

Article

Reimagining the Future of the Sydney CBD: Reflecting on Covid-19-Driven Changes in Commercial and Residential Property Trends

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Abstract

Covid-19 has led to unprecedented changes in functional structures in our cities. Since the mid-20th century, central business districts (CBDs) worldwide have hosted economic and employment activities, leaving suburbia to home the residential function. However, the global Covid-19 responses have resulted in changes in some urban functions, and it is yet to see if these changes would transpire as temporary or permanent. Some argue that the broad macrogeographical pattern of urbanisation is unlikely to be changed. Still, that significant intra-metropolitan, neighbourhood-level and daily life changes are to become part of the new reality. Thus, this article considered these changes by focusing on property trends in the Sydney CBD to reflect on future trends, urban structures, and associated functions. An evaluative single case study desk-top analysis was conducted to investigate commercial vacancy rates and rental prices within the CBD of Sydney (Australia) between 2018 and 2021 to reflect on the Covid-19-drive changes and their implications for urban planners. Findings highlighted that before Covid-19, both residential and commercial markets were growing, with rising rental prices and decreasing vacancy rates. However, commercial vacancies in the CBD have increased, and rental prices have decreased since 2020's lockdown, stressing the dropping demand for commercial spaces. The residential market experienced a different trend with dropping vacancy rates and increasing rental prices. The data analysed provide an initial understanding of how Covid-19 has impacted the Sydney CBD. It poses some insights into potential future trends and changes in the urban landscape. It highlights the implications that the planning profession should consider in the quest to realise sustainable and resilient cities.

Keywords

commercial use; Covid-19; future of CBD; pandemic impacts; property data; purchasing prices; residential use; vacancy rates

Issue

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1. Introduction

Cities were predominantly planned as economic hubs, but recently they have transitioned into complex ecosystems, playing a significant role in realising sustainability objectives. The contemporary city's economic prosperity increasingly depends on healthy social structures (Beumer et al., 2018), highlighted even further by the

global Covid-19 pandemic. Simultaneously, a global discussion on the cities' role was initiated since the pandemic, contemplating if cities will ever return to their planned role and function in pre-Covid times. Various authors have speculated that cities as we knew them will no longer exist (Angel & Blei, 2016; Couclelis, 2020), with other optimists considering that cities will rebound stronger from the pandemic (Pojani & Alidoust, 2021).

As there is currently limited evidence to substantiate these speculations, this article aims to investigate property data and the trends' changes brought along since the start of the pandemic from an urban planning perspective to reflect on possible future scenarios. Therefore, a single evaluative case study desktop analysis was conducted to investigate residential and commercial vacancies and rental price data in the central business district (CBD) of Sydney, Australia, to understand the changes in trends brought by the Covid-19 pandemic. Based on the observed fluctuations over four years, this article argues that these property changes are informing a new spatiality of the city and that the CBD of the future would need to incorporate unique characteristics in terms of form and function to support the post-Covid-19 environment and changing societal needs.

Accordingly, an overview of the pre- and post-pandemic discourses on the role and function of the city is presented, followed by the methodological approach and the findings of this investigation of the property trends in the Sydney CBD. This article concludes with a three-part reflection on the future city and the implications for urban planning professionals in shaping sustainable and resilient cities of the future.

1.1. Discourses of a Pre- and Post-Pandemic City

Regardless of the fundamental relationship between urban planning and property, planners have rarely looked at the latter and its implications for their practice. Property is traditionally linked to ownership and a plot of land, which are essential in urban planning (Fawaz & Moumtaz, 2017). As Campbell (1996, 2016) asserts, property is one of the planners' sustainability triangle axes, highlighting this intertwined relationship between these disciplines and elements. Property not only has the tension of generating private capital but also the opportunity to create social benefits. Planners regulate property, which often the private sector resists, and work for capital through, for example, increased property tax (Campbell, 1996, 2016). Regardless of the conflicts, it could be said that one is the reflection of the other. Planners shape how property takes place in the city and its use and form. In return, property markets provide insights into what is needed in urban areas.

Cities are shaped by their urban form, not simply in terms of the appearance, but also in terms of defining characteristics such as the design and structure, where development occurs, what type of developments are likely to be realised, and the interconnections between different areas (Cilliers, 2015). In the 20th century, a vast majority of planning theory and practice was strongly opposed to density in the urban context, with considerable efforts being made to reduce urban density wherever possible and to separate the various uses (housing, commerce, industry, etc.) through the application of a rigid type of mono-functional zoning (Moroni, 2016). Great Britain explored the garden cities conceived by

Howard in 1902, while the United States embarked on decentralisation in reaction to density, based on the work of Mumford, Stein, Bauer, and Henry Wright (Graham, 2016). Work by Jane Jacobs suggested that overcrowding was undesirable and that it should be isolated from the issues of population and building density (without any severe overcrowding), and many began to embrace the vision of the "compact city" (Grant, 2006). Planners swung in favour of fostering compact urban situations (Rice, 2010) in an attempt to avoid low-density development and the new enemy of "sprawl" (Flynt, 2006).

Today, spatial change is at a peak within the urban landscape, with most of the world's population currently residing in cities (United Nations, 2019). Projections show that urbanisation, the gradual shift from rural to urban areas, combined with the overall growth of the world's population, could add another 2.5 billion people to urban areas by 2050 (reaching 68% urbanisation), intensifying the challenges of the contemporary urban landscape (United Nations, 2019). The four urban functions of working, living, leisure, and transport that Le Corbusier (1929) once so elegantly deployed in the Charter of Athens can no longer be separated from each other either spatially or socially (Mulder, 2002). The contemporary urban landscape deploys a picture where formal data (land-use, functions, and zonings) are now complemented by a new set of data based on activities and interactions that challenge traditional planning-based data and planning structures.

Urban planning can thus not only be seen as a conglomerate of formal land-use activities but has to consider the intricacies of social interactions, markets, and, nowadays, pandemics. In this process, it is fundamental to understand the property market changes driven by the pandemic and how governments and people have reacted to the pandemic itself—part of it by being in lockdown and the need to work from home, changing the city's planned use. Land use and zoning are still the same, but how people interact with them is modified; thus, planning needs to consider these global, external, and relational factors.

Cities have always attracted population growth and economic agglomeration, building on the benefits of density, proximity, and connectivity (Burdett, 2022). As a result, cities have existed as epicentres of new capital, creativity, and innovation because proximity generates serendipity, a spillover effect, and connections from which new ideas and opportunities arise (Albizu & Estensoro, 2020). Various global cities followed this high-density pattern and included multi-use CBD spaces to host their workforce, contributing to economic prosperity.

Before the Covid-19 pandemic, cities across the globe were booming, together with their housing markets. As people flocked to cities for job opportunities, educational facilities, and cultural provisions, residential property prices in Australian cities soared with a sharp increase in housing prices and pressures on rental

markets (Bullock & Orsmond, 2019). Suitable land for residential development in city centres was notoriously scarce, leading to even more significant increases in house prices in cities (Bullock & Orsmond, 2019). It is important to highlight that this process was experienced across greater metropolitan areas, not necessarily in the CBD alone. This worldwide process was experienced differently in Sydney, as people sought to live in the suburbs and outskirts of the city due to their amenities as well as affordability matters.

With the outbreak of the Covid-19 pandemic, these vibrant, low- and high-density city spaces were the first to lockdown in response to prevent the amplification of viral spread (Goldstein & Singer, 2020). Compact development, which was initially linked to higher economic productivity, innovation generation, and higher knowledge-based economic productivity (Hamidi et al., 2020), has now also emphasised the challenges relating to the socio-spatial inequities and increased vulnerabilities as a result of overcrowding and perilous living in these compact settings (Biglieri et al., 2020).

Pandemics expose both the vulnerability and resilience of urban systems and serve as change agents for planning resilient cities and regions globally (Banai, 2020). Historically, cities have systematically metamorphosed in response to threats such as pandemics, as was evident from the 14th-century bubonic plague, which contributed to the emergence of Renaissance cities in Europe, and the cholera epidemic of the 19th century, which inspired a global sanitary movement in colonial cities (Markel et al., 2007). This leads to the assumption that the current Covid-19 pandemic will also leave a legacy that has already resulted in an, at least temporarily, significantly reconfigured city life. Once more, changes ranging from the interface between work and residence, the use of public space, to the safety and security of transportation have demonstrated how cities continue to be shaped throughout history by pandemics and their consequences (Martínez & Short, 2021). This phenomenon has also posed fundamental questions about equity of access to resources (Banai, 2020) and measures that could be considered to plan the resilient and sustainable cities of the future.

During the recent pandemic, it became more evident how lockdowns imposed on the benefits of agglomeration economies. At the same time, they provided evidence of how agglomeration benefits of cities are eroded by better communication technologies (Voith & Wray, 2021). However, it has forced built environment professionals to rethink how and where these agglomeration economies occur. The pandemic has highlighted the importance of access to shops, essential services, and the internet. Simultaneously, the pandemic has challenged megacities with large multinational companies having more flexible work arrangements, no longer seeming to need these clusters of activities.

Additionally, the discourses on the future and resilience of the urban environments have also changed

since the Covid-19 pandemic started at the beginning of 2020, with many media and academic articles discussing the impact this once-in-a-lifetime event had and will continue to have on urban areas (Couclelis, 2020). An evident shift in the use of local spaces and business districts, movement patterns and mobility needs indicated that changes (either temporary or permanent) would be part of the future urban landscape.

Early predictions show how the post-pandemic city may be less convivial (Martínez & Short, 2021), less crowded, and have more spacing requirements and limitations on direct contact between citizens. Pojani and Alidoust (2021) engaged in a document-based study in which they analysed the media discourses on the future of cities, highlighting that the main changes to be expected were around the decrease in the use of public transport and mass moving to the suburbs due to fear of density and long-lasting remote working opportunities (also highlighted by Badger, 2021; Overstreet, 2021). In conjunction with the prior, CBD retail has also been deeply impacted by continuous lockdowns leading to high vacancies (also highlighted by Mortimer, et al., 2020) in the sector and commercial outlets, which are envisioned to be transformed into residential spaces. As the authors express: “This will reshape not only the urban form but also the regional and even the national superstructure. Monocentric or polycentric cities will turn into dispersed settlements” (Pojani & Alidoust, 2021, p. 10).

Highlighting how pandemics in the past have created havoc in cities throughout history (without substantially changing their role), Florida et al. (2021) assert that the Covid-19 pandemic will have long-term impacts on the urban structures and morphologies at the local scale, especially changes of a social nature. These changes include moving out of cities into suburbs, with a “youthification” of the city. As a result, this might also mean changes in transport related to the possibility to work from home, where there might be longer but less often commutes for some, and zero commutes for the young people moving into urban centres. Finally, the authors discuss how lockdown-driven impacts on retail may influence the role of main streets to change and the use of roads as they were designed. Other effects on the city structure relate to the potential adaptation of vacant commercial lettings into other more flexible spaces that include residential uses (Florida et al., 2021).

On the other hand, there is certainty among some academics that cities will go back to normal, and “come back to life” (Pratt, 2020, p. 1). People are ultimately social beings, which is why the CBD will not die. For example, going to work is more than just working; it is about socialising, which is why cities will continue to exist regardless of remote working (Couclelis, 2020; HSTalks, 2021). What is evident is that the pandemic highlighted existing issues and emphasised the need for urban preparedness for future pandemics (Martínez & Short, 2021). Shorter-term implications might well spill over

into a longer-term impact on city design, resilience, and sustainability. While the change in our cities, our CBDs, and urban landscapes are continuous, urban planners need to reflect on and understand these transformations to adequately plan and design our future cities based on existing trends and the newly introduced Covid-19 related ones. Yet the longer-run history provides us with reasons to be optimistic about the future of the CBD, where urban connections have produced new technologies and profound social change for the last 2,500 years (HSTalks, 2021). Given all the positives and negatives brought along by the global lockdowns that brought the future of cities and CBDs into question, it is probably safe to say that the recent pandemic will most likely not lead to a massive demographic outflow from urban agglomerations to less densely populated areas, but that it will result in a ripple in the permanent dynamic evolution of cities (Sassen & Kourtit, 2021). Cities and urban agglomerations have never been static but rather tranquil living and working environments (Sassen & Kourtit, 2021).

Futurism has been used as a mechanism for learning, an attempt to take actions in the present that will enable suitable futures (Poiani & Alidoust, 2021) and yet again, society is in a situation where we are reflecting critically on the future and the role of our future cities. At the same time, it is important to highlight that all the literature and documents consulted above have been written at various times: during lockdowns or when governments were pushing to a “going back to normal” whilst others were going to a third lockdown. Even more relevant, all of these were written before booster vaccines, new Delta and Omicron variants, fourth waves of restrictions in Europe, and almost complete ease of restrictions in New South Wales (and most of Australia) whilst having a record number of new cases per day.

In this vein, this article aims to answer the following question: How can evolving property data trends inform planners in rethinking the Sydney CBD? To answer this, the article focuses on actual property market data in the Sydney CBD to understand the current trends and reflect on the role and function of the city based on the pandemic-driven changes in the property market from 2018 to 2021 (with an emphasis on the changes observed during the pandemic years of 2020 and 2021) and possible future scenarios that will result from managing these changes.

2. Methodological Approach

This research employs a qualitative single evaluative case study approach (Harrison et al., 2017) to investigate residential and commercial property data within the CBD of Sydney, Australia, over four years (2018–2021). Case study analysis is a popular approach employed in planning literature (Association of African Planning Schools, 2010). It is mainly used in cases where more information is needed to make sense of complex phenomena (Moore et al., 2012).

An evaluative approach to property data then informed the findings of this article, drawing on publicly available property data from private and governmental sources such as the Property Council of Australia, SQM Research, Cushman & Wakefield, Domain, CBRE Australia, the International Monetary Fund, and the Australia Bureau of Statistics. Commercial data was limited to “office space” data for this research. This publicly available data was limited to graphs and tables, leading to one of the limitations of this research, namely not having access to data sets to engage in further statistical analysis.

Additionally, overarching residential data, including the different Australian capital cities, were incorporated to validate the findings directly related to the Sydney CBD. Equally, aggregated national data from the International Monetary Fund on commercial real estate prices were also considered to provide context on the state of commercial properties in Sydney.

2.1. Case Study: Sydney Central Business District, New South Wales, Australia

The Sydney Metropolitan Area is the most populous and multicultural city in Australia and Oceania, comprising 5,312,163 people as of 2019, almost 43% of them being born overseas, mainly in mainland China, the UK, and India (Australian Bureau of Statistics, 2022). This metropolis is located on Australia’s east coast and extends more than 70 kilometres on its sprawl, consisting of 658 suburbs within 33 local government areas. Sydney is a city that is frequently featured in widely discussed and distributed global “liveability” rankings. It is classified as an “alpha global city” by the Globalisation and World Cities Research Network (2020), indicating a significant influence in the Oceanian region and beyond.

The pattern of Sydney’s urban structure still follows the CBD (downtown)–periphery (suburbia) structure, with a large population commuting to and from employment centres, of which Sydney CBD is the largest. However, the future vision for Sydney draws on a polycentric approach to enhance other existing centres, such as Parramatta, and create new ones towards the west of the metropolitan area (Figure 1). These aim to allocate work and services to revert the patterns of centralisation of the 20th century, improve the spatial mismatches between homes and work (jobs), and reduce spatial inequity that has characterised the migrant heavy western suburbs of the metropolis for many years (Greater Sydney Commission, 2018).

This article focuses mainly on the Sydney CBD located in the local government area City of Sydney. By June 2020, this local government area had an estimated population of 248,736 people, representing around 4.6% of Greater Metropolitan Sydney’s population (City of Sydney, 2020), 133,676 residential dwellings, and 23,513 commercial spaces, including 7,800 retail spaces (City of Sydney, 2018). Within the City of Sydney, there are 33 suburbs,

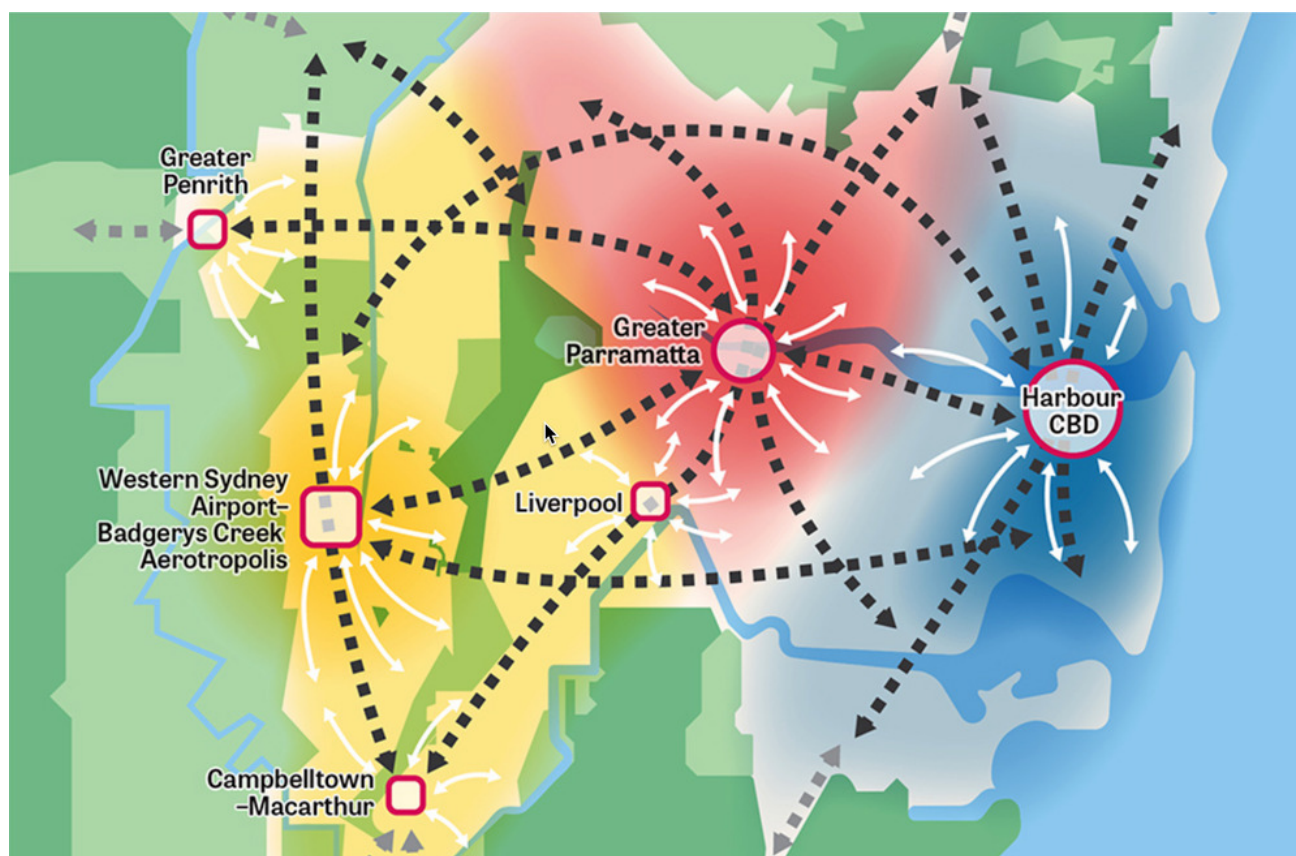


Figure 1. The Greater Sydney Commission's three cities plan. Source: Greater Sydney Commission (2018, p. 7).

of which the suburb of Sydney is the CBD and home to most economic exchange and office work functions.

According to the City of Sydney (2018), more than 80,000 workers in the labour force were employed full time. The number of businesses employing workers in the city grew by 8.7% between 2010 and 2017 (City of Sydney, 2018). Recent reports show that Australian CBDs attract over 39% of staff employed by the professional and financial service industries (PwC, 2021a). Sydney CBD is no exception.

Consistent with the rest of the world, the Covid pandemic in Australia has deeply affected people and the cities in which they live. The progression of this pandemic is still evolving, and it has involved two different approaches since the arrival of the virus in Australia in March 2020 (Australian Department of Health, 2022). From 2020 until February 2022, timeframe on which our research focused, the Commonwealth of Australia undertook an aggressive elimination strategy which meant the total closure of the international borders for international tourists and temporary residents. It also incurred several lockdowns in major cities, which significantly impacted people's mobility, working arrangements, and, consequently, use of the CBD. The federal and New South Wales governments (among other states) abandoned the lockdown strategy, moving toward suppressing the virus and mass vaccination to address the new Delta and Omicron variants (De Foo et al., 2021).

3. Findings

This section discusses the commercial and residential markets in the CBD through two lenses. The first one engages with the vacancy rate trends, representing the portion of available properties relative to the CBD total stock. The second part discusses the rental and selling price changes for both property types.

3.1. Vacancy Rates for Residential and Commercial Markets

Before 2020, the trends in cities' properties were characterised by a sharp increase in prices related to market pressure and scarce suitable land for development, primarily residential. After Sydney's first set of pandemic policies and lockdowns, the CBD experienced a sharp increase in residential and commercial property market vacancy rates. However, the second year of the pandemic proved to be different for these markets, where vacancy rates tended to decrease in the residential sector. In contrast, they continued to increase in the commercial one.

Residential vacancy rates in the Sydney CBD have been stable in the past decade, averaging 4%. There was a prominent 8% peak in vacancy rates during the winter months of 2019 (May–July), which could not be explained solely by seasonal paths. As summarised by the SQM director of research:

The increase in rental vacancies in June tends to be a seasonal rise for the start of winter however Sydney's increases go beyond seasonal factors, and so our expectation remains that Sydney will reach a 4% vacancy rate before 2019 is completed. (SQM Research, 2019, p. 1)

The 2019 peak was therefore related to a process of equilibrium due to increasing supply and slowed demand in cities of South-Eastern Australia, such as Sydney, Melbourne, and Canberra (SQM Research, 2019, p. 1).

The 2019 peak and the process of equilibrium are further backed by data from the residential rental market in other cities (Owen, 2019) and the higher-than-average points of vacancy between 4.1% and 5.3% in the last months of 2019. However, from February to May 2020, the residential vacancy rates significantly increased by 250%, with available dwellings rising from 423 (4% vacancy rate) to 1,507 (16%). Figure 2 shows this sharp increase concerning data from the previous 15 years, which coincides with the closure of international borders and the city's first complete lockdown that finished in July that year. Vacancies remained stable at a remarkably high level throughout 2020, averaging 13%, with rates only starting to decrease during the last quarter of the year. By January 2021, residential vacancy rates had dropped 4.8%, reaching a low of around 8% (or 587 vacant units), similar to July 2019. However, this rate is still higher than the average observed over the last decade.

This stabilising trend in vacancies experienced a slight increase to 8.2% (785 vacancies), with the second city-wide lockdown due to the Delta variant extending from 21st June to 11th October 2021.

In contrast to the sharp increase in 2020, the mild increase in vacancy rates related to the 2021 lockdown shows that the Sydney CBD's residential market is stabilising. The latter demonstrates a "reoccupation" of the city and CBD related to a process of people adapting and

accepting pandemic conditions (Young, 2021). The initial shock and uncertainty caused by the novel disease at the beginning of 2020 is no longer enough disincentive for the residential market. A complementing factor relates to the real estate industry remaining active in the 2021 lockdown differently from 2020. The trend above corresponds to the overall Metropolitan Sydney residential vacancies. However, regardless of the tendency to reflect the same curve, the vacancy rates have historically been much lower in the metropolitan area than in the CBD per se. In this vein, Figure 3 shows, in a more detailed manner (the period between 2017 and 2021), an increase from around 2.5% to 3.5% in residential rental vacancy rates from March to May 2020, representing an increase of 40% additional vacant properties. As in the CBD, this increase was followed by a steady decline from June 2020 to July 2021, dropping back to similar rates as of December 2019.

However, the residential rental market data (actual transactions) show that the percentage has not been corrected to pre-Covid (at least 2019) rates. In other words, there are low vacancy rates in both the aggregated and the exclusively rental property markets, but this is not reflected in the number of actual rents taking place, which may refer us to an increase in the purchase market.

In summary, the residential property market has rebounded from the impacts of the 2020 restrictions and endured the 2021 lockdowns and other potential affecting factors such as federal economic policies. However, the residential occupation of the Sydney CBD remains low, as vacancy rates remain high compared to the previous decade.

Contrary to the residential market, prime office space within the commercial market experienced a solid decreasing vacancy rate during the four years before the pandemic, dropping from 7.3% in 2016 to 3% in 2019 (Figure 3). Aligned with the Covid-19 restrictions in 2020 and the introduction of working-from-home arrangements, there was a rapid increase in vacancy

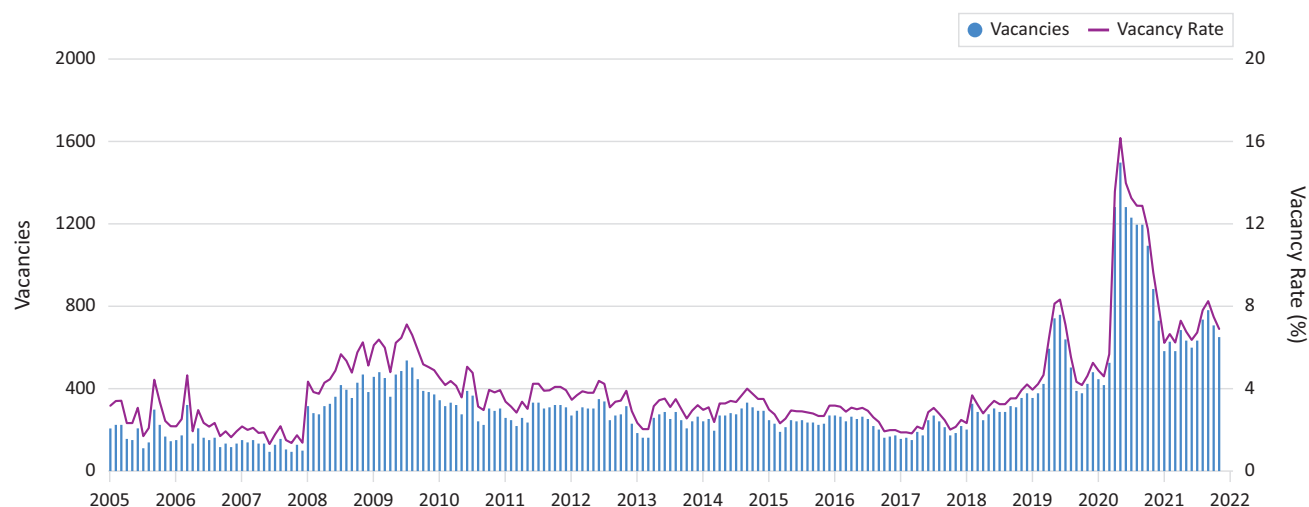
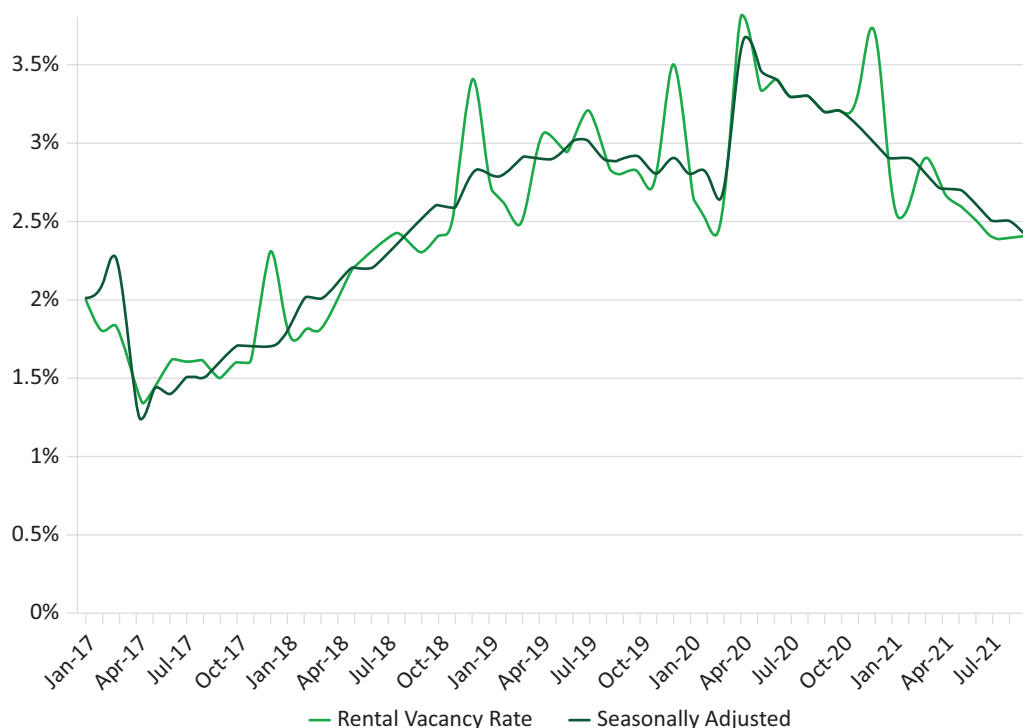


Figure 2. Residential vacancy rates (2005–2021). Source: SQM Research (2021).



Note: The vacancy rate represents the portion of available, empty rental properties relative to the total rental stock in a city. The rental vacancy rate is based off adjusted Domain rental listings and will be subject to slight revisions over time. Seasonally adjusted vacancy are computed using X-13-ARIMA-SEATS methodology.

Figure 3. Residential rental vacancy rates (2017–2021). Source: Domain Research House (2021).

rates, reaching 8.3% on average. However, differently from the impact on the residential market, the commercial vacancy rates did not correct in 2021 but continued to increase (Figure 4), reaching 8.5% in the first quarter

of 2021 and 9% by July that year. The latter shows the drastic impact of the Covid-19 lockdowns and the continued shift of economic activity away from the Sydney CBD during 2021.

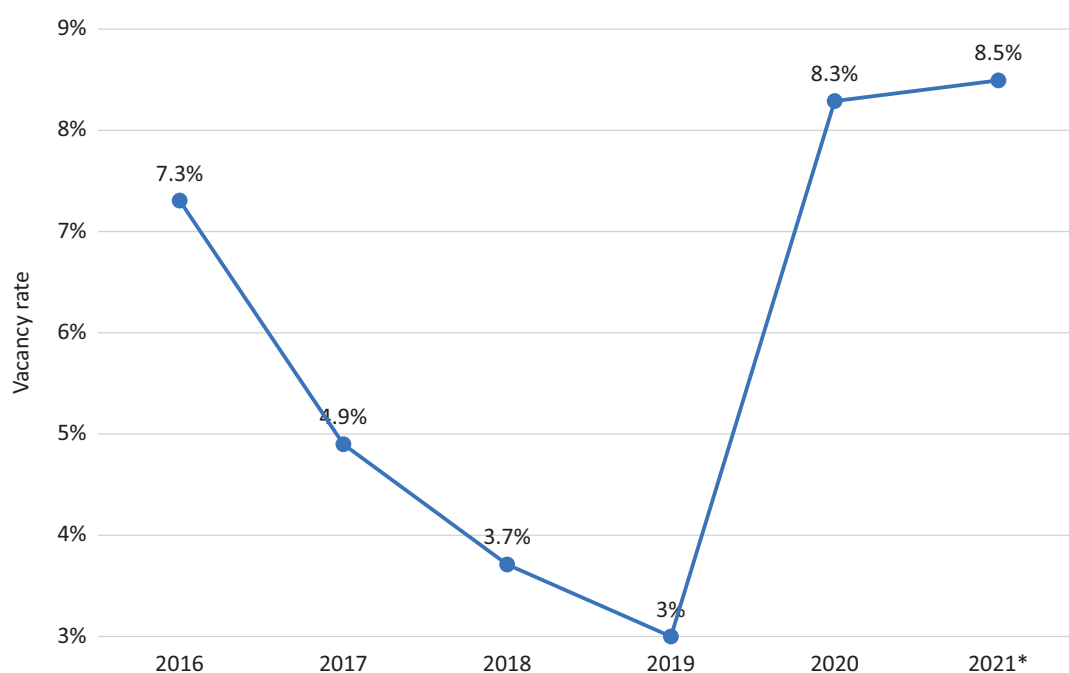


Figure 4. Vacancy rate of the prime office market in Sydney CBD (2016–2021). Source: Statista (2021) using CBRE estimates from 2021.

The data above show a steady increase in vacancy rates as a consequence of the Covid-19 pandemic, which indicates a potential shifting trend in economic activity in the Sydney CBD, and thus, the possibility of the commercial character of this area of the city not fully returning “back to normal” to its pre-Covid function.

3.2. Prices of Residential and Commercial Properties

The analysis of prices shows two different scenarios that reflect and is consistent with the vacancy rates data above. The subsections below discuss the drop in residential rental prices in 2020 and their slight increase in 2021, as well as the intense sell/buy activity in the residential market in the Sydney CBD, which has rebounded to pre-pandemic levels showing scarcity and high prices. The discussion on the commercial market focuses on rental data in Metropolitan Sydney and purchasing prices in Australia. The available commercial data show a process of stasis that might reflect the shifting nature of the Sydney CBD.

Considering the Australian context, Figure 5 shows that Metropolitan Sydney had the harshest drop in rental prices, with around a 3.5% decrease since March 2020 compared to the pre-Covid market. Melbourne also experienced a decline in rental prices, reflecting the effect of lockdown measures taken by state governments during 2020. Rental prices increased in other capital cities that did not endure extended Covid restrictions.

The drop in rental prices in 2020 in Metropolitan Sydney aligns with the increase in vacancy rates in the CBD, which is an expected scenario (Belsky, 1992).

Sydney CBD’s residential purchasing price data in 2019–2020 show an inverted bell curve, involving a drastic reduction of prices by approximately 7% from December 2019 to June 2020. However, Figure 6 shows a very rapid rebound from June 2020 to June 2021, with an expansion of around 10%, reaching the highest proportional increase in prices experienced in the past few years. This increase was sustained by federal economic measures and low-interest rates (Reserve Bank of

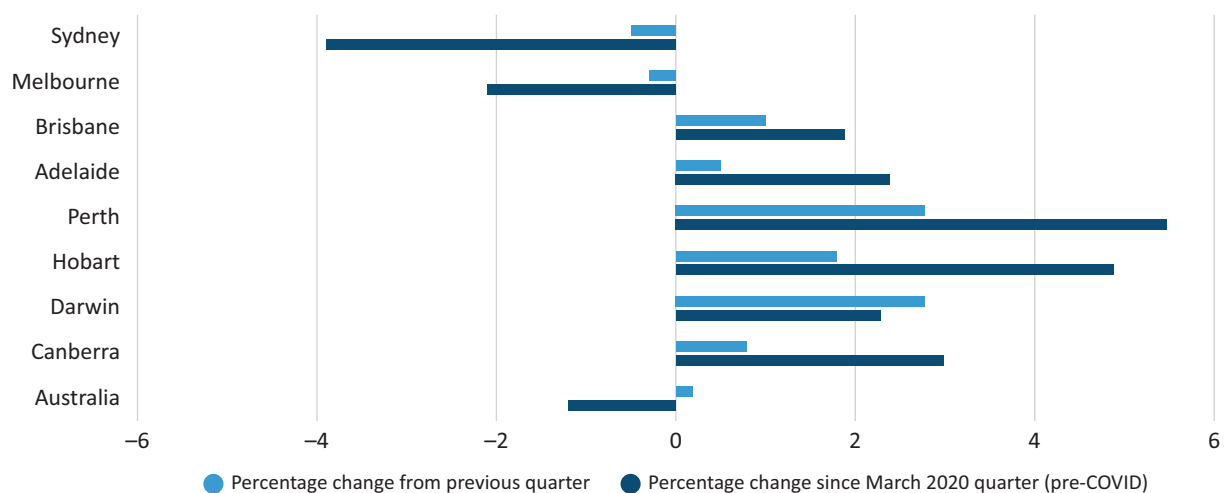


Figure 5. Percentage rental prices changes in Australian capital cities (March 2020 vs. September 2021). Source: Australian Bureau of Statistics (2021).

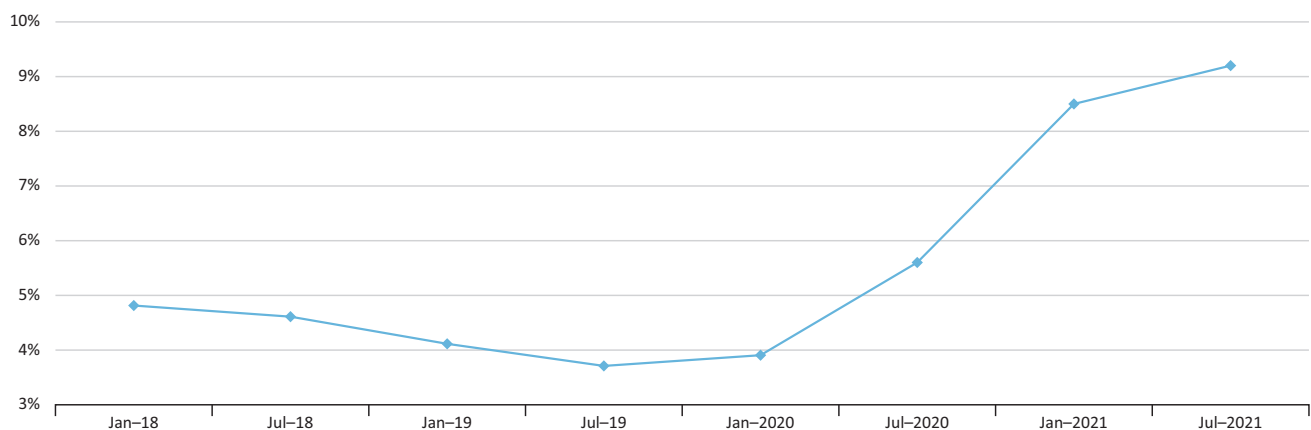


Figure 6. Office vacancy in Sydney from January 2018 to July 2021. Source: Property Council of Australia (2021a).

Australia, 2021, 2022). Residential property prices are higher than before the pandemic.

Publicly available disaggregated data on the Sydney CBD commercial rental markets is limited. Data on the Sydney metropolitan area show a similar inverse distribution between rental prices and vacancy rates related to the impact of Covid in the commercial property market. From 2017 until the start of the pandemic, the commercial property market in Sydney had been strengthening with a decreasing vacancy rate and increasing rental prices. Figure 7 displays that since the introduction of Covid-19-related measures, commercial rental prices dropped from the peak average of A\$1,100 per square metre in the first quarter of 2020 to less than A\$900 per square metre by the second quarter of 2021.

Accompanied by the rising vacancy rates mentioned in the previous section and yet again highlighted yet again in Figure 8 the low rental prices imply a significant recession in the commercial function of Sydney's CBD that has not shown any indication of rebounding or stabilising into pre-Covid indicators.

Publicly available data on commercial rental markets and disaggregated price data of commercial prop-

erties of Australian cities are limited. However, this article refers to Australia-wide commercial real estate prices (albeit not seasonally adjusted). This data provides the broader context of Sydney's commercial property market.

After a slight increase in the already favourable market in the percentage change in commercial property prices, Figure 9 shows a sharp decline in this proportion from the first quarter of 2020, becoming negative between the end of 2020 and the first quarter of 2021. The latter reflects a reduction in prices in the Australian commercial market. This is consistent with the above data about rental prices and vacancy rates, demonstrating a reluctance to invest in this property type.

4. Discussion and Conclusions

Covid-19 is requiring us to rethink city living, CBDs, and cities' forms and functions as we know them. Now is the time to reimagine a livelier, more interesting, and more equitable post-pandemic city as we continue to make cities less vulnerable to pandemics in the future (Martínez & Short, 2021). In asking multi-scalar,

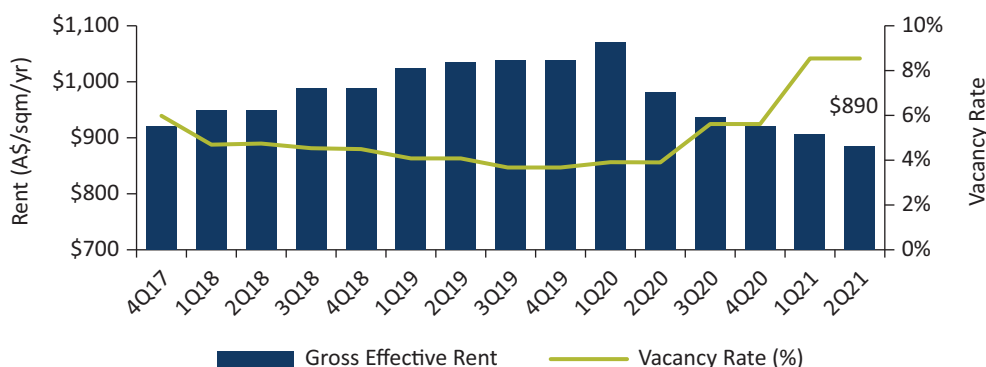


Figure 7. Prime gross effective rent price and overall vacancy (six-monthly) in Sydney from the fourth quarter of 2017 to the second quarter of 2021. Source: Cushman & Wakefield (2021).

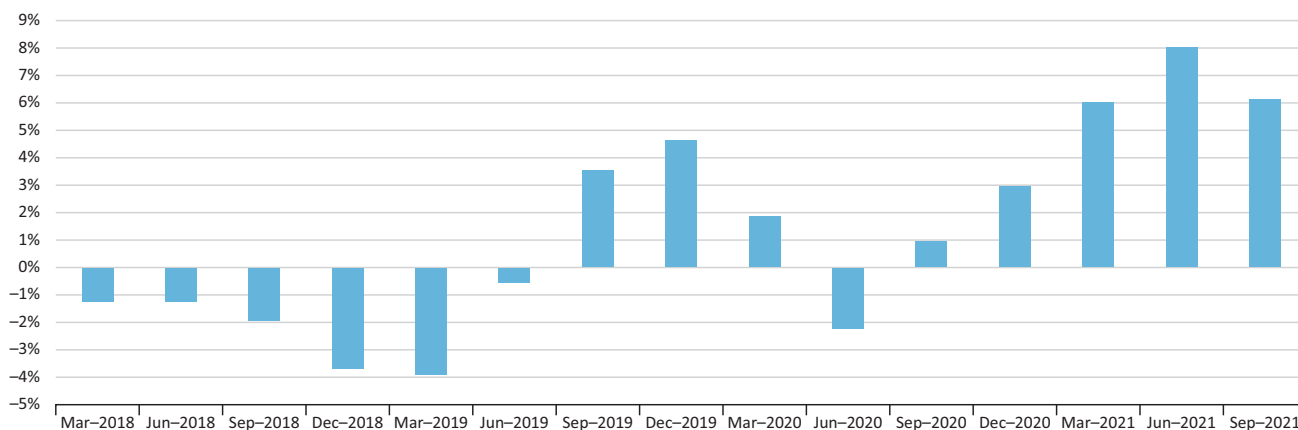


Figure 8. Residential property price index in Sydney from March 2018 to March 2021. Source: Property Council of Australia (2021b).

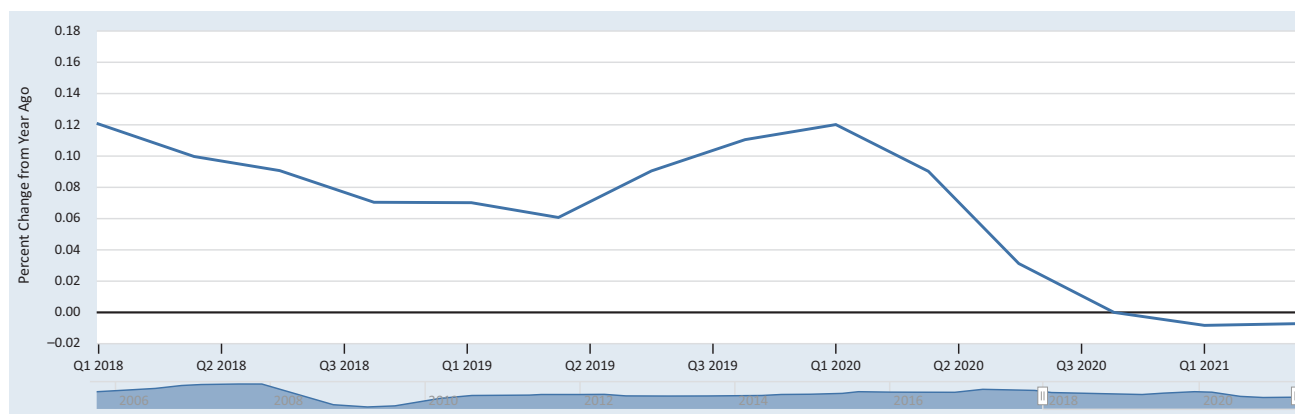


Figure 9. Commercial real estate prices for Australia, Q1 2018–Q1 2021. Source: International Monetary Fund, retrieved from Federal Reserve Bank of St. Louis (2021).

cross-disciplinary questions, we could better understand the complexities of the Covid-19 pandemic in the periphery (Biglieri et al., 2020). Future approaches should most certainly consider the declining urban density and the expansion of smart and connected cities (Voith & Wray, 2021).

The previous sections have discussed the residential and commercial markets in the Sydney CBD. The data shows there has been a change in trend since the normalisation of the Covid-19 pandemic, the acceptance of “learning to live with Covid-19,” and adequate response measures put in place, including social distancing measures, flexible working arrangements, and prioritised health considerations (Cilliers et al., 2021). The residential market has started to intensify, reflected in the increase in rental prices and the decrease in vacancy rates. On the opposite side of the spectrum, the commercial market has experienced a negative impact of Covid-19-related measures with decreasing rental prices and increased vacancy rates. The last two years’ data show that this may be a trend that will continue this path and eventually stabilise rates that will not reach pre-Covid numbers.

There is a necessary reflection related to the role of city centres and how to understand and strengthen them in a scenario where the trend that we discussed in this article maintains. Similar considerations have been made by research from consulting companies worldwide who have jumped quickly into the analysis and have called for attention to the future of the CBDs in a post covid world. These considerations mainly recognise that cities’ economic diversity, particularly in the case of CBDs, is the driver of the global economy (Bloomberg New Economy Forum & McKinsey & Company, 2021) due to their creation of high-intensity economies and business support that spills over the greater metropolitan areas. Moreover, they call for a reflection of what could happen if the economic diversity and high-intensity agglomeration economies were lost.

Similarly, the Urban Land Institute and PwC (2021) call for attention to the growing importance of business

organisational change to understand the necessary processes of CBD revitalisation. In this case, we must consider the issues of talent development which can transform into a significant problem for many businesses and industries if the nature of the CBD changes. Shallow talent pools cannot benefit from agglomeration economies and can be detrimental to developing the skills needed for building successful markets.

In general, the importance of rescuing the complex ecosystems of CBDs and their strengths based on attractiveness and centrality for the long-term future of Canada’s six major CBD areas is also recognised (PwC, 2021b). The Canadian context is easily transferable to the Australian one due to the characteristics of their economies and urban structures. An alert should be placed on the acceleration of Covid-19 trends that lead to a decline of people heading to the CBD and create a process of urban decay. This decay is a possible prospect in a context where there is an abandonment of central areas. There are currently no clear economic incentives either from businesses or the state to recover these areas in the future.

However, for all the work and, in many cases, speculation around the future of CBDs, there is also an opportunity to harness the appealing living environments that mixed populations can bring to revitalise and change cities’ characteristics. By pushing and investing in the revitalisation of the CBD as a “living space,” cities can ensure that the economic consequences of a transformation of the CBD into a hybrid structure can, in the end, work for the betterment of the city as a whole.

An opposite trend in the residential and commercial uses of the city that this article uncovered insinuates an important evolution of the structures of the CBD urban space. The CBD seems to have the potential to increasingly become more residential with more vacancies for commercial uses that seem to be leaving this business district. As Florida et al. (2021) discussed, the Covid-19 pandemic will have long-term impacts on urban structures and morphologies of the city, though those are difficult to predict. However, the emerging data analysed in

the article hint at processes of re-structuring use, functions, and ultimately the spatiality and built form of the Sydney CBD. Some initial findings from this investigation include recognising the changing landscape, distinguishing between temporary and permanent changes, and considering the new normal for city centres by reimagining the future of the CBD.

4.1. Recognising the Changing Landscape

The research illustrated the shifts and changing trends of Sydney CBD's residential and commercial property market over the last four-year period and the likely impacts of the Covid-19 pandemic on these changes. It is also evident that more changes will occur as the CBD (and city inhabitants) learn to live with Covid-19 and collectively co-design the city's future, the CBD function, and its eventual form. As planners, we must acknowledge change. Property markets are providing clear hints to where we need direct our actions. This changing landscape is a call to generate intended change instead of just reacting to it; it is a call to shape more flexible and resilient cities.

4.2. Distinguishing Between Temporary and Permanent Changes

In considering the future of the CBD, the notion of temporary changes and permanent changes would be an essential concern. As observed from the case study analysis, these changes in trends suggest a "new normal" for CBDs and greater metropolitan areas alike. Still, many authors speculate if CBDs will bounce back to be the economic hubs envisioned in traditional planning theories. Thinking back on polycentric cities, these changing trends seem instead the start of a new transition from CBDs to central community districts, with a greater emphasis on social needs and social support structures. In this vein, planning professionals must pose and reflect on critical questions: Who do these new central community districts need to cater to? What activities do we need to think of and plan for? How do we plan cities that are really resilient, safe, and liveable?

4.3. Considering the New Normal for City Centres: Reimagining the Future of the Central Business District

With corporate tenants downsizing or relocating in the wake of the pandemic and commercial space increasingly vacant in the Sydney CBD, there is adequate evidence to engage in trans-disciplinary conversations and think about the CBD's future and how changing social needs will shape urban reality. The general observation of all the data presented previously calls for further research towards more disaggregated and specific analyses (hedonic characteristics of properties in the market, for example), and the possibility of developing a spatial analysis related to disaggregated property data and trends in the CBD. This research supports the work of Hamidi

et al. (2020) in the sense that planners and local governments play a key role in adopting measures tailored to their community for more effective implementation of social distancing measures and to mitigate the adverse impacts on businesses, households, and citizens (Hamidi et al., 2020). Planners are thus requested to understand the impacts, the temporary and permanent changes, the short-term and long-term implications, and how we reimagine the form and function of future cities to reposition the post-pandemic city to be less vulnerable and more resilient.

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Conflict of Interests

The authors declare no conflict of interests.

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