



Remote impact

The economic consequences of working from home

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Economics - Global

- ◆ As remote work looks to become a post-pandemic norm for many...
- ◆ ...there are worries about the direct hit to growth...
- ◆ ...but some of the benefits could be substantial

As restrictions start to ease again, the question of how much time workers spend in offices across much of the world is set to return to the fore. Even prior to December's Omicron surge, offices across the world appeared to be running at half capacity, with workers preferring a hybrid model, one that appears to be more likely than ever to persist post pandemic, based on a wide range of survey data.

But while the impact on individuals and businesses is relatively clear, the broader macro implications are often ignored or misunderstood. It's not easy to say that working from home adds or subtracts X or Y from GDP growth, but we can consider the numerous channels by which a greater degree of remote working may impact economic activity, both in the near-term and longer-term.

The impacts will be seen via:

- ◆ **Spending:** Downside risks from reduced spending on travel and work-related expenses – lunches, coffees and clothing
- ◆ **Adverse effects for cities:** on public transport operators and businesses in cities that rely on footfall
- ◆ **Productivity:** May be lower or higher depending on roles and experience. The worry is that productivity gains diminish over time, but technological improvements and other uses of saved time may offset that
- ◆ **Labour market:** Upside risks from better skills-matching for jobs, with greater mobility between roles
- ◆ **Regional inequality:** Might be improved by remote and hybrid work
- ◆ **Housing:** With people more likely to move to bigger homes, we could see housing construction and durable goods sales supported

London may provide a good case study – given its size, the UK's pandemic approach, its geography and the nature of jobs in the city. We outline the impact on the city so far and what could be yet to come.

While it's hard to give a concrete conclusion, it seems that while remote working may create some short-term downside risks to economic growth, the longer-term benefits from tackling regional inequality, allowing a better matching of job roles and saving costs and time could be substantial. If technology and hybrid solutions allow some of the remote productivity concerns to be tackled, then remote or hybrid working could be a structural economic shot in the arm for years to come.

This is an abridged version of a report by the same title published on 24-Jan-22. Please contact your HSBC representative or email AskResearch@hsbc.com for more information.

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Remote impact

- ◆ Remote working looks set to stay in a big way, post-pandemic in much of the world, particularly developed markets
- ◆ A hybrid model seems likely, but this will still have an impact...
- ◆ ...on the economy in both the near-term and longer-term

Here to stay?

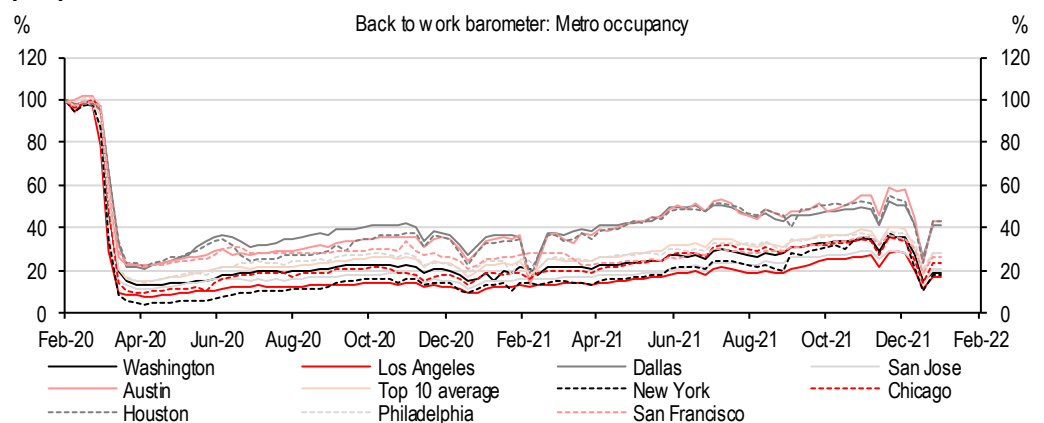
The longevity of remote work will come back into focus as restrictions ease

While remote working has become much more commonplace across much of the world during the pandemic, the arrival of the Omicron variant has brought it back into focus. Now comes the acid test. In the UK, one of the earliest places to be hit by Omicron, restrictions are being eased, offering an enticing prospect of a genuinely post-COVID-19 world before too long. Against this backdrop, what might the future look like for remote work and what will the impact be?

The impact has been much greater in developed markets, where the employment mix is more focused on services roles that can be done remotely. Equally, it's mostly professional service workers being affected by this shift, but the impact of this big share of workers' changing habits could be substantial, as we've seen during the pandemic.

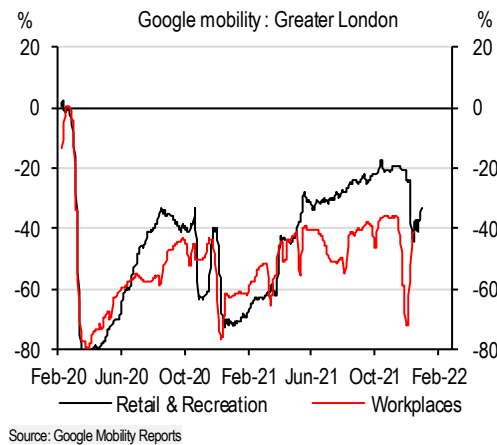
While Omicron forced more people back to remote work, it wasn't as if knowledge workers had been rushing back to offices throughout 2021. Data from Kastle Systems (which manages keycards for offices) in the US (chart 1) shows that while office attendance dropped further in December and early January, office attendance was running at less than half of pre-pandemic levels prior to this.

1. Even before Omicron, American workers weren't back in offices anywhere near pre-pandemic levels

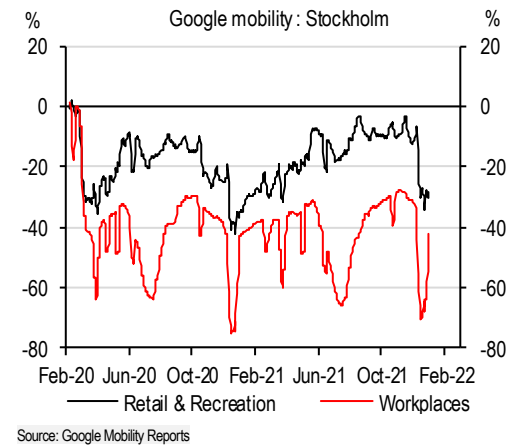


And it's not just the US where we're seeing this phenomenon. Google mobility data shows that in the biggest cities in Europe, workplace attendance is down considerably and a gap is opening up between workplace attendance and leisure (charts 2 and 3).

2. Prior to Omicron, a big gap had opened up between fun and workplaces...



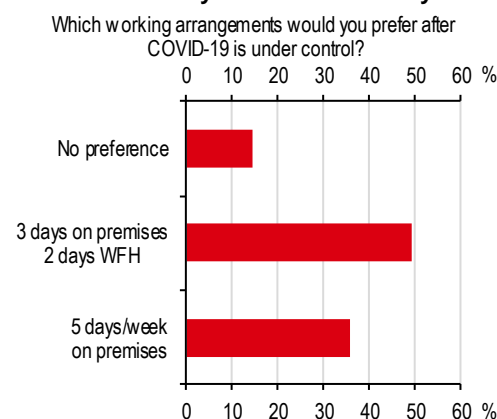
3. ...that was very evident in cities where remote working is more prevalent



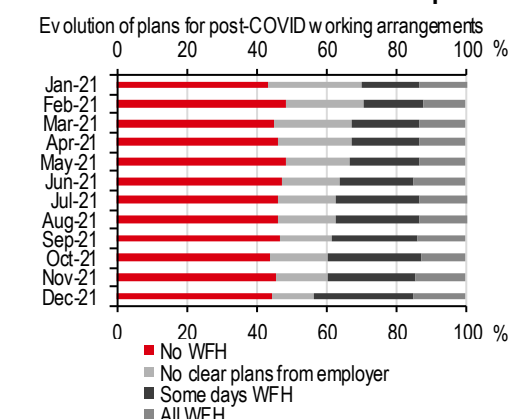
The evidence suggests that workers want to work remotely even more now than a year ago

Particularly in the current tight labour market, where employees have increased negotiating power, we think it's becoming increasingly likely that the current remote-working trends become more entrenched. We have long assumed that a post-pandemic norm would involve workers who can spend roughly half of their time in offices and half the time working remotely. But data from Economist Nicholas Bloom, as part of his *wfhresearch.com* project suggest that both firms and workers in the US are getting on board with the idea of remote working being more commonplace. While this survey is US based, it matches a wide range of global surveys on worker attitudes to remote working¹ The data show that roughly half of surveyed workers prefer a hybrid model, while the average percentage of full paid working days that employers plan on being from home has steadily risen through the pandemic, from 21% in summer 2020 to 28% in December 2021. This suggests that this new world is becoming much more entrenched by both workers and employers.

4. Workers see hybrid as here to stay...



5. ...and businesses continue to adapt



On top of this, new jobs are being advertised remotely. Karin Kimbrough, LinkedIn's Chief Economist has widely quoted² figures that the website's jobs portal has shifted from about 1.4% of US postings

¹ See, for example: Business and individual attitudes towards the future of homeworking, UK: April to May 2021, ONS and Will the office return to its pre-COVID dominance? Ninety per cent of us hope not, ABC News, 24 March 2021

² See, for example, Job and city switching surge in the pandemic, Marketplace, 15 December 2021

being fully remote (roughly 1 in 67) before the pandemic to more than 14% (about 1 in 7) now. Data from Adzuna in the UK suggests that that figure has gone from 1 in 100 jobs being remote to 1 in 8 now³.

Businesses are having to adapt to worker demands

As more roles become fully remote, the share of work that's done either entirely in that way or on a hybrid basis looks set to stay high once the pandemic subsides – it could even increase. While workers are deciding that they want to work remotely more, and staff shortages persist, businesses are having to adapt accordingly⁴. As a result, it's worth looking at some of the macroeconomic impacts of these shifts.

How could this shift impact the economy?

The impact of more remote working is very complicated. What the phenomenon likely means for cities, public transport networks and urban migration patterns, but the more direct impact on economic activity is likely to be evident in many ways. This is much more likely to be seen in developed markets with many more professional services workers than emerging markets, and of course remote working isn't possible for everyone. We focus on the impact on those who are able to work remotely, which can be estimated to be roughly half of the working population in the developed world⁵.

Lower direct spending

Lower spending on lunch and coffees...

Most analysis has focused on the impact on consumption – simply that remote workers cut their spending on transport, coffees and lunches – both directly, through supply chains ('indirect impact') and through lower incomes for workers in affected sectors ('induced impact').

This, coupled with the loss of clustering benefits between businesses and between workers ('agglomeration') led PwC to estimate that UK GDP could be GBP15.3bn lower per year (0.5% of 2019 GDP) if all the workers currently working remotely work from home permanently. So a hybrid shift may see a smaller, but still substantial impact. This breakdown is estimated to be disproportionately lower as a result of lower spending (GBP12.1bn).

Cities may feel the brunt

...will likely be seen most in city centres

Cities themselves may see a much greater impact on local activity. The clearest impacts may be on those businesses that rely on both the occupancy and footfall of office workers – which may have an impact on commercial real estate valuations and businesses that serve commuters such as lunch venues, coffee shops and dry cleaners. Hotels reliant on business travellers or conferences in big cities may see lower visitor numbers if a share of business meetings and events move to a more permanent online alternative.

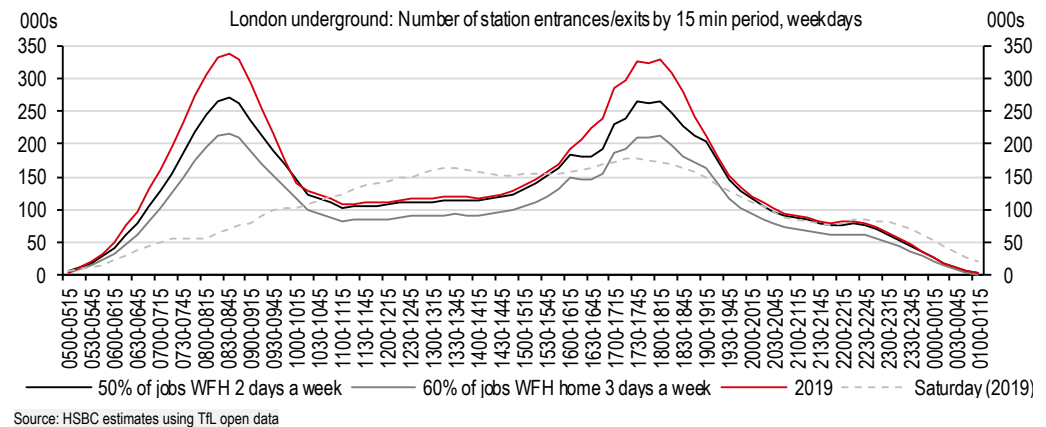
One way of modelling the level of footfall is to look at commuting volumes. Chart 6 shows the number of station entrances and exits by fifteen minute intervals across the London underground network for a typical weekday in 2019 compared to some modelled estimates for the degree of remote working. If we assume that half of roles work from home 2 days a week, that cuts the number of journeys considerably, and in the scenario where 60% of workers work remotely for three days a week we could see the peak load of the London transport network be close to a weekend peak level. These impacts will clearly be outsized in areas reliant on office footfall rather than other roles such as manufacturing or construction.

³ Via @andrewtc04 on Twitter, co-founder of Adzuna.

⁴ £150,000 starting salaries as firms fight for staff, BBC, 12 January 2022

⁵ Based on data for the UK, such as Business and individual attitudes towards the future of homeworking, UK: April to May 2021, ONS

6. The impact on the number of commuters is striking



A big challenge for public transport

That's clearly a huge impact for transport operators, whose models may be put under pressure. Alternative models such as being more reliant on broader tax takes or raising prices may have to be considered. The challenge is how to provide enough funding for public transport networks to maintain the current level of service, as reduced access to public transport could see the smaller number of commuters seek out private transportation solutions. That would mean that one of the key environmental benefits of fewer journeys being made each day could be eroded, and may even lead to more congestion if private car transportation options are used more frequently.

It is also worth considering the impact that we could see on intra-city transportation. Given the spread of the population that this shift is likely to mean over the coming years, we may see more investment in these transport networks that join up towns and cities. But, with fewer people likely to be using them, the investment case may not be as clear cut.

Productivity

The productivity debate has been robust

The productivity of remote workers has been a topic of much debate through the course of the pandemic. Many, such as a paper from The Centre for Economic Policy Research (CEPR)⁶, have focused on whether the savings from commuting costs are enough to offset the foregone agglomeration economies that have typically made urban areas so productive.

The CEPR paper suggests that telecommuting benefits typically accrue to predominantly college-educated workers but have a negative impact on individuals with low education or vocational training. Equally, the paper argues that the benefits hit a speed limit, where after an initial threshold, a higher share of home-workers reduces the strength of the knowledge and information spillovers. Simply, too much remote working may be detrimental to long-run innovation and growth due to foregone agglomeration economies in the form of face-to-face contact and knowledge spillovers.

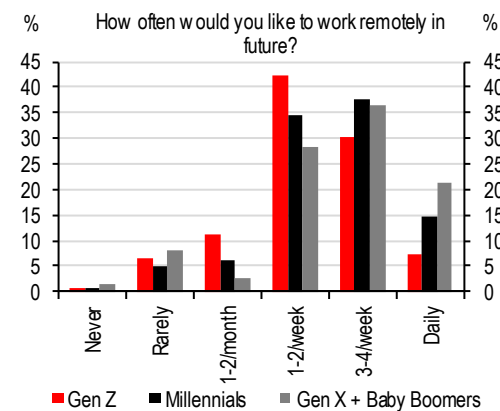
Many worry that remote work may adversely affect younger workers

This is a worry voiced by many when thinking about the impact that remote work could have on new joiners, or younger workers. But a survey from McKinsey and Company showed that in actual fact this age group are more likely to want a hybrid set up – a summer 2021 study of more than 5,000 global workers' hopes for the future showed that 48% of 18-to-29-year-olds are interested in a hybrid work set-up, compared to 44% of 30-to-49-year-olds, and 38% of workers 50 and older⁷. While today's younger generation have arguably the most to lose from not having networks and mentoring that happens more easily in-person, they are more likely to be technically adept at working in this environment, as 'digital natives'.

⁶ CEPR, DP15669 Working from home: Too much of a good thing?, January 2021

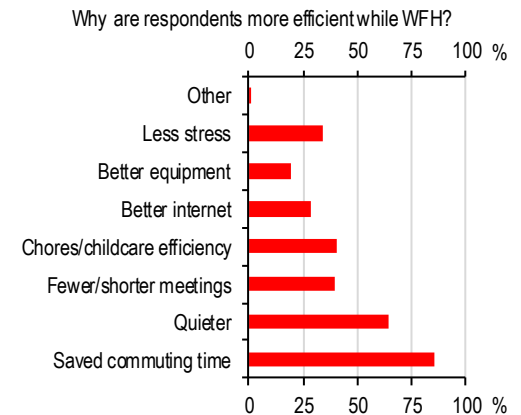
⁷ Why younger workers want hybrid work most, BBC, 3 August 2021

7. Younger generations may be more open to offices, but only sometimes



Source: Hubble. Note: Based on 1000 people surveyed in the UK as of August 2021/

8. Workers find remote working has other benefits



Source: Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis (2021). "Why Working From Home Will Stick."* NBER Working Paper 28731

The overall impact may be positive in terms of productivity

The academic research suggests that these worries may be misplaced, and actually remote working creates a productivity lift that can support growth in the years to come. An August 2021 paper led by Jose Maria Barrero at the Centre for Economic Performance⁸, suggests that its data suggest that, in the US, shifts towards 20% of workdays being completed remotely imply a 5% productivity boost in the post-pandemic economy. However, because traditional metrics of productivity do not capture the time saved from less commuting, we may only see a fraction of this in the data (they estimate just a fifth).

Not just about direct productivity

Data from Nicholas Bloom's *wfhresearch.com* suggest that respondents were more efficient while working remotely for a whole host of reasons beyond the commute – ranging from saving time doing other chores (such as hanging the washing out between meetings, welcoming tradespeople or receiving deliveries) to having fewer, shorter meetings.

And if this saved time is used productively – learning new skills or by engaging in leisure activities or home improvements, we could see these benefits show up elsewhere.

For example, given that 15% of Americans claim to be using their saved time from commuting for home improvements and chores and another 11% for outdoor leisure and exercise⁹, this may have contributed to the surge in demand for both DIY equipment and athleisure wear over the past couple of years. However, many workers are reporting working longer hours – with 52% of British workers reporting that they were working longer hours remotely than before the pandemic¹⁰.

While some of these may seem relatively insignificant from a broad macro perspective, these efficiency gains, coupled with lower stress levels may have some substantial impact on the amount of leisure time available to workers as a result of working remotely.

Some of the efficiency gains may come for firms, too. This could be from reduced overheads, reduced sickness levels and improved staff wellbeing – all of which may help to reduce churn of staff, too. We could also see that it's much easier for workers to find appropriate jobs and firms to find appropriate hires. In the ONS survey, 35% of firms said that having a wider pool of candidates was a key reason to increase homeworking, while 17% said that it would lead to improved job matching.

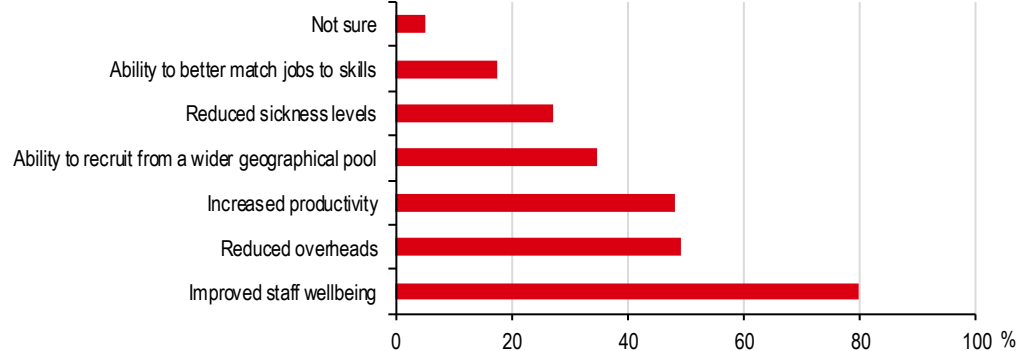
⁸ Why working from home will stick, Centre for Economic Performance, August 2021

⁹ 60 million fewer commuting hours per day: How Americans use time saved by working from home, VOXEU, 23 September 2020

¹⁰ Half of professionals working longer hours at home, poll finds, People Management, 10 August 2021

9. Firms can benefit from remote working, too

UK: Reasons why businesses plan to use increased homeworking as a permanent business model going forward, 19 April to 2 May 2021



Source: ONS

Remote work creates geographical freedom

Spreading the love

A survey from Upwork¹¹, for the US, estimated that up to 23 million people planned to relocate due to a greater ability to work remotely.

The same survey found that for many, this involved moving away from cities that were densely populated, expensive, and close to their office. 20.6% of those planning to move were based in a major city while more than half (52.5%) were planning to move to a significantly more affordable house than their current home.

The freedom to live wherever without worrying about work can help redistribute opportunity. Whereas previously, many skilled professionals left their hometowns or small communities looking for better jobs in big, expensive cities, the rise of remote work could make it easier to find opportunities, although reduced networking opportunities may have the opposite impact. However, it's worth noting that this flexibility could mean that workers may find it easier to leave areas with a lower-quality of life.

Migration and housing

These incentives to move home have acted as a support to housing markets across the world. While low rates and an accumulation of a savings buffer have clearly supported house prices during the pandemic, having spent longer in our homes than at any point in recent history – a desire for space, both internally and externally, has pushed housing demand. Rightmove, in the UK, says¹² that more homebuyers are looking towards rural locations, bigger properties, access to a garden and detached homes. Four and five-bed properties have seen the biggest growth in demand for buyers as people look to have spare rooms that can double as home offices. This trend may persist a bit as remote-working becomes even more entrenched, but it's more likely that it softens as economies open up more in the coming quarters.

¹¹ Economist Report: One Year Remote, Upwork, March 2021

¹² One year on: how coronavirus lockdowns have changed what home-movers are looking for, Rightmove, 22 March 2021

“ Demand for more space has always been the most common reason for people moving home, but the evolution for many from balancing their laptop on the end of a bed last March to making an office a permanent addition to a home, whether that’s by converting a bedroom, garage or garden shed, has led to a need for even bigger homes than before.

Rightmove, 22 March 2021

Migration impacts may vary depending on local geographies

And these properties are likely to be in suburbs and surrounding towns as the relative appeal of big cities diminishes. For example, Arjun Ramani’s paper on The Donut Effect of Covid-19 on Cities¹³ uses US Postal Service data to suggest that “within large US cities, households, businesses, and real estate demand have moved from dense central business districts (CBDs) towards lower density suburban zip-codes”. The level of commuting has dropped, meaning that a longer commute is now more acceptable to workers, while still getting the benefit of being close enough to cities for work should that be the case, or in order to access the leisure amenities there, too.

In the UK, Rightmove’s list of the top sellers’ markets in 2021¹⁴ included suburbs like Easton, Eastleigh and Middlewood at the top, or close to the cities of Bristol, Southampton and Manchester, respectively.

When it comes to the move away from London, top of that same list is the commuter town of Andover, in Hampshire, while many of the top-searched rural home locations are in villages with train connections to the capital¹⁵.

We’re seeing a similar impact in the US data – where rental prices in the likes of Seattle and Los Angeles are some way lower than before the pandemic, and house prices rising most quickly in smaller cities such as Tampa (FL), Charlotte (NC) and Raleigh (NC), as well as towns and cities where property is more affordable. Some of this may be due to tax changes across states, however. In the US context, the shift in terms of living habits may be slightly different to in Europe – as rail networks aren’t as commonplace – so commuting would often happen within the same city rather than from a surrounding town to another. As a result, it’s telling that it’s these smaller cities that are more affordable, which are seeing the sharpest rises in house prices.

New housing stock may need to be built to satisfy changes in tastes

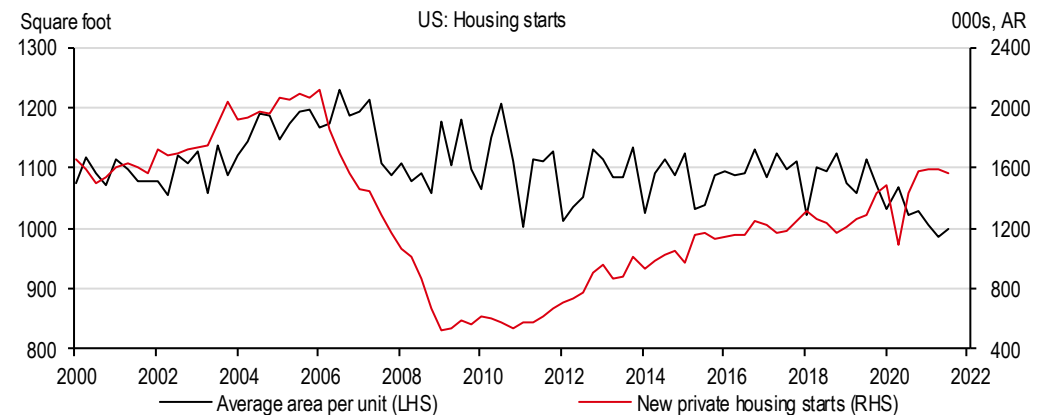
But in terms of the bigger picture, these shifts in terms of living may act as a continued support for both housing markets and construction. As housing construction remains well below 2006 levels in the US despite a continued shortage of housing supply (chart 10), it is striking that there has been a gradual shift lower in terms of property size – as construction has increased more quickly for apartments rather than family homes. This trend hasn’t shown a sign of turning yet, based on building permits data. If there is a quest for more space, we could see housing construction need to stay higher for longer, but focused on larger homes.

¹³ The Donut Effect of Covid-19 on Cities, NBER, May 2021

¹⁴ The top 10 hotspots for home-sellers in 2021, Rightmove, 22 December 2021

¹⁵ The 10 most in-demand rural locations for buyers, Rightmove, 30 November 2021

10. Housing construction may act as economic support



Source: Refinitiv Datastream

Regional inequality is a huge issue

Inequality

If people then move to a wider range of geographical areas within the economy, this could play a role in helping to tackle regional inequality. Regional inequality is a big issue that can lead to more in the way of protectionism and isolationism and, ultimately, a smaller economic cake. These shifts alone won't solve the issues – there needs to be investment in housing, infrastructure and amenities, but the shift towards more remote work could help with the process. This shift may, in theory, make it easier for national governments to achieve regional levelling-up agendas, such as the UK's 'Northern Powerhouse' by more high-paid jobs moving away from the biggest cities.

Investment will be needed to make the most of the shift in where people want to live

In some circumstances, this will require investment. As highlighted in the FT¹⁶, the barriers for this spread of workers, jobs and wealth are typically as simple as having fast broadband speeds – something that should be easily fixed with the continued rollout of 5G across the world. But equally, repairing or improving public services such as schools and transport links will be key, as they will still play a role in determining where people live.

We expect towns and cities across the world to compete with each other, and this could spark a wave of investment in urban infrastructure and local transportation in order to attract would-be residents. Some of this will be focused on the climate side but some may be more straightforward, such as cities advertising themselves to the population. While cities, states and countries have long had marketing departments to attract workers or businesses, that focus will have to change in the coming years. We've already seen this in the US – with the likes of Savannah, Georgia, offering USD2,000 grants to cover moving expenses for remote tech workers, or Topeka, Kansas, which has offered relocation benefits for people to move to the area¹⁷.

This is an abridged version of a report by the same title published on 24-Jan-22. Please contact your HSBC representative or email AskResearch@hsbc.com for more information.

¹⁶ Levelling up is easier in a world of remote work, FT, 16 November 2020

¹⁷ Paying Remote Workers to Relocate Gets a Pandemic-Era Boost, Bloomberg, 23 June 2020

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