Understanding COVID-19's Impact on Commercial Real Estate

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Abstract

This research paper explores the impact of the COVID-19 pandemic on commercial real estate in the United States, analyzing its impact on societal dynamics. The study explores several industries including retail, and office and note how these industries have adapted. Statistical data analytics before, during, and after the pandemic were used to understand the extent of the impact. By using this data, we make predictions of what the future holds in each industry.

Furthermore, this study examines overall trends in specific cities to develop an understanding of how consumer behavior has changed and what businesses are doing to adapt to these changes.

Based on the evidence, as the work-from-home life culture continues to spread through various industries, office vacancy rates will continue to increase as more businesses transition towards remote conditions. The United States is at an all time high in vacancy rates with no sign of decreasing. Industries like IT have led this movement, while others aren't far behind. Moreover, the retail industry will continue to expand its digital capabilities as people prefer shopping from the convenience of their homes. Businesses unable to adapt online will have difficulty competing with other businesses.

Introduction

When the COVID-19 pandemic began in March 2020, all offices and businesses were forced to shut down leading to alternative means of working, which had significant effects on office vacancy levels throughout the nation. This led to the spread of a new remote work practices where workers could work from their homes in a more comfortable environment. As workers shift towards this environment companies have lost the need for office accommodation. (Vise) This has caused a significant decline in the demand for office spaces throughout the United States. Working from home proved to be much easier for employees as it allowed them to have flexible hours, eliminated their daily commute, and gave them more time for other activities. Prior to COVID, 5% of workers worked remotely. This increased to 24% between April and December of 2020, comprising 35.5 million people (Coate). This shift in work culture has changed societal norms that have existed for a few hundred years, normalizing remote work environments. This study concludes that based on workers' desire to maintain work-from-home practices, companies will continue to have a decrease in demand for office businesses to adopt more flexible and remote work arrangements.

Moreover, the pandemic has had an unprecedented impact on the retail sector, as it has disrupted the supply chain, labor force, and consumer behavior. During the pandemic, physical vendors were forced to shut down, causing a sudden shift towards e-commerce. This transformed the way people shopped because it allowed them to acquire all their basic desires and needs at their doorstep. Even groceries were made available, making once unthinkable feat possible. From 2019 to 2020, online grocery shopping saw a 233% increase and reached the highest level in December 2022 with sales at $7.6 billion (Ozbun).

Background

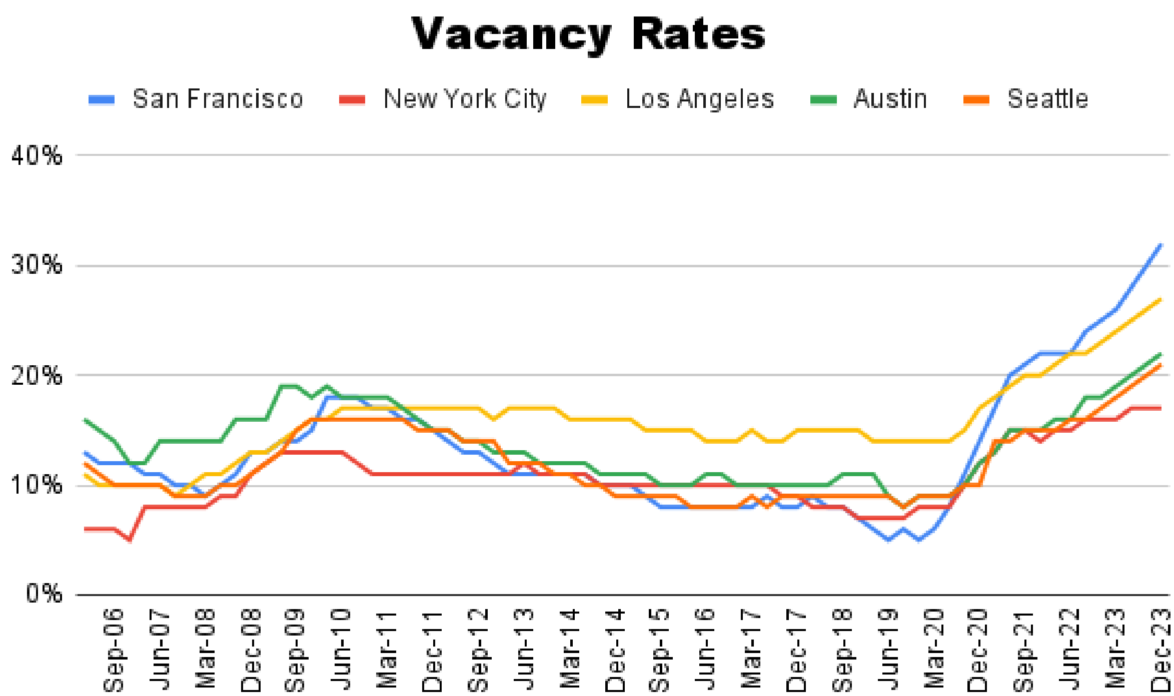
To understand how the pandemic has impacted the commercial real estate market, we will examine several cities that facilitated the development of major industries. It is important to understand this is the overall trend, and some cities have been affected more than others, particularly cities that were influenced by the ever-growing IT industry. San Francisco, known for its vibrant tech and startup scene, has experienced a significant impact on its commercial real estate market. Since office spaces had become less used over the course of the pandemic it became beneficial for companies to end the lease for their office buildings, in order to save money. Additionally, remote work conditions have made it easier for companies to hire employees with specialized skills in different places. This has helped to increase productivity as in-person-only companies are confined to the skills of the people in a specific region. Another major city, not renowned for its IT status, but rather for its healthcare and financial industries is New York City. New York is the United States's largest city, with a population of approximately 8.3 million people. However, the effects of the pandemic were rather severe in New York, which did not favor remote work. As working from home removed the geographical barrier on workers, many companies began outsourcing their work to various countries. This has led many companies to outsource jobs An economist from Stanford University, Nicholas Bloom, estimates 10-20% of US service jobs like software developers as it more affordable(Tsipursky).

Data & Results

Vacancy rates increased from 12% in the 4th quarter of 2017 before the pandemic to 17% the 4th quarter of 2023, reaching an all time high in some places across the nation (Statista). During the first quarter of 2024, San Francisco reported a 36.6% office vacancy rate, one of the largest in the nation (Rogers). Studies have shown that workers have opted to move to greener, environmentally friendly communities in suburban areas as they were able to operate remotely. This trend has remained prominent throughout the country as over 2 million Americans have moved from urban metropolitans to smaller communities from 2020 to 2022 (Vise). In major cities consisting of over 10,000 people per square mile, moving rates increased by 17%(Henderson). The IT industry has emerged as the leading sector of remote work as most of this work can be performed digitally remotely. Other industries including marketing and finance are not far behind, as they adapt to remote working conditions by integrating digital platforms. Silicon Valley, known for being home to global enterprises Google, Apple, and Facebook, has continued to increase vacancy rates reaching 17%. Additionally it has reached a record 7.6 million square feet in available office space as compared to 2.7 million square feet in 2019 (Bartholomew). Businesses are developing hybrid work models to have a blend of in-person and virtual work environments. Meanwhile, New York, reported a 19.2% vacancy rate, although down from its peak, it is still significantly more than its pre-pandemic levels at around 9.9% (Osgood). Ultimately, the cause of NYC's low rental vacancy rate and high office vacancy rate is the lack of supply for an ever-growing pool of demand from companies, as the once dramatic demand for office space is no longer prevalent. As the pandemic’s spread slowed, people began to resume their daily lives, and needed places to live near office spaces again, due to the slowly decreasing amount of remote work. In the future, the rental vacancy rate is expected to steadily increase, due to an influx of citizens moving away from urban cities. This may also cause rent prices in NYC to increase dramatically. Additionally, following the increase in job opportunities after the pandemic, the unemployment rate has also decreased from around 21% in May 2020 to 5.1% in February 2024 (YCharts).

The tech industry has been the first to adapt to this remote working condition as the work-from-home trend continues. As much of their work was already primarily digital, tech hubs like San Francisco and Seattle have some of the highest office vacancy rates, while other cities aren't far behind. This is evident as the national average has increased consistently from 16.8% in prepandemic times to over 19.6%(Moody Analytics) .Industries like marketing and finance are taking a bit longer to adapt.

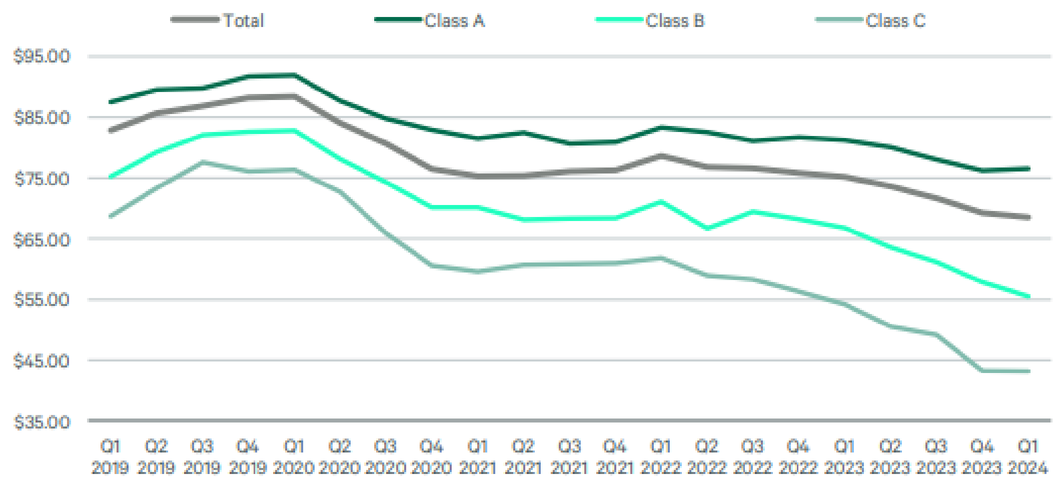
During the years after the pandemic, the retail industry saw consistent overall growth as e-commerce surged by 43% in 2020, reaching $815.4 billion. Following transition to digital and contactless payment practices, retail employment suffered significantly. Many stores began integrating self-checkout forms of payment, causing employment projections for cashiers(approximately 17% of the retail workforce) to lose 7% of their workforce by 2029 (NLC 100). The future of the retail market will continue to be influenced by online consumerism as online retail continues to become more effective and convenient for consumers. Many businesses unable to adapt to provide goods and services digitally were forced into bankruptcy and closure, including a record 12,200 store closures in 2020 (Wahba). A 2021 report shows that 71% of small-medium businesses survived the pandemic by going digital, providing a strong indication that businesses will have to integrate digital alternatives to thrive. (Bensley)



Credit: Sf.gov

Figure 1 Office vacancy rates in major cities

Figure 1 illustrates the office spaces vacancy rates in five cities known for their technology employment. Up until March 2020, right before the beginning of the pandemic, the vacancy rates maintained a consistent downward trend, only spiking during the 2008 financial crisis and its subsequent years. The vacancy rate increased from March 2020 to the present, due to the pandemic relocating a majority of workers remotely from their homes. Remote work was beneficial to the IT industry, as companies no longer had to hold their office spaces, and many leases were terminated. The culmination of the pandemic's effects led to the upward trend depicted in the last four years in Figure 1. The discrepancy amongst these major cities is still significant, especially between San Francisco and New York. San Francisco is a haven for the technology industry, and the vacancy rate dramatically increased after the pandemic began, starting from an all time low of ~6% increasing to 32% at its peak. Los Angeles sits right below San Francisco, but maintained a high vacancy rate throughout the last two decades due to its abundance of complexes that are largely left vacant.



Source CBRE, San Francisco average cost per sq m

Figure 2, Average cost of business rental space in San Francisco

Figure 2 illustrates the average price per square foot of rental space in San Francisco, one of the world's largest IT hubs. Each of the lines on the graph depicts a different level of luxury, with Class A being the most luxurious and Class C the least luxurious. The graph shows a steady decline in all three classes due to the decrease in the number of people living in the city. As the pandemic ran its course, many people moved from urban centers to other cities to reduce their cost of living while earning a high salary from a well-known IT company, like Google or Amazon. Figure 1 and Figure 2 demonstrate an inverse relationship overtime, in that as the vacancy rate increases, the price per square foot decreases. As shown in Figure 2, all 3 classes plateau at an all-time high right at the cusp of the pandemic, before dropping. Class C real estates dropped the most, as many companies would rather have no office space than a less luxurious one. This cycle is continuing up to the present day, as the relationship between the two is similar because of a feedback cycle. As the vacancy rate increases, the price per square foot decreases, thus causing the vacancy rate to go up again, perpetuating the cycle. However, as the pandemic declines, the cycle will abate and ultimately cease because vacancy rates stability, as people begin to go back to work on site.

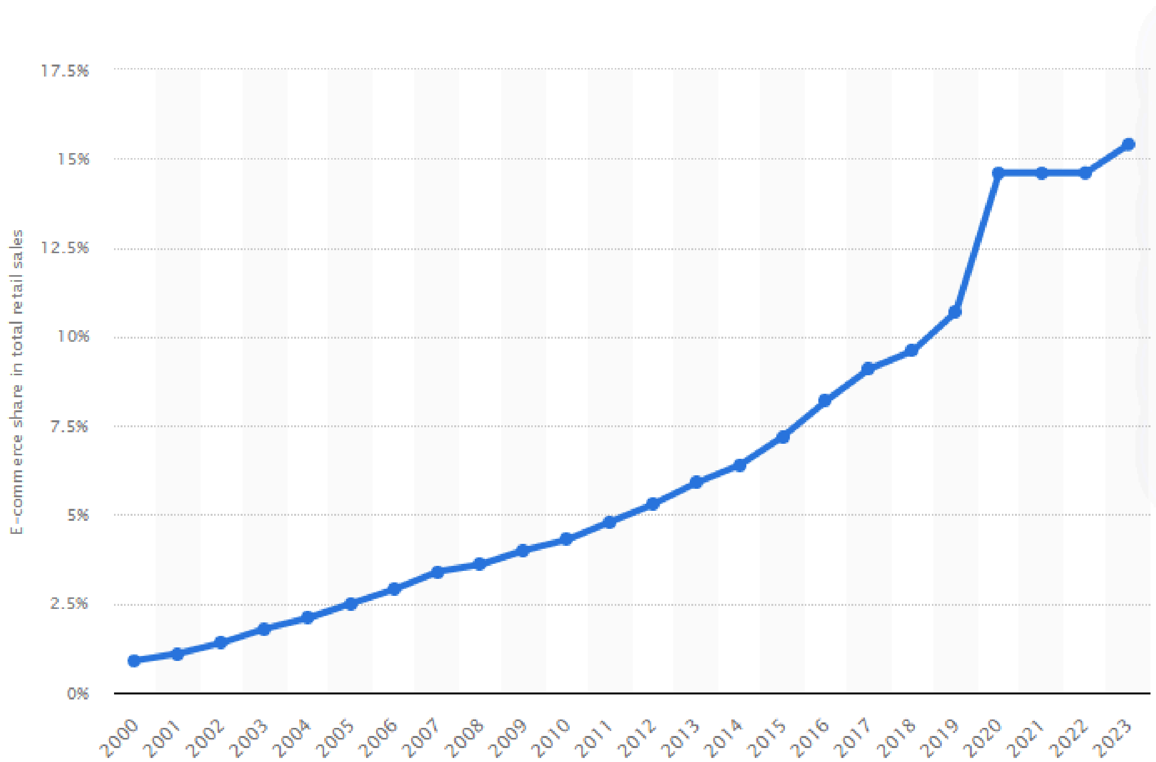


Figure 3 US e-commerce share in retail sales

Figure 3 shows a consistent increase in E-commerce share of retail sales. As lockdowns and social distancing measures were enforced, consumers shifted to online platforms. This led to an increase in e-commerce transactions. In the years before 2020, there was a dramatic increase in retail activity. The amount of activity increased from 10.7% to 14.6%, marking a 34.4% increase. Meanwhile from 2000 to 2018, there is about a 13.5.% increasing showcasing the profound impact of the pandemic. When the pandemic began, there was a clear exponential increase in the online retail markets as the growth rate was substantially higher. This trend is constantly increasing till suggesting that it will continue to grow in the future.

Conclusion

The COVID-19 pandemic's impact on the commercial real estate industry has remained unmistakable as it has altered cultural norms. It has introduced us to a new form of work culture that has drastic effects on office supply/demand, and the way retailers provide products. The immediate lockdowns in March 2020 forced businesses to adapt to new forms of work, involving workers operating out of their homes. Workers enjoyed this new lifestyle, allowing them to work out of the convenience of their homes and avoid daily commutes. This led many to escape the chaotic metropolitans for greener suburbs. However, this caused many offices to become vacant, in a continued increasing trend. The IT industry led this trend as they were the first to adapt, as evident through the large vacancy rates throughout Silicon Valley. Other industries aren't far behind and are continuing to adapt, causing a decrease in office space demand. As office spaces are able to save on rental costs and hire employees in various cities, we can expect to see an increase in vacancy rates as businesses continue to adapt causing cities to become increasingly empty. The national vacancy rate in the United States prior to the pandemic was roughly 12%. However, according to a study conducted by Cushman & Wakefield, vacancy rates are expected to increase to 18% by 2030, a figure about 1.3 times greater than its pre-pandemic turnout. With an increase in vacancy rate across the nation, office spaces are going to become increasingly irrelevant as technology becomes the kingpin of facilitating company interactions.

Additionally, the pandemic has transformed how consumers shop. As many retail stores were forced to shut down, businesses shifted towards e-commerce-based platforms enabling customers to shop from the convenience of their computer. This trend continued rapidly and spread across various industries, including groceries. Many businesses that struggled to integrate digital alternatives were forced into closure. As e-commerce continued to become the preferred option, many retail stores shut down and focused on digital business. For businesses to thrive in the future, they will need to focus on providing their products digitally to allow them to reach larger markets.

Sources

1. https://thehill.com/homenews/3944865-two-million-people-fled-americas-big-cities-from-2020-to-2022/#:~:text=Two%20million%20people%20fled%20America's%20largest%20cities%20from%202020%20to,enduring%20and%20potentially%20worrisome%20trend.
2. https://www.sf.gov/data/san-francisco-office-space-vacancy
3. https://www.cbre.com/offices/corporate/san-francisco#sort=%40publishdate%20descending&numberOfResults=9
4. https://therealdeal.com/sanfrancisco/2023/06/22/silicon-valley-office-vacancy-jumps-to-17-as-tech-firms-shed-floors/
5. https://www.nlc.org/resource/future-of-cities-reenvisioning-retail-for-recovery-and-resilience/#:~:text=With%20the%20pandemic%2Dfueled%20rise,of%20their%20workforce%20by%202029.
6. https://www.census.gov/library/stories/2022/04/ecommerce-sales-surged-during-pandemic.html
7. https://www.mckissock.com/blog/appraisal/covid-impact-on-us-commercial-property-values-the-real-numbers/
8. https://www.salesforce.com/news/stories/growing-smbs-survived-the-pandemic-by-going-digital/#:~:text=New%20Report%3A%2071%25%20of%20Growing,Pandemic%20by%20Going%20Digital%20%2D%20Salesforce
9. https://www.mckinsey.com/mgi/our-research/empty-spaces-and-hybrid-places-chapter-2
10. https://www.bls.gov/opub/mlr/2022/article/telework-during-the-covid-19-pandemic.htm
11. https://fortune.com/2021/01/07/record-store-closings-bankruptcy-2020/

12. https://www.ncci.com/SecureDocuments/QEB/QEB_Q4_2020_RemoteWork.html
13. https://www.statista.com/aboutus/our-research-commitment
14. https://www.globest.com/2024/03/27/office-vacancy-rate-still-going-up-in-san-francisco/#:~:text=The%20office%20vacancy%20rate%20hit,to%20preliminary%20data%20from%20CBRE.
15. https://stateline.org/2022/03/23/the-pandemic-prompted-people-to-move-but-many-didnt-go-far/
16. https://cre.moodysanalytics.com/insights/cre-trends/q1-2024-preliminary-trend-announcement/