

Short-term lets in Cambridge

What are the economic and social impacts of Short-term lets and what are the policy options at the disposal of local governments in England?

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1 June 2021



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1. Executive summary

The Cambridge region is one of the fastest growing economies in the UK, yet it is also facing one of the most severe inequality and housing affordability challenges in the country. With this context in mind, this study investigates the economic and social impacts of Short-term lets in Cambridge and proposes policy options to address its negative externalities.

This issue has been identified as a topic for Cambridge Ahead’s Housing Group to explore and understand within the City Living Workstream. The Cambridge Ahead Executive Team and the Housing Group Chair have helped to develop the scope which we are bringing to the Group to inform and shape the work.

Key Findings:

- **The extent of the phenomenon in Cambridge:** the number of Short-term lets has risen exponentially in the UK in the past decade. Platforms such as Airbnb have changed the letting business by making it easier to find tenants, even at short notice, for much shorter periods of time. During non-pandemic times, the number of Airbnbs in Cambridge is estimated to be around 500-750. Per capita, this is a number comparable to Bristol and Manchester, although lower than London.

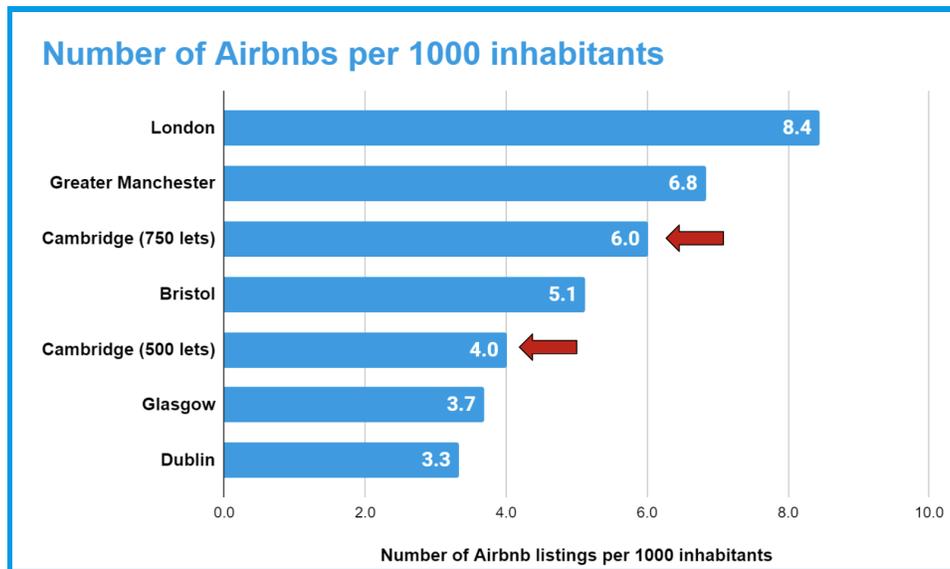


Figure 3.

- **Although no official definition for ‘Short-term lets’ exists, the Cambridge City Council uses the following working definition in its documentation:**

‘any residential tenancy of less than six months where utilities, television and internet are included in rent. Properties are let fully furnished and landlords are expected to provide bedlinen and a fully equipped kitchen [...].’

A notable omission in Cambridge’s definition is the absence of a limit on total days in a calendar year in which a property or part of a property can be let.

- **Important data limitations exist:** researching Short-term lets is a challenge because of data limitations, as short-term letting platforms do not publish data on listings. This makes it hard for local authorities to properly assess the extent of the phenomenon and respond with the necessary policies.
- **Greater Cambridge Shared Planning finds monitoring Short-term lets incredibly difficult because of the dynamic nature of the market.** Local governments have the ability to tackle the symptoms of Short-term lets, such as noise disturbances and anti-social behaviour, but mounting a successful legal process against a property that is being used against its intended planning permission is incredibly time and personnel intensive. The problem is compounded by a lack of resources and by the permissive attitude of the UK government.
- **The impact on housing affordability and availability:** the literature review on the topic is clear in its conclusions: Airbnb is associated with increases in both rents and property prices. The magnitude of the relationship varies from small to modest to considerable in different cities. It is important to note, however, that Airbnb is not the only nor the principal contributing factor to house rent and price increases in Cambridge. It nonetheless remains an important contributing factor with a significant effect. A policy that wishes to address the housing issues in the city will have to tackle the negative externalities associated with the rise of Short-term lets.
- **Short-term lets are a source of significant social impacts.** Although these effects are hard to quantify, numerous qualitative studies have noted the noise disturbance, increase in waste management, parking concerns, anti-social behaviour, safety concerns, and a sense of loss of cohesion in neighbourhoods and apartment buildings. The Greater Cambridge Shared Planning Service noted these same issues to be occurring in Cambridge as well.

Principal recommendations:

- **Central government should empower local authorities:** local governments can only address the negative externalities associated with Short-term lets with more central government support. This could be done based on the Scottish model outlined in section 6.1. In summary, this would include: (1) a government mandated registration scheme for properties; (2) giving local government the capacity to establish control areas, where the number of STLs is either limited or wholly banned, and (3) a review of property taxation and providing the option to tax Short-term lets with business rates. Unfortunately, the central government is currently **not** planning for further legislation. This means that local governments might have to pressure the central government into doing so.
- **Create a registration service to bridge gaps in data:** in a context where lack of data is cited as a major limitation in research and decision-making outcomes, a registration service could source some of the information necessary to bridge this gap. The work of planning authorities would be especially alleviated as the monitoring of Short-term lets could be done mostly online. A registration service can be created either centrally by the government or by cities themselves, either alone or collaboratively, which is more likely for Cambridge. Furthermore, Airbnb has stated that it is receptive to the idea.
- **Find the right time-limit:** if the data gathered through a registration service shows that Short-term lets are impacting housing availability to a considerable negative degree, an upper limit on the total nights a property can be let should be imposed. This recommendation will rely on balancing the needs for long-term housing availability with the benefits associated with increases in visitors.
- **Collaborate more closely with Airbnb:** despite the image often associated with Airbnb in the news, the corporation is not wholly opposed to stricter regulation. The company has stated to be in favour of a 'simple, online, cost-free and centralised system [of registration]' and of a time-limit. Airbnb's willingness to collaborate should be fully leveraged.

2. Project Definition & Introduction

The Cambridge region is one of the fastest growing economies in the UK, yet it is also facing one of the most severe inequality and housing affordability challenges in the country.¹ Within such a context, an inquiry into the effects of Short-term lets on housing availability and affordability in Cambridge is opportune. Much of the existing research has focused on the role of Airbnb as the most prominent and prevalent online platform for short-term lets in the UK and internationally. As such, our research on the economic and social effects will similarly focus on Airbnb, but the findings and especially the proposed regulation should be generalisable to other Short-term let platforms (such as Booking.com, VRBO, Homeaway, and others).

Researchers, policymakers, and the public have voiced increasing concern about the possible negative externalities caused by the exponential rise in Short-term lets this past decade. Local governments in particular are exploring viable ways to regulate and facilitate the practice while minimising its potential negative effects. The academic research has so far focused on major cities or metropolitan areas, with little research on cities closer in size and context to Cambridge. In order to fill this gap, this research will:

- (1).** Define ‘Short-term lets’, the legality of the practice, and the current regulation surrounding their use in the UK;
- (2).** Summarise the type of lets being listed in the UK, the type of ‘guests’ and the type of ‘hosts’;
- (3).** Assess the economic and social effects of short-term lets on the housing markets by evaluating the evidence of the existing literature on the topic;
- (4).** Appraise the degree to which these same effects are present in Cambridge; and
- (5).** Put forward recommendations for regulatory responses to the increase in Short-term lets in a way that limits the negative externalities without missing out on the wider economic benefits.

A note on the COVID-19 pandemic: The pandemic has impacted worldwide travel and decreased international demand for Short-term lets. The full extent of this effect remains

¹ Centre for Cities. (2018). *Cities Outlook 2018*.



to be seen but it is clear that Short-term letting companies have suffered ‘massive losses’.

² This study assumes that with restrictions easing, the practice of Short-term letting should return to a degree comparable to that before the pandemic.

² Danielle (2020). ‘Airbnb’s IPO filing reveals huge COVID impact’. *Fortune*.

3. Definitions, Legality & Regulation of Short-Term Lets

3.1 What are Short-term lets?

The number of Short-term lets has risen exponentially in the UK in the past decade especially because Airbnb and similar platforms have changed the letting business by making it much easier to find tenants, even at short notice, for much shorter periods of time.³ Despite their apparent ubiquity, there is no standard or agreed upon definition for what constitutes a ‘Short-term let,’ neither internationally nor in cities throughout the UK. **Cambridge City Council does not have a fixed definition** either but uses the following working definition in its official documentation.⁴ According to the council, a short-term let is:

‘any residential tenancy of less than six months where utilities, television and internet are included in rent. Properties are let fully furnished and landlords are expected to provide bedlinen and a fully equipped kitchen [...].’⁵

A notable omission in Cambridge’s definition is the absence of a limit on total days in a calendar year in which a property or part of a property can be let out on a short-term basis. London and many other international cities do include such a limitation, which is set at a total of 90 days in a calendar year.⁶ What is also missing from Cambridge City Council’s definition is the categorisation of different types of Short-term lets. Not all Short-term lets are equal and some will have larger impacts on the availability of housing and community than others. With the introduction of the 2011 Localism Act and the 2015 Deregulation Act, the government initially envisaged the practice of Short-term letting as a way to benefit individual residents who could let out parts of their property, or their whole property when away, as a way to supplement their income.⁷ With their exponential rise however, there is evidence that some Short-term letting platforms have become commercialised to an extent and used by landlords and property investment companies to let out properties that could have instead been available for long-term residents.⁸ Furukawa & Onuki’s tri-categorical definition is quite useful in this sense as it

³ Cambridge City Council (2017). ‘Briefing Note on Short term Lets’, 1.

⁴ Cosh (2020), ‘Housing Research Note 2020/04: Short-term and holiday letting in London’. *Greater London Authority*. 8.

⁵ Cambridge City Council (2017). ‘Briefing Note on Short term Lets’.

⁶ Camden Council. ‘Short term lettings and planning permission’.

⁷ Cosh (2020), 8; 27.

⁸ *Ibid.*, 27.

conceptualises three main types of short-term lets and could provide the basis upon which to build qualitative regulation:⁹

(i) Primary Hosted Short-term lets: the lets are part of the primary residence of the host, who usually inhabits part of the home at the same time as the guests.

(ii) Primary Unhosted Short-term lets: the lets are part of the primary residence of the host but the host is absent and the entire home is rented out.

(iii) Nonprimary short-term lets: lets in nonprimary homes of the host. The letting of second homes or other properties.

A good policy should attempt to be less restrictive of the first and second types, within the right time-frames, while regulate the third type more firmly so as to provide the right incentives to landlords to rent long-term.

3.2 The legality of Short-term lets

Under England's national planning laws, residential homes are classed under The Town and Country Planning (Use Classes) Order 1987 as C3 - dwellinghouses or residential homes.¹⁰ If there is any 'material change of use' to a property or building, i.e. if a property is being used in a way that contravenes its intended purpose as has been classified, planning permission must be obtained.¹¹ Usually, it is quite clear when a 'material change of use' occurs, for example when a residential home is converted into a block of flats or a commercial building.¹² But the practice of short-term letting complicates the affair. At what point, for example, does a property's main purpose change from that of a residential home to one whose main purpose is to be let to visitors? This is further complicated by properties that are simultaneously residential homes and short-term lets. It is often down to planning authorities to make individual judgements based on facts and degree.¹³ Furthermore, there is the issue that local authorities are not automatically alerted when entire homes are being let out on a short-term basis, and instead must rely on complaints by local residents.¹⁴ If it is found that a property/building is being used in

⁹ Furukawa & Onuki (2019). 'The Design and Effects of Short-term Rental Regulation.' *Current Issues in Tourism*, 3.

¹⁰ *The Town and Country Planning (Use Classes) Order 1987, Part A.*

¹¹ Cambridge City Council (2017). 'Briefing Note on Short term Lets',

¹² Ibid.

¹³ Cromarty & Barton (2020). *The growth in short-term lettings (England)*. House of Commons Library Briefing Paper no. 8395, 4.

¹⁴ Oxford City Council (2019). 'City Council calls on short-let landlords of entire homes in Oxford to apply for planning permission'.

contravention of intended use then a local planning authority can respond with a number of enforcement options.¹⁵ These options and their successful application in Cambridge will be discussed in the section 6.7 - Relying on legal proceedings.

At least in theory, the situation is simpler in London than it is in the rest of England. With the introduction of the 2011 Localism Act and the 2015 Deregulation Act, the government legalised the practice of short-term letting in London for a maximum period of 90-days in total in a calendar year.¹⁶ This amended the 1973 Act, which prohibited Short-term lets with the intended purpose of protecting London's existing housing supply.¹⁷ Under The Deregulation Act, a property owner must seek planning permission if it intends to let a property on a short-term basis for more than 90-days in a calendar year. In practice, however, several reports note that this time limit is not always respected.¹⁸

As there is no time-limit on short-term lets outside of London, the situation is more complicated. It invariably comes down to the local planning authorities to judge each case separately and decide whether a letting is being used in a way that violates the planning permission for the property.¹⁹ Because of this fact, the Cambridge City Council notes that the concept of 'material change of use' is 'ill-defined' and 'legally-uncertain' within the context of Short-term lets.²⁰ Nonetheless, in its official documentation, the planning authorities of Cambridge City Council do operate with a working definition, which is as follows:

*'A material change of use of a dwelling from Class C3 to a sui generis use of short-term visitor accommodation is likely to have occurred where all, or the majority of, the bedrooms within a dwelling are used as short-term visitor accommodation and: (1) The frequency of the short-term visitor uses exceeds 10 in any calendar year; or (2) The cumulative duration of short-term visitor use exceeds 6 months in any calendar year. Short-term visitor accommodation is defined as accommodation of less than 90 days duration provided for paying occupants.'*²¹

¹⁵ Cromarty & Barton (2020), 4.

¹⁶ *Deregulation Act 2015, Sections 44 and 45.*

¹⁷ Ibid.

¹⁸ Cosh (2020). 'Housing Research Note 4'. *Greater London Authority*, 28.

¹⁹ Cromarty & Barton (2020), 15.

²⁰ Cambridge City Council (2018). 'Planning Enforcement Report for: Address: 17 Richmond Road, Cambridge, Cambridgeshire CB4 3PP'.

& Oxford City Council (2019). 'City Council calls on short-let landlords of entire homes in Oxford to apply for planning permission'.

²¹ Cambridge City Council (2018). 'Planning Enforcement Report for: Address: 17 Richmond Road, Cambridge, Cambridgeshire CB4 3PP'.

Analysis: In theory, therefore, local planning authorities have the legal powers to deal with homeowners that let out their properties on a short-term basis in a way that contravenes their intended planning permission. It should be noted that there have been successful examples of local authorities that have proven that a ‘material change of use’ had occurred. These examples will be presented in section 6.4 - Relying on legal proceedings, where its potential as a policy tool will be assessed (or where its regulatory feasibility will be assessed).

3.3 Enforcement at the local level

Local governments have found monitoring Short-term lets incredibly difficult in particular because of the dynamic nature of the Short-term let market and their online presence.²² Currently, local governments have the ability to tackle the symptoms of Short-term lets, such as noise disturbances and anti-social behaviour, but mounting a successful legal process against a property that is being used against its intended planning permission is incredibly time and personnel intensive. The Cambridge and London Councils cite a lack of resources as a reason for these difficulties, which is compounded by the lack of available data.²³ Measures of significance - such as nights stayed - are not available and often have to be estimated through lengthy processes.²⁴ Without data on the number of nights, the planning authorities have to rely on reports from local residents and have to carry out proactive evidence gathering in order to build cases.²⁵

Planning authorities also report that their workload related to the monitoring of Short-term lets has increased exponentially, as a result of the increase in Short-term lets, but this has not been met by an increase in the resources available to conduct the increased workload.²⁶ This was confirmed by a representative of the planning authority in Cambridge.²⁷ The locations of Short-term lets on Airbnb vary compared to their precise

²² Nieuwland & van Melik (2020), ‘Regulating Airbnb: How Cities Deal with Perceived Negative Externalities of Short-term Rentals.’ *Current Issues in Tourism*, 811.

²³ Cosh (2020), 4 &

Shuttlewood, John, Principal Planning Enforcement Officer at Greater Cambridge Shared Planning Service, interviews by Ugo Dino Fonda (author). *Video-call Interviews* on 23.04.2021 & 27.05.2021.

²⁴ Cosh (2020), 12.

²⁵ Cromarty & Barton (2020), 25.

Shuttlewood (2021). *Interviews*.

²⁶ Cosh (2020), 26,

Shuttlewood (2021). *Interviews*.

²⁷ Shuttlewood (2021). *Interviews*.

addresses. Airbnb claims that the reason for this is safeguarding the privacy of their members. Other platforms, however, such as Booking.com do provide the exact address.

These same difficulties were noted in my discussions with the Greater Cambridge Shared Planning Service, who also underlined the labour intensive nature of the work needed to compile cases against properties in breach of existing regulation.²⁸

3.4 The government's current attitude

Consecutive Conservative governments in the UK have been fairly supportive of the 'sharing economy'²⁹ these past ten years.³⁰ For Short-term lets in particular, the government has adopted a number of pieces of legislation in support of the practice. The Deregulation Act of 2015 was one such example. As part of the Rent a Room Scheme of the same year, the government increased the level of tax-free income that can be received from letting a room or rooms in an individual's only or main residential property to £7,500.³¹ Similarly, 2016 saw the introduction of a £1000 income tax allowance for landlords renting out whole properties.³² It is clear at the moment that the government's attitude is unlikely to change. The UK government has stated that it 'has no plans to ban the use of residential properties for short-term letting' and believes that any further legislation would be 'overly bureaucratic'.³³ What it promotes instead is a non-regulatory approach by prompting the Short Term Accommodation Association to 'improve standards and promote best practice in the industry'.³⁴

²⁸ Shuttlewood (2021). *Interviews*.

²⁹ The UK government defines companies that are part of the sharing economy as having the following characteristics: (1) They offer services online, often via an app; (2) They allow customer-to-customer transactions; (3) They give access to a service or good that is under-utilised; (4) Customers often pay for access to a service or good, rather than ownership.

From Cromarty & Barton (2020), 7.

³⁰ Cosh (2020). 'Housing Research Note 4'. *Greater London Authority*, 8.

³¹ HM Revenue & Customs (2015). *Rent a Room relief increase*.

³² HM Revenue & Customs (2017). *Guidance: Tax-free allowances on property and trading income*.

³³ Cromarty & Barton (2020), 6.

³⁴ *Ibid.*, 38.

4. Airbnb, the Industry Leader

4.1 Why focus on Airbnb?

So far this research has spoken of Short-term lets in general, but the following sections on the numbers and effects of Short-term lets will focus primarily on Airbnb. This is because most of the academic research and available data on Short-term lets is on Airbnb, as it is a global phenomenon, and also because Airbnb is the market leader as it accounts for 62% of the sector's revenue in Europe.³⁵ The statistics and findings will therefore relate specifically to Airbnb, but the regulatory options proposed at the end will be relevant to the other platforms of the sector, such as Booking.com, VRBO, Homeaway, and others.

Airbnb was established as a small start-up in 2008 and has expanded to be worth more than \$86.5 billion, which is more than the 3 largest hotel chains (Marriott, Hilton, and Intercontinental) combined.³⁶ It currently accounts for more than 7 million lettings in over 100,000 cities in the world, which according to the company represents more lettings than the combined rooms offered at the world's eight largest hotel groups.³⁷

As opposed to the traditional renting markets and the hotel industry, **Airbnb has some unique features and advantages that differentiate it from the competition.**³⁸ Airbnb has near-zero marginal costs since hosts face few costs to entry and new rooms can be added incrementally with negligible extra overhead cost.³⁹ As a result, Airbnb can respond to changes in demand in a seamless way, even in the short-term.⁴⁰ This is especially useful for cities that host large events that don't last long. Within the current regulation, Airbnbs often have a comparative price advantage over traditional lettings since hosts can offer lower rates on account of the fact that their fixed costs, such as heating and electricity, are already covered and do not have to pay staff (cite these two: Oskam & Boswijk, 2016).⁴¹ The hotel industry has complained that properties listed on

³⁵ European Commission - DG GROW (2018). *Study on the Assessment of the Regulatory Aspects Affecting the Collaborative Economy in the Tourism Accommodation Sector in the 28 Member States*, 52. (580/PP/GRO/IMA/15/15111J). p52

³⁶ Sonnemaker (2020). 'Airbnb is worth more than the 3 largest hotel chains combined after its stock popped 143% on its first day of trading'. *Insider*.

³⁷ Barker (2020). 'The Airbnb Effect On Housing And Rent'. *Forbes*.

³⁸ Zervas et. al. (2017), 'The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry.' *Journal of Marketing Research*, 704.

³⁹ Kim et al. (2019), 'Planning and the So-Called 'Sharing' Economy' and other essays. *Planning Theory and Practice*, 275.

⁴⁰ Zervas et. al. (2017), 704.

⁴¹ Nieuwland & van Melik (2020), 813-814.

Airbnb do not pay business rates, just council tax like residential homes.⁴² Furthermore, in England there are no standardised health and safety nor insurance prerequisites, which the traditional tourist sector is particularly critical about.⁴³ Even in cities where Airbnb was not found to be cheaper, it nonetheless provided visitors with 'better accommodations at more reasonable prices'.⁴⁴

Analysis: fairness notwithstanding, it is these differences and comparative advantages, coupled with a favourable regulatory environment in England that has resulted in Airbnb's exponential rise and success.⁴⁵

4.2 Why use Airbnb?

It is crucial to understand the economic and social incentives that drive individuals towards using Airbnb instead of more traditional options, such as hotels for visitors and long-term letting for homeowners. Independent Research commissioned by the Scottish Government on the impact of Short-term lets in Scotland, found that financial incentives were the main driver behind people letting on Airbnb.⁴⁶ The average price paid for Airbnb accommodation offers the potential to earn more income than open-market tenancy.⁴⁷ These financial incentives are borne out of the comparative advantages and more lenient regulation that letting through Airbnb entails. This is cause for concern for some, who argued that this incentives landlords to move entire properties out of the long-term market and thus impacts housing availability for the local population.⁴⁸

The pandemic has also put pressure on landlords who may want to exit the private renting market if arrears continue to grow while demand does not. This is occurring within a context of increasing uncertainty in the Private Rental Sector and in particular the buy to let market. The Residential Landlords Association (RLA) and the National Landlords Association (NLA) assert that Government policies, in particular

⁴² Cromarty & Barton (2020), 36.

⁴³ Nieuwland & van Melik (2020), 813-814.

⁴⁴ Jiao & Bai (2020). 'An Empirical Analysis of Airbnb Listings in Forty American Cities.' *Cities*, 1.

⁴⁵ Ferreri & Sanyal (2018). 'Platform Economies and Urban Planning: Airbnb and Regulated Deregulation in London.' *Urban Studies*, 3364.

⁴⁶ Evans et al. (2019). 'Research into the impact of short-term lets on communities across Scotland'. *Scottish Government*, ii.

⁴⁷ Cosh (2020), 28.

⁴⁸ Cromarty & Barton (2020), 27.

changes to taxation, are incentivising landlords to move from longer-term rentals into the holiday lettings market.⁴⁹ The effect of the pandemic is likely to accelerate this trend.⁵⁰

How much can a ‘host’ earn? According to Airbnb, a typical host in the UK in 2018 earned an average of £3,100 during the year.⁵¹ In London, the GLA compared these averages with the yearly averages for private-rented sector tenancies. If the 90-day limit is respected, a London host could earn on average £9,810 as opposed to the £20,710 they could earn on average from letting on a long-term basis.⁵² In order to equal the returns from a private-rented sector tenancy, an Airbnb listing would need to be let out for 190 nights a year, which clearly violates the time-limit in place.⁵³ In theory therefore, a well designed time-limit, can incentivise homeowners who can let out whole properties on a long-term basis to do so. This will of course depend on the powers and enforcement capabilities of individual councils and planning authorities.

Is the 90-day limit in London respected? Most of the Airbnb listings (77%) did respect the 90-day limit, which nonetheless leaves an important proportion (23%) that did not.⁵⁴ Of the listings surpassing the 90-day limit, the average estimated occupancy was 145 nights a year.⁵⁵ Of these lettings, 6,140 (or 55%) were entire homes and 5,000 (or 45%) were private rooms.⁵⁶ It is important to caution that the planning permission class of the different properties has not been verified, so the sample might comprise a small number of listings classed as C1 or ‘sui generis’, which would allow them to surpass the limit.⁵⁷

⁴⁹ Cromarty & Barton (2020), 28 & Walmsley (2020). ‘Budget 2020: Action needed to halt fall in supply of homes’. *National Residential Landlords Association*. & Affordable Housing Commission, The (2020). A National Housing Conversion Fund: buying properties to boost affordable housing supply, 15.

⁵⁰ Ibid., 15.

⁵¹ Cromarty & Barton (2020), 10.

⁵² Ibid., 12 & Cosh (2020), 22-23.

⁵³ Cromarty & Barton (2020), 12 & Cosh (2020), 22-23

⁵⁴ Ibid., 4.

⁵⁵ Ibid., 19.

⁵⁶ Ibid., 19.

⁵⁷ Ibid., 19.

Occupancy rate (nights)	Number of listings	Percentage of listings
1 or 2	350	1%
3 to 30	17,140	36%
31 to 90	19,420	40%
91 or more	11,200	23%
Total	48,110	100%

Figure 1. Estimated occupancy of Active Airbnb listings in **London**⁵⁸

What are the visitors' incentives? For visitors, on the other hand, the Independent Research commissioned by the Scottish Government found that the key appeal of Airbnb, and Short-term lets more generally, is the convenience of whole property holiday accommodation, the location, the flexibility and wider range of choice, the price, and ability to stay for shorter periods of time.⁵⁹

4.3 A note on data availability and limitations

Numerous academics have noted that researching Airbnb is a challenge mainly because of data limitations.⁶⁰ Airbnb and other Short-term letting platforms do not publish data on listings.⁶¹ Local authorities in particular struggle to gain access to data that would help them assess the extent of the phenomenon, the proportion of listings that are entire homes, and the amount of total nights spent.⁶² In order to get around this, a lot of academic studies and government or independent reports use data provided by Inside Airbnb, an independent, US-based organisation that analyses and presents data scraped directly from Airbnb's website.⁶³ However, a crucial measure - nights stayed - is not available and has to be estimated.⁶⁴

Policy implications: the lack of data also impacts policy-makers and urban planners as they struggle to get a true sense of the spatial distribution and the impacts of

⁵⁸ Graph taken from: Cosh (2020), 19.

⁵⁹ Evans et al. (2019), 30.

⁶⁰ Jiao & Bai (2020), 3

⁶¹ Cosh (2020), 3.

⁶² Kim et al. (2019), 279.

⁶³ Cromarty & Barton (2020), 10.

⁶⁴ Cosh (2020), 3.

Airbnb in their cities.⁶⁵ There have been examples of cities who have forced Airbnb to share data with them - New York, San Francisco, and other US cities - but this will be assessed in section 7 - regulation options.

4.4 How prevalent are Airbnb lettings?

Airbnb listings in London

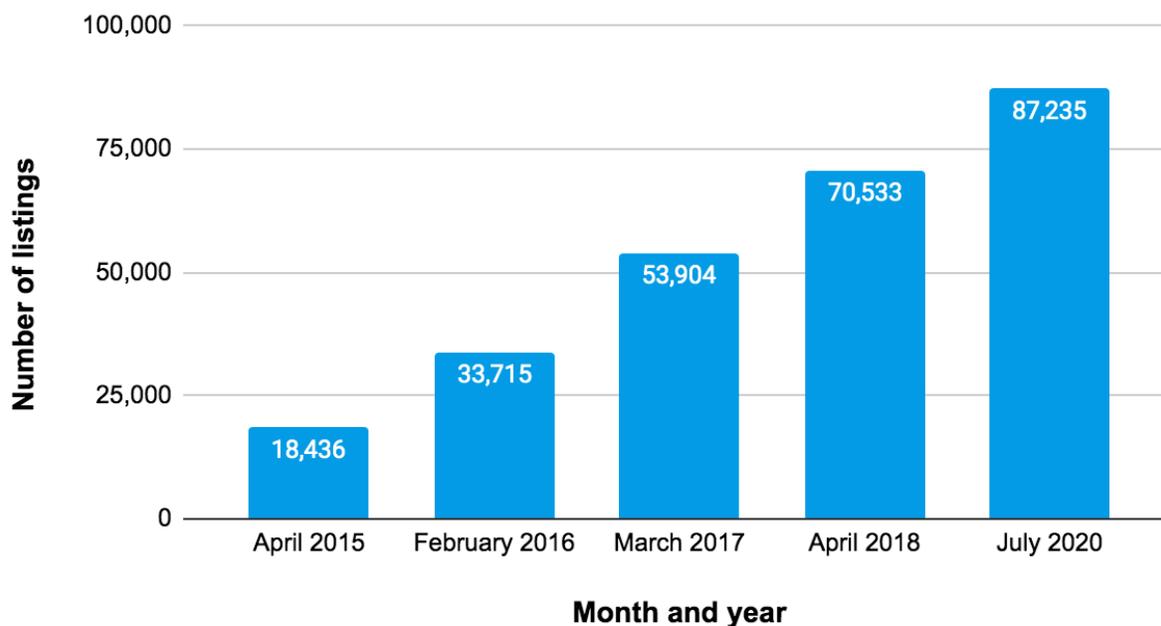


Figure 2.⁶⁶

The number of Airbnb listings available on the market has risen exponentially over the last decade. Figure 2. above shows the almost 5-fold increase in Airbnbs in London in just the last 5 years. In the city of Cambridge, the number of Airbnb listings is estimated to be around 500 (modest estimate) to 750. This number is difficult to discern, as Airbnb does not share it. The number was estimated after discussions with John Shuttlewood, the Principal Planning Enforcement Officer at Greater Cambridge Shared Planning Service, a supporting ambassador from Airbnb, and by visiting the Airbnb's website on multiple occasions. In addition, Mr. Shuttlewood noted that Airbnb listings are estimated to make up only 50% of the Short-term lets market in Cambridge, meaning another 500-750 listings are available through other Short-term let platforms.⁶⁷

⁶⁵ Jiao & Bai (2020), 7.

⁶⁶ Graph created with figures from: Inside Airbnb. *Dataset: London*. Accessed May 2021.

⁶⁷ Shuttlewood (2021), *interviews*.

Using that approximation, we can plot the number of Airbnbs in the city of Cambridge's number, both the lower estimate of 500 and higher of 750, against those of other cities in the UK to see the relative prevalence of the phenomenon, in Figure 3. We observe that although the number is not as high as in London, it is still comparable with other cities that have complained about the prevalence of Short-term lets, such as Manchester and Bristol.

Number of Airbnbs per 1000 inhabitants

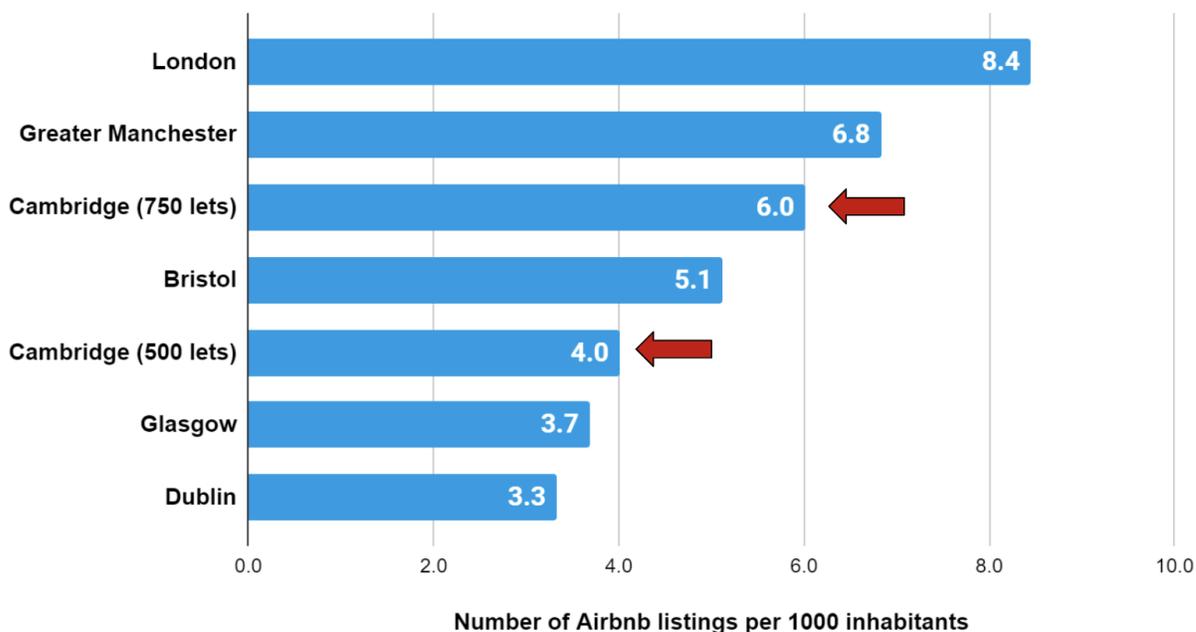


Figure 3.⁶⁸

4.5 What is the make-up of the guests & hosts and what type are the properties let out?

Understanding who the hosts, users, and types of properties being let are is critical in order to understand the costs and benefits to the local economy incurred from Airbnb's practice. The type of guest is not easily generalizable and appears to not differ

⁶⁸ Graph created with data from: Office for National Statistics (2020). *Dataset: Estimates of the population for the UK, England and Wales, Scotland and Northern Ireland.* & Inside Airbnb. *Dataset: Get the data.* Accessed May 2021. & Cosh (2020). & Evans et al. (2019), 12.

widely from traditional visitors; rather, it is the volume of visitors that has increased in areas with more Airbnbs.⁶⁹

The key question regarding the type of properties is whether Short-term lets are simply rooms that are part of a residential property where the host is present or entire properties where the host is occasionally absent or always absent.⁷⁰ Cambridge-specific data was not found, but two important studies have been conducted into this very question in London and Scotland, the findings of which are here presented.

4.5.1 In London - findings from the GLA Housing and Land research into Short-term lets

The majority of London hosts identified by the study (84% of the total or 26,760) had only one active listing to their name. 3,200 hosts or 10% of the total, had two active properties on Airbnb. However, 280 hosts (only 1% of the total) had more than 10 properties each to their name, which amounts to 15% or 7,440 of the active short-term lettings listed on Airbnb in London.⁷¹ This is clearly captured in the graph below. Upon further inspection, the study found that a significant proportion of these ‘super-hosts’ are actually commercial entities managing the properties as opposed to individuals.⁷² Some of these companies, as the February 2019 BBC Inside OUT investigation found, actively encouraged hosts to go beyond the 90-day limit, In February 2019, by assisting them in posting their listings on multiple platforms.⁷³ Apart from being illegal, these practices and the wider commercialisation of short-term lettings appears to be contrary to the original intention of Government policy and legislation in London.⁷⁴

⁶⁹ Evans et al. (2019), 28.

⁷⁰ Ibid., iii.

⁷¹ Cosh (2020), 3-4.

⁷² Ibid., 18.

⁷³ Lynn (2019). ‘London firms helping landlords break letting laws’. *BBC*.

⁷⁴ Cosh (2020), 27.

No. listings linked to host ID	Number of hosts	Number of listings	% of listings owned/managed
1	26,670	26,670	55%
2	3,200	6,410	13%
3	890	2,660	6%
4 to 10	890	4,930	10%
11 to 50	260	5,120	11%
51 to 100	15	960	2%
101 to 200	4	540	1%
200 or more	1	820	2%
Total	31,930	48,110	100%

Figure 4. Number of hosts with one or more active Airbnb listings to their name⁷⁵

In terms of the type of properties, as of May 2019 45,070 properties (56% of properties let on Airbnb) were entire homes.⁷⁶

[4.5.2 In Scotland - findings from the independent 'Research into the impact of short-term lets on communities across Scotland'](#)

The numbers in Scotland are very similar to those in London. 76% of hosts had only one Airbnb listing to their name.⁷⁷ But things are even more unequal at the top. A very small portion of the hosts (only 0.3%) owned, or acted as agents, to 13% of total listings. The larger Short-term let property portfolios included between 16 to over 100 properties.⁷⁸ At the very top, only four hosts owned or managed 8% of all the listings, which translates to a total of 2500 listings.⁷⁹

In terms of the make-up of the listings, the government-commissioned research found that the majority of Scottish Airbnb listings are entire properties (69.2%) with the rest being private rooms (30.3%) and only 0.4% being shared rooms.⁸⁰ In the urban

⁷⁵ Graph taken from: Cosh (2020), 17.

⁷⁶ Ibid., 15.

⁷⁷ Evans et al. (2019), iii.

⁷⁸ Ibid., iii.

⁷⁹ Ibid., iii.

⁸⁰ Ibid., iii.



centres of Edinburgh and Glasgow the proportion of entire homes was even higher: 79% and 78%.⁸¹

Analysis: There are clear signs that Airbnb and other Short-term letting platforms are allowing for commercial entities to operate in the market.⁸² The lack of regulation makes it easier to let properties, which in turn may be contributing to a lack of housing availability, as these would presumably, be otherwise occupied by local residents.⁸³

⁸¹ Ibid., ii.

⁸² Cosh (2020), 3.

⁸³ Horn & Merante (2017). 'Is Home Sharing Driving up Rents? Evidence from Airbnb in Boston.' *Journal of Housing Economics*, 15.

5. What is the Impact of Airbnb?

5.1 The case for Airbnb

Airbnb argues that it greatly contributes to local economies. The platform claims that the activity of its hosts and guests generated £135 million for the economy of the East of England in 2018.⁸⁴ They have appraised this number by combining the income earned by local households (£31 million) with the estimated guest spending (£104 million). This would amount to 0.07% of the region's GDP.⁸⁵ Yet, these estimates do not take into account the costs incurred by local communities. The ability of the platform to meet short-term surges in demand for accommodation increases the ability of cities to welcome tourists at peak times, during major sporting or cultural events or conferences.

For consumers, the main benefits are a wider choice of accommodation types in a range of locations, often at a cheaper relative price than traditional accommodation options.⁸⁶ For homeowners, **Airbnb, and its proponents, claim that its platform permits hosts to 'make ends meet, keeping residents in communities amid increasing living costs and income inequality'.**⁸⁷ This argument was particularly compelling in a post-2008 crisis context. The average earning of a 'typical' host in the East of England amounted to £3,000 in 2018, according to Airbnb.⁸⁸ However, independent studies show that the pool of individuals able to use Airbnb to earn extra income is limited.⁸⁹ Their ability to do so is highly dependent on the home's location, individual characteristics of the homes, and the homeowner's digital skills. Economically challenged individuals who may wish to reap Airbnb's benefits may be unable to do so.⁹⁰ This runs the risk of exacerbating existing inequalities. Furthermore, some commentators note that the 'mortgage relief' potential of a property might become capitalised into the property's price in the long-term, undermining any affordability benefits.⁹¹

⁸⁴ Airbnb (2018). *Airbnb UK Insights Report*, 47.

⁸⁵ European Commission - Internal Market, Industry, Entrepreneurship and SMEs. *Regional Innovation Monitor Plus: East of England*.

⁸⁶ Cromarty & Barton (2020), 5.

⁸⁷ Airbnb (2015). *Adequacy of the regulation of short-term, holiday letting in New South Wales*, Airbnb submission to NSW parliamentary inquiry, 5. Accessed via: Gurran & Phibbs (2017). 'When Tourists Move In: How Should Urban Planners Respond to Airbnb?' *Journal of the American Planning Association*.

⁸⁸ Airbnb (2018). *Airbnb UK Insights Report*, 5; 46.

⁸⁹ In Jiao & Bai (2020). &

Gurran & Phibbs (2017). &

Wachsmuth and Weisler (2018). 'Airbnb and the Rent Gap: Gentrification through the Sharing Economy.' *Environment and Planning*.

⁹⁰ Jiao & Bai (2020).

⁹¹ Gurran & Phibbs (2017), 90.

5.2 The impact on housing availability and affordability

Note of caution: The effects of Airbnb are varied and highly context dependent. It is difficult to isolate the effects of Short-term lets on housing availability and affordability from the myriad of other factors of influence, in particular those relating to broader processes of touristification.⁹²

This did not prevent some academics, although relatively small in number, to quantify Airbnb's effect on house rents and prices, the findings of which are summarised in the table below.⁹³ Almost all studies found that Airbnb clearly increases rents and prices (from small to modest to considerable effect), although the degree to which this happens differs in the various cities. It is fair to say that Airbnb is not the only nor the principal contributing factor to house rent and price increases in the UK. Nonetheless, it remains an important contributing factor, the importance of which is magnified by the housing affordability issues plaguing Cambridge. In order for the regulation to tackle such a pervasive problem, it must take on a holistic approach, i.e. by tackling the various causes that contribute to the unaffordability of housing in the city.

⁹² Barron et al. (2021). 'The Effect of Home-Sharing on House Prices and Rents: Evidence from Airbnb.' *Marketing Science*. &

Ioannides et al. (2019). 'Airbnb as an Instigator of 'tourism Bubble' Expansion in Utrecht's Lombok Neighbourhood.' *Tourism Geographies*.

⁹³ Ayoub et al. (2020), 'Does Airbnb Disrupt the Private Rental Market? An Empirical Analysis for French Cities.' *International Regional Science Review*, 77.

Article	Context and method	Impact on housing affordability	Impact on availability and further findings
Todd et al. (2021)	C: Airbnb's impact on house prices in London M: Random effects regression	<ul style="list-style-type: none"> • A significant and modest positive association between the frequency of Airbnb and house prices • A unit increase in the frequency of Airbnb listings corresponds to a 0.18% increase in house prices (£14.78 per m²) 	
Ayoub et al. (2020)	C: Airbnb's impact on rents in 8 French cities (Bayonne, Lyon, Marseille, Montpellier, Nantes, Nice, Paris, and Toulouse) M: Hedonic model	<ul style="list-style-type: none"> • Airbnb rentals do not systematically raise private-sector rents • Where rents are increased (as in Lyon, Montpellier, and Paris), the impact is sizeable • A unit increase in the density of Airbnb listings corresponds to an increase in rents of 0.39% (Lyon), 0.40% (Montpellier), and 0.54% (Paris). 	<ul style="list-style-type: none"> • Argues for context dependent regulation based on the needs of different cities • Difference in outcomes might be explained by the existence of seasonal or all-year demand for Short-term lets
Chen et al. (2020)	C: the impact of Airbnb's policy capping the number of properties per host in NYC, SF, and Portland M: quasi-experimental pretest-posttest design	<ul style="list-style-type: none"> • A modest positive association between the frequency of Airbnb and house prices • The adopted policy resulted in decreased long-term rents and house prices by 1.2% and 1.1% respectively. • For every 1% increase in the density of Airbnbs affected by the policy, rents and home values decreased by 0.06% - 0.08% 	<ul style="list-style-type: none"> • Location matters: in markets with the highest density of policy-affected Airbnb properties, the decrease was as high as 5% (or \$720 savings in annual rent and \$15,098 savings in house price)
Duso et al. (2020)	C: Airbnb's impact on rents in Berlin. Also considers the effects of a law introduced to curb the 'misuse' of apartments on Airbnb (ZwVbG in 2014-2016).	<ul style="list-style-type: none"> • A small but significant positive association between the frequency of Airbnb and rents was observed • Each additional nearby entire home on Airbnb increases monthly rents by at least 7 cents per m² 	<ul style="list-style-type: none"> • The type of Airbnb property matters: When only high-availability properties are considered, the average effect increases to 13 cents per m² per additional nearby Airbnb listing • All things considered, the ZwVbG 2014-2016 reform resulted in a large drop of entire homes on Airbnb

Article	Context and method	Impact on housing affordability	Impact on availability and further findings
Garcia-López et al. (2020)	C: Airbnb's impact on housing rents and prices in Barcelona between (2009 - 2017) M: Panel-fixed effect models	<ul style="list-style-type: none"> • a considerable positive correlation: Airbnb activity has increased rents by 1.9% and prices by 3.7-4.6% 	<ul style="list-style-type: none"> • Location matters: The impact is not equal between neighbourhoods. In the top most popular areas - rents have risen by 7% and prices by 14-17%
Koster et al. (2019)	C: Airbnb's impact on house prices in Los Angeles county M: Compares house prices of bordering cities with differing levels of STL restrictions.	<ul style="list-style-type: none"> • A small positive correlation between Airbnb density and prices. • Cities that have restricted Airbnb have seen 50% drops in available Airbnb listings and a 3% drop in housing and rental prices. 	<ul style="list-style-type: none"> • Regulation can limit the overall number of Airbnb properties: A strong negative correlation is observed between regulatory restrictions and number of Airbnb listings.
Barron et al. (2017)	C: Airbnb's impact on the US housing market M: Fixed-effects regression analysis	<ul style="list-style-type: none"> • A small positive correlation between the frequency of Airbnb and rents and property prices • A 1% in increase leads to a 0.018% increase in rents and a 0.026% in house prices, i.e. Annual increase of \$9 to monthly rent and \$1800 to house prices. 	<ul style="list-style-type: none"> • The total supply of housing is not affected by the entry of Airbnb, Airbnb listings increase the supply of short-term rental units and decrease the supply of long-term rental units.
Horn & Merante (2017)	C: Airbnb's impact in Boston M: Regression modelling of micro panel data	<ul style="list-style-type: none"> • A modest positive correlation is observed between Airbnb density and rent prices • 1 standard deviation increase in Airbnb density leads to a 0.4% increase in local rent prices 	<ul style="list-style-type: none"> • 1 standard deviation increase in Airbnb density is correlated to a 5.9% decrease in the number of long-term lettings on offer.
Sheppard & Udell (2016)	C: Airbnb's impact on house prices in New York M: difference in difference model	<ul style="list-style-type: none"> • A considerable positive correlation is observed between Airbnb density and property prices. • a doubling of Airbnb listings is associated with 6-11% increase in house values, ceteris paribus. 	<ul style="list-style-type: none"> • Airbnb properties may bring other community benefits (such as improved safety, better schools, or contributing to better local infrastructure). However, this caveat rests on unproven assumptions.

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5.3 The impact on the community

There are clear costs to neighbourhoods with higher densities of Short-term lets that are a lot harder to quantify. Numerous qualitative studies have noted the noise disturbance, increase in waste management, parking concerns, anti-social behaviour, safety concerns, and a sense of loss of cohesion in neighbourhoods and apartment buildings.⁹⁴ Nieuwland & van Melik point to the fact that Airbnbs are often located in residential areas, thus shifting the impacts of greater touristification to quieter areas of the city.⁹⁵ This all happens within a context of most Short-term lets only paying the council tax and not business rates, as hotels must, which is perceived as unfair because of the higher footprint that their operation entails. **In the interviews conducted with Cambridge City Council, many of these same issues were noted to be occurring in Cambridge as well.**

5.4 The impact on the hotel industry

Airbnb claims that its model of accommodation expands the tourism market rather than competing directly with hotels for the same customers.⁹⁶ Independent studies, however, argue that Airbnb listings do have a negative impact on the profitability of the local hotel industry.⁹⁷

Zervas et al. (2017), in the most extensive study to date, compared Airbnb listings in Texas against the quarterly revenue of Texas hotels, finding that a 10% increase in the size of the Airbnb market was associated with a 0.39% decrease in hotel income.⁹⁸ But the impact varies based on local contexts. In Austin, where Airbnb is most prominent, the study found a causal decrease in hotel revenue of 8-10%.⁹⁹ The impact is also not uniformly spread between different types of hotels either, with lower-priced hotels and hotels that do not cater to business travelers being the most affected.¹⁰⁰ The impact manifests itself primarily through less aggressive hotel room pricing, benefiting all consumers, not just participants in the sharing economy.¹⁰¹ Zervas et al. caution that their findings are representative of the state of Texas and thus generalising their findings to

⁹⁴ Nieuwland & van Melik (2020), 820.

⁹⁵ Ibid., 813.

⁹⁶ Gurran & Phibbs (2017), 82.

⁹⁷ Boswijk (2016). 'Airbnb: The future of networked hospitality businesses.' *Journal of Tourism Futures*. & Guttentag (2015). 'Airbnb: Disruptive innovation and the rise of an informal tourism accommodation sector.' *Current Issues in Tourism*.

⁹⁸ Zervas et. al. (2017), 688.

⁹⁹ Ibid., 688-690.

¹⁰⁰ Ibid., 687.

¹⁰¹ Ibid., 687.

different housing markets might be complicated by the dynamic nature of (supply and demand) of different housing markets across the world.¹⁰²

5.5 The impact on Cambridge

The relatively high number of Short-term lets in Cambridge coupled with the strength and variety of the academic evidence suggests that Short-term lets do have a modest but significant role in contributing to Cambridge's housing unaffordability.

There are of course other important factors contributing to this crisis. Cambridge is renowned for its scientific research and technology clusters and sits at the top of the UK league for economic growth prospects.¹⁰³ The broader implications of this growth are not only positive. Cambridge has risen to be the UK's most unequal city, with the top 6% earning 19% of the total income generated and the bottom 20% earning 2%.¹⁰⁴ Similar impacts are observed in Silicon Valley in the US.¹⁰⁵ Employment growth has not coincided with a corresponding increase in the supply of housing, or developments in infrastructure.¹⁰⁶ In turn, housing prices have risen sharply while commutes and congestion have increased.¹⁰⁷

Housing availability and affordability issues impact all - businesses and people. Housing affordability pressures have been singled out as 'one of the main threats to growth in Cambridgeshire [...], and one of the main burdens on people's lives' by the Cambridgeshire and Peterborough Independent Economic Review.¹⁰⁸ The Review further warns that without the necessary investments in housing and infrastructure, Cambridge's growth may be unsustainable in the long-term because high-value businesses may be reaching a point where Cambridge may no longer be an attractive location in which to settle.¹⁰⁹

¹⁰² Ibid., 704.

¹⁰³ Cambridge City Council & South Cambridgeshire District Council (2019). *Homes for the Future: Great Cambridge Housing Strategy 2019 - 2023*, 7.

¹⁰⁴ OECD. 'Local entrepreneurship ecosystems and emerging industries: Case study of Cambridgeshire and Peterborough, United Kingdom'. *OECD Local Economic and Employment Development (LEED) Papers 2021/01*, 19.

¹⁰⁵ Ibid., 19.

¹⁰⁶ Cambridge and Peterborough Independent Economic Commission (2018). *Cambridgeshire and Peterborough Independent Economic Review: Final Report*, 9.

¹⁰⁷ Ibid., 9.

¹⁰⁸ Ibid., 64.

¹⁰⁹ Ibid., 9.

6. Regulatory Options

In lieu of growing concerns about the negative externalities of Short-term letting, a number of politicians, organisations, and academics have called for greater regulation of Airbnb and other such platforms. This section will present various options and appraise their qualities and limitations.

6.0 Preamble - context matters

Since the prevalence and impact of Short-term lets varies across places and contexts, a centralised, top-down approach to defining, taxing, and regulating Short-term lets may not be the most suitable or effective method to regulate the phenomenon.¹¹⁰ Some cities may even want to embrace Airbnb so as to stimulate tourism further.¹¹¹ Considering the housing problems currently facing Cambridge, stricter regulation is needed to alleviate the negative externalities of Short-term lets.

6.1 The government empowering local authorities - the Scottish example

Because context matters, and the impact of Airbnb will differ based on place, central government should empower local authorities so that they can tweak the regulation to suit their contexts better.

The Scottish Government has recently taken a more active approach towards the regulation of Short-term lets. In January 2020, after a large consultation and on the back of an extensive independent research into the effects of Short-term lets, the Scottish Government announced a number of regulatory proposals to curb the negative externalities of the phenomén, such as:

- The establishment of a licensing scheme with a mandatory safety component for all Short-term lets;
- Give local government the capacity to establish Short-term let control areas under the planning powers.¹¹² Because the effect of Short-term lets is very neighbourhood-dependent, this would allow local government to limit, or

¹¹⁰ DiNatale et al. (2018). 'Short-term Rentals in Small Cities in Oregon: Impacts and Regulations.' *Land Use Policy*, 415.

¹¹¹ Nieuwland & van Melik (2020), 814.

¹¹² *The Town and Country Planning (Short-term Let Control Areas) (Scotland) Regulations 2021*.

outright ban, Short-term lets in areas that are more negatively impacted, without missing out on the benefits of Short-term lets in areas that are better suited or where their overall number is low. It is currently planned that this measure will not affect the letting of a room in one's home, or the letting of a whole property while the resident is on holiday.¹¹³

- A review of the tax, so as to ensure that the appropriate level of contribution is made in the communities in which they operate.¹¹⁴

The Control Area Regulations came into force on 1 April 2021, while the licensing scheme has been withdrawn from the Scottish Parliament to allow for draft guidance to be developed.¹¹⁵ According to the current timeline, local authorities will have until 1 April 2022 to establish a licensing scheme that suits local needs, while current hosts have until 1 April 2023 to sign-up.¹¹⁶ Based on the result of the May 2021 Scottish Parliament Elections, it is expected that this plan will go ahead.

Relevance to the Cambridge case: The new legislation is an interesting blend of central government direction with ample space for contextual tinkering. Under the proposed plans, local governments will be able to set their own conditions that will best meet local needs and concerns. A similar mix of national guidance with space for independent changes at the local level, which will depend on the needs of different contexts, will be necessary in England.

Limitations: As previously discussed, the UK government is not likely to implement such regulation at the moment. If the Scottish case proves to be successful, local governments in England should pressure central government to follow suit.

6.2 A registration/licensing scheme

In a context where policy-makers, urban planners and researchers are citing lack of data as a major limit in their decision-making and research respectively, a registration scheme could help catalogue the different properties on offer and gather much needed data. According to the House of Commons briefing paper on the growth of short-term

¹¹³ Scottish Government (2020). 'Regulating short-term lets'. *Website of the Scottish Government*.

¹¹⁴ Housing and Social Justice Directorate (2020). 'Publication - Advice And Guidance: Short-term lets: regulation information'. *Website of the Scottish Government*.

¹¹⁵ Ibid.

¹¹⁶ BBC (2021). 'Scottish government withdraws new law on short-term lets'.

lettings (England) and Oxford City Council, requiring hosts to register their property before letting it would empower local governments to monitor the amount of short-term lets in the area and successfully enforce existing rules and protect communities against the most salient negative impacts.¹¹⁷

Denver, US, example: Denver was the first city in the world to introduce a licensing scheme online. It made sense for an industry that operates online to have a scheme that could be compiled wholly online. After the introduction of the scheme, compliance rates were reported to be relatively high.¹¹⁸ In turn, this permitted for the enforcement to also be done online, as opposed to going door-to-door, as planning authorities can monitor listings online and check whether they display a licence number. If a property is found to be unregistered, a notification of non-compliance is first sent, which can lead to fines of \$150-999 a day or a complete withdrawal of the licence if non-compliance continues after the notification.¹¹⁹

Strengths & Limitations: Most other recommendations will rest upon the ability of local government to access more local-specific data. A registration scheme will be the first step into better regulation that can be effectively enforced. Another important consideration is that Airbnb is willing to introduce such a scheme and has collaborated to do so in other cities. On 24 September 2019, Airbnb stated that it would collaborate with hosts, communities and politicians across the UK on proposals for the introduction of a ‘registration system’.¹²⁰

6.3 Require Airbnb to share more data, e.g. the occupancy rate

If the registration scheme proves to be unsuccessful, or if the uptake rate among hosts is insufficient, central or local governments could attempt to force Airbnb to share more data. Many cities, like Amsterdam, Barcelona, New York, and Paris, and countries, like Denmark, request platforms to share data with regulators or enforcers. Denmark, for example, has two different sets of regulations for Short-term letting platforms.¹²¹ One, more lenient, for platforms that collaborate with the government, and another, more stringent, for non-collaborating platforms.

¹¹⁷ Cromarty & Barton (2020), 5. & Oxford City Council (2019). ‘City Council calls on short-let landlords of entire homes in Oxford to apply for planning permission’.

¹¹⁸ Nieuwland & van Melik (2020), 821.

¹¹⁹ Ibid., 821.

¹²⁰ Cromarty & Barton (2020), 41.

¹²¹ Ibid., 47.

Limitations: relative to other international cities, the political authority of cities in England means that they have little direct control over the regulation surrounding Short-term letting.¹²² Without the help of the central government, Cambridge would not be able to implement such a measure.

6.4 Quantitative limitations

These include a limit on the nights let per year, or the number of visitors, or the number of Short-term lets per host. The right time-limit, such as 90-nights in London, and Oxford's unofficial 140-nights, can create the right financial incentives for long-term lets to become attractive again.¹²³

Strengths: The introduction of a time-limit creates a clear boundary after which a property is being used against its planning permission and could result in less legal ambiguity.

Limitations: Proving that a property has surpassed the time-limit relies on the ability of local government to have the occupancy rate, which is currently a laborious task unfit for mass policing. On top of that, London's experience with a time-limit has shown that some properties move across platforms so as to avoid the limit on a single platform.

6.5 Relying on legal proceedings

There have been successful cases of the Planning Inspectorate succeeding in proving that a property was being used in contravention of their planning permission, and the owners appeal dismissed.

Example 1: 17 Richmond Road, C3 terraced house. The appellant evidenced that the property was unoccupied 45% of the time, and that 60 Short-term let stays occurred within the 12 months prior.

→ *'the evidence indicates that the character of the use in question, in particular the notably transient pattern of occupancy, together with the pattern of related arrivals*

¹²² Cosh (2020), 8.

¹²³ Oxford City Council (2019). 'City Council calls on short-let landlords of entire homes in Oxford to apply for planning permission'.

and departures, is significantly different from that normally associated with a house. The difference is such that, as a matter of fact and degree, I consider it amounts to a material change of use.¹²⁴

Example 2: Florian/Marino House - 13 apartments across 2 blocks built for C3 use and instead let out as Short-term lets. The inspector concluded “some sort of hybrid between use class C3 and C1” and ruled that the ‘variable nature of the transient uses of the properties has resulted in a different character of usage from class C3’.¹²⁵

Strengths: This is an option that councils have and use, with successful examples. On top of that, numerous successful planning enforcements can carry deterrent power against homeowners using their properties in contravention of planning permission.

Limitations: As already established, this is a time and resource consuming process, which relies on the gathering of complaints, followed by a lengthy enforcement process. Despite the investment of time, the process can still result in limited successful prosecutions¹²⁶ In London, between 2015-2019, five central boroughs served over 600 Planning Contravention Notices. Only 113 subsequent Enforcement Notices were served, although none of the five boroughs reported any successful prosecutions.¹²⁷ In order for this option to be successful, planning authorities would need to be properly resourced, which is currently not the case.¹²⁸

6.6 Closer collaboration with Short-term letting platforms

Despite the image often associated with Airbnb in the news, the corporation is not wholly opposed to stricter regulation. In the UK for example, Airbnb is in favour of introducing a ‘simple, online cost-free and centralised system where hosts can input their personal information and instantly obtain an entry on the register’.¹²⁹ The London Mayor, Sadiq Khan, and six Inner London Councils have been vocal supporters of a mandatory registration scheme, although the government has shown little support for national legislation that would require it. Airbnb’s willingness to cooperate should be taken advantage of and it is a missed opportunity for the government not to act on it.

¹²⁴ The Planning Inspectorate (2018). *Appeal Decision APP/Q0505/C/18/3193261*, point 17, page 4.

¹²⁵ The Planning Inspectorate (2019). *Appeal Decisions APP/Q0505/C/18/3196460*, point 48, page 9.

¹²⁶ Cosh (2020), 26.

¹²⁷ Cromarty & Barton (2020), 26 & Cosh (2020), 25

¹²⁸ *Ibid*, 4.

¹²⁹ Airbnb (2019). *Airbnb Submission: Scottish Government Short-Term Lets Consultation*, 9

Airbnb has also introduced a cap on its website in 2017, which automatically makes whole properties unavailable once they have been let out for 90-days.¹³⁰ Importantly, such a limitation does not exist for rooms (as opposed to full properties), which Airbnb claims is a consequence of the different interpretation of the law.¹³¹ Commentators and councils have noted, however, that this is not foolproof. There are ways to get around the cap. Hosts can evade the cap by relisting properties using different addresses and photos, thus circumventing the algorithm designed to detect duplicates.¹³² If that fails, hosts can also advertise their listings on multiple platforms since there is no coordinated capping system that scans properties across all platforms.¹³³ The platforms are not currently required to report the properties that exceed the 90-night or the number of them, which makes the monitoring job of local government that much harder.¹³⁴ Although the degree to which this happens is not noted. Nonetheless, a registration service would go some way to alleviating these problems, as it will be a lot harder to disguise the same property and avoid the cap.

Airbnb is also asking for regulation that would limit the total number of days in a calendar year during which a property can be let on a short-term basis. The Oxford City Council has proposed a 140-day per year limit, which was endorsed by Airbnb.¹³⁵ We have already noted the loopholes that exist to avoid a time-limit, yet this should nonetheless be welcomed as a time-limit would nonetheless create a clearer boundary after which properties are in contravention of their planning permission.

¹³⁰ Cosh (2020), 8.

¹³¹ *Ibid.*, 7.

¹³² *Ibid.*, 8.

¹³³ *Ibid.*, 8.

¹³⁴ *Ibid.*, 8.

¹³⁵ Oxford City Council (2019). 'City Council calls on short-let landlords of entire homes in Oxford to apply for planning permission'.

7. Conclusions and Recommendations

7.1 Central government must empower local authorities

If Short-term lets are to be properly regulated in Cambridge, a degree of central government support is necessary. Local governments in England must therefore pressure the central government to provide them with the necessary tools to address the negative externalities of Short-term lets. This could be done on the basis of the Scottish model outlined above. A central government mandated registration scheme could be established, local governments could be given the capacity to establish control areas, where the number of Short-term lets is either limited or wholly banned, and a review of taxation tools undertaken.

Because of the context-sensitive nature of the phenomenon, no one size of local policy fits all. It will be up to the local authorities to judge the extent of the negative externalities of Short-term lets and to be more strict or lax depending on the local contexts and needs.

7.2 Create a registration service to bridge gaps in data

In a context where lack of data is cited as a major limitation in research and decision-making outcomes, a registration service could provide some of the information necessary to bridge this gap. As part of this service, planning authorities would be informed of the occupancy rate of properties. Building upon the Denver case outlined above, an online registration scheme would be appropriate for an industry that operates almost wholly online. The service would preferably be free for sign-up to ensure high uptake rates, but would involve fines for contravening hosts. The more effective collection of fines provided by online monitoring could address some of the lack of resources of planning authorities. The registration platform could be created by the central government and used by cities around the country, or created by different cities in collaboration with each other and Airbnb, who has shown receptiveness to such a measure. Finally, a registration service would improve the monitoring work of planning authorities, as the policing of unlicensed or illicit Short-term lets would require less time and resources.

7.3 Find the right days-in-a-year-limit to create the right incentives for long-term letting

If after the introduction of the registration service, the collected data shows that the negative externalities associated with Short-term letting are unacceptably high, an upper limit on the total nights a property can be let in a year should be imposed. This recommendation will rely on the effective ability of planning authorities to monitor the occupancy rate, which could be achieved with the implementation of a registration scheme. The issue of properties being let on different platforms also exists. However, a well designed registration service should allow planning authorities to monitor properties across different platforms.

Deciding upon the upper cumulative limit for Short-term lets will depend upon the needs of the different cities. A balance will have to be found between ensuring that the right financial incentives for long-term letting exist and making the most of the benefits of short-term letting.

7.4 Collaborate more closely with Airbnb

Airbnb's willingness to collaborate should be fully leveraged. With the right regulation in place, Airbnb has already shown to be willing to introduce caps on its website for night-limits in London or collect tourist tax for cities in the Netherlands.¹³⁶ It is also important to note that the pandemic has greatly impacted Airbnb's profitability. This might be a particularly favourable time for governments at different levels to exact concessions from Airbnb.

¹³⁶ Airbnb. 'Occupancy tax collection and remittance by Airbnb in Netherlands'. *Airbnb Help Centre Website*.

8. Bibliography

- Abril, Danielle. 'Airbnb's IPO filing reveals huge COVID impact'. *Fortune*, 2020. Accessed on May 2021, via:
<https://fortune.com/2020/11/16/airbnb-ipo-initial-public-offering-coronavirus-impact/>
- Affordable Housing Commission, The. A National Housing Conversion Fund: buying properties to boost affordable housing supply. Released: September 2020. Accessed on May 2021, via:
<https://www.affordablehousingcommission.org/news/2020/9/23/report-a-national-housing-conversion-fund-buying-properties-to-boost-affordable-housing-supply>
- Airbnb. *Airbnb Submission: Scottish Government Short-Term Lets Consultation* (2019). Accessed on May 2021, via:
<https://press.airbnb.com/wp-content/uploads/sites/4/2019/09/Airbnb-Submission-Scottish-Government-Short-Term-Lets-Consultation.pdf>
- Airbnb. *Airbnb UK Insights Report*, 2018. Accessed on May 2021, via:
https://www.airbnbcitizen.com/wp-content/uploads/2018/10/AirbnbUKInsightsReport_2018.pdf
- Airbnb. 'Occupancy tax collection and remittance by Airbnb in Netherlands'. *Airbnb Help Centre Website*. Accessed on May 2021, via:
<https://www.airbnb.co.uk/help/article/2289/occupancy-tax-collection-and-remittance-by-airbnb-in-netherlands#:~:text=Guests%20who%20book%20Airbnb%20listings,for%20reservations%20in%20Amsterdam%2C%20Netherlands>
- Ayouba, Kassoum, Breuillé, Marie-Laure, Grivault, Camille, and Le Gallo, Julie. 'Does Airbnb Disrupt the Private Rental Market? An Empirical Analysis for French Cities.' *International Regional Science Review* 43, no. 1-2 (2020): 76-104.
- Barker, Gary. 'The Airbnb Effect On Housing And Rent'. *Forbes*, February 2020. Accessed on May 2021, via:
<https://www.forbes.com/sites/garybarker/2020/02/21/the-airbnb-effect-on-housing-and-rent/?sh=17cbd7292226>
- Barron, Kyle, Kung, Edward, and Proserpio, Davide. 'The Effect of Home-Sharing on House Prices and Rents: Evidence from Airbnb.' *Marketing Science* 40, no. 1 (2021): 23-47.

- BBC. 'Scottish government withdraws new law on short-term lets'. *BBC*, February 2021. Accessed on May 2021, via: <https://www.bbc.co.uk/news/uk-scotland-scotland-business-56115450>
- Boswijk, J. 'Airbnb: The future of networked hospitality businesses.' *Journal of Tourism Futures*, 2(1), 2016, 22–42.
- Cambridge and Peterborough Independent Economic Commission. *Cambridgeshire and Peterborough Independent Economic Review: Final Report* (2018). Accessed on May 2021, via: <https://www.cpier.org.uk/media/1671/cpier-report-151118-download.pdf>
- Cambridge City Council. 'Briefing Note on Short term Lets'. March 2017. Accessed on May 2021, via: <https://democracy.cambridge.gov.uk/documents/s38249/Briefing%20Note%20on%20Short%20Term%20Lets%20FINAL%20060317.pdf?fbclid=IwAR37G6kr80DMFtX-bHj7KyOvkHJWb5fNmAEb-86EG7PDzpZOLuqMdTIMX8Q>
- Cambridge City Council. 'Planning Enforcement Report for: Address: 17 Richmond Road, Cambridge, Cambridgeshire CB4 3PP'. Edited by Head of Planning Services for Planning Committee. December 2018. Accessed on May 2021, via: https://democracy.cambridge.gov.uk/documents/s40847/EN014316%20-%20Report.pdf?fbclid=IwAR0sQqSpTjzptCykctKGkTW-VMK5e6zD9N7doVEwZboAY6zLwWWJBe6_oU
- Cambridge City Council & South Cambridgeshire District Council. *Homes for the Future: Great Cambridge Housing Strategy 2019 - 2023*. Published 2019. Accessed on May 2021, via: <https://www.cambridge.gov.uk/media/7296/greater-cambridge-housing-strategy-2019.pdf>
- Camden Council. 'Short term lettings and planning permission'. Accessed on May 2021, via: <https://www.camden.gov.uk/short-term-lettings-planning-permission>
- Centre for Cities. *Cities Outlook 2018*. London, 2018. Accessed on May 2021, via: <https://www.centreforcities.org/wp-content/uploads/2018/01/18-01-12-Final-Full-Cities-Outlook-2018.pdf>
- Chen, Wei and Wei, Zaiyan and Xie, Karen. 'The Battle for Homes: How Does Home Sharing Disrupt Local Residential Markets?' Accessed on May 2021, via: <https://ssrn.com/abstract=3257521>
- Cosh, Georgie. 'Housing Research Note 2020/04: Short-term and holiday letting in London'. *Greater London Authority*. 2020. Accessed on May 2021, via:

https://www.london.gov.uk/sites/default/files/housing_research_note_4- short-term_and_holiday_letting_in_london.pdf

- Cromarty, Hannah and Barton, Cassie. *The growth in short-term lettings (England)*. House of Commons Library Briefing Paper no. 8395. London: House of Commons Library., May 2020. Accessed on May 2021, via: <https://commonslibrary.parliament.uk/research-briefings/cbp-8395/>
- *Deregulation Act 2015, Sections 44 and 45: Short-term use of London accommodation: relaxation of restrictions and power to relax restrictions*. Accessed on May 2021, via: <https://www.legislation.gov.uk/ukpga/2015/20/notes/division/5/46#:~:text=The%20purpose%20of%20section%2025,City%20as%20temporary%20sleeping%20accommodation.&text=This%20applies%20even%20if%20only,207>
- DiNatale, Sadie, Lewis, Rebecca, and Parker, Robert. 'Short-term Rentals in Small Cities in Oregon: Impacts and Regulations.' *Land Use Policy* 79 (2018): 407-23.
- Duso, Tomaso, Michelsen, Claus, Schäfer, and Tran, Kevin Ducbao. 'Airbnb and Rents: Evidence from Berlin'. *DIW Berlin Discussion Paper* No. 1890. Accessed on May 2021, via: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3676909
- European Commission - Directorate General Internal Market, Industry, Entrepreneurship and SMEs (DG GROW). *Study on the Assessment of the Regulatory Aspects Affecting the Collaborative Economy in the Tourism Accommodation Sector in the 28 Member States (580/PP/GRO/IMA/15/15111J)*. European Union (2018). Accessed on May 2021, via: <https://op.europa.eu/en/publication-detail/-/publication/1a76a592-5273-11e8-be1d-01aa75ed71a1/language-en/format-PDF/source-70757522>
- European Commission - Internal Market, Industry, Entrepreneurship and SMEs. *Regional Innovation Monitor Plus: East of England*. Accessed on May 2021, via: <https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/base-profile/east-england#:~:text=Complete%20Regional%20Profile-,Economy,UK%20population%20and%20GDP%20respectively.>
- Evans, Anna, Graham, Eddy, Rae, Alasdair, Robertson, Douglas, and Serpa, Regina. 'Research into the impact of short-term lets on communities across Scotland'. *Scottish Government*, October 2019. Accessed on May 2021, via: <https://www.gov.scot/publications/research-impact-short-term-lets-communities-scotland/>
- Ferreri, Mara, and Sanyal, Romola. 'Platform Economies and Urban Planning: Airbnb and Regulated Deregulation in London.' *Urban Studies* 55, no. 15 (2018): 3353-368.

- Furukawa, Norikazu, and Onuki, Motoharu. 'The Design and Effects of Short-term Rental Regulation.' *Current Issues in Tourism*, 2019, 1-16.
- Garcia-López, Miquel-Àngel, Jofre-Monseny, Jordi, Martínez-Mazza, Rodrigo, and Segú, Mariona. 'Do Short-term Rental Platforms Affect Housing Markets? Evidence from Airbnb in Barcelona.' *Journal of Urban Economics* 119 (2020): 103278.
- Gurrán, Nicole, and Phibbs, Peter. 'When Tourists Move In: How Should Urban Planners Respond to Airbnb?' *Journal of the American Planning Association* 83, no. 1 (2017): 80-92.
- Guttentag, D. 'Airbnb: Disruptive innovation and the rise of an informal tourism accommodation sector.' *Current Issues in Tourism*, 18(12), 2015, 1192–1217.
- HM Revenue & Customs. *Rent a Room relief increase*. July 2015. Accessed on May 2021, via:
<https://www.gov.uk/government/publications/rent-a-room-relief-increase/increasing-rent-a-room-relief>
- HM Revenue & Customs. *Guidance: Tax-free allowances on property and trading income*. Published April 2017, last updated May 2019. Accessed on May 2021, via:
<https://www.gov.uk/guidance/tax-free-allowances-on-property-and-trading-income>
- Horn, Keren, and Merante, Mark. 'Is Home Sharing Driving up Rents? Evidence from Airbnb in Boston.' *Journal of Housing Economics* 38 (2017): 14-24.
- Housing and Social Justice Directorate. 'Publication - Advice And Guidance: Short-term lets: regulation information'. *Website of the Scottish Government*, Published March 2020, last updated May 2021. Accessed on May 2021, via:
<https://www.gov.scot/publications/short-term-lets/>
- Inside Airbnb. *Dataset: Get the data*. Accessed on May 2021, via:
<http://insideairbnb.com/get-the-data.html>
- Inside Airbnb. *Dataset: London*. Accessed on May 2021, via:
<http://insideairbnb.com/london/>
- Ioannides, Dimitri, Röslmaier, Michael, and Van Der Zee, Egbert. 'Airbnb as an Instigator of 'tourism Bubble' Expansion in Utrecht's Lombok Neighbourhood.' *Tourism Geographies* 21, no. 5 (2019): 822-40.
- Jiao, Junfeng, and Bai, Shunhua. 'An Empirical Analysis of Airbnb Listings in Forty American Cities.' *Cities* 99 (2020): 102618.

- Kim, Anna Joo, Brown, Anne, Nelson, Marla, Ehrenfeucht, Renia, Holman, Nancy, Gurrán, Nicole, Sadowski, Jathan, Ferreri, Mara, Sanyal, Romola, Bastos, Marta, and Kresse, Klaas. 'Planning and the So-Called 'Sharing' Economy / Can Shared Mobility Deliver Equity?/ The Sharing Economy and the Ongoing Dilemma about How to Plan for Informality/ Regulating Platform Economies in Cities - Disrupting the Disruption?/ Regulatory Combat? How the 'Sharing Economy' Is Disrupting Planning Practice/ Corporatised Enforcement: Challenges of Regulating AirBnB AndOther Platform Economies/ Nurturing a Generative Sharing Economy for Local Public Goods and Service Provision.' *Planning Theory & Practice* 20, no. 2 (2019): 261-87.
- Koster, Hans R.A, Van Ommeren, Jos, and Volkhausen, Nicolas. 'Short-term Rentals and the Housing Market: Quasi-experimental Evidence from Airbnb in Los Angeles.' *Journal of Urban Economics*, 2021, 103356.
- Lynn, Guy. 'London firms helping landlords break letting laws'. *BBC*, February 2019. Accessed on May 2021, via: <https://www.bbc.co.uk/news/uk-england-london-47305575>
- Nieuwland, Shirley, and Van Melik, Rianne. 'Regulating Airbnb: How Cities Deal with Perceived Negative Externalities of Short-term Rentals.' *Current Issues in Tourism* 23, no. 7 (2020): 811-25.
- OECD. 'Local entrepreneurship ecosystems and emerging industries: Case study of Cambridgeshire and Peterborough, United Kingdom'. *OECD Local Economic and Employment Development (LEED) Papers 2021/01*. Accessed on May 2021, via: https://www.oecd-ilibrary.org/economics/local-entrepreneurship-ecosystems-and-emerging-industries_044ffc1d-en
- Office for National Statistics. *Dataset: Estimates of the population for the UK, England and Wales, Scotland and Northern Ireland*. Released: June 2020, accessed on May 2021, via: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland>
- Oxford City Council. 'City Council calls on short-let landlords of entire homes in Oxford to apply for planning permission'. October 2019. Accessed on May 2021, via: https://www.oxford.gov.uk/news/article/1220/city_council_calls_on_short-let_landlords_of_entire_homes_in_oxford_to_apply_for_planning_permission

- Scottish Government. 'Regulating short-term lets'. *Website of the Scottish Government*, January 2020. Accessed on May 2021, via: <https://www.gov.scot/news/regulating-short-term-lets/>
- Sheppard, Stephen and Udell, Andrew. 'Do Airbnb Properties Affect House Prices?'. October 2016. Accessed on May 2021, via: <https://web.williams.edu/Economics/wp/SheppardUdellAirbnbAffectHousePrices.pdf>
- Shuttlewood, John, Principal Planning Enforcement Officer at Greater Cambridge Shared Planning Service, interviews by Ugo Dino Fonda (author). Video-call Interviews on 23.04.2021 & 27.05.2021.
- Sonnemaker, Tyler. 'Airbnb is worth more than the 3 largest hotel chains combined after its stock popped 143% on its first day of trading'. *Insider*, published December 2020. Accessed on May 2021, via: <https://www.businessinsider.com/airbnb-ipo-valuation-tops-three-hotel-chains-combined-opening-day-2020-12?r=US&IR=T>
- The Planning Inspectorate. *Appeal Decision APP/Q0505/C/18/3193261* (2018). Accessed on May 2021, via: <https://acp.planninginspectorate.gov.uk/ViewCase.aspx?CaseID=3193261&CoID=0>
- The Planning Inspectorate. *Appeal Decisions APP/Q0505/C/18/3196460* (2019). Accessed on May 2021, via: <https://acp.planninginspectorate.gov.uk/ViewCase.aspx?Caseid=3196460&CoID=0>
- *The Town and Country Planning (Short-term Let Control Areas) (Scotland) Regulations 2021*. Accessed on May 2021, via: <https://www.legislation.gov.uk/sdsi/2021/9780111048085/introduction>
- *The Town and Country Planning (Use Classes) Order 1987, Part A*. Accessed on May 2021, via: <https://www.legislation.gov.uk/uksi/1987/764/schedule/made?view=plain>
- Todd, James, Musah, Anwar, and Cheshire, James. 'Assessing the Impacts of Airbnb Listings on London House Prices.' *Environment and Planning. B, Urban Analytics and City Science* 0, no. 0, (2021).
- Wachsmuth, David, and Weisler, Alexander. 'Airbnb and the Rent Gap: Gentrification through the Sharing Economy.' *Environment and Planning* 50, no. 6 (2018): 1147-170.

- 
- Walmsley, Sally. 'Budget 2020: Action needed to halt fall in supply of homes'. *National Residential Landlords Association*, February 2020. Accessed on May 2021, via: <https://www.nrla.org.uk/news/budget-2020-action-needed-to-halt-fall-in-supply-of-homes>
 - Zervas, Georgios, Proserpio, Davide, and Byers, John W. 'The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry.' *Journal of Marketing Research* 54, no. 5 (2017): 687-705.