09

IMPACT SERIES

The flexible future: Reshaping how we live and work

Foreword

Welcome to the ninth Impact Series report from our Research team, which explores the economic impacts of post-COVID work patterns that may fundamentally change how people live and shop.

29 June 2021

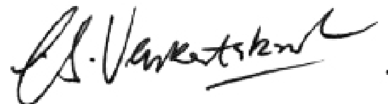
The virus has wreaked havoc with lives and economies. Lockdowns and working from home emptied city centres and office buildings; internet shopping increased as stores became off-limits; travel and live entertainment came to a near halt. Many of these societal changes are likely to be felt for years to come – and some could become permanent.

This report focuses on trends and data emerging from the UK, USA, France, Spain, Germany and Sweden, but with relevance for all urban economies. Our Research analysts conclude that 'hybrid' working (splitting the working week between the office and home) will be a predominant feature of the post-COVID world. Offices, in turn, could take on new uses as places for workers to exchange ideas and meet clients, rather than execute their daily tasks. This is likely to have significant implications for the way we use real estate – homes, offices, and shops.

There are signs of recovery, as vaccination programmes start to take hold. In this report, our Data & Investment Sciences teams have used geolocation data to estimate the rates at which workers are returning to the office and city centres. Their findings illustrate the future of a flexible working environment.

Such changes will likely be experienced differently across countries and regions, but it is clear the impact of a shift away from pre-COVID working patterns could be enduring.

We hope you find our analysis thought-provoking.



C.S. Venkatakrishnan
Global Head of Markets
Co-President, BBPLC

> "As the enforced isolation wore on, employers discovered that output was not hit as they had feared."

Resilient productivity in the face of home-working has forced a rethink

The foundations of traditional office working began to wobble early last year. As economies locked down to contain the spread of the virus, governments across the world urged employees to work from home as much as possible. Many companies embraced the trend, anticipating a rapid return to normal working patterns – and regular levels of productivity – once the pandemic was brought under control.

But as the enforced isolation wore on, employers discovered that output was not hit as they had feared. On the contrary, some companies reported that staff were actually more productive from home, having made use of remote-working tools such as chat apps and videoconferencing. For their part, many employees said they did not miss the stress and cost of the daily commute. Now, even though fears of infection are receding and the need for social distancing is diminishing, both employers and employees are keen to preserve what they see as more efficient ways of working. More companies are likely to offer flexible working options, and more staff are likely to take them up. The most common model is likely to be a split week (partly in the office, partly at home), rather than working exclusively remotely.

This new dynamic will likely have long-term, structural effects on property markets. The less time people spend at work, the more time will be spent in and around the home. Owning and improving that home, whether in a city or the suburbs, will thus become more of a priority. The residential property market should remain strong for years to come, buoyed by low interest rates and reduced spending on services.

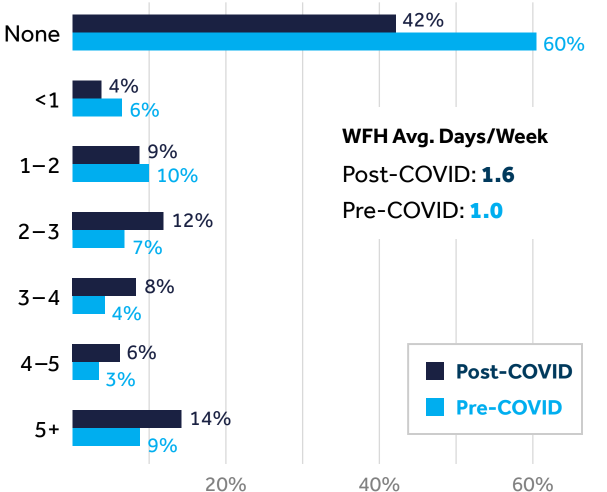
Real-estate brokers are likely to continue to see brisk business, as should manufacturers of appliances and exercise equipment. As the number of people vaccinated increases and individuals become more comfortable allowing people into their property, homeowners are likely to turn their focus to more extensive building projects that require professional expertise.

Meanwhile, demand for offices could fall by about a fifth, according to our Research analysts' estimates. Cuts will be driven by larger organisations and by the TMT and professional services (finance, accountancy, legal, real estate) sectors, in particular.

Remaining city-centre premises are likely to take on a different character, becoming focal points for employees to gather periodically, rather than as a daily destination. In order to induce staff to make the trip, those buildings will need to have superior features. Demand for the most desirable offices, near amenities such as bars and restaurants, are therefore likely to increase.

Figure 1

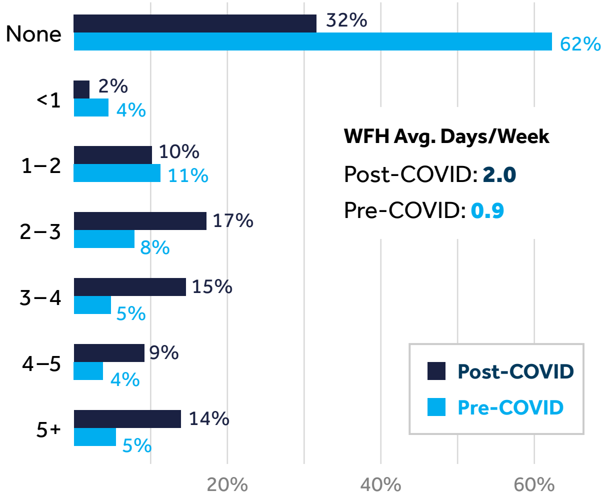
Office-based employees expect average WFH days/week to increase from <1.0 to >1.6 post-COVID



Source: YouGov survey, Barclays Research

Figure 2

Office-based employers expect a greater increase in average WFH days/week, to >2.0 post-COVID



Source: YouGov survey, Barclays Research

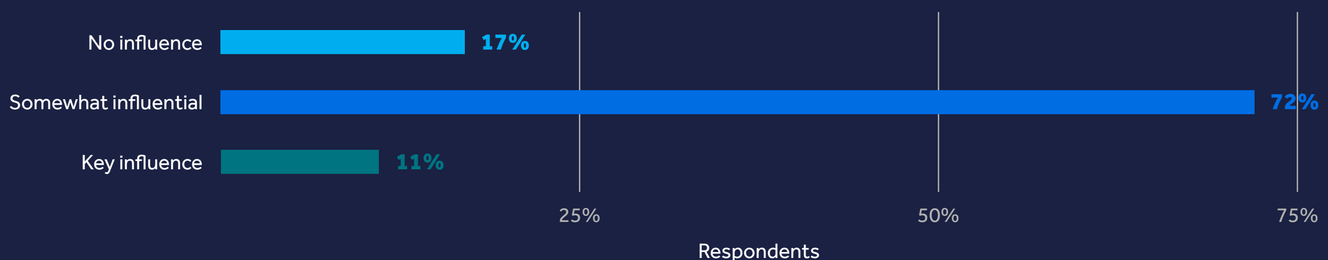
The social and environmental ripple effect of WFH

More diverse workforce, greater social mobility: With less need for people to work in centralised offices, employers should be able to draw on a larger, more diverse pool of talent, and employees will not be limited to the jobs available in their local towns and cities. This could have the effect of boosting social mobility, creating flexible opportunities for disabled people and working parents. This type of pattern was already seen pre-COVID, with more women applying for and obtaining senior positions at the insurer Zurich since it introduced flexible working for all its roles.

Greener buildings: With less demand for office space, landlords that provide high quality, environmentally friendly buildings with a 'green' label will find it easier to attract tenants. And companies are becoming more serious about reducing their carbon footprint. A 2021 survey by real estate firm Knight Frank found that 50% of occupiers currently have less than 10% of their real estate portfolio holding an environmental accreditation. When combining this result with relatively low awareness of the potential benefits of a greener real-estate strategy across tenants, we believe that this represents a huge opportunity for landlords.

FIGURE 3

How influential will sustainability considerations be in determining your real estate strategy and portfolio over the next three years?



Source: Knight Frank, Barclays Research

Home comforts: For many, there's no going back

We believe that COVID-19 is likely to lead to increased flexibility for both employers and employees, allowing people to work when and where they want to.

At the end of 2020, Barclays commissioned YouGov to undertake a survey of 4,300 office-based workers and >1,500 senior decision makers across six countries (UK, USA, France, Spain, Germany and Sweden), to gain a better understanding of how employees and employers view a return to the office, post-pandemic. The survey was clear: both groups expect much more working from home (WFH) in the future. Among the employees, about 60% said they expected to work partially or permanently from home, compared with less than 40% prior to the pandemic.

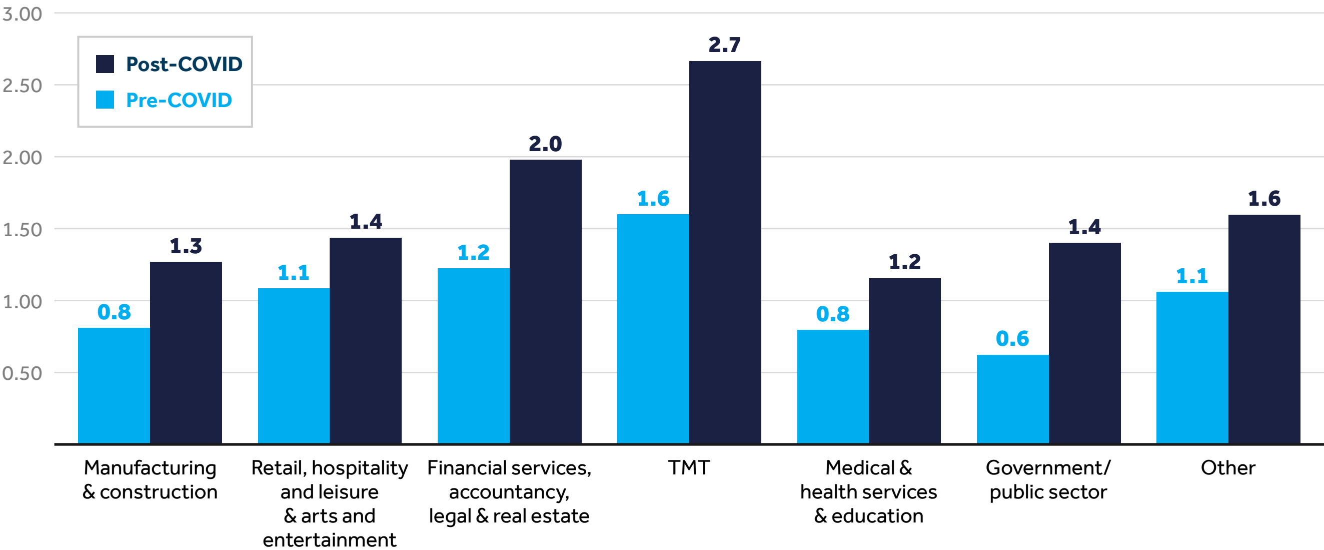
Not only do more people expect to WFH, those who did so prior to COVID expect to do more of it. Employees expect 60% more WFH, while employers expect WFH days to double.

The desire to WFH appears broad-based, across industries, countries, age groups and genders. However, we find evidence that the effect on office demand will be predominantly driven by larger organisations, and by the TMT and professional services (finance, accountancy, legal, real estate) sectors, in particular.

Employers cited a wide range of reasons for increased WFH: 46% cited flexibility for all (employees and employers); reduced commuting time was reported by 41%; and cost savings, better work/life balance and increased productivity were noted by about a third of respondents. Only 24% of employers said they would not encourage WFH in a post-COVID world.

FIGURE 4

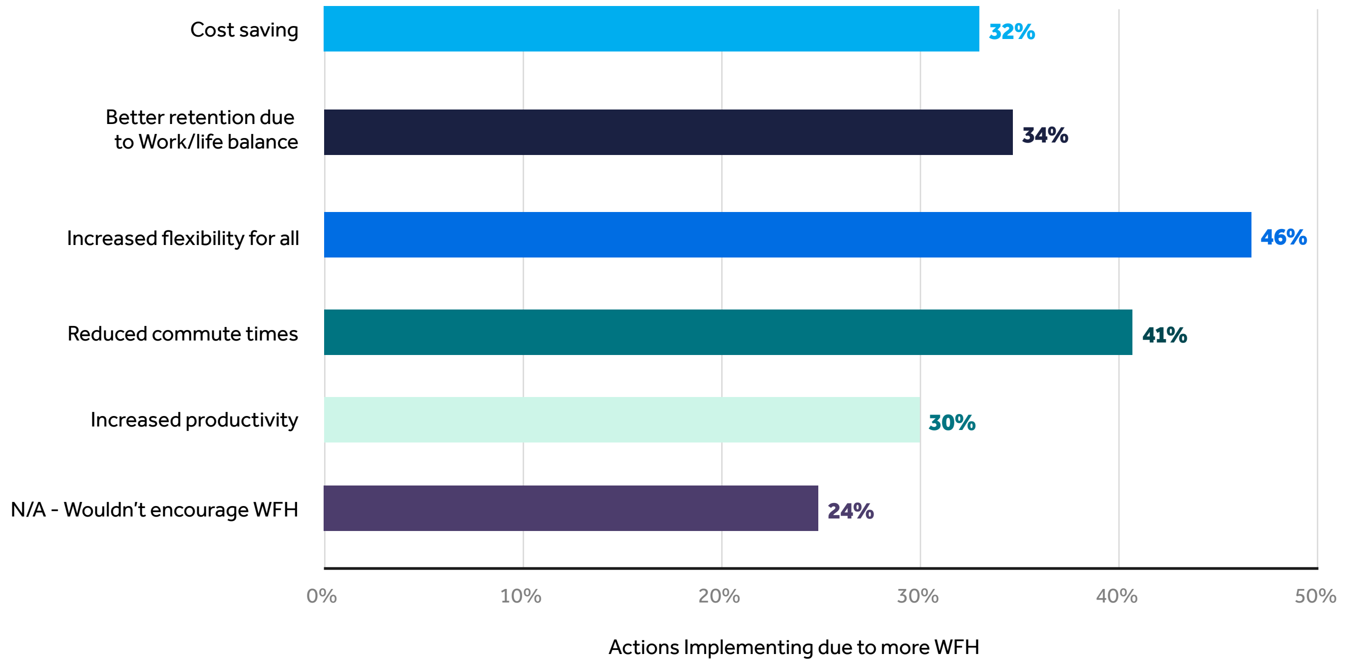
Pre- and post-COVID WFH office-based employee expectations by industry sectors



Source: YouGov survey, Barclays Research

FIGURE 5

Why employers would support staff working from home



Source: YouGov survey, Barclays Research

Who benefits?
Home goods companies, digital exercise companies, homebuilders and real-estate brokers ... and carmakers

Big purchases are being funded by savings pots built up during the pandemic, as people were unable or unwilling to spend in shops, bars and restaurants. We estimate that as of February 2021, consumption in the US across apparel, travel and leisure categories was down $500bn year-on-year, compared with a near-$200bn increase in spending across at-home food consumption, furnishings and equipment. That suggests a net $300bn of spending that could be reallocated. Subsequently, the third round of stimulus cheques sent an additional $370bn to US households by mid-April.

Some sectors have done well, and we expect many to continue doing so:

Consumer durables: The shift to remote working, coupled with strong demand for homes, has led to an increase in the sale of home appliances as the pandemic drives "nesting" behaviour. We believe this will continue[1].

1 Source: Barclays Research

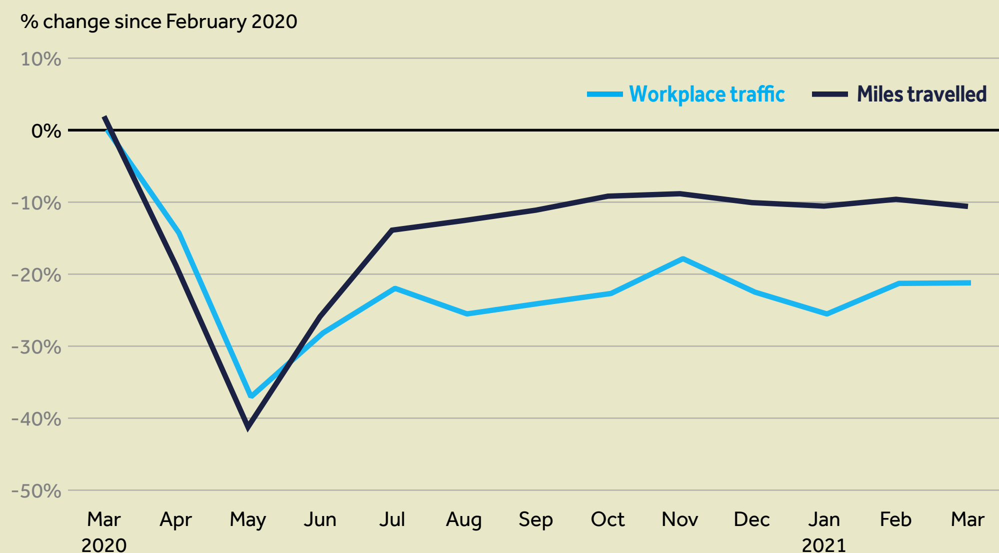
Digital fitness companies: WFH has been good news for fitness and training apps, with notable digital fitness companies citing both increased sales, and user usage – implying improved value for the consumer. The big question is how sustainable this trend will be as gyms re-open and instructor-led classes resume[2].

Carmakers: The advent of the pandemic caused a collapse in driving and led some to speculate that the drop would be permanent. However, evidence is mounting that more work from home leads to more time behind the wheel. For much of the past six months, Google's workplace traffic indicator for the US has been more than 25% lower than pre-pandemic benchmarks, but total miles travelled were off only 10%, with some additional travel attributable to people collecting goods ordered online in the "click-and-collect" model. That certainly suggests the possibility that miles will recover even if workplaces do not. That's encouraging for carmakers.

2 Source: Barclays Research

Figure 6

Workplace traffic and miles travelled, from Google



Source: Google, Barclays Research

Homebuilders: In the US, the sector has benefited from a "spring selling season" that has lasted about a year, and counting.

The strength in demand has been broad-based, with few exceptions across buyer demographics – first-time, move-up, luxury, and active adult – and geographies. Moreover, even rising mortgage rates since the end of January have not stifled demand. Most homebuilder management teams have signalled that order volumes would have been even stronger in recent months, had they not pushed up prices and limited new releases. Even with fast-rising construction costs, especially for timber products, homebuilders are posting their strongest gross margins in nearly two decades[3].

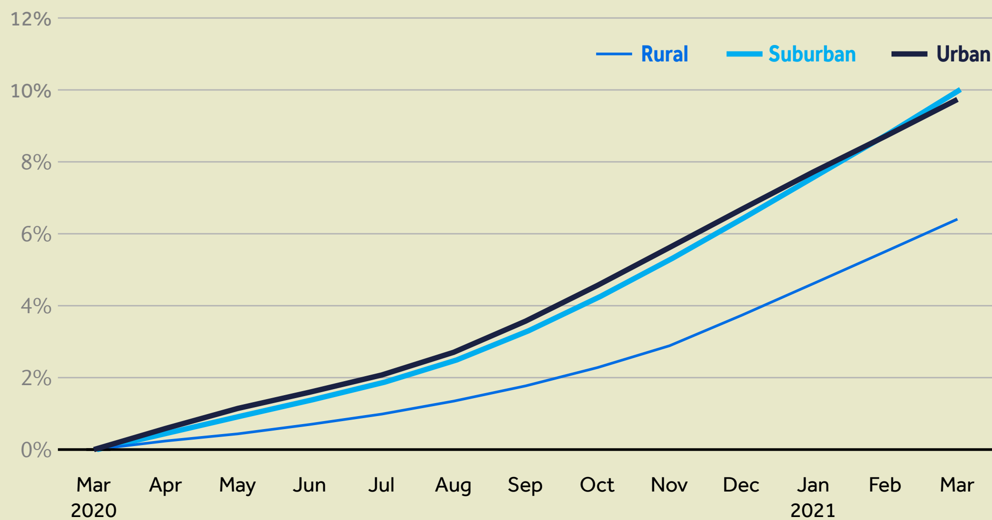
Moreover, as people grow more comfortable allowing strangers into their homes, we think they will spend more on larger home-improvement plans.

Real-estate brokerages: are reaping the twin benefit of higher volumes and rising prices. Single-family existing home sales in the US have averaged roughly 5.6mn since June 2020, when COVID-related restrictions began to ease. That is almost one-fifth higher than the monthly average across 2018-2019. In March 2021, the average selling price of those homes was $329,100, 17% higher than a year earlier.

3 Source: Barclays Research

FIGURE 7

Property prices are up about the same in suburban and urban zip codes (US), though gains in rural areas are lagging



Source: Zillow, Barclays Research

The end of the urban exodus?

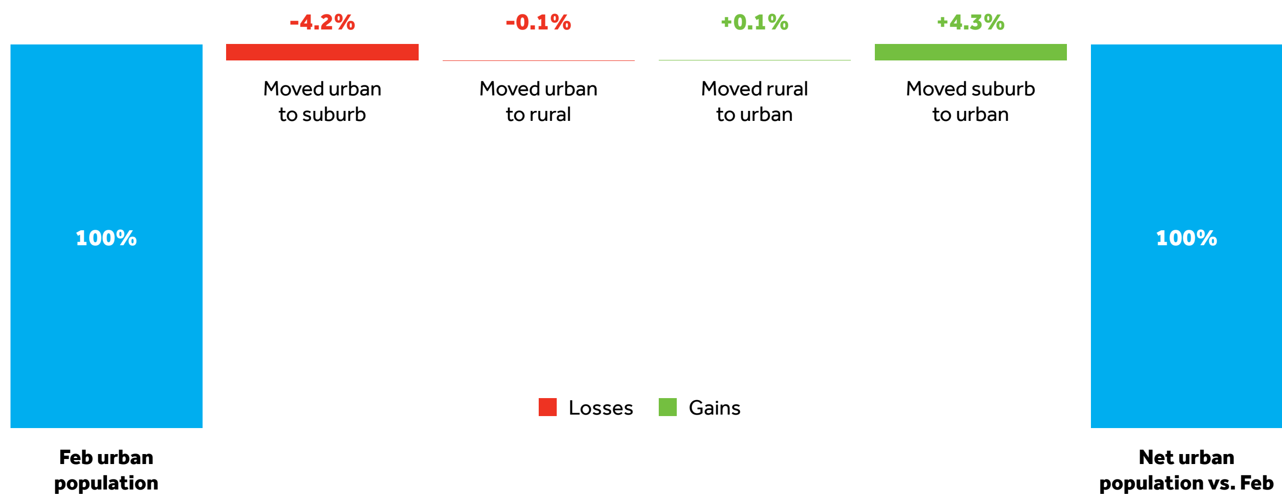
Those price gains are spread pretty evenly across urban and suburban areas, suggesting that some of the early speculation about the pandemic – that it would cause a hollowing-out of big cities – was off the mark.

Geolocation data suggest that there was indeed net migration out of US cities through at least the first half of 2020: we estimate that from February to April 2020, about 2.8% of urban residents left, mostly to the suburbs. And then from April to July, it seems that a further 0.8% of people left. But that trend seems to have come to an end. From February to April 2021, we measure a slight net migration into urban areas at only 0.05%, but it still represents a halt to the COVID-era migration. We think the trend will stick: the preferences that made city living desirable are still in place, and will remain once the pandemic recedes.

Figure 8

Demand for urban living in the US appears to have stabilised

Urban migration Feb–Apr 2021, % of Feb 2020 urban population



Source: Complementics, Barclays Research

So what happens to the office?

Offices will remain critical places for employers and employees to do business. But we believe the function of those buildings will change. Their focus is likely to shift to becoming gathering places for social interactions, and for training and creativity-inspiring discussion, rather than the process- and task-driven spaces of the past.

That shift is likely to require new layouts: more meeting rooms, break-out areas, collaboration spaces and desk-sharing areas, along with permanent desks for those not working under a hybrid model. So-called "hot-desking" has never been much liked by employees, because people tend to like to have a space they can call their own. We see desk sharing as a potential solution: employees have their own desk at the office, albeit one that is shared, always in the same space, and located next to team members.

If hybrid working becomes the norm, as we expect, we see the potential for a 10-20% reduction in office demand across all countries. Moreover, there is a risk that incremental office demand will be less than it was. The expansion of workforces may no longer lead to an increased need for square footage, as new employees are able to slot into the hybrid model. This could break down the longstanding correlation between growth in employment and demand for office space.

Some argue that companies are unlikely to scale down their real-estate requirements dramatically, given that such expenses are typically a low percentage of the overall cost base. Why would a company risk disruption to its operations that could squeeze the top line? We see two key reasons:

The first is that while savings on real estate may be limited, they are immediate – upon expiry of the lease – and do not have material adverse effects on the remainder of the business. Other potential cost savings, such as cutting the workforce or upgrading IT systems, come with risks of lower productivity and initial cost overruns. But as the COVID-era WFH experiments showed, productivity was unchanged – or even increased – from the shift away from the traditional office set-up.

The second reason is that office usage prior to COVID-19 was about 60% globally[4] as many organisations based their real estate requirements on the assumption of 100% occupancy. Utilisation rates were already relatively low, implying that companies were not especially focused on making savings on office space. As such, potential post-pandemic reductions could be larger than our 10-20% estimates.

4 Source: Cushman and Wakefield

Figure 9

How much office space do we need? Employee and employer expectations post-COVID

Employee responses highlight a potential 12-25% reduction in office space post-COVID

	Delta pre- vs. post-COVID never in office	Always in office	Partial WFH days	Net space saved
Total	**5%**	**42%**	**2.3**	**17%**
UK	13%	34%	2.4	**25%**
USA	6%	42%	2.3	**18%**
France	1%	45%	2.2	**13%**
Germany	2%	49%	2.2	**12%**
Spain	4%	46%	2.4	**16%**
Sweden	7%	36%	2.1	**19%**

Source: YouGov, Barclays Research

Employer responses highlight a potential 18-27% reduction in office space post-COVID

	Delta pre- vs. post-COVID never in office	Always in office	Partial WFH days	Net space saved
Total	**8%**	**32%**	**2.5**	**24%**
UK	11%	27%	2.6	**27%**
USA	12%	36%	2.3	**24%**
France	9%	39%	2.4	**21%**
Germany	5%	32%	2.6	**21%**
Spain	11%	32%	2.7	**27%**
Sweden	0%	27%	2.4	**18%**

Source: YouGov, Barclays Research

A big rethink for tenants...

It is true that people have begun to return to offices. Using geolocation data, we tracked foot traffic in 28,000 US offices tied to commercial mortgage-backed securities, which we think represent a broad cross-section of office-specific jobs. As of mid-May, the data suggested that the number of people entering offices was down about 57% from pre-COVID levels.

That represents a material rebound from the lows of April 2020, when traffic was down almost 85%. With vaccinations now rising to levels where governments feel able to ease restrictions, we expect traffic to continue to recover through the summer.

Australia and New Zealand point to a potential model of post-COVID recovery, given that they had almost entirely eliminated the virus even before the vaccination programmes began. In New Zealand, workplace traffic appears to have recovered to almost 100% of its pre-pandemic levels, while in Australia it remains only 10-15% below pre-COVID levels.

However, it is clear that a pick-up in availability and vacant space has started. We suspect that this is driven in part by slow leasing volumes as a direct result of the lockdowns, preventing companies from physically visiting buildings. But we believe that it also shows that tenants are in no rush to re-locate or extend leases as they reconsider their real-estate requirements.

As they do so, employers will likely gravitate towards modern, high-quality and environmentally-friendly spaces. This was a trend already evident prior to COVID, but may now accelerate. Conversations with landlords lead us to think while general tenant demand has remained low thus far in 2021, it has focused on recently completed (or soon-to-be-completed) office buildings. According to Barclays Research, there is virtually no demand for properties that do not tick these boxes.

Location will also be vital. Early on in the pandemic, there was talk that office demand might shift to the suburbs, as people moved out of cities and as suburban offices experienced (slightly) less severe declines in foot traffic than urban areas. We think those predictions were misplaced. Now that economic reopening has become a reality, urban offices are recovering at a faster pace than suburban ones, and now have roughly the same amount of traffic as their pre-COVID baselines. And most critically: the centres of cities remain the easiest places to access for most people.

... And landlords

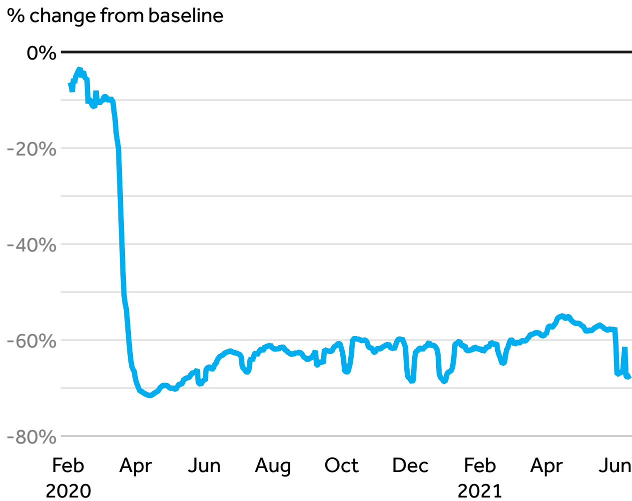
Given that we expect tenant demand to centre on fewer but higher-quality buildings, pressure could rise on values and rents for secondary offices. Buildings that need heavy refurbishment or are not in the right location (not close to transport links and amenities such as bars and restaurants) are unlikely to attract many tenants. Holders of secondary office properties could therefore be forced to upgrade their buildings to remain competitive.

Refurbishment capital expenditure is likely to be defensive (preserving the value of the building) rather than proactive (increasing the value). This will in all likelihood have a negative effect on the value of the property. This issue is becoming more pressing as the availability of space continues to increase. In London, for example, empty buildings are roughly at levels last seen in 2004. The result: more landlords will be competing for a smaller pool of tenants.

This presents an opportunity for those real-estate investors who 1) understand local office dynamics; 2) have a deep understanding of tenant requirements and are willing to adapt to the changing needs of tenants in the hybrid model; 3) are well capitalised; and 4) are willing to take risks and acquire properties that are, or will soon be, obsolete. Those who can separate the ‘bad’ from the ‘good’ office buildings and are able to acquire those at the right price, could see attractive returns, even when overall demand for office space will have reduced.

Figure 10

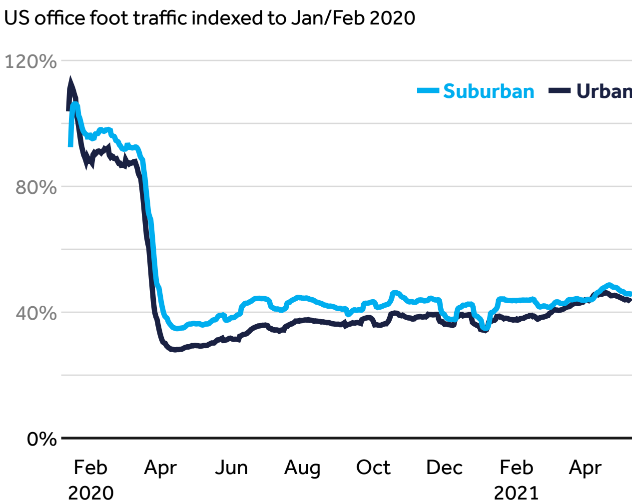
Office foot traffic in the US is recovering steadily



Source: Complementics, Barclays Research

Figure 11

Early in the pandemic, suburban-sited offices were more used than urban ones, but the gap has closed with progress towards full reopening



Source: Barclays Research

Converting offices to homes? Not as easy as it sounds

It would appear to make sense to transform unwanted office space into residential use, but there are significant hurdles to this process. Office rents and values are generally still higher than residential ones, which implies that conversions do not make sense financially, as landlords will keep buildings in their most valuable usage form. For example, in Paris, we calculate that office rents would need to fall around 30% to break even with residential rents. The long-term relationship between vacancies and rents suggests that this is, indeed, a possibility if office demand falls as much as we expect. But even if it does, it is likely to be a long time before prices are so drastically reduced.

Conversion can also be expensive, and some buildings are simply not suitable to be transformed into residences for several reasons:

Too deep: Some offices built in the 1980s-90s are 12-15m deep, which means they have less natural light towards the back. It would be expensive to create courtyards, for example, and would lead to a loss of usable space, which Barclays analysts estimate at 15-25%.

Too much glass: Office facades could feature up to twice as much glass as traditional residential, which is not suitable for residential use. Adding balconies would also add cost.

Age matters: Using Paris as an example, office buildings built in the 1960s-70s are relatively easy to convert, but those from the 1980-90s are more difficult due to their low ceilings. Other unforeseen costs include asbestos removal.

Pulling power: the lure of city centres

To estimate how optimal office siting may change after COVID, we developed a model that adapts physics gravity-mapping models to measure the proximity of places to people. It works by measuring the distance between each point in a metropolitan statistical area (MSA, which includes cities, suburbs, and nearby rural areas), to the time-weighted locations of all the people in that area. Each place therefore exerts something like a gravitational pull on every person throughout each day, and the strength of that pull declines with the square of distance – like the force of gravity that pulls together two planets in space. We call it "geo-gravity": the places that have the strongest pull are those that are the most convenient to the greatest amount of people.

An example might help to clarify. Imagine a person who, pre-COVID, spent 10 hours in the office, two hours commuting, and 12 hours at home. We would observe strong geo-gravity from the office and its immediate area, and an even stronger geo-gravity from the home. Places passed during the commute, however, would see weak geo-gravity, while places that were very far away would have a similar, but very weak, pull.

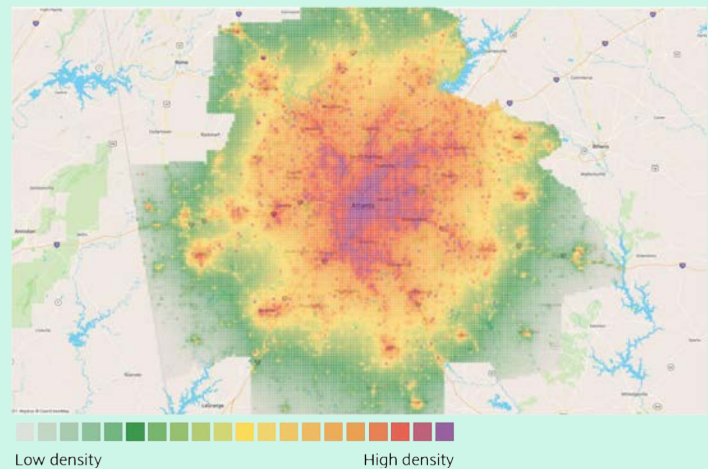
Then, if during COVID he or she spent 22 hours per day at home and two hours running errands, we would see very strong geo-gravity at the home and small geo-gravity where he or she ran errands. The office would be indistinguishable from the rest of the MSA.

It is easiest to understand the concept by looking at a heatmap of an MSA. The places that have the most geo-gravity are the "hottest" spots, and exert the strongest pull on people. To measure the effects of COVID, we generated maps from March 2019 and March 2021 – and the changes in geo-gravity from 2019 to 2021. Here we show two of the most dramatic transformations.

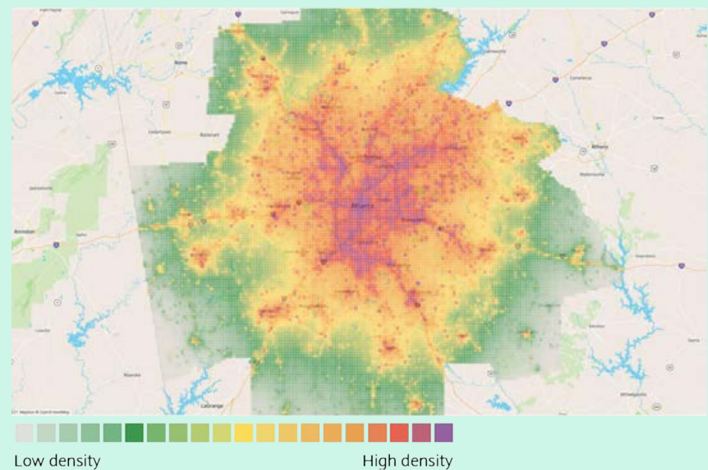
FIGURE 12

Atlanta, Sandy Springs & Alpharetta

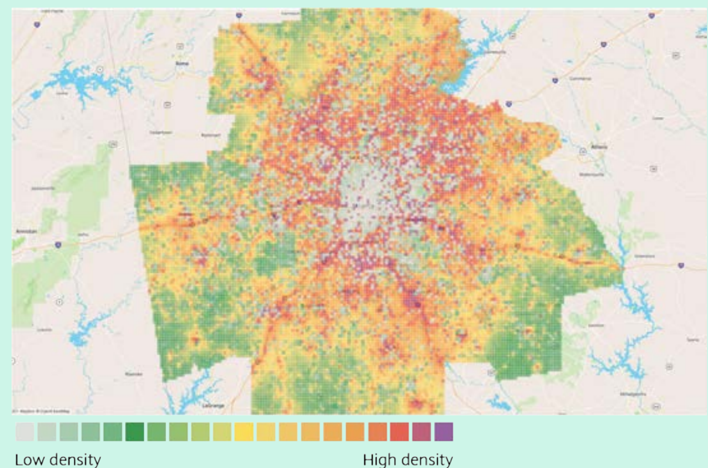
2019



2021



Geo-gravity shift from pre-COVID to post-COVID

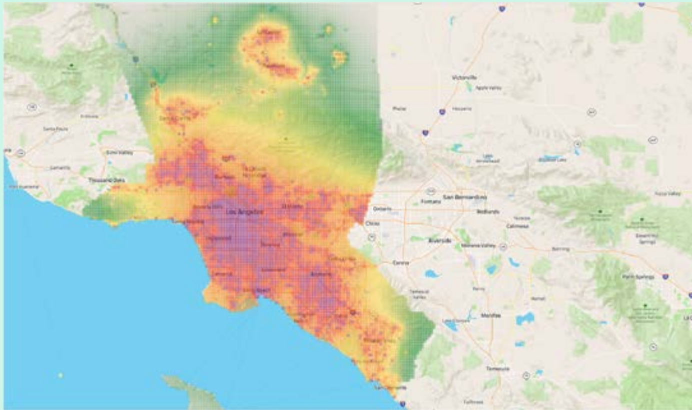


Source: Complementics, © OpenStreetMap contributors and Barclays Research

FIGURE 13

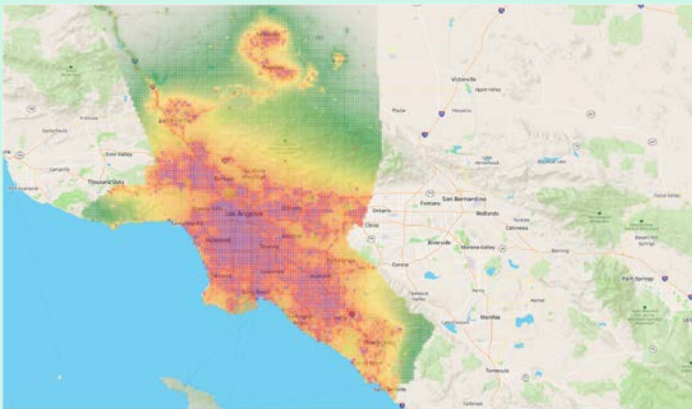
Los Angeles, Long Beach & Anaheim

2019



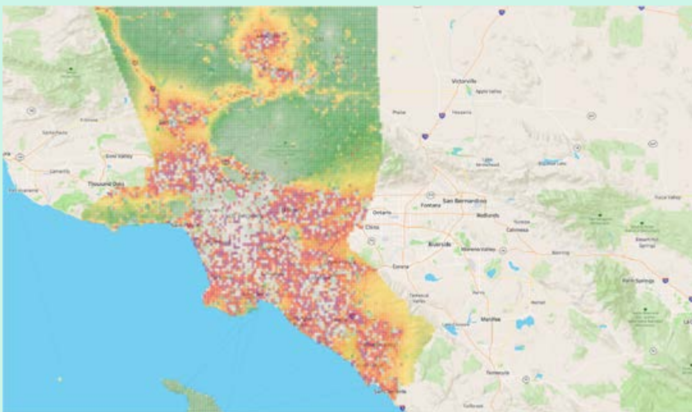
Low density High density

2021



Low density High density

Geo-gravity shift from pre-COVID to post-COVID



Low density High density

Source: Complementics, © OpenStreetMap contributors and Barclays Research

The key takeaway from these maps: the pre-COVID focal points in cities (the hotter areas in March 2019) mostly remain the same focal points in 2021, even as traffic migrated outward. This suggests that even as people sharply shifted where they were spending their time during the pandemic, from the middle of MSAs towards the outskirts, the places where it is most efficient to gather did not fundamentally change.

Travel: mixing business with pleasure

Business travel (conventions and "business transient," representing individual business travellers) comprises about two-thirds of demand for higher-end hotels in the US and most developed markets. There is a concern that a structural reduction in the use of office space could result in lower use of hotels in many markets. During the pandemic, hotel demand has been dominated by leisure travel, which held up better than business travel.

However, more comfort with remote work is likely to create demand for new kinds of work trips, such as "bleisure" travel (mixing leisure and business) as more people embrace the 'work from anywhere' concept.

In the long run, more flexible working arrangements could result in incremental business-travel demand in the form of higher conference attendance; more off-sites, training, and other incentive travel; and more frequent trips to the home office for those who are working in different metropolitan areas. Ultimately, historical trends show that overall hotel demand is cyclical and is likely to return to long-run averages over time.

Retail: trend to online accelerates

The challenges for brick-and-mortar retailers are not over. In 2020 a number of weaker players closed their doors and almost all reduced their footprints, as the long drift toward e-commerce was suddenly accelerated by social distancing. In the US, more than half of sectors experienced an increase in online spend share from mid-March 2021 through to the end of April 2021, despite a lockdown-affected comparison period.

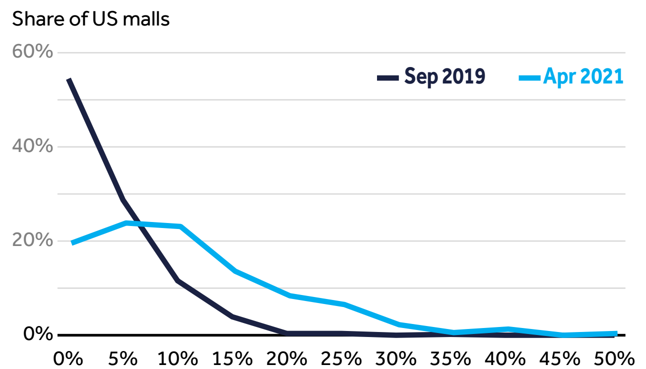
Surviving retailers have pushed for changes to lease structures, while restructuring their store fleets. Such retooling will have to continue, as stores become the edge of the distribution network. Outlets will get smaller and more focused, taking on roles akin to showrooms or marketing hubs, or will be repurposed as final-mile distribution nodes. The ability to ship from store reduces shipping times and costs – especially when done within the same zip code as the order – and increases the efficiency of companies' inventories.

Other features such as buy online/pick up in store, and using third parties to execute same-day delivery are also competitive advantages. Store presence, in fact, is such a vital part of the online experience that many retailers have found that when they exit a particular region by pulling down the shutters, they can lose more than 70% of their run-rate online sales in that region (plus, of course, 100% of their offline sales).

The effects of the big migration online have shown up most obviously in malls. The average property now has about 13% store vacancies, putting them in danger of a downward spiral of falling rents and tenant exits. The stock of Simon Property Group, the most prominent operator of high-quality malls in the US today, still trades 45% off its all-time highs. The outlook for large urban flagship stores is not encouraging either. Multi-storey, high-rent stores on 5th or Madison Avenue may well disappear over time.

Figure 15

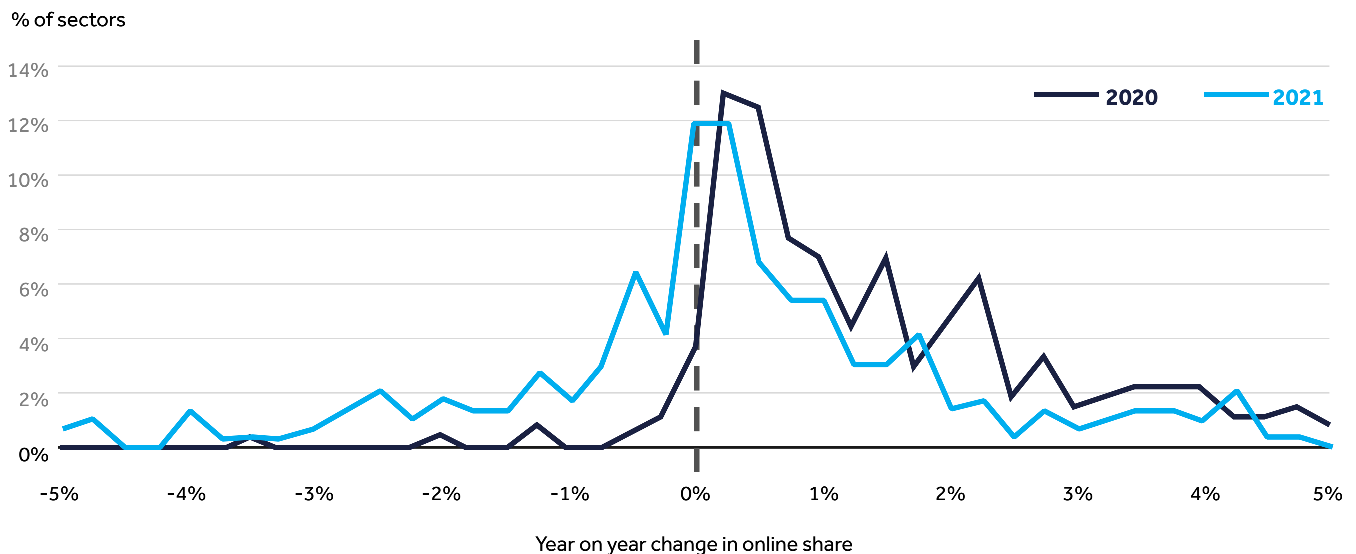
More than half of US malls have lost at least 10% of their stores



Source: Barclays Research

Figure 14

More than half of sectors posted a year-on-year increase in online spend share in March-April 2021



Source: Barclays Research

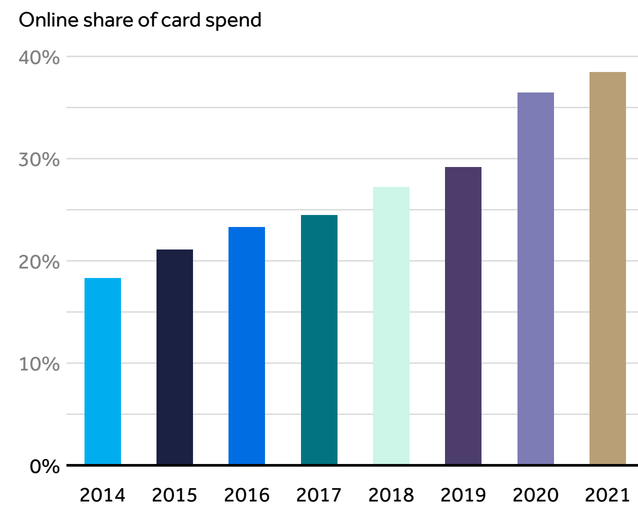
The rise and rise of online

A rise in online purchases was one of the most significant shifts during the COVID pandemic, with the biggest jump at the beginning of the first lock-downs. We believe that this sharp rise is an indication of a continuing trend as people become used to the convenience of buying online, especially for less time-sensitive items.

According to the US Census Bureau, online sales have levelled out to account for 14-15% of retail sales – only modestly higher than the 12-13% range pre-pandemic. But we looked at credit card data, which show that after a pause in the second half of 2020, online share rose once more in early-2021.

FIGURE 16

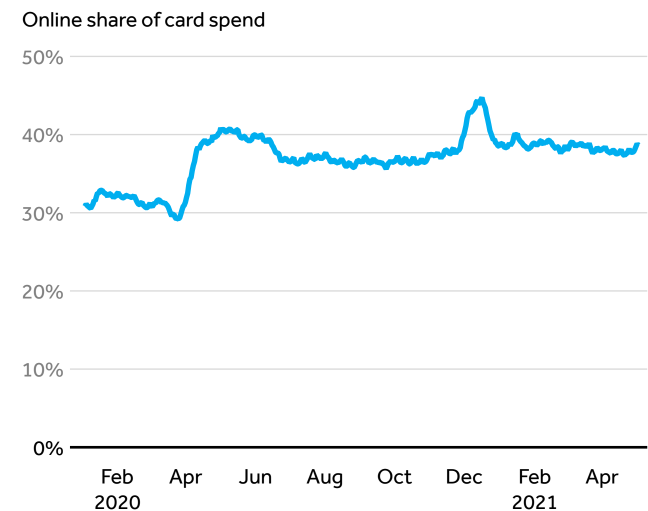
Online share of card spending jumped in the pandemic, and has risen further in 2021



Source: Barclays Research

FIGURE 17

The pandemic jump in online share retreated in mid-2020, but seems to be rising again



Source: Barclays Research

Case study

Starbucks: ground to a halt

As a case study in adapting to the pandemic and its sudden shift to WFH, consider Starbucks. Early on, the coffee company experienced a sharp drop in traffic at its urban and dense metropolitan markets.

Consumers still craved the sense of normality provided by the Starbucks run, but went to suburban locations instead. They also elected to do group orders and loaded up on food. This uplift in transactions – especially at drive-through outlets – more than offset the volume reductions in the cities.

The company invested in warming ovens and rolled out mobile devices for employees to take orders for customers as they stood in line, in addition to offering curb-side pick-up.

Starbucks has stated its intention to increase the share of drive-through and pick-up locations within its portfolio over the next three years. Assuming it adds roughly 1,000 net new stores over this period, Barclays analysts estimate in the US, this shift would imply the closure of 950 traditional cafes, the addition of 1,150 drive-throughs and 800 new formats such as pick-ups.

In midtown Manhattan, the company anticipates that the daytime population could drop by 25% as some level of work from home becomes permanent. It still intends to have 79 locations in the city, but over time expects that pick-up locations will comprise nearly one-fifth of these, compared with just 1% in 2019.

Source: Barclays Research

A brave new world?

It is unclear how societies will embrace the changes we have highlighted in this report. What is certain is that the COVID-19 pandemic has forced a rethink of the way people live, work and shop, with the transformation ranging from subtle to substantial.

A form of WFH is likely to remain for the foreseeable future, while the office will probably continue to play a crucial role for businesses and their employees and clients. The pandemic has accelerated the rising trend toward e-commerce and a repurposing of the physical store. Some businesses will be able to seize the opportunities these changes bring, while others are likely to fall by the wayside.

About the authors

Ryan Preclaw is the head of Investment Sciences, a group that creates investment insights by combining alternative data, data science, and traditional research. Previously, he was a Director in Credit Strategy, where he focused on special situations, event-driven strategies, and industries facing fundamental transitions. Ryan has also worked as a coverage banker in Barclays' Communications and Media group. Prior to joining Barclays, Ryan worked as an economist at NERA Economic Consulting and London Economics International. Ryan received his M.B.A. from the University of Chicago in 2008, his M.A. from Western University in 2001, and his B.A. from the University of Alberta in 2000.

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