
Rent premiums and vertical sorting in Amsterdam's tall office towers

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Reflection on research

Master thesis rent premiums and vertical sorting in Amsterdam's tall office towers

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Proposal Date: 12 March 2017



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This is the reflection report of the master thesis 'Rent premiums and vertical sorting in Amsterdam's tall office towers' by Nick van Assendelft. To reflect on the process and outcomes within a coherent manner, each subsequent phase of the research will be discussed.

Research proposal

The graduation process started in February 2016. There was one clear goal from the start of this research, which was to study rent premiums for higher office floors. This was the main objective from the first day, and I am pleased this is also part of the outcomes elaborated upon in the thesis. This is mainly caused by my determination and stubbornness, as I had no clue on how to operationalise this study from the start. However, it did provide a clear starting point for the research. This was quite convenient, as I saw several fellow students struggling with finding a suitable research subject. This research goal has been present in all the assessment periods and provided the opportunity to work towards one goal from an early stage in the research.

The first phase evolved mostly on defining the problem field and designing the research. The initial plan was to conduct a mixed method strategy, deploying both qualitative and quantitative research approaches. However, it became clear in the early stages of the research that getting the data for the quantitative analysis would be difficult. To ensure the research quality, I chose to deploy only the quantitative research strategy, as this related most to the research goal of analysing rent premiums. This was not only the most practical approach, but could also obtain clear and unambiguous results unaccompanied by my own interpretation of them.

Reflecting back on the research proposal, it is indeed a very important step within the research, as you write down what you exactly want and need to do. Although the beginning stages are still full of uncertainty, it is necessary to think about the steps to be taken within the research. It is furthermore important to consider several options, as the preferred option may not work out. Within this research it would have been beneficial to have a more thought true research plan, which could have proven to be beneficial within the subsequent phases.

Theoretical Analysis

The theoretical analysis is an important part of writing a thesis. Not only to provide background and context but also to increase your understanding of the methodology. The focus of this research was clear from day one, however the focus within the literature study was not. The field of vertical rent gradients is developing, having a rather limited body of knowledge. Furthermore, the steps to be taken within the literature study were not formulated clearly within the research proposal, resulting in a lack of focus within this phase. Both these aspects caused a broad scope within the literature study which resulted in an extensive research. Although the work was extensive, the general level of the study was basic and lacking the proper focus within the research field. From a learning perspective, it would be beneficial to study a bit of everything, however it is not beneficial to the process as the literature study needed to be enriched after the P2. This could have been avoided by having a clear research plan in P1 and further narrowed down the scope for the literature study.

Additionally, when literature study phase started I had difficulties reading paper after paper. This was because I just understood the basics of the deployed methodology. When I read these studies now, I understand much more of the content and statements within the research. This makes it easier to read these papers and subsequently makes them more interesting. Therefore, it is important to also study the research methodology deployed within the important literature of the research field of interest.

Clear steps and research scope within the literature study phase would have saved time within subsequent phases of the research process. Furthermore, it is very beneficial within the process to not only focus on the theoretical field, but also study the methodology extensively. This has not been done appropriately within this study, as the methodological knowledge was lacking up until the end of the data collection phase. Having had this knowledge would have

been beneficial within both the literature study and data collection phase. This is one of the steps I would have improved when provided the opportunity to redo this research.

Data collection

Analysis within the commercial real estate sector has always been hampered with the availability of data. To analyse rent premiums for office floors, I needed data of market transactions within the Amsterdam office market. This data is mostly owned by large entities within the market. Several opportunities arose when choosing the graduation company, and C&W was selected due to their position as market leader within office brokerage deals and valuation assignments.

However, the data collection phase was proven to be more difficult as expected and resulted in extending the time frame of the research. The extension also led to the exclusion of other cities besides Amsterdam within the research. This is caused by several aspects. First, it takes time to get acquainted and adjusted with all the processes and sources when starting at a new company. It took a while for me to know who I needed to approach for certain information and data sources. There were also several dynamics and internal regulations that restricted me for having access to certain sources. This is something you can't account for and should be dealt with during the process.

Second, the availability of data was a large concern. At the beginning of the data collection phase, the goal was to collect market transactions and connect them to specific floor units. This would have resulted in a dataset of roughly 150 transactions, of which several of them were already in the TU Delft property database. However, as I like to do things differently I looked for other opportunities. I could get access to rich information within rental contracts and rent rolls. However, these needed to be hand coded towards the dataset which took a long time. Therefore, the data collection phase and the subsequent time frame of the thesis was extended so I could transcribe this data towards the dataset. Looking back, the final database amounted to 627 transactions, concerning a vast amount of information regarding lease and property characteristics. It was worth extending the research, as this rich information resulted in more appropriate outcomes of the research, in comparison to when only market transactions were deployed. The larger sample size also increased the validity of the outcomes significantly.

Finally, due to the basic level of methodology and understanding of the theoretical field, several variables were not researched which could have proven to be beneficial within the analysis. Again, if I knew more about the methodology and deepened the understanding within the theoretical framework, it could have saved time which could have been spent on collecting and analysing several other significant variables.

Empirical analysis and outcomes

Interpreting the results was in my opinion the most difficult part of the research process. The lack of methodological knowledge discouraged me from starting the analysis sooner. Furthermore, I personally need to complete tasks before starting new ones. While this is quite appreciated within the work environment, it has proven difficult within the analysis phase. Overlapping the data collection phase with premature analysis of the data could have resulted in a better understanding of both the methodology and data in an early stage, which could have subsequently led to a more analysis and saved a lot of time during these phases.

This phase was quite hectic, as the time frame for increasing the knowledge about the methodology and subsequently interpreting the results was rather limited. Large steps have been made during a short time, however things started to get clear within the final stage. During the data collection phase I collected a lot of variables, which were not significant within the final analysis. I tried to analyse this extensively, and look for ways to incorporate them within the analysis, so that collecting them would not be a waste of time. Letting go of not significant results had proven to be hard during this phase, and resulted in less time for the final stages of the research.

However, the final results presented in the thesis are the answer to the main goal of the first day. The research outcomes have proven to be reliable within different models, showing the consistence of the deployed measures. The research is difficult to be replicated, as the data sources are confidential. However, the research steps have been outlined clearly within the report as well as how the data is collect. I therefore believe it is possible that this type of study is to be replicated within the future. I am furthermore quite confident in the validity of the measurement concepts. The analysed independent variables are consistent between models, showing the internal validity of these measures. However, the research needs to be extend towards other Dutch cities to validate the external validity of this research and generalize results.

Difference between P2 and P4

The main goal of the research has not changed during the progress. However, the research has been evolved since the P2 application in several ways. First, the data collection phase took longer than assumed within the research plan. This led to the exclusion of Rotterdam in the final analysis. Second, the analysis of vertical sorting was added to the research. Due to a large sample set, which included both floors number and tenant types it was possible to conduct this analysis. Second, the dataset includes rich information from both rent rolls and rental contracts instead of using only market transactions. These had to be hand coded within the specific databases.

Overall research process

“Two roads converged in a wood and I took the one less travelled by, and that made all the difference.”

-Robert Frost-

This quote was very applicable towards the process in writing this thesis. I wanted to do something different and do it in a way which was not very common at the MBE department, namely applying only quantitative statistical analysis within the research. Roads in a forest are not straight lines, but meander around obstructions in the form of trees. This is a metaphor for the path towards the end of this thesis. It was a long road, with ups and downs along the way, meandering towards the end. The research process followed the path as described within the P2, with some slight alterations concerning the exclusion of other cities within the analysis, the additional data and including vertical sorting within the analysis.

Motivational problems arose within three phases of the research. The first was during the literature study, where lack of properly understanding the methodology and a lack of proper focus led to some motivational problems in writing down the literature findings for the P2. This also occurred during the data collection phase, due to several setbacks concerning the available data and restrictions concerning this data. Furthermore, I was hesitant in further understanding the methodology within the early stages of the research, which discouraged me from starting the data analysis sooner, which could have proven to be more beneficial within the analysis phase.

Academic relevance

These empirical results of this thesis contribute to the current body of knowledge concerning vertical rent gradients and vertical spatial structure within the field of urban and real estate economics. This research builds upon previous research concerning rent premiums in the Dutch market (Koster et al., 2014) and the vertical spatial structure (Liu et al., 2016). This research has differentiated itself by deploying a rich dataset and extend the analysis towards the building floor level. It furthermore provides novel insights in the vertical sorting within the Amsterdam office market. These results add to a more comprehensive understanding of the dynamics of tall buildings.

Utilization potential

The empirical results of this research are beneficial for a large variety of stakeholders within the real estate market, like investors, researchers, brokers, appraisers, urban planners and policy

makers. The respective stakeholders have vested interest in understanding the dynamics of the office markets (Slade, 2000). These results provide insights in the gap between the building costs and revenues within tall buildings, and indicate that when the height of the building is increasing this gap gets larger. This provides opportunities for the architect in the design phase, to add additional quality to the building and connect the structure within the urban fabric. These results furthermore indicate that height as attribute become important if the building is 26 floors or higher, due to the additional amenities as panoramic view, prestige and exclusivity.

The empirical results furthermore provide new insights in the way comparables are search by brokers and appraisers, as comparables with identical characteristics can still differ significantly in value if these are located on different floors within the office building.

This research furthermore provides an immediate practical application, as these results could provide more precise estimates within the feasibility analysis of new tall building developments. These novel insights could also prove to be beneficial within the analysis of office markets and attribute as a benchmark within the valuation process. Finally, it would be beneficial to end user of commercial office space, as it would increase transparency concerning office rents. These firms could be provided with more information on rental prices, on which they could analyse the cost-benefits analyses for moving and opportunity costs.