

# How Covid affected the commercial real estate market

by Beva

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## General metrics

|               |              |            |                      |                      |
|---------------|--------------|------------|----------------------|----------------------|
| <b>24,278</b> | <b>3,631</b> | <b>417</b> | <b>14 min 31 sec</b> | <b>27 min 55 sec</b> |
| characters    | words        | sentences  | reading time         | speaking time        |

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## Writing Issues

 No issues found

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## Unique Words

Measures vocabulary diversity by calculating the percentage of words used only once in your document

**24%**unique words

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Measures depth of vocabulary by identifying words that are not among the 5,000 most common English words.

**46%**rare words

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## Word Length

Measures average word length

**5**characters per word

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Measures average sentence length

**8.7**words per sentence

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2

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How Covid Affected the Commercial Real Estate Market

Research Problem

The Coronavirus outbreak in 2019 (COVID-19) was a global crisis that affected public health and disrupted economies worldwide (Allan et al., 2021). The sectors affected were the commercial real estate (CRE) market, finance, transport, and construction (Chong & Phillips, 2022; Wen et al., 2022). Evidence from diverse global economies, including the United States, China, and Denmark, highlights the far-reaching consequences of the pandemic. Aggregate spending plummeted, consumption patterns shifted, and urban

demographics faced notable changes (Wen et al., 2022). Major U.S. cities witnessed declines in population and business, while suburban areas had slight growth. There was also a surge in remote work and a shift in consumer preferences, production, and supply of goods and services (Chong & Phillips, 2022). In the real estate sector, COVID-19 affected the price and volume of retail, office, and industrial properties. Different studies have only explored the immediate effects of the crisis on the general real estate market, leaving a gap in the commercial segment and transformative effects.

More studies have also explored how the pandemic immediately affected financial assets like REITs, mortgages, and real estate stocks and securities (Gujral et al., 2020). However, there is a research gap on the long-term impacts of COVID-19 on diverse commercial property types (Ling et al., 2020). These include office space demand, the trajectory of retail space utilization, and the ongoing influence of e-commerce on industrial property needs. Such knowledge would be significant to understanding the enduring consequences and recovery patterns post-pandemic. Secondly, a research gap exists in evaluating the impacts of specific policy responses, such as fiscal stimulus packages and rent subsidies, in mitigating the pandemic's negative effects on different property sectors.

Thirdly, there is limited research on the social and environmental implications of COVID-19 on commercial real estate; this pertains to changes in office space utilization, community development, and adaptive urban planning. A study by Wouda and Opdenakker (2019) also recommended further research on the role of emerging technology, including automation and virtual reality, in shaping commercial real estate. The technologies and living patterns influenced by the pandemic have long prolonged effects on real estate. Therefore, this research

aims to bridge these gaps by investigating how COVID-19 affected the commercial real estate market.

#### Research Questions

How has the demand for varied commercial real estate property types (office, retail, industrial) changed since COVID-19 and the evolving consumer preferences?

What recovery patterns are observed in the commercial real estate market regarding property values, rental rates, occupancy levels, etc.?

To what extent have the various economic recovery policies for the COVID-19 pandemic impacted the commercial real estate market?

What adaptive strategies and technologies have emerged in the commercial real estate market post-COVID-19?

#### Review of the Literature

Recent literature on the impacts of COVID-19 on CRE market

Different existing kinds of literature have explored the impact of the COVID-19 pandemic on the commercial real estate market. Allan et al. (2021) offers a comprehensive analysis of the Asia–Pacific region, highlighting substantial rent declines, especially in retail properties. The retail property sector experienced a staggering drop of over 30%. Importantly, the study emphasizes the positive impact of fiscal stimuli imposed by governments in mitigating the crisis's adverse effects (Allan et al., 2021). Despite the valuable findings and recommendations, Allan et al. (2021) focused on the Asia–Pacific real estate markets; there is a need to replicate the study on the United States CRE market.

Wen et al. (2022) examined the market-specific responses and their implications for post-pandemic urban planning. Focusing on Florida's metropolitan areas and employing a fixed effect regression model, the study found distinct trends across different property types (Wen et al., 2022). Retail properties experienced an immediate decline in sales volumes following the shock of COVID-19 (Wen et al., 2022). Similarly, the rent growth rate for office properties had a short-term decline but bounced back to around 70% within one quarter. Notably, industrial properties demonstrated a rise in both the growth rate of sales and rent prices during the pandemic (Wen et al., 2022). These findings align with Deghi et al. (2021), who revealed that overvaluation in CRE prices occurred across major advanced economies in the 2020 first quarter.

Deghi et al. (2021) emphasize the CRE sector's substantial size and interconnectedness with the broader economy. They projected the recovery to depend on the overall pace of economic recovery and structural shifts induced by the pandemic (Deghi et al., 2021). While easy financial conditions contribute to increased financial vulnerabilities and persistent price misalignment, effective macroeconomic policies are vital to the risks in the CRE sector (Deghi et al., 2021).

However, Hoesli and Malle (2022) caution against the simplistic interpretation of direct commercial real estate indices, emphasizing the need to consider inherent caveats. They examined direct and listed real estate, retail and hospitality properties, and office buildings for a more comprehensive view. The residential and industrial sectors have shown greater resilience to the pandemic (Hoesli & Malle, 2022). The economic changes in other sectors influenced commercial real estate pricing and future trajectory that hinges on

asset type and location (Hoesli & Malle, 2022). However, this study was limited to the European CRE markets.

A report by Gujral et al. (2020) reveals how the commercial real estate (CRE) sector is navigating the immediate challenges posed by the COVID-19 crisis. The report states that industry leaders balance capital preservation and competitive differentiation (Gujral et al., 2020). The crisis accelerated the adoption of strategic changes, focusing on diversification and enhancing tenant experience. The efforts to protect safety and health led to changes in communication practices, emphasizing company-level brand communication and direct engagement with tenants (Gujral et al., 2020).

The study underscores the shift toward more centralized cash management to address uncertainty, with a lean-enterprise mentality gaining importance (Gujral et al., 2020). Tailored, informed decision-making in commercial lease concessions is highlighted, emphasizing the need for fact-based insights to navigate varied economic scenarios. However, this report is limited to occurrences in 2020, which may have changed since the pandemic ended.

#### Recent literature on Real Estate Market Liquidity

Chong and Phillips (2022) focus on the U.S. commercial real estate market, estimating the dollar impact of COVID-19 on aggregate values. Their equity analysis, leveraging traded Real Estate Investment Trusts (REITs), provides statistical estimates of the decline in commercial real estate values (Chong & Phillips, 2022). A key aspect of this research is the use of REITs to assess the impact of the pandemic on commercial real estate. REITs provide a valuable dataset that quantitatively evaluates the dollar's impact on aggregate values. The study also highlights the compounding effects of telecommuting, social distancing, and business closures faced by the sector (Chong & Phillips, 2022).

Like Allan et al. (2021), Chong and Phillips (2022) also recognize the role of extreme monetary and fiscal policies in mitigating the effects of the pandemic. The pandemic caused a decrease in the value of most REITs, lodging/resort REITs (−45.81%), retail REITs (−41.16%), and office REITs (−22.63%) (Chong & Phillips, 2022). However, the study uncovers divergent trajectories among REITs, with certain sectors showing resilience. Ling et al. (2020) revealed that the substantial drop in All Equity REITs index in 2020 reflects a decline in the mortgage-backed securities and market performance. By April 2020, S&P 500, equity REITs, and the Russell 2000 had declined by 16%, 23%, and 26%, respectively as shown in Figure 1 below.

Figure 1: Return indexes: S&P 500, Russell 2000, FTSE-NAREIT

In another pioneering study, Ling et al. (2020) investigate the transmission of the COVID-19 shock to equity markets through the firm's underlying assets in the CRE market. Utilizing asset-level data and constructing the GeoCOVID measure, the study explores the relationship between abnormal returns and geographically weighted exposure to COVID-19. The findings reveal a negative relationship, even after accounting for the rate of COVID-19 cases, property type, geographic concentrations, and firm characteristics (Ling et al., (2020). While the demand for retail and residential properties exhibited more negative reactions, the healthcare and technology sectors reacted positively (Ling et al., 2020). The pandemic triggered a rise in the demand for commercial real estate properties suitable for healthcare activities like hospitals and quarantine centers.

The MIT Center for Real Estate, in a comprehensive analysis by Van Dijk et al. (2020), reveals the substantial and adverse effects of the COVID-19 pandemic on liquidity in the global real estate market. Focusing particularly on private commercial property, the study reveals a significant decline in liquidity across



major U.S. markets. The severity of this liquidity drop surpasses that observed during the Global Financial Crisis (GFC); the first four months of 2020 alone witnessed a considerable fraction of the total liquidity drop seen throughout the GFC (Van Dijk et al., 2020). This finding emphasizes the challenges faced by the real estate sector during the early stages of the pandemic, surpassing even the economic turbulence experienced in the previous financial crisis. Although this study by Van Dijk et al. (2020) used comparisons to the GFC as a benchmark for economic downturns, the liquidity challenges caused by the pandemic did not focus on CRE markets. Thus, further research on the liquidity implications in the US CRE market is essential.

The COVID-19 pandemic also impacted commercial real estate transactions with the rise of blockchain technology (Wouda & Opdenakker, 2019). The CRE market responded to the move toward cashless transactions by adopting blockchain applications to improve efficiency, transparency, and safety. However, the findings of Wouda and Opdenakker (2019) were only limited to the CRE market in the Netherlands and observations made in 2019 when COVID-19 started.

Investors' perceptions of assets and behavior also shaped real estate investment decisions during the COVID-19 pandemic (Ramya, 2023). The findings highlight the significance of perceived asset value (PAV), overconfidence (O.C.), and herding (H.D.) in predicting real estate investment decisions during the crisis (Ramya, 2023). PAV is the most crucial factor, underscoring its central role in guiding investor choices. In contrast, disposition effect (D.E.) and risk aversion (R.A.) have an insignificant impact on real estate investment decisions during the pandemic.

## Methods

The study adopts a qualitative approach that uses structured interviews to investigate the impact of COVID-19 on the commercial real estate market. The rationale for choosing a qualitative design is to capture respondents' in-depth insights, experiences, and perspectives. Similarly, using structured interviews ensures a systematic and consistent data collection process, enabling a focused exploration of key themes related to the effects of COVID-19 on different property types, recovery patterns, policy responses, and adaptive strategies. The purposive sampling strategy selects ten respondents with diverse commercial real estate sector expertise. Ethical considerations include participant confidentiality, informed consent, and overall research integrity.

Sampling: This study employed a purposive sampling strategy to select 10 participants with expertise in the selected commercial real estate market. Participants included commercial real estate developers, property managers, and industry analysts.

#### Data Collection and Analysis

Data was collected through structured phone call interviews conducted individually with each participant. In a structured interview, the researcher used standardized questions and responses recorded as multiple choice or scale such as Likert. In this case, all the respondents received standard treatment without bias. The interview guide consisted of multiple research questions that respondents could reply to as Strongly Agree, Agree, and Disagree. A simple structure facilitated easy responses and saved time during the phone interviews. The data collected was then subjected to cleaning - check for missing or incomplete responses. A cleaned data set was first analyzed through descriptive statistics such as mean, median, mode, and standard deviation for each item. Similarly, correlation analysis was done to examine the relationships between different variables.

### Validity and Reliability

To ensure the validity and reliability of the findings, member checking was conducted with participants through follow-up calls to confirm the accuracy of interpretations. Data source triangulation was also incorporated by comparing interview findings with relevant secondary sources. The literature review section had multiple existing studies about the impacts of COVID-19 on the CRE market; these findings were useful for corroborating the responses and highlighting outliers, inaccuracies, and gaps. Finally, a detailed audit trail documenting the research process and decisions was maintained to ensure clarity and validity.

Despite the substantial validity and reliability efforts, the research design had myriad limitations. For instance, using a small sample size of 10 participants limited the generalizability of the findings to the wider population of the U.S. CRE market. Expanding the sample size would increase the scope of data and the accuracy of the findings. Secondly, phone call interviews limited the ability to observe non-verbal cues and the scope of data. The calls were straight to the point, and respondents did not have free time to express long personal opinions, experiences, and stories. Therefore, these limitations should be considered when interpreting the findings and applying them to the wider population.

### Findings and Discussion

Demand for CRE property types (office, retail, industrial) changed since COVID-19.

The research data revealed that most respondents (70%) strongly agree that demand for office space has changed due to COVID-19. This suggests that the pandemic has significantly impacted the office real estate market.

Furthermore, 90% of respondents strongly agree that demand for retail space has changed due to COVID-19. This is linked to the lockdowns, restrictions, and shift towards online shopping, which affected brick-and-mortar retailers. In contrast, 40% of respondents disagree on whether demand for industrial space changed due to COVID-19. This suggests that the impact of the pandemic on the industrial real estate market is more mixed. The data table below shows the responses recorded as Strongly Agree – 3, Agree – 2, and Disagree – 3.

Respondent ID

Demand changed for office space due to COVID-19

Demand changed for retail space due to COVID-19

Demand has changed for industrial space due to COVID-19

1

3

3

3

2

3

3

1

3

3

2

2

4

1

3

1

5

3

3

2

6

2

3

1

7

3

3

3

8

3

3

1

9

2

3

2

10

3

3

3

Strongly Agree - 3

7

9

3

Agree - 2

2

1

3

Disagree - 1

1

0

4

These findings align with Ling et al.'s (2020) findings that the demand for retail and residential properties declined while the healthcare and technology sectors increased. The pandemic triggered the demand for commercial real estate properties suitable for healthcare activities like hospitals and quarantine centers (Van Dijk et al., 2020). Therefore, the current survey in 2024 confirms the observations made in 2020 during the peak of the pandemic. The survey data suggests that COVID-19 has significantly impacted the demand for all three types of CRE property (office, retail, and industrial). However, the nature of the impact varies depending on the property type.

Recovery patterns have been observed in the CRE market since the COVID-19 pandemic.

Regarding the overall CRE market recovery post-COVID, 60% of respondents strongly agreed there is recovery. 80% of respondents strongly agreed that property values are recovering, as shown in the Table below. Another 70% strongly agree rental rates are recovering. These findings align with Deghi et al. (2021), who projected the recovery of the CRE market to depend on the overall economic recovery. However, in 2024, further research can explore whether the

recovery is consistent across all property types and specific indicators such as increased investment or leasing activity.

Respondent ID

Overall, the CRE market is recovering

Property values are recovering

Rental rates are recovering

Occupancy levels are recovering

1

3

3

3

3

2

2

3

2

2

3

3

3

3

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4

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10  
2

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3

3

3

Strongly Agree -3

6

8

7

6

Agree - 2

3

2

3

4

Disagree - 1

1

0

0

0

Moreover, 80% of respondents who strongly agree with the recovery of property values confirm the observations made in 2022. The CRE equity analysis by Chong & Phillips (2022) leveraged REITs to assess the degree of decline value. Importantly, they predicted the recovery of the REITs would depend on the monetary and fiscal policies used to mitigate the effects of the pandemic. Nevertheless, there is a need to research whether different property types experience similar value increases or there are variations. There is also a need to clarify whether different property types experience similar rental rates and occupancy increases.

Did economic recovery policies for COVID-19 impact the CRE market?

The interview asked whether the respondent knew of any specific economic recovery policies that benefited the CRE market and their implications. Only 30% of respondents strongly agreed that economic recovery policies positively impacted the CRE market. Another 30% agreed, while 60% disagreed that the economic recovery policies positively impacted the CRE market. This suggests that some real estate stakeholders believe these policies boosted the CRE market, while others suggest other causes. However, 60% of respondents strongly agreed that they know specific policies impacting the CRE market. This indicates that most of these stakeholders know the policies implemented in response to the pandemic, even if they do not agree on their impact.

Respondent ID

Economic recovery policies positively impacted the CRE market

I am aware of specific policies impacting the CRE market

1

2

3

2

1

2

3

2

3

4

1

1

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3

3

6

3

3

7

1

1

8

3

3

9

1

2

10

2

3

Strongly Agree - 3

3

6

Agree - 2

3

2

Disagree - 1

4

2

Adaptive strategies and technologies emerge in the CRE market post-COVID-19?

Based on the data, 70% of the respondents strongly agreed that new technologies are emerging in the CRE market post-COVID-19, and 30% agree. 80% of these respondents strongly agreed that these technologies positively impact the CRE market, as shown in the Table below. This suggests that the pandemic has accelerated the adoption of new technologies in the CRE industry as businesses and investors look for ways to improve efficiency, flexibility, and resilience. These findings support the observations and predictions for 2019 during the pandemic's peak. Wouda and Opdenakker (2019) predicted emerging technology, including automation and virtual reality, was essential for the CRE market. In 2023, the overall real estate market experience rose in modern technologies such as virtual tours and 3D modeling, Data analytics and A.I., and Smart building solutions (Miljkovic et al., 2023). Current commercial properties also adopt flexible workspace, e-commerce, and logistics spaces.

Respondent ID

Technologies are emerging in the CRE market

Technology is having a positive impact on the market

1

3

3

2

3

3

3

2

2

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3

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3

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3

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9

2

2

10

3

3

Strongly Agree - 3

7

8

Agree - 2

3

2

Disagree - 1

0

0

### Conclusion

The commercial real estate market in 2024 still reflects the challenges and opportunities caused by the COVID-19 pandemic. The market still exhibits shifting demands, uneven recovery patterns, impacts of economic recovery policies, and the emergence of disruptive technologies. The pandemic significantly changed demand across CRE sectors. Demand for office space dropped due to remote work, social distancing, and restrictions. Conversely, retail brick-and-mortar stores also dropped while industrial spaces thrived. The recovery patterns varied, with property values and rental rates growing in 2024. Occupancy levels saw a moderate increase, suggesting a cautious return to normalcy. However, the effectiveness of economic recovery policies on the CRE market remains a point of debate. While some stakeholders acknowledge positive impacts, many still express uncertainties. This underscores the need to study these policies' specific effects on different market segments further. The pandemic also catalyzed technological advancements in the CRE market. New technology solutions like virtual tours and smart building systems are gaining traction, enhancing efficiency and flexibility. The rise of flexible workspace options caters to modern workstyles, while e-commerce's growth fuels demand for logistics facilities. Thus, the findings presented in this study offer valuable information to understand the present market and guide strategies for future CRE markets.

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