in a report. Be sure to digest the found theory in your report, from the moment you start reading an article. Doing so will make sure that you know which sources you have used, that you know you have finished digesting the source and that you know that all the knowledge you obtain is due to reading it somewhere. Especially when doing interviews and literature simultaneously, it might happen that you write from the mind thinking that you read the statement somewhere, while instead the statement came from an interview. If you can try even to print the reports out and cut out the used pieces of text. It will work way better than all Atlas.Ti like software existing. Final remark on the literature study when doing an exploratory research is that it is of the essence to know that you don’t need to explain the underlying theory to all. The report should focus on trying to explain the theory to your tutors and not to your mom, dad, and girlfriend. So continue to be explicitly focused on explaining only what is really necessary to be explained. This research in the end could throw away up to 30 pages of text because of not doing so. Think of all the time it could have saved me.
Literature


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Huisman, R., 2007. De rol en toegevoegde waarde van de onafhankelijk adviseur bij de financiering van projectontwikkeling, Amsterdam: Amsterdam School of Real Estate.

Huizinga, V., 2010. De slechste referentie is nog een referentie; een verkennend onderzoek naar mogelijke standaardisatie voor de beoordeling van huurreferenties, Amsterdam: Amsterdam School of Real Estate.


Jones Lang LaSalle, 2012. OSCAR, s.l.: Jones Lang LaSalle.


Kat, R., 2010. De kredietwaardigheid van vastgoed, Amsterdam: Amsterdam School of Real Estate.

Kohsiek, G., 2006. Het risico van op risico, Amsterdam: Amsterdam School of Real Estate.


KPMG en de lege kantoorkolos. 2012. [Film] Directed by De Slag om Nederland. The Netherlands: VPRO.


Mierlo, Y. v., 2010. Ontwikkelaar Nieuwe Stijl: Toekomstige succesvolle strategieën en businessmodellen voor ontwikkelaars, Amsterdam: Amsterdam School of Real Estate.

Muijsson, M. A., 2010. Incentives op de kantorenmarkt, kan het niet anders?, Amsterdam: Amsterdam School of Real Estate.


NEPROM, 2010. Handboek Projectontwikkeling. 2nd ed. Doetinchem: Reed business b.v..


B. T. Harding – October 2012
The profitable influence of lease incentives for new office developments


Available at: http://www.propertynl.com
[Accessed 3 Januari 2012].


Wild, G. d., 2010. Financieringswaarde van te ontwikkelen onroerend goed: Onderzoek naar de meest geschikte waarderingsmethode, Amsterdam: Amsterdam School of Real Estate.


Appendices

Appendix I: List of interviewees

Investors

- CBRE GI: Jaap Snellen
- Deka: Geoff de Booij
- IVG: Gijs Albada Jelgersma
- Maarsen Groep: Gerard Kohsiek
- NordCapital: Florian Wagner

Developers

- MAB: Gilliam Molsbergen
- Maarsen Groep: Gerard Kohsiek
- New industry: Vincent Taapken
- JOIN/OVG: Jan-Hein Tiedema

Municipality

- OGA: Sjoerd Ooms
- Zuid-As: Robert Dijckmeester

Financiers

- FGH Bank: Maarten Donkers
- ING Real Estate Finance: Sander Knijnenburg

Experts

- Arcadis: Michiel Harmstra
- Dean Faculty of Architecture: Karin Laglas
- StiVAD: Pieter Jager
# Appendix II: Questionnaire

## The phenomenon of developers being able to contract tenants at effective rent levels equal to the effective rent levels of existing assets

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<thead>
<tr>
<th>QUESTIONNAIRE</th>
<th>True</th>
<th>False</th>
<th>Comment</th>
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<tbody>
<tr>
<td><strong>THEORETICAL</strong></td>
<td></td>
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<tr>
<td>The phenomenon of developments being able to compete at effective rent levels of existing assets has partly to do with profit sharing</td>
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<tr>
<td>The sharing of profit enables the developer to offer lower effective rent levels</td>
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<tr>
<td>Profit can only be shared when profit is available</td>
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<tr>
<td><strong>Theoretical</strong></td>
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<tr>
<td>Profit explanations</td>
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<tr>
<td>1. The developer accepts less profit than its usual fee of 8-15%</td>
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<tr>
<td>2. A difference exists between development costs and selling price</td>
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<tr>
<td><strong>Theoretical</strong></td>
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<tr>
<td>Elaborating on I.</td>
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<tr>
<td>A. Either development costs have decreased</td>
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<tr>
<td>B. Or selling prices have increased</td>
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<tr>
<td><strong>Theoretical</strong></td>
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<tr>
<td>Elaborating on A.</td>
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<tr>
<td>I. Land prices have decreased, or did not increase enough</td>
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<tr>
<td>II. Construction costs have decreased</td>
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<tr>
<td>III. Additional costs have decreased</td>
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<tr>
<td><strong>Theoretical</strong></td>
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<tr>
<td>Elaborating on B.</td>
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<tr>
<td>IV. Yields have decreased</td>
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<tr>
<td>V. Rent levels have increased</td>
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</tbody>
</table>

## The next aspects should be answered in the light of the period 2002-2008 (pre-crisis period)

<table>
<thead>
<tr>
<th>Question</th>
<th>True</th>
<th>False</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elaborating on I.</td>
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<tr>
<td>Land prices reached delayed to new market information (lagging)</td>
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<tr>
<td>Municipal competition decreased the land price</td>
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<tr>
<td>Land prices based on averages performing better than average resulted in exponential margins</td>
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<tr>
<td>Land prices based on current values, therefore foreseen value increase was not included in the land price</td>
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<tr>
<td>For land prices both existing and newly built assets are compared</td>
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<tr>
<td>Incentives possibly had a negative influence on the land value</td>
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<tr>
<td>Elaborating on II.</td>
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<tr>
<td>Development costs had not been decreasing compared to inflation</td>
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<tr>
<td>Development costs had not been decreasing much compared to inflation</td>
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<tr>
<td>Elaborating on III.</td>
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<tr>
<td>Financing costs were low (Wall of Money)</td>
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<tr>
<td>Advice fees had been decreasing</td>
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<tr>
<td>The developer accepted less profit than its usual fee of 8-15%</td>
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<tr>
<td>Incentives costs are factored in under additional costs</td>
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<tr>
<td>Elaborating on IV.</td>
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<tr>
<td>A strong trust in ever increasing asset value enabled the approval of low yields</td>
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<tr>
<td>Financing costs were low for investors, which led to a decreasing GPR (Wall of Money)</td>
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<tr>
<td>Foreign investors: all of a sudden had to invest high amounts of capital (Wall of Money)</td>
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<tr>
<td>Strong competition between investors led to an increase in selling prices</td>
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<tr>
<td>Strong competition enabled asset quality to be often neglected</td>
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<tr>
<td>A strong common belief of ever increasing asset values enabled the approval of low yields</td>
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<tr>
<td>A strong common belief of ever increasing asset values enabled an investor indifference towards incentives</td>
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<tr>
<td>Elaborating on V.</td>
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<td></td>
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<tr>
<td>Tenants were not all of a sudden willing to pay more rent; rather the other way around</td>
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<td></td>
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</tr>
<tr>
<td>Contract rent levels have increased due to incentives</td>
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</tbody>
</table>

## Incentives

- Incentives were used to raise up contract rent levels to realize higher profits, which would then be shared back with the tenant
- Tenants did not correct for incentives, due to overoptimism and/or indifference
- Possibly incentives have had an influence on land value

## Current situation

- The Wall of Money has disappeared
- Incentives have started to correct the incentives and analyse asset quality more thoroughly
- Land prices are rather too high than too low
- Development costs have not decreased significantly

## General conclusions

- Profit sharing is only done when the space market is on a low
- The phenomenon can exist when land prices do not fully follow contract rent development
- The phenomenon can exist when the asset market is characterized for a high demand

END
Appendix III: Questionnaire results

Table 7: Theorem agreement overview

<table>
<thead>
<tr>
<th>The phenomenon of developments being able to compete at effective rent levels of existing assets has partly to do with profit sharing</th>
<th>86% 86%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The sharing of profit enables the developer to offer lower effective rent levels</td>
<td>86% 86%</td>
</tr>
<tr>
<td>Profit can only be shared when profit is available</td>
<td>100% 100%</td>
</tr>
<tr>
<td>The developer accepts less profit than its usual fee of 8-10%</td>
<td>57% 43%</td>
</tr>
<tr>
<td>A difference exists between development costs and selling price</td>
<td>100% 100%</td>
</tr>
</tbody>
</table>

A (on 2) Either development costs have decreased | 57% 57% |
B (on 2) Or selling prices have increased | 71% 71% |
C (on 2) Or both | 57% 57% |
I (on A) Land prices have decreased, or did not increase enough | 57% 57% |
II (on A) Construction costs have decreased | 57% 57% |
III (on A) Additional costs have decreased | 57% 57% |
IV (on B) Yields have decreased | 63% 63% |
V (on B) Rent levels have increased | 50% 50% |

ANSWERED IN LIGHT OF PERIOD 2002-2008

(on I) Land prices reacted delayed to new market information (lagging) | 88% 88% |
(on I) Municipal competition decreased the land price | 38% 38% |
(on I) Land prices were based on averages; performing better than average resulted in exponential margins | 50% 50% |
(on I) Land prices were based on current values; therefore foreseen value increase was not included in the land price | 43% 43% |
(on I) For land prices both existing and newly built assets are compared | 50% 50% |
(on I) Incentives possibly had a negative influence on the land value | 40% 40% |
(on II) Development costs had not been decreasing compared to inflation | 83% 83% |
(on II) Development costs had not been decreasing much compared to inflation | 100% 100% |
(on III) Financing costs were low (Wall of Money) | 88% 88% |
(on III) Advisor fees had not been decreasing | 71% 71% |
(on III) The developer accepted less profit than its usual fee of 8-10% | 71% 29% |
(on III) Incentives costs are factored in under additional costs | 83% 83% |
(on IV) Financing costs were low for investors, which led to a decreasing GIY (Wall of Money) | 88% 88% |
(on IV) Foreign investors all of a sudden had to invest high amounts of capital (Wall of Money) | 100% 100% |
(on IV) Strong competition between investors led to an increase in selling prices | 88% 88% |
(on IV) Strong competition enabled asset quality to be often neglected | 75% 75% |
(on IV) A strong common believe of ever increasing asset values, enabled the approval of low yields | 94% 94% |
(on IV) A strong common believe of ever increasing asset values, enabled an investor indifference towards incentives | 50% 50% |
(on V) Tenants were not all of a sudden willing to pay more rent; rather the other way around | 50% 50% |
(on V) Contract rent levels have increased due to incentives | 57% 57% |
Possibly incentives have had an influence on land value | 71% 71% |

CURRENT SITUATION

The Wall of Money has disappeared | 88% 88% |
Investors have started to correct for incentives and analyze asset quality more thoroughly | 100% 100% |
Land prices are rather too high than too low | 71% 29% |
Development costs have not decreased significantly | 50% 50% |

GENERAL

Profit sharing is only done when the space market is on a low | 43% 57% |
The phenomenon can exist when land prices do not fully follow contract rent development | 79% 79% |
The phenomenon can exist when the asset market is characterized for a high demand | 64% 64% |