Is the work-from-home concept here to stay?

Study of changes in rental income from commercial real estate firms

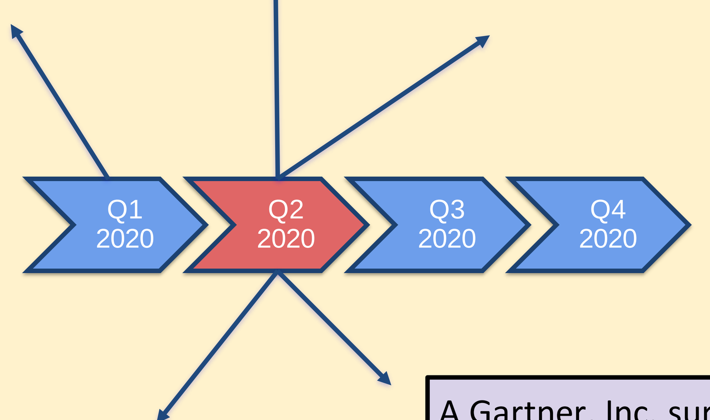
Introduction

In March of 2020, the COVID-19 pandemic produced a sudden influx of office-based employees working from home full-time. Office tenants, working with the real estate investment firms that own their workspace, immediately started to sublet, cancel, or modify their leases to account for the unprecedented times triggered by the pandemic. The employees saw this change as an opportunity to start moving away from cities as they resorted to their home offices instead. That might signal a shift in demand for companies connected to residential real estate; however, one industry is positioned to lose big if Americans don't return to office buildings: **commercial real estate.**

The first case of COVID-19 in the United States was reported on 1/21/2020 (Johns Hopkins, 2021).

Q2 2020 quickly showed an average decrease in rental income by more than 12% from Q1 in the seven corporations we studied.

Data from three different sources documented more than 35% of all workers reported working from home last May. (Bick, Blandin and Mertens, 2020).



A study of 100,000 tweets in spring 2020 showing a 73% positive sentiment toward working from home (Dubey & Tripathi, 2020).

A Gartner, Inc. survey on June 5 of 127 company leaders, representing HR, Legal and Compliance, Finance and Real Estate, revealed 82% of respondents intend to permit remote working some of the time as employees return to the workplace (Baker, 2020).

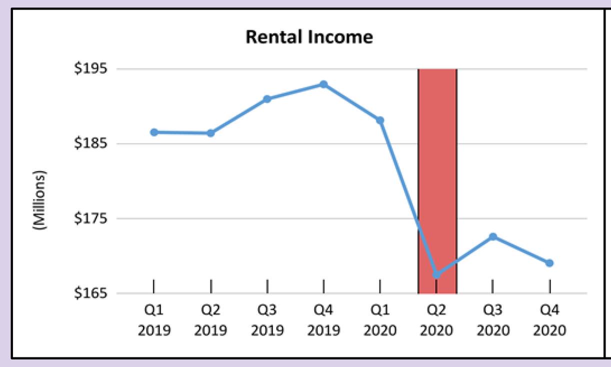
Methods

We tested 6 measures of performance using Bloomberg to find information for the seven companies we observed.

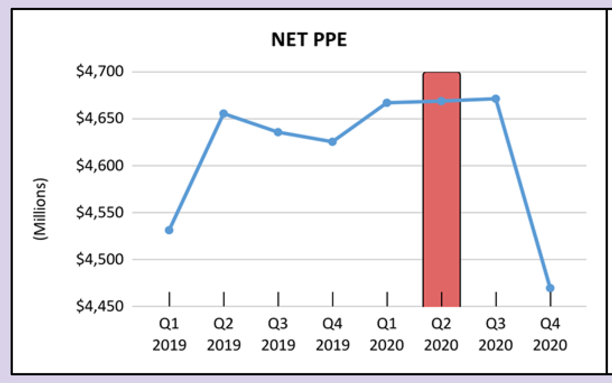
Due to effects caused by the pandemic, we expected the following to happen:

1. We expected to see a decrease in rental income because of an increase in vacancy rates and decrease in the number of properties owned.
2. We expected a decrease in net PPE due to a decrease in the average number of properties owned.
3. We expected a decrease in the number of properties owned because of an increase in vacancy rates.
4. We expected a decrease in depreciation and amortization because of a decrease in the number of buildings owned.
5. We expected an increase in capital expenditures because the companies are making improvements to the properties they already own to combat for the loss of income.
6. We expected an increase in vacancy rates due to companies opting to work from home instead of in office.

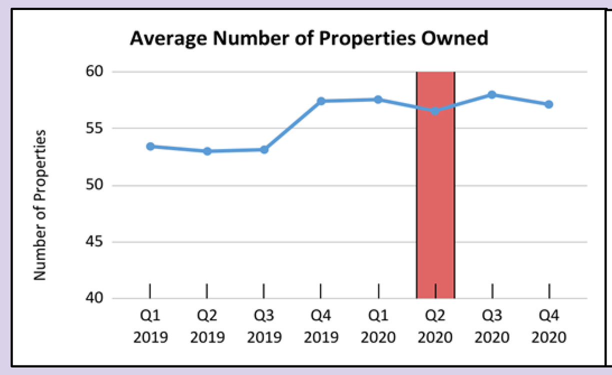
Results



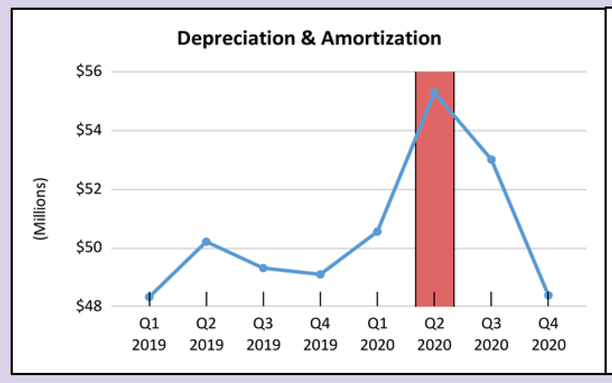
Average rental Income of the seven companies increased by 3.4% from Q1 2019 to Q4 2019. Then, from Q4 2019 to Q2 2020, we saw a significant decrease of 13.2% in the average rental income.



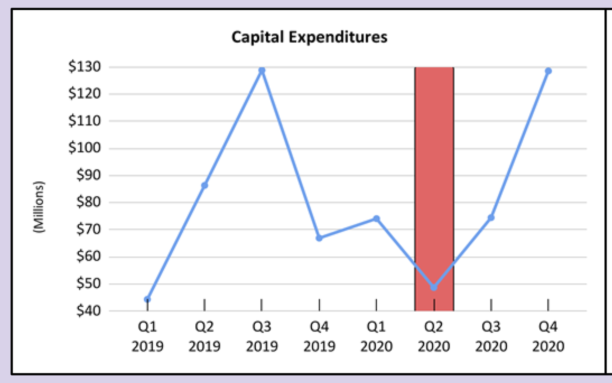
The average net property, plant, and equipment of the seven companies increased by 2.7% from Q1 2019 to Q2 2019. From Q2 2019 to Q3 2020, average net PPE remained relatively constant besides a slight dip from Q2 2019 to Q4 2019. However, we see a sharp decrease from Q3 2020 to Q4 2020.



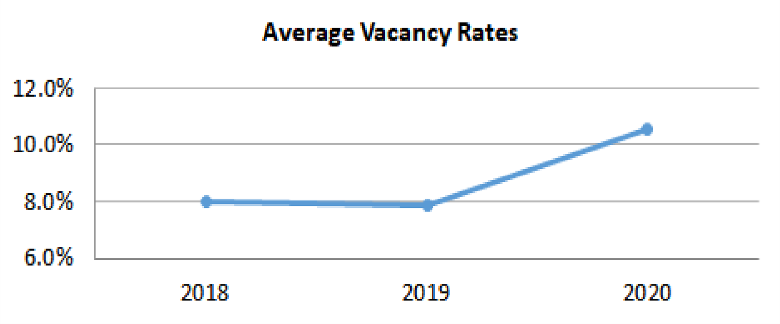
From Q1 2019 to Q3 2019, we see that average number of properties owned by the seven companies remains between 53 and 54 properties. However, in Q4 2019, the average number of properties owned increased by just over 4 properties or 8.1%. From Q4 2019 to Q4 2020, the average number of properties owned fluctuated slightly between 56.5 and 58 properties.



From Q4 2019 to Q2 2020, we observe a 12.6% increase in the average depreciation and amortization of the seven companies. The average depreciation and amortization then decreases by 14.3% in the 2 quarters following Q2 2020.



The average amount of capital expenditures between the seven companies nearly tripled from Q1 2019 to Q3 2019. Then, in the 3 quarters after Q3 2019, average capital expenditures fell by over 250%. In the last 2 quarters of 2020, we see average capital expenditures increase by approximately 2.6 times what it was in Q2 2020.



The average vacancy rates of the seven companies fell slightly from 8% in 2018 to 7.89% in 2019. In the following year, the average vacancy rates increased from 7.89% to 10.57%.

Q4 2020 Descriptive Statistics

	SLG Green Realty Corp	Piedmont Office Realty Trust	CIM Commercial Trust Corporation	Boston Properties, Inc.	Franklin Street Properties Corp.	Alexander's, Inc.	American Assets Trust, Inc.	Average	Standard Deviation
Rental Income (In Millions)	$190.40	$130.80	$13.40	$655.30	$59.40	$56.10	$78.30	$169.10	$221.96
# of Properties Owned	69	54	12	196	34	7	28	57.14	65.02

Discussions

The rental income graph can also be explained with the help from the other graphs. For example, the average vacancy rates improved slightly from 2018 to 2019, but from 2019 to 2020 vacancy rates increased higher than it was in both years. The loss of tenants occupying the companies' office space contributes to the loss of rental income.

If business tenants are changing to a primarily home office type structure, then this would appear on the real estate companies' financial statements. Most importantly, it would show up under rental income in the income statement. There was a total decrease among the corporations we studied from 2019 to 2020.

SLG Realty saw an unusually large decrease in net PPE when they sold 50% of a one million square-feet property. They saw a decrease in depreciation expenses and increase in capital expenditures as a result of this building undergoing renovations.

In our study, the average number of properties remained relatively constant with only minor fluctuations in 2020.

According to CBRE Group Inc., in 2020, the amount of available office space for subleasing nationwide was at its highest since 2003. The 137 million square feet of available office space for subleasing across the country is 40% higher than it was in 2019.(Putzier, 2021)

Conclusion

Overall, we found evidence that suggest a change in this industry that lead us to see the average rental revenue and vacancy rates decline.

- The average long-term lease for office space is around 3-5 years (Smith, 2021), so it may take years to see an impact as clients decide now to renew leases in the future and management completes existing projects. In the upcoming years, it may be helpful to look in the footnotes of the lease terms to draw conclusions.
- If the current work from home migration shift becomes permanent or even slowly recovers, the loss in office property values alone could reach 20 – 25%, Barclays Bank estimates. (Hill, 2020)
- While closing brick-and-mortar locations and workers anticipate a permanent work-from-home status, their landlords are not yet experiencing a significant change in their rental income or PPE. Q2 2020 findings of our data estimate only an average decrease in rental income by 12% from Q1. At the end of the year, only one of the companies had a higher Q4 result than the first quarter. The six other companies had all decreased.
- We are still in the pandemic, so it is too early to draw conclusions about **long-term** effects. The vaccine program this year will be a huge factor in keeping offices open. This discussion needs to continue to be studied as companies continue to shift to a permanent work-from-home culture.

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