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Marketing Material

The future of office spaces

Contrary to common fears, Covid-19's long-term effect on office demand might actually be accretive, or at least not destructive.

- _ Many observers have claimed that the pandemic has revealed city-center offices to be relics of the 20th century.
- _ We take a more nuanced look to assess the net effect of working from home, together with other changes on demand for office space.
- _ Instead of 20th century offices as such, the relics might turn out to be those increasingly tiny cubicles growing numbers of employees have had to endure.



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As investors are starting to come to grips with Covid-19, many are concerned that the recent trend toward working from home (WFH) will reduce the need for office space. Already, there are reports that various businesses are re-evaluating their long-term real-estate plans.¹ During his June testimony before Congress, even U.S. Federal Reserve (Fed) Chair Jerome Powell acknowledged that Covid-19 has accelerated changes that were already happening in the workspace.² "The pandemic revealed just how many offices were being run as relics of the 20th century," The Economist recently declared.³

In this piece, we take a closer look at such claims. Our main focus is the United States. This not only reflects the country's importance for real-estate investors, but also the abundance of data and recent research on U.S. office space. However, we suspect that some of our insights might be transferable to other countries too. After all, the majority of the world's office workers connected virtually during the Covid-19 lock-

downs at one point or the other. In the United States and elsewhere, employees proved that work can get done even in a fully remote environment thanks to the advances in digitization over recent decades. Most office workers adjusted to new "work routines" inconvenient as connectivity limitations and domestic space constraints may have been.

We use the word "routines" deliberately. According to an influential theory on economic change, organizations such as companies learn and remember by doing.⁴ When the business environment is fairly static, routines improve incrementally, going down a well-trodden path of small tweaks. Additional efficiency gains get squeezed out of established working practices. A good example is that over the past decade, we have seen office density rise substantially. Per our estimates, the average space used per employee declined by almost 10% from 2009 to 2019. Organizations have increasingly allocated less square footage to individual workstations.⁵

¹ <https://www.economist.com/briefing/2020/09/12/covid-19-has-forced-a-radical-shift-in-working-habits>

² <https://www.federalreserve.gov/newsevents/testimony/powell20200616a.htm>

³ <https://www.economist.com/leaders/2020/09/12/is-the-office-finished>

⁴ Nelson, R. and Winter, S., 1982, An Evolutionary Theory of Economic Change, Harvard University Press, pp. 96 – 136.

⁵ CBRE Group Inc. as of July 2020 CBRE Group Inc. as of July 2020

A global pandemic is exactly the sort of sudden event that can cause organizations to suddenly change direction, with lasting consequences. An important question is whether workers are going back to the traditional office environment or are likely to prefer changes that allow for more remote work. We believe that will largely depend on two distinct factors: Their willingness and their ability to perform their work duties remotely. In our view, these factors will ultimately guide corporate decisions around space allocation for years to come.

From what we are seeing, WFH is likely to be only partially adopted once the pandemic is over. There are many recent surveys that have analyzed U.S. employees' desires. Gensler, an architectural firm, surveyed 2,300+ full-time office workers at companies of 100 or more people from April 16 to May 4, 2020. The survey found that only 12% of workers want to work from home full-time and another 18% want to work three to four days remotely. Before this experience, only one in 10 U.S. office workers had regularly worked from home, and less than a third previously had the option to work from home. The research found that people overwhelmingly want to return to the office, but would like to see significant changes.⁶

A GWL Realty Advisors (GWLRA) survey found 40% of office workers are finding working from home less productive and most desire to return to the office once Covid-19 is resolved. Most office workers have found things to like in the unusual times of the pandemic, whether avoiding a commute, spending more time with family, or being able to do focused work more effectively. Yet working from home has also created productivity challenges.⁷ Issues when working from home include slow and spotty connectivity, lack of equipment, and inability to collaborate with colleagues in a timely way. According to the GWLRA survey, 42% found they were more productive at home, albeit at a price. The survey showed 22% of those working from home got more done, simply because they were working more hours.⁸

The ability to work remotely is also a function of companies' willingness to provide for it and functional limitations that do not allow for sustained work from home (e.g. SEC regu-

lations and compliance limitations). In some jobs, working from home may increase the risk of data leaks and security. A recent analysis finds that only 37% of jobs in the U.S. can be performed entirely at home, with significant variation across cities and industries.⁹ According to the 2018 American Time Use Survey, less than a quarter of all full-time workers worked at all from home on an average day, and even they typically spent well under half of their working hours at home. There is significant variation across cities and industries, as Table 1 shows.

Eventually, medical solutions to the current pandemic will be found. When that happens, office workers will be able to return back to their pre-Covid work arrangements. According to NAI Partners, a commercial real-estate brokerage, however, most companies say the work from home policies popularized during the pandemic may lead to more remote work in coming years. Almost 60% of survey respondents said that they prefer employees in the office, but they recognize they may be required to implement long-term remote policies and allow some employees to work remotely.¹⁰

The benefits for employees are clear: Significant time savings from a lack of commute – more than an hour-per-day per employee, on average. These time savings have been spent on additional family time, sleep, and exercise. For the work-from-home trend to be sustainable and acceptable long-term, however, we believe there also need to be benefits to employers. For them, the benefits of WFH may have been less apparent during the pandemic. But, there are potential real-estate and payroll savings as well as talent recruitment and retention if implemented post-pandemic.

We think that one critical question will be how employers adapt their organizational routines to the new normal. Otherwise, any cost savings could come at the expense of company culture, mentorship, and serendipitous collaboration. As mentioned above, according to Gensler, only 30% of the employees were allowed to work from home pre-pandemic, and 10% of employees were actually working from home regularly.¹¹ Post-pandemic, 30% of the Gensler survey responders would

⁶ Gensler Research Institute as of March 2020

⁷ GWL Realty Advisors Inc. Survey as of May 2020

⁸ GWL Realty Advisors Inc. Survey as of May 2020

⁹ <https://brentneiman.com/research/DN.pdf>

¹⁰ NAI Partners Survey as of May 2020

¹¹ NAI Partners Survey as of May 2020

prefer to work from home three to four days per week. According to an YouGov survey, 60% of companies are planning to encourage employees to work from home, therefore 18% of the U.S. workforce will likely work from home regularly.¹² Net, this will amount to a net increase of 8% in employees working from home regularly.

Meanwhile, and until the pandemic is finally over, employers will have to adopt as best they can to health guidelines, in order to enable a partial return to the office. Most office space is not configured to facilitate social and physical distancing. Research suggests that beyond 40% occupancy rate, physical distancing cannot not easily be implemented without office layouts being redesigned.¹³ Two forces are at play. For some employees, if an office space does not adhere to the "rules" then they will simply refuse to return to work (potentially supported by government decree). Employers also need to be seen to be doing the "right thing." It is therefore likely that safely re-entering the workplace will require a reversal of the densification trend, at least for the near-term. Moreover, some of the changes to office layouts might be retained, if they prove beneficial in increasing productivity, for example.

We took a theoretical approach to analyze how much density is optimal to achieve physical distancing according to U.S. government health guidelines.¹⁴ Assuming a 6-foot radius for each employee and a 30% load factor for common areas, bathrooms, mechanical, etc., each employee would require around 147 square feet of office space to achieve physical distancing. Using occupied stock divided by office-using employment as proxy, we estimate that the amount of square feet per person in the U.S. is currently about 159 square feet.¹⁵

While, on average office tenants may comply with the guidelines for physical distancing, the reality is different. Many tenants across the United States are likely short of the necessary space if all employees return back to the office. As of mid-May,

the JLL occupancy planning team had developed social-distancing plans for approximately 150 million square feet of their clients' real-estate portfolios. Among clients for whom they had developed social-distancing plans, 49% reported that they were losing 50% capacity or more on their floors to accommodate for social distancing.¹⁶

In other words, about half of tenants would need additional space, to reach an average of 147 square feet per person equal to the guidelines. At the same time, tenants that have more than enough space to meet the physical-distance guidelines most probably will not make changes in their space needs as their layout is driven by company-specific space requirements. The net result, according to SunTrust, companies would require more than 20% increase in office space per employee to achieve the range that allows for proper social distancing.¹⁷

Combining the effects of work from home and de-densification, we calculate that in a scenario in which 18% of the workforce works remotely, companies will have to increase their space allocation to accommodate physical distancing. This is likely to result in an increase of 9% in office demand (Table 2), roughly in line with the overall rise in office density we observed over the previous decade. Our analysis suggests that once the pandemic is over, the net effect of working from home and de-densification may be accretive, or at least not destructive, to office demand over the longer term. All told, we believe it might not be offices as such that become relicts of the 20th century. Instead, the real relicts might be those increasingly tiny cubicles ever growing numbers of employees have had to endure during the early decades of the 21st century, before Covid-19 came along.

¹² YouGov PLC & Barclays PLC as of June 2020

¹³ <https://www.burohappold.com/articles/social-distancing-in-the-workplace/>

¹⁴ <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html>.

¹⁵ CBRE Group Inc. as of July 2020

¹⁶ Jones Lang LaSalle [JLL] IP Inc. as of May 2020

¹⁷ SunTrust Robinson Humphrey Inc. as of June 2020

TOP FIVE SHARE OF JOBS THAT CAN BE DONE AT HOME (BY LOCATION AND INDUSTRY)

More than 45% of jobs in San Francisco, San Jose, and Austin could be performed at home. So could most jobs in finance, corporate management, and professional and scientific services.



METROPOLITAN AREA (% work from home)

1. San Jose, CA – 51%
2. Washington, DC – 50%
3. Durham, NC – 46%
4. Austin, TX – 46%
5. San Francisco, CA – 45%



INDUSTRY (% work from home)

1. Educational Services – 83%
2. Professional, Scientific, and Technical Services – 80%
3. Management of Companies and Enterprises – 79%
4. Finance and Insurance – 76%
5. Information – 72%

Sources: BLS and <https://brentneiman.com/research/DN.pdf> as of May 2020

POST-COVID-19 CHANGE IN OFFICE SPACE REQUIREMENTS PER 100 EMPLOYEES

Covid looks set to lead to behavioral changes, due to a higher proportion of employees regularly working from home and physical distancing. Below table outlines key sensitivities.



	Pre-Covid	Post-Covid	Change
Employees	100	100	-
% Work from home	10%	18%	+8%
Office employees	90	82	-9%
Space (in square feet) per employee	159	191	+20%
Total space required (in square feet)	14,310	15,646	+9%

Sources: BLS, Gensler, CBRE-EA, SunTrust Robinson Humphrey and DWS Investment GmbH as of May 2020

GLOSSARY

The [U.S. Federal Reserve](#), often referred to as "the Fed", is the central bank of the United States.

The [United States Congress](#) is the legislature of the federal government. It is comprised of the Senate and the House of Representatives, consisting of 435 Representatives and 100 Senators.

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