

Preface of the Editors

Worldwide, sustainability is the current hot topic both in the commercial as well as in the residential real estate markets. This is not surprising given the fact that buildings are responsible for a considerable amount of total energy use and greenhouse gas emissions. As the market for sustainable property is still in a developing stage, it is not yet clear, what sustainability really is and how it can be operationalized. National and international certificates on sustainability serve as substitute and have become a very important characteristic of a property or a development when being at sale or being leased.

One of the key barriers to making sustainability an important criterion for both owners and renters of office space, however, is the lack of knowledge about the economic consequences of implementing environmental standards. Although a number of research articles have been published or are in the process of being published on this topic, the demand for more detailed information by policy makers as well as businesses is large and far from satisfied.

In addition, as more research is published, it becomes apparent that much of the earlier work needs to be reconsidered because of methodological flaws or because the data were not sufficiently representative. The three essays contained in Mr. Reichardt's dissertation advance the literature in both respects. The data used are far richer than in much of the previous work and, hence, do lay the foundation for more representative results. The three essays also stand out relative to the published research in that the methodology is state-of-the-art.

Mr. Reichardt's dissertation covers three issues related to the environmental certification of office buildings in the US. In particular, the three research papers are meant to provide pertinent information on the business case for sustainable buildings.

In the first chapter, Mr. Reichardt gives an introduction into the issue of building certification. It puts into perspective the different concepts and definitions of sustainability and gives an overview of voluntary building certifications, in particular LEED and Energy Star, the two leading US-certifications.

In the second chapter, the author analyses if sustainable buildings command a rent premium over comparable conventional buildings. Different to the previous literature, he conducts an empirical analysis not using cross-sectional data, but employing a panel-data approach, specifically a difference-in-differences as well as a fixed-effects model.

In chapter three, Mr. Reichardt addresses the question to which extend the rental premiums of certified buildings can be attributed to savings in operating expenses of tenants, perceived gains in public reputation or productivity gains. The allocation of the rental premium is so far an open question in the literature.

International corporations have to consequently execute their corporate missions and visions and have to act “sustainable“ what leads to the fact that they also have both to occupy sustainable space and invest in sustainable property. Chapter 4, therefore, investigates how companies incorporate sustainability into their leasing decisions as the demand for sustainable space is expected to differ between industries.

The essays add to the rather limited number of research articles on the economic consequences of environmental standards for office buildings. The three essays are based on a very significant amount of detailed data work, display outstanding methodological choices, and are very well researched in terms of the existing academic literature.

From a policy perspective, the work of Mr. Reichardt is highly relevant as increasing the number of sustainable commercial buildings is one of the primary ways the political goal of greenhouse gas emissions and, hence, the trend towards global warming can be achieved.

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Preface of the Author

Knowledge about the economic consequences of green investment is essential for building owners and investors. So far, the research on the economic consequences of sustainable office buildings has been limited mainly due to the lack of representative data. Datasets on the sustainable performance of office buildings are rarely available and have to be put together by hand from various sources, which is it a difficult and timely effort. The three essays in this dissertation are based on three large datasets, which lay the foundation for more representative results. Besides that, the three essays are based on more sophisticated statistical methods as previous studies.

A Ph.D. project is a long journey that involves many different types of work, which makes it a very interesting and enlightening period. The fact that I was able to write three high quality research papers is due to many friends and persons who accompanied me along my Ph.D.-project. To these persons I want to direct my preface.

First of all, I would like to thank my supervisors, Professor Dr. Nico B. Rottke and Professor Dr. Joachim Zietz for their continuous support throughout the thesis. I appreciate all their guidance and encouragement, which have made my Ph.D. experience both productive and instructive. Their theoretical and empirical advices were essential to the completion of this dissertation and have taught me innumerable lessons and insights on the workings of academic research in general. I would like to sincerely thank both supervisors for their support.

I would like to thank all fellow doctoral students at the Real Estate Management Institute for their support as well as many interesting and personally valuable hours. The good-spirited discussions in our bimonthly Mind Factories have brought many valuable and constructive suggestions which enhanced the quality of my thesis. I would also like to thank Dr. Franz Fuerst for the inspiring research cooperation and the numerous discussions, which have given me deep insights into the topic. I would further like to thank Professor Dr. John Glascock and Professor Dr. Randy Anderson for the helpful advices.

For this research, the collection of a lot of data was necessary. I would like to thank CoStar for providing me with access to their database.

I want to express my thanks to all my friends who supported me with helpful comments but even more important with their patience.

At the end, I would like to thank my parents with all my heart for their help and support. At any time they have given me the opportunity to pursue my own path of life. Thereby they had a watchful eye on my development and have provided me with the right amount of encouragement and useful advises.

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