



BIBLIOMETRIC INSIGHTS INTO RESEARCH ON COMMERCIAL REAL ESTATE TENANTS' ASSESSMENT

Sigita Bytautė

Industrial real estate consultant

Abstract

The landscape of commercial real estate is dynamic and multifaceted, influenced by various economic, social, technological, and environmental factors. Understanding the evolution of research in this field and the key areas of focus and principal contributors is crucial for advancing knowledge and informing decision-making processes. This study aims to analyze the trends and patterns in publications related to assessing commercial real estate tenants, shedding light on the key topics addressed and the individuals driving research in this domain. Commercial real estate encompasses a vast and diverse sector, ranging from office spaces and retail stores to warehouses and industrial facilities. Within this sector, the dynamics of tenant assessment plays an important role in shaping property performance, investment outcomes, and market positioning. The ability to effectively evaluate potential tenants is essential for property owners, investors, lenders, and managers, as it directly impacts revenue streams, occupancy rates, and overall asset value. To address the complexities of tenant assessment, this study employs a comprehensive bibliometric approach, drawing on a wide range of scholarly literature spanning from 2000 to the present. By systematically analyzing existing research, the study aims to identify key themes, trends, and contributors in the field of commercial real estate tenant assessment. Through this analysis, it seeks to provide valuable insights into the global landscape of research in this domain. Understanding the contributions of various stakeholders can help to foster collaboration, exchange of ideas, and collective efforts to address critical challenges and advance knowledge in the field. The findings of the study have several implications for theory, practice in the commercial real estate sector. By elucidating the key themes and trends in tenant assessment research, the study contributes to theoretical frameworks that can inform future research endeavors. Moreover, the insights provided by the study can guide practical decision-making processes, such as tenant selection, lease negotiation, and property management practices.

KEY WORDS: commercial real estate, tenant assessment; bibliometric analysis.

JEL classification: L85; M10; R30

Introduction

The space within commercial properties can be viewed as a product that is subject to market dynamics. Users of commercial space, also known as tenants, require space for offices, retail stores, warehouses, and many other purposes. Suppliers of commercial space, also known as landlords, create or acquire space to satisfy tenant demands (Glickman 2014). The complexity of successful transactions, whether in the electronic space or not, in cases such as a commercial real estate deal arises from various sources. As posited by Stavrovski (2004), there exist complexity of:

- the product (commercial property's description encompasses numerous factors like location, type, price, taxes, age, condition, size, parking, heating/cooling, amenities, floors, and materials);
- the agreement to be negotiated by the participants (a real estate lease contract includes negotiable terms like start and end dates, duration, taxes, rent-free periods, parking allocation, security deposits, late fees, maintenance, insurance, utilities, rights of first offer, non-disturbance clauses, etc);
- the customer's preferences. For instance, traditional push factors like car accessibility, extension need, and location and building image remain important. Nowadays sustainability issues like reducing energy consumption and better public transportation accessibility are highly prioritised pull factors as well (accessibility, multi-tenancy, meeting facilities etc.) (Remoy et al 2014);
- the search process, including selected searching tools, also the time-consuming nature of the search process, and

the difficulty in understanding the status changes of objects (Tsung-Yin et al 2022);

- the negotiation process in complex business transactions, particularly in commercial real estate, can be time-consuming and involve multiple stages and players. (Choi 2018).

A fundamental premise for a successful transaction should entail a thorough recognition of the various distinctions among customers. Landlords consider various factors when selecting tenants for their properties (Udoka et.al 2023). The assessment of commercial real estate tenants holds significant importance for various stakeholders within the real estate industry, including property owners, investors, lenders, and property managers. Assessing tenants helps property owners ensure a steady and reliable income stream. By evaluating the financial stability and creditworthiness of potential tenants, property owners can minimize the risk of late payments, defaults, or vacancies, thus safeguarding their investment returns.

The quality of tenants directly impacts the overall performance of commercial real estate properties. Some studies have attempted to explore the role of tenant quality on building performance, such as Liu et al. (2019), investigating the impact of tenant credit quality on the valuation of a building. Selecting tenants with a strong business track record, reputable brand, or stable customer base can enhance property value, occupancy rates, and leasing terms.

Effective tenant assessment supports efficient property management practices. The value contributions of properties can be optimized when property management professionals take responsibility for continuously

providing appropriate facility solutions to business challenges (Then 2005). Property managers can streamline day-to-day operations, minimize conflicts, and maintain a positive tenant-landlord relationship by selecting tenants who align with the property's use and maintenance standards.

It could also be said that the tenant's assessment can be influenced by the phase of growth or recession of the country's economy. Throughout every stage of the economic or business cycle, the condition of the economy is dictated by macroeconomic variables such as aggregate demand, employment rates, corporate profits, import volumes, interest rates, and GDP. Understanding both phases is equally important, except that one phase presents opportunities, and the other phase presents threats (Pyrantas et.al 2023).

The existing literature on commercial real estate predominantly focuses on various aspects of property investment, management, and market dynamics. It could be argued that there remains a notable gap specifically regarding the evaluation of potential tenants in commercial real estate. The explanation of this gap might be limited academic attention. Consequently, there is a scarcity of scholarly articles, research studies, and theoretical frameworks dedicated to this specific aspect of tenant assessment. It could also be mentioned complexity and variability - tenant evaluation in commercial real estate is inherently complex and variable, influenced by factors such as industry trends, economic conditions, tenant preferences, and property-specific considerations.

The value of the research lies in its comprehensive analysis and evaluation of the existing scholarly literature on the assessment of tenants in commercial real estate. By employing a bibliometric approach, the study provides insights into the volume, trends, themes, and key contributors within this specific area of research. Additionally, the identification of key areas of focus and emerging trends in tenant assessment research offers valuable guidance for future research directions in the field.

Contextual background for analysis of commercial real estate tenants' assessment

Much of the literature about commercial occupiers' property strategy is written from the perspective of the tenant, and analyses what property directors, managers or facilities managers should consider in order to maximise

the utility of the premises occupied (see, for example, Ginevičius et.al. 2016; Haynes 2012; Sanderson et al 2014, Sanderson 2016).

Also commercial property tenants are on a journey to sustainability. Tenants are interested and willing to engage in discussions about sustainability initiatives (Robinson et al. 2013). At the same time that the sustainability agenda has gained purchase within the commercial property market, financialisation has also been having an impact (Rydin 2016). Motivated by the role of customer satisfaction for a firm operating, it's reasonable to expect that in the real estate sector, there is also a similar pattern in terms of the relationship between customer satisfaction, customer demand, and performance of the company: whether the customer of the building, the tenant, is satisfied with the building might also have some connection with their decision of space demand and finally the financial performance of the building (Hu 2014). According to Ovedokun et.al 2014, it is important to underline the need for pragmatic and tenant-oriented management as a means to achieving increased occupier satisfaction in commercial properties.

In the context of the real estate sector, the research literature has covered various aspects related to digitalization, such as the Internet of Things (IoT), artificial intelligence (AI) and building information management (Atkin and Bildsten 2017; Bröchner et al 2019). Thus, digitalization in the real estate sector involves a wide range of companies and other actors together forming an ecosystem. Real estate firms, defined as an actor that owns, develops and rent real estate as their primary business, have key roles in this system (Vigren et.al 2022).

The existing research on commercial real estate tenants' assessment encompasses a range of themes, methodologies in the literature. After conducting a scientific literature analysis, the themes related to the assessment of potential commercial real estate tenants could be divided into three key themes include evaluating financial viability, assessing creditworthiness, and analyzing business models of potential tenants (see Table 1).

In summary, the literature on commercial real estate tenants' assessment is characterized by diverse themes and methodologies. By synthesizing existing research and identifying areas for further investigation, it might be possible to advance knowledge and develop practical tools for effective tenant evaluation in commercial real estate.

Table 1. Key themes on commercial real estate tenants' assessment

Key theme	Authors and their insights
Financial Viability Assessment	The financial viability of tenants in commercial real estate can be assessed by considering their credit rating, financial stability, business growth, and market performance (Yao 2022). Tenant quality plays a significant role in explaining the cross-sectional variations of real estate investment trust (REIT) returns and market exposure (Wang et.al 2022). Factors such as tenant credit information, including credit rating, Altman Z-score, earnings per share forecast, price performance of publicly traded tenants, and tenant mix index, can be used to measure tenant quality (Crosby et.al 2021). Additionally, analyzing the options embedded in lease contracts, such as break options that allow tenants to move before the end of the contract, can provide insights into the owner's income and the reliability of cash flow projections (Crocker et al 2010). By combining Monte Carlo simulations for market prices and rental values with an optional model that considers tenant behavior, a more accurate assessment of the financial viability of tenants can be achieved (Amédée-Manesme 2012). Listed studies have focused on developing models and methods to assess the financial stability and viability of potential tenants. These models often incorporate financial ratios, cash flow analysis, and credit scoring techniques to evaluate tenants' ability to meet lease obligations and sustain long-term occupancy.
Creditworthiness Evaluation	The creditworthiness of tenants in commercial real estate can be assessed through various ways. For instance, one approach is to use a commercial tenant reputation authentication system based on blockchain technology, which provides a secure and transparent way to process transaction and evaluation data (Yao 2022). Another method is to utilize credit reference information, including credit rating information, to determine the creditworthiness of a commercial tenant. This information can be obtained by querying credit information and providing credit reference information for the specific tenant, as well as providing information on similar tenants with high credit ratings (Li at al 2019). Additionally, evaluating the resilience of tenants to social distancing measures can also be an indicator of their creditworthiness. Firms holding properties with tenants that are more resilient to social distancing tend to perform better, suggesting that their creditworthiness is higher (Wang et.al 2022).
Business Model Analysis	To understand the business models of potential tenants, a framework for management of machine learning models can be used to determine business criteria based on the preferences of the tenant. Multiple models can be built dedicated to the tenant, each trained and fitted to perform different combinations of processes based on the integrations of the business criteria (Masekera et.al 2018, Nielsen 2014). By utilizing a new transaction system, preferences of potential customers (tenants and landlords) can be quantitatively evaluated, allowing for the definition of search areas and allowable ranges for bargaining. The system can also generate a statistical model that presents the current market situation and future tendencies related to customer preferences (Stavrovksi 2005). Studies have examined factors such as industry dynamics, market positioning, competitive advantage, and growth prospects to assess tenants' business viability and compatibility with property objectives.

Research methodology

In pursuit of the purpose outlined in this study, the following research inquiries were posited: How has the landscape of publications concerning the assessment of commercial real estate tenants evolved in recent twenty four years? What are the key areas within the realm of commercial real estate tenants' assessment? Who are the principal contributors to this field of research? In order to meticulously refine the retrieval of pertinent information pertaining to the assessment of commercial real estate tenants, a comprehensive bibliometric analysis of relevant publications was undertaken (see Figure 1).

The search for information for the bibliometric analysis was carried out using the Web of Science Core Collection search engine from the Clarivate Analytics database in February 2024. The primary search parameters included searching by name, a timeframe from 2000 to 2024 (only 2024 January), and focusing on the analysis of articles. A search of the Web of Science Core Collection database by

name was conducted using keywords business entities valuation models as potential commercial real estate tenants, commercial real estate, potential tenant assessment of commercial real estate (search summary: "business entities valuation models as potential commercial real estate tenants" (Topic) OR "commercial real estate" (Topic) OR "potential tenant assessment of commercial real estate" (All fields). Timespan: years 2000-2024. The data processing and visualization for bibliometric analysis were conducted utilizing analytical tools such as Clarivate Analytics, Microsoft Office Excel, and VOSviewer. A comprehensive search yielded 1,489 publications, which were identified based on predefined keywords. Of all publications, 72,42% (1079) were articles. The primary search encompassed all categories within the Web of Science Core Collection database. An essential step in evaluating the necessity for further detailed searches involves analyzing the distribution of primary search results across different research areas. Based on the analysis conducted using the Clarivate Analytics data analysis tool, a substantial number of search

results were identified across various categories. Specifically, a significant volume of publications were retrieved from the Business Economics, Urban Studies, Engineering, Environmental Sciences Ecology, Computer Science. In contrast, the remaining categories yielded

fewer than 100 records each. Notably, certain search results were found to overlap across multiple categories. Consequently, it was deemed unnecessary to further delineate the search based on individual categories.

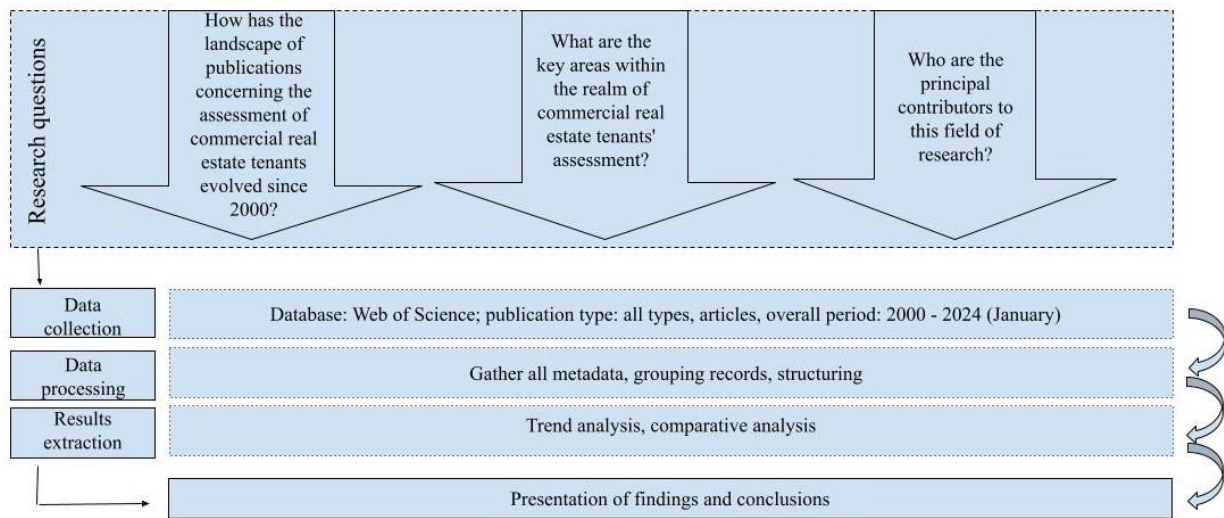


Fig. 1. Research methodology

Research results

Publication trends

Through a comprehensive examination of publication trends, documents spanning from 2000 to 2023 were analyzed, with a focus on the distribution of publications by year (see Figure 2).

Notably, there has been a substantial surge in the number of scientific papers pertaining to the subject, particularly evident since 2019. The peak in publications on this subject was observed in 2020 (145).

Considering the distribution of search results across various research areas, a notable proportion of publications were retrieved from fields such as Business Economics, Urban Studies, Engineering, Environmental Sciences Ecology, Computer Science and Construction Building Technology. The surge in scientific publications on commercial real estate between 2020 and 2024 could potentially be influenced by multiple factors and trends within economic, social, technological, environmental domains. These factors may encompass:

- Economic fluctuations: Variations in economic conditions or projections of economic development, can directly impact the commercial real estate sector and associated research endeavors. Such investigations often aim to comprehend market dynamics and devise strategic responses.
- Technological advancements. Progress in technology, particularly in the realm of data analysis tools and big data processing, empowers researchers to conduct more comprehensive analyses of commercial real estate market trends. This enables the identification of novel opportunities and assessment of risks.
- Demographic transformations. Shifts in population dynamics, urbanization patterns, and social and cultural

factors can shape the demand for commercial real estate and investment prospects.

- Concerns regarding climate change and sustainability. Public apprehensions regarding climate change and the pursuit of sustainable development may stimulate fresh inquiries into the commercial real estate sector. Such research endeavors may focus on evaluating its environmental impact and exploring avenues for enhancing sustainability.

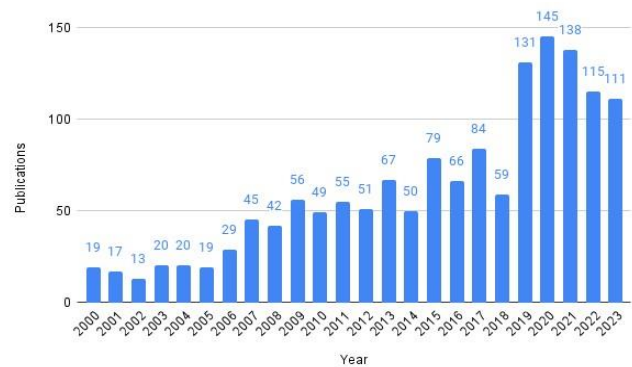


Fig. 2. Distribution of the number of publications by year (created by author, based on data from Clarivate analytics)

Hence, the heightened interest and uptick in scientific publications pertaining to relevant to the keywords under investigation in this study likely stem from the intricate interplay of these and other factors, underscoring their significance within academic research and society at large.

Figure 3 illustrates the nineteen authors who have authored the highest number of publications pertinent to the keywords under examination in this study.

Among the most prolific authors in the field, Ling D.C. shines with 17 publications to their name. Professor Ling's

works delve into various aspects such as real estate investment trusts, private commercial real estate investments including closed-end funds, performance evaluation, and commercial mortgage markets and pricing. Following closely are Freybote J. and Geltner D., both with 14 publications each. Dr. Freybote's research primarily focuses on commercial real estate investment and finance, as well as technological innovation within the real estate domain.

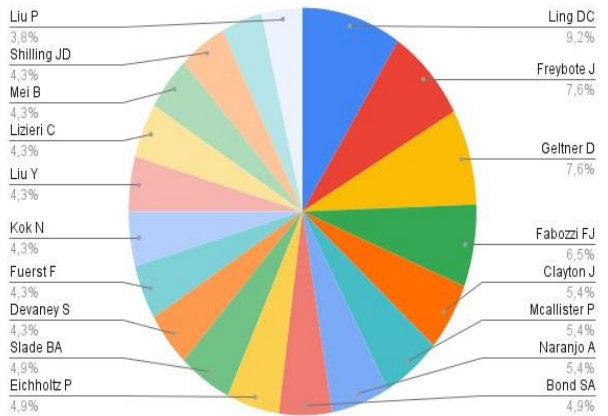


Fig. 3. Authors who generated the highest volume of publications relevant to the keywords under investigation in this study (created by author, based on data from Clarivate analytics)

Her contributions have found their place in esteemed journals like Real Estate Economics, the Journal of Real Estate Finance and Economics, and the Journal of Real Estate Research. Professor David Geltner holds the distinction of being the lead author of the highly cited textbook "Commercial Real Estate Analysis & Investments." Fabozzi F.J. follows with 12 publications covering essential aspects of bonds, analytical techniques, and portfolio strategy. Clayton J., Mcallister P., and Naranjo A. each have 10 publications attributed to their names. The remaining 231 authors collectively contribute 676 publications, averaging six or fewer publications per author.

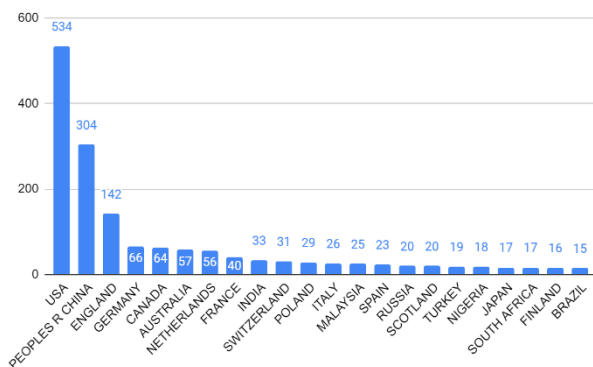


Fig. 4. Countries with the highest number of published articles related keywords under investigation in this study (created by author, based on data from Clarivate analytics)

In total, articles were published in 89 countries on the analyzed topic. Figure 4 provides information on the 22

countries in which since 2000 until 2024 January 15 and more than 15 articles on the topic was published. In this study, the countries prominently featured in the top five of most published scientific publications within the chosen key topics are the USA (534), China (304), England (142), Germany (66), and Canada (64). In Lithuania 6 articles were published during the period under review. These data indicate that articles on the analyzed topic are widely disseminated across various countries worldwide. According to the information provided, the highest number of scientific publications in this field comes from the USA, China, England, Germany, and Canada. This suggests that these countries are leading in researching this topic and actively contributing to scientific progress. Additionally, while Lithuania is not among the top countries in terms of publication count, it also has its own contribution, as six articles on this topic were published in the country during the specified period.

Key areas

Through an analysis of the pivotal areas pertinent to the keywords central to this study—specifically, business entities valuation models as potential commercial real estate tenants, commercial real estate, and potential tenant assessment of commercial real estate—a total of 5170 keywords were identified. A co-occurrence map was subsequently generated, taking into account keywords that appeared at least 5 times across all gathered documents, resulting in 328 keywords meeting this criterion. For each of these 328 keywords, the aggregate strength of co-occurrence links with other keywords was computed. The keywords demonstrating the highest total link strength were then curated, forming 9 clusters interconnected by a total of 6221 links.

Based on the significance denoted by the size of circles within each cluster, the most prevalent keywords are as follows: Cluster 1 (63 items): appraisal, asset, bias, big data, bubbles, capitalization rate; Cluster 2 (61 items): attitudes, banks, barriers, buildings, certification, climate change; Cluster 3 (55 items): access, accessibility, agglomeration, agglomeration economy, allocation, amenities; Cluster 4 (50 items): architecture, built environment, China, cities, city, commercial buildings; Cluster 5 (29 items): adjustment, bank lending, banking, business, business cycles, capital expenditures; Cluster 6 (27 items): asymmetric information, bankruptcy, capital structure, CMBS, commercial banks, cycles; Cluster 7 (21 items): agents, brokerage, commercial housing, commercial real estate market, corruption, decision making; Cluster 8 (13 items): asset pricing, bond, comovement, cross-section, illiquidity, institutional investors; Cluster 9 (9 items): behavior, COVID-19, green building, investment, office, real options (see Figure 5).

From the analysis of keywords and their co-occurrence in the field of commercial real estate tenant assessment, several conclusions can be drawn:

1. The clusters of keywords provide insight into the primary themes within commercial real estate tenant assessment research. These themes encompass a wide range of business economics topics, including appraisal methods, asset valuation, market dynamics, risk

The identified clusters and keywords provide valuable insights for guiding future research directions in commercial real estate tenant assessment. Areas with high occurrence and link strength, such as risk assessment and market dynamics, warrant further investigation to enhance understanding and develop innovative approaches to addressing challenges in the field. Overall, the analysis of keywords and their co-occurrence networks offers valuable insights into the prevailing themes, emerging trends, and research focus areas within commercial real estate tenant assessment. The information was thoroughly researched by employing either commonly used keywords or by seeking out the most frequently authored articles relevant to the subject matter.

Discussion

The findings underscore the intricate nature of assessing tenants in commercial real estate, which is influenced by various factors including the complexity of the properties themselves, the negotiation process, and the diverse preferences of customers. Successful transactions hinge on understanding these complexities and tailoring agreements to meet the needs of both parties. Tenant selection emerges as a critical strategic concern, as it directly impacts the performance and value of commercial properties.

Assessing commercial real estate tenants is pivotal for stakeholders like property owners, investors, lenders, and managers, aiding in risk mitigation and property performance enhancement. Studies indicate that selecting tenants with strong business histories and reputable brands can boost property value, occupancy rates, and leasing terms. Furthermore, studies cited in this article indicate that effective tenant assessment supports efficient property management practices, leading to optimized value contributions and positive tenant-landlord relationships, ultimately contributing to long-term success in the commercial real estate market. It could also be argued, that existing literature focuses on commercial occupiers' property strategy from the tenant's perspective, emphasizing factors like maximizing utility and engagement in sustainability initiatives. Similar to other industries, customer satisfaction, in this case, tenant satisfaction with the building, likely impacts space demand and financial performance. Digitalization, including IoT, AI, and building information management, is transforming the real estate sector, with real estate firms playing key roles in this ecosystem.

Scholarly literature on commercial real estate largely overlooks tenant assessment, creating a notable research gap. To address this, the paper systematically reviews existing literature through bibliometric analysis, noting a growing interest in tenant assessment since 2000, driven by economic, technological, demographic, and sustainability factors. Prolific authors in the field include Ling D.C., Freybote J., and Geltner D., whose research covers diverse aspects such as real estate investment trusts, commercial real estate finance, and technological innovation. Most publications on this topic are published in countries such as the United States, China, England, Germany and Canada. A co-occurrence map generated

from keywords revealed nine clusters, highlighting prevalent themes such as appraisal methods, asset valuation, market dynamics, and sustainability. Terms like "COVID-19" and "green building" signify emerging trends, reflecting the industry's response to global challenges and the growing emphasis on sustainability and resilience. Keywords like "commercial real estate" "risk" and "investment" indicate central themes in tenant assessment research, emphasizing the importance of understanding market dynamics and evaluating investment risks.

The limitations of the study include a limited focus on specific topics and methodologies, a lack of systematic examination of potential commercial real estate tenant assessment, and dependence on available data and scholarly sources. To improve commercial real estate decision-making processes and development, further research is needed to comprehensively explore all key themes and methodologies, including the financial stability, creditworthiness, and business model analysis of potential tenants. This entails a deeper understanding of the risks and benefits that these tenants can bring and how these factors can affect the value and operation of commercial real estate. It is also necessary to investigate how different conditions and contexts can influence tenant assessment outcomes and how these factors can be utilized in the decision-making process. Empirical research and analysis across various business environments and geographic regions could be included to create a more comprehensive and reliable understanding of the potential commercial real estate tenant assessment process.

Conclusions

Commercial real estate transactions are complex due to property diversity, negotiation intricacies, and varied customer preferences. Successful transactions necessitate understanding these complexities and adopting a strategic tenant selection approach.

Assessing tenants involves evaluating their financial stability, creditworthiness, and compatibility with the property's objectives. Studies indicate that selecting tenants with strong business track records and reputable brands can enhance property value and occupancy rates. Moreover, effective tenant assessment supports efficient property management practices, leading to optimized value contributions and positive tenant-landlord relationships.

Despite the significance of tenant assessment, the existing literature on commercial real estate predominantly focuses on aspects of property investment and management. This fact suggests a need for more attention to be given to the evaluation of potential tenants. The complexity and variability inherent in tenant evaluation pose challenges, making it difficult to develop standardized models or methodologies. Consequently, there is a scarcity of scholarly articles and research studies dedicated to this specific aspect of tenant assessment.

The contribution of this study is its aim to provide a comprehensive overview of the volume, trends, themes, and key contributors within this specific research area. The results of this analysis offer insights into the landscape of

research on commercial real estate tenant assessment, highlighting key areas of focus, emerging trends, and prominent contributors. The bibliometric analysis revealed a substantial increase in publications related to commercial real estate tenant assessment, particularly since 2000. Various factors such as economic fluctuations, technological advancements, demographic transformations, and sustainability concerns likely contributed to this surge in interest. Key contributors to the field were identified, along with the countries (the world's biggest economies like USA, China, Germany) with the highest number of published articles.

Moreover, the analysis of keyword co-occurrence networks highlighted the primary themes and emerging trends within commercial real estate tenant assessment research. Themes such as financial viability assessment, creditworthiness evaluation, and business model analysis emerged as prominent areas of focus. The identified clusters and keywords highlight dominant themes such as valuation methods, asset valuation, market dynamics, global challenges and an increasing focus on sustainability and resilience.

This study sheds light on the importance of tenant assessment in commercial real estate by highlighting its important role in property performance, risk mitigation, and value enhancement. Through a comprehensive analysis of existing scholarly literature, the study reveals the multifaceted nature of tenant evaluation and its significant implications for stakeholders such as property owners, investors, lenders, and managers. By identifying key themes, trends, and contributors in this area, the study lays the groundwork for further research and development, providing insights for informed decision-making processes in commercial real estate.

References

- Amédéc-Manesme, Charles-Olivier and Baroni, Michel and Barthelemy, Fabrice and Dupuy, Etienne, Combining Monte Carlo Simulations and Options to Manage the Risk of Real Estate Portfolios (June 6, 2012). *29th International Conference of the French Finance Association (AFFI) 2012* <https://ssrn.com/abstract=2084266> or <http://dx.doi.org/10.2139/ssrn.2084266>
- Atkin, B. and Bildsten, L. (2017), "A future for facility management", *Construction Innovation*, Vol. 17 No. 2, pp. 116-124, <https://doi.org/10.1108/CI-11-2016-0059>
- Bröchner, J., Haugen, T. and Lindkvist, C. (2019), "Shaping tomorrow's facilities management", *Facilities*, Vol. 37 No. 7/8, pp. 366-380, <https://doi.org/10.1108/F-10-2018-0126>
- Choi, A.H. (2018). The Design of Staged Contracting. *Social Science Research Network*, doi: 10.2139/SSRN.2977676
- Crosby, N., & Wyatt, P. (2016). Financial viability appraisals for site-specific planning decisions in England. *Environment and Planning C: Government and Policy*, 34(8), 1716-1733. <https://doi.org/10.1177/0263774X16636118>
- Crosby N., Devaney S., Lizieri C., Mansley N. Modelling sustainable rents for estimation of long-term or fundamental values of commercial real estate. *Journal of Property Research*, 2022, vol. 39, issue 1, 30-55. <https://doi.org/10.1080/09599916.2021.1913441>
- Edwards, V., Ellison, L. (2004). *Corporate Property Management Aligning Real Estate with Business Strategy*, 80–89. Blackwell Publishing: Oxford.
- Gibler, K. M., Black, R. T., & Moon, K. P. (2002). Time, Place, Space, Technology and Corporate Real Estate Strategy. *Journal of Real Estate Research*, 24(3), 235–262.
- Ginevičius T., Skačkauskienė I., Stasiukynas A., Jokšienė I. (2016). Formation of a system of multicriteria indicators for the assessment of office leasing options. *International Journal of Strategic Property Management* Volume 21, 2017 - Issue 2, 159-169, <https://doi.org/10.3846/1648715X.2016.1248521>
- Glickman, E.A (2014). An Introduction to Real Estate Finance, 25-49, <https://doi.org/10.1016/B978-0-12-378626-5.00002-4>
- Haynes, B. P. (2012). Corporate real estate asset management: aligned vision. *Journal of Corporate Real Estate*, 14(4), 244–254.
- Haynes, B. P., & Nunnington, N. (2010). *Corporate Real Estate Asset Management: Strategy and Implementation*. Elsevier, Oxford.
- Heywood, C. (2011). Approaches to aligning corporate real estate. In European Real Estate Society (ERES) Conference 2011, Eindhoven
- Hu, M., Kok, N., & Palacios, J. (2023). Tenant satisfaction and commercial building performance. Paper presented at *European Real Estate Society Conference - London 2023*, London, United Kingdom, https://eres.architexturez.net/system/files/P_20230221195520_2606.pdf
- Yau C., Davis T. (1994). Using multi-criteria analysis for tenant selection. *Decision Support Systems* Volume 12, Issue 3, October 1994, 233-244, [https://doi.org/10.1016/0167-9236\(94\)90007-8](https://doi.org/10.1016/0167-9236(94)90007-8)
- Liu, C. H., Liu, P., and Zhang, Z. (2019). Real assets, liquidation value and choice of financing. *Real Estate Economics*, 47(2):478–508, <https://doi.org/10.1111/1540-6229.12148>
- Liu, Crocker H. and Liu, Peng (2010). The Relationship between Tenant Quality and REIT Risk & Performance (November 29, 2010). *46th Annual AREUEA Conference Paper*, <https://ssrn.com/abstract=1717000>
- Masekera, C., Chan, S., Szeto, K. P. (2018). Framework for management of models based on tenant business criteria in an on-demand environment. *US Patent App.*, <https://patents.google.com/patent/US20180096028A1/en>
- Miller, E. and Buys, L. (2008), "Retrofitting commercial office buildings for sustainability: tenants' perspectives", *Journal of Property Investment & Finance*, Vol. 26 No. 6, pp. 552-561, <https://doi.org/10.1108/14635780810908398>
- Nielsen, C., Analyzing Business Models (March 17, 2014). Nielsen, C. & Lund, M. (Eds.) *The Basics of Business Models*, Ventus Publishing, 2014, Available at SSRN: <https://ssrn.com/abstract=2579456>
- Nourse, H. O., & Roulac, S. E. (1993). Linking Real Estate Decisions to Corporate Strategy. *Journal of Real Estate Research*, 8(4), 275–394.
- Oyedokun, T.B., Oletubo, A. and Adewusi, A.O. (2014), "Satisfaction of occupiers with management of rented commercial properties in Nigeria : An empirical study", *Property Management*, Vol. 32 No. 4, pp. 284-294. <https://doi.org/10.1108/PM-06-2013-0036>
- Pyrantas, Rokas, Vilda Giziene, and Daiva Laskiene. "The impact of macroeconomic factors on the performance of the construction sector in Lithuania." *Management/Vadyba* (16487974) 39.2 (2023)
- Remøy, H. and J.M. van der Voordt, T. (2014), "Priorities in accommodating office user preferences: impact on office users decision to stay or go", *Journal of Corporate Real Estate*, Vol. 16 No. 2, pp. 140-154, <https://doi.org/10.1108/JCRE-09-2013-0029>
- Rydin, Y. (2016). Sustainability and the financialisation of commercial property: Making prime and non-prime markets. *Environment and Planning D: Society and Space*, 34(4), 745-762, <https://doi.org/10.1177/0263775816633472>
- Robison, R.A.V.; Jansson-Boyd, C.V. (2013) Perspectives on Sustainability: Exploring the Views of Tenants in Supported

- Social Housing. *Sustainability* 2013, 5, 5249-5271, <https://doi.org/10.3390/su5125249>
- Roulac, S. E. (2001). Corporate Property Strategy is Integral to Corporate Business Strategy. *Journal of Real Estate Research*, 22(1-2), 129–152.
- Sanderson, Danielle C.; Edwards, Victoria M. (2014). What Tenants Want: UK occupiers' requirements when renting commercial property and strategic implications for landlords. *Working Papers in Real Estate & Planning* 03/14
- Sanderson, D. C. (2016) The tenant as customer: does good service enhance the financial performance of commercial real estate? PhD thesis, University of Reading <https://centaur.reading.ac.uk/65939/>
- Skačkauskienė, I. (2022). Research on management theory: A development review and bibliometric analysis. *Problems and Perspectives in Management*, Volume 20, Issue 2, <https://etalpykla.vilniustech.lt/handle/123456789/113315>
- Stavrovski, B. (2005). Connecting potential tenants and landlords via the internet: development and pilot testing of a transaction system for a commercial real estate enterprise. *Journal of Internet and Enterprise Management*, <https://www.inderscience.com/info/inarticle.php?artid=8755>
- Stavrovski, B. (2004). "Designing a new-business model for a commercial real estate enterprise: a case study", *Online Information Review*, Vol. 28 No. 2, pp. 110-119, <https://doi.org/10.1108/14684520410531664>
- Tsung-Yin, Ou., Guan-Yu, Lin., Hsin-Pin, Fu., Shi, Wei., Wen-Lung, Tsai. (2022). An Intelligent Recommendation System for Real Estate Commodity. *Computer Systems: Science & Engineering*, doi: 10.32604/csse.2022.022637
- Then, S. S. (2005). A proactive property management model that integrates real estate provision and facilities services management. *International Journal of Strategic Property Management*, 9(1), 33–42, <https://www.tandfonline.com/doi/abs/10.1080/1648715X.2005.9637524>
- Udoka, C., Ugonabo., Fidelis, I., Emoh. (2023). Investigating Tenant Selection Bias and Discrimination in the Enugu Metropolitan Residential Property Market, Nigeria. *International journal of civil engineering, construction and estate management*, doi: 10.37745/ijcecem.14/vol11n2102110
- Vigren, O., Kadefors, A. and Eriksson, K. (2022), "Digitalization, innovation capabilities and absorptive capacity in the Swedish real estate ecosystem", *Facilities*, Vol. 40 No. 15/16, pp. 89-106, <https://doi.org/10.1108/F-07-2020-0083>
- Wang C., Zhou T.(2022). Face-to-face Interactions, Tenant Resilience, and Commercial Real Estate Performance. *SSRN Electronic Journal.Elsevier* BV, <https://doi.org/10.2139/ssrn.3743818>
- Yan-an, Yao. (2022). Face-to-face interactions, tenant resilience, and commercial real estate performance. *Real Estate Economics*, Volume51, Issue6, November 2023, Pages 1467-1511, <https://doi.org/10.1111/1540-6229.12412>

RECEIVED: 05 January 2024

ACCEPTED: 14 February 2024

PUBLISHED: 08 April 2024

Sigita Bytautė is experienced industrial real estate consultant in “Real Game” company with a passion for innovation and a proven track record in optimizing commercial spaces for maximum efficiency and profitability. Sigita has master’s degree in Economic Analysis and Planning, Vilnius University. The scientific article with co-author prof. I.Skačkauskienė "Social capital definition and measurement problems” was published in scientific journal, edited by Vilnius Tech University, *Business: Theory and Practice* 13.3 (2012): 208-216. Research interests: decision support, social capital. E-mail: bytaute@gmail.com. Phone: +370 620 97 988, ORCID ID: <https://orcid.org/0009-0002-0064-7720>

