

Vertical Sorting, Height Premiums and Productivity in Multi-Tenant Office Buildings

A study of Amsterdam, Rotterdam and The Hague.

Separate reflection document

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This research indicates the end of the Management in the Built Environment master track within the MSc Architecture, Urbanism and Building Sciences programme. The research illustrates the final work of the information which is gathered throughout the master track. The graduation topic of price premiums and vertical sorting originates from the Real Estate Management graduation lab with Dr. I. Nase as my main supervisor. Ing. P. de Jong served as a second mentor offering additional insights from the Design and Construction Management graduation lab. The topic of this graduation study originated from a combination of courses within the general master track and a personal interest in financial functions of real estate properties. Even though the financial aspects with a quantitative focus was a relatively small part of the academic structure, the topic still holds a strong relationship with the master track as it sheds light on the objects and their economic models that will probably be a significant part of the lives of MBE graduates. The choice of this topic with a commercial focus also started with a focus on my personal professional career after graduation as this would be the field that I could see myself working.

Despite the relatively narrow focus on tall multi-tenant office buildings within Amsterdam, Rotterdam and The Hague a strong and primarily scientific relevance can be attributed to the research. One of my personal focusses was to ensure as much direct applicability or contribution to the body of knowledge in the real life real estate market as possible. By analysing actual transactions through a quantitative approach, realistic patterns and information is gathered which provides insights into the theoretical economic model of tall office buildings within The Netherlands.

The quantitative focus is also one of the strongest points within the methodology as it enables factual and realistic results by analysing real world transactions. The design of data gathering methods also enabled a smooth process by using both private and public data sources. This combination limited the dependability of a specific source. The vital individual rental transaction data, however, was only possible through the internship with Cushman & Wakefield which offered significant additional insights and data sources which would otherwise be inaccessible. Although most data was readily accessible, limitations in terms of accuracy were also present through the research. Differences of data sources due to licensing, compared to previous research results in different conclusions as tenant sector coding deviates per data source. Separate licenses through the internship generated different SBI-codes per transaction, altering the sector in which a number of tenants operate in. As this research could be compared to the works of Van Assendelft (2017), manual analysis in terms of regression models could be made to identify whether the differences in terms of coding had a significant impact on the results of the study. The differences in terms of data gathering for these tenant characteristic variables was less than ideal as identical data sources would be preferred. However, as this was not possible within the set timeframe the new data source was used. This does not mean that the results are inaccurate, however, the comparability between two studies revolving around the same subject became slightly weaker.

The data gathering process was a manual task in which rental transactions needed to be transcribed to a single database. Locating these rental transactions, however, was the most challenging part of the data gathering process. Through the Research Department within Cushman & Wakefield, a tool was made in which the location of certain transactions could be identified which significantly sped up the gathering process.

As this results has a relatively limited social relevance by shedding more light into the interrelationship between price premiums, vertical sorting and productivity no real social relationship can be identified with the real world.

From a scientific perspective, however, relatively high transferability of the research to the real world can be made for a specific building type. As this research focuses on a single building type while ignoring residential and other functions there is limited transferability to other types. However, with a focus on the office sector, directly applicable knowledge is found which helps businesses operating within this area to understand the behaviour of tenants.

Due to the quantitative and scientific focus of the research no ethical issues and dilemmas were experienced throughout the process of the research. From the start of the study the secrecy of tenant information was a main focus as this information is not and should not be publicly accessible. Great care has been put in making it difficult to trace tenants back to their characteristics and rental value. As the internship company does not want their data to become public, the database covering all transactions is seen only by other people when strictly necessary. This approach was also reflected in the professional code of ethics which is signed mandatorily within the internship company.

All in all, the graduation process was an interesting and valuable experience which taught me both scientific but also practical skills through the experience with the internship company. The approach chosen throughout the study has been successful in generating the desired results and conclusions. By writing the methodology in such an explicit manner, the structure and steps towards the end goal became clear to me and helped me by scheduling each section in terms of time and output.

The feedback in the past months from both my first and second mentor were incredibly valuable and helpful towards the final product. By submitting the work so far at specific scheduled moments and then by going over the newly written parts improvements and directions were given which helped me continue and enhance the quality of the study. Especially in the final weeks towards the submission date, both mentors were continuously available to answer specific questions which needed to be answered before I could continue. The collaboration with both mentors was incredibly valuable and improved the final product significantly. I appreciated the form of feedback they gave me by not answering the questions that I had directly, but by providing insights so I could figure out as much as possible by myself.

The graduation thesis helped me improve my scientific, statistical, report writing and analytical skills drastically. I indicated to my mentors at the start that I wanted to learn something new, in the form of a quantitative, statistics oriented research because I knew that by learning something new I would be challenged the most. This challenge, however, has also improved me significantly.

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