

WHY EXISTING REGULATORY FRAMEWORKS FAIL IN THE SHORT-TERM RENTAL MARKET: EXPLORING THE ROLE OF REGULATORY FRACTURES

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SUMMARY

With historical roots in the once-common practices of lodging and boarding, short-term rentals (STRs) have become in recent years a prominent feature of the global travel accommodation space. Worth roughly US\$40 billion in 2010, the global value of the STR market reached US\$115 billion in 2019. Despite a significant hit on business as a result of the COVID-19 pandemic, the STR market is showing strong signs of rebounding. The increased popularity and accessibility of the STR market can be largely attributed to the emergence of digital sharing economy platforms, such as Airbnb and Vrbo, which play the role of mediator in simplifying interactions and transactions between hosts and guests from around the world.

As this platform-facilitated STR market has grown, home sharing has garnered increasing attention. Many have celebrated such innovation in the hospitality sector for the benefits it has delivered, among them lower prices, increased consumer choice, local economic development, community revitalisation, and a reliable income stream for property owners. However, others have been quick

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to decry the practice, accusing STR platforms of engaging in anti-competitive behaviour, exacerbating issues of over-tourism and a lack of affordable housing, and undermining the habitability of communities. Of notable concern among many STR skeptics is a potential shift in practice away from individual hosts renting a primary residence or space therein, and towards commercialization, whereby corporate entities are buying up what were once residential properties to list in the more lucrative STR market.

The above picture of costs and benefits points to a market that is rife with tensions. Naturally, this reality has produced calls for regulation and government involvement, and in some cases, has even fuelled campaigns for all-out ban of the practice. As governments have stepped into the regulatory fold, however, they have faced significant challenges. This is because STR activity, different in composition and dynamics from that which plays out in traditional markets, pushes conventional policy boundaries, undermining in some cases the effectiveness of standard legal, regulatory, planning, and governance processes. Regulatory struggles can be attributed to three key factors.

First, most conceptions of home sharing employed in the regulatory space treat the STR market as conventional and thus two-sided; that is, as encompassing interactions between those supplying the service (hosts) and those accessing it (guests). Such understandings fail to capture the involvement of additional players—digital STR platforms, most notably, but more recently professional property managers as well—not to mention the nature, extent, and implications of their involvement. Importantly, STR platforms are more than passive facilitators of market activity, and not only influence the contours and dynamics of the market, but also actively shape the regulatory space.

Second, attempts to regulate home sharing have been hampered by the widespread tendency, within both policy and academic circles, to treat the market as a monolith. Yet, an assessment of drivers of participation and dynamics among guests, hosts, and platforms makes manifest the complexity of the STR market and the diversity of activity that plays out within it. Notably, STR hosting spans a spectrum of activity, from low- or no-fee home sharing in the spirit of collaborative consumption, to renting a suite in a primary residence, to the commercial multi-hosting referenced above. Drivers of guest participation in the market are similarly diverse. Far from passive, platform involvement is shaped by the desire to create and benefit from network effects, and thus spans partnership development, bridging to distinct but related markets, and even the pursuit of socially minded or philanthropic endeavours. The above diversity suggests that one-size-fits-all approaches to management are destined to fail.

Third, governments and policymakers have relied on traditional regulatory concepts and parlance, such as the notion of regulatory violation, to characterize various forms of STR market activity. However, in the case of platform-mediated home sharing, the concept of regulatory fractures—instances in which new modes of activity do not map well onto existing frameworks, thus disrupting regulatory effectiveness—is more apt. The conceptual frame of regulatory fractures enables one to uncover the tensions and complications that are produced when novel activity arises within the context of longstanding institutions and processes, and underscores the extent to

which reimagined regulatory and policy approaches, tailored to the unique features of the STR market, are vital. Further, if not addressed, regulatory fractures will not only undercut the intent and effectiveness of regulation but will also curtail the potential benefits of home sharing activity.

Going forward, successful management of the STR market will hinge on the ability of policymakers to confront the factors currently hindering the effectiveness of policy and regulatory approaches, namely an under-developed understanding of the STR market and its dynamics, and a continued use of tools ill-suited to novel economic activity. Fortunately, governments ready to innovate in the regulatory space and reimagine management strategies will learn that a number of less conventional approaches show promise.

Among such emerging approaches is co-regulation, a tactic employed with success throughout the European Union in particular. Given their prominent role in the market, as well as their desire to influence regulation to maintain network dominance, platforms could make willing and effective partners in co-regulation, just as some other industries are entrusted with a degree of self-regulation. Though it would require the development of a robust framework to ensure effectiveness, co-regulation could help governments to overcome existing issues, such as those related to compliance and enforcement, while also enabling access to more comprehensive data, without which tailored policy and regulatory solutions are significantly hampered.

POLICY RECOMMENDATIONS

As a result of our analysis, we recommend that jurisdictions looking to manage the STR market consider the following recommendations and insights in establishing regulatory approaches:

1. The STR market is diverse. Policymakers must account for the existence of a spectrum of host types—from unsophisticated home-sharers to professional STR businesses—and refrain from crafting regulations that conceive of all STR hosting as professional and profit-motivated business operations.
2. Relatedly, hosts and guests participate in the STR market for social, practical, and profit-based reasons, and policymakers must keep these distinct and overlapping motivations in mind. In particular, regulators may want to ensure that regulations are designed to limit large-scale commercial operators, without undermining access to the social and practical benefits of STRs.
3. The costs and benefits of STRs vary depending on the shape and nature of the market in a given jurisdiction, as well as the local context. Thus, effective regulation rests on the ability of policymakers to both understand local market dynamics and how they intersect with community issues, as well as leverage such information to craft tailored solutions.
4. As key market participants, platforms have vested interests, including in influencing policy and regulations. Regulators must understand the central role platforms play in shaping the market and regulatory spaces, and account for this in regulatory frameworks.
5. The STR market confounds typical two-sided market models, given the active participation of platforms alongside hosts and guests. Common regulatory approaches are ill-suited to addressing the dynamics produced by this three-dimensionality, and thus jurisdictions will need to innovate beyond usual tools to ensure regulatory effectiveness.
6. To address issues (e.g., lack of compliance), authorities might consider the merits of co-regulation, whereby platforms are given responsibility for certain regulatory functions.

INTRODUCTION

Home sharing is not a new phenomenon. People have always found innovative ways to swap their homes with others (e.g., through sabbatical and residency exchanges), rent out unoccupied vacation properties such as cottages and timeshares, and share open spaces or rooms in their homes with guests for limited stays. However, both home sharing, as well as the short-term rental (STR) market in which such activity takes place, have been revolutionized in recent years by sharing economy platforms such as Airbnb, Homestay, Vacation Rental by Owner (Vrbo), and others. These digital platforms have transformed existing peer-to-peer accommodation exchanges by making it easier and less risky for hosts and guests to participate in the STR market. Specifically, platforms play a facilitative role in matching prospective guests with those offering accommodation, thereby reducing information, search, and transaction costs (Barron, Kung, and Proserpio 2018; Quattrone et al. 2016; Einav, Farronato, and Levin 2016), such that finding an STR is now as simple as booking a hotel, and feels similar, too.

Participating in the STR market is an attractive prospect for both guests and hosts, as engagement provides a number of key benefits. First, accommodation available in the STR market is often cheaper than a hotel (Guttentag 2015, 1196). In addition, many listings offer guests the promise of an authentic travel experience off the beaten path and the opportunity to live as a local outside of tourist centres (Zenker, Braun, and Petersen 2017). In the STR market, guests are also able to choose from a wide range of listings and opt for accommodation better suited to their needs. For example, families, large groups, and those staying for an extended period of time have the option of accessing entire homes and the comfort, space, and amenities that come with them (Guttentag et al. 2018). On the supply side, the rise of the STR market has resulted in the commodification of one's personal living space, such that spaces within the home are not just shelter for the family, but also a revenue generator that can be leveraged to offset living costs, such as mortgage payments (Sperling 2015; Wilkerson et al. 2016; Jefferson-Jones 2015; Macleod 2019; Smith 2018; Forgacs and Dolnicar 2017; A.W. Allen 2019). Further, some landlords have found renting in the STR market to be a more profitable and flexible venture than operating a long-term rental (LTR) property (Cocola-Gant and Gago 2019).

However, the growth of the STR market is not without controversy. Much of this contention results from the fact that increasing STR activity pushes modern policy boundaries (Dolnicar 2017), challenging notions of and relationships among economy, community, place, home, housing, governance, and regulation in the process. This creates tensions, not only for actors in disrupted markets (e.g., hospitality accommodations, LTRs), but also for the communities in which home sharing takes place and the governments called upon to intervene. For example, residents in some cities fear STRs are exacerbating over-tourism and extending the bounds of tourist activity, ultimately undermining a sense of community (Cocola-Gant and Gago 2019); others question the extent to which STRs are to blame for gentrification and housing availability and affordability problems (Smith 2018; Lee 2016; Lima 2019; Wachsmuth and Weisler 2018). Further, many local authorities have experienced a spike in resident complaints spanning a range of issues from unwanted noise, parking congestion, and

improper garbage disposal to more serious incidents of criminal behaviour (Bivens 2019a; Gurran and Phibbs 2017; Povich 2019). The traditional hospitality sector has also raised concerns of unfair competition given weak or non-existent regulatory and tax requirements for STRs (Benner 2017; Vigliotti 2019).

The above tensions have produced governance questions and policy, planning, legal, and regulatory issues, most of which policymakers and authorities have struggled to address. This is unsurprising, given the STR market is often oversimplified in the literature and public discourse, and such conceptualizations undoubtedly influence regulatory and policy responses. In fact, the STR market is complex and the activity that unfolds within it is diverse, and while it does overlap existing markets, it also meets demand not addressed elsewhere. Drivers of participation for guests, hosts, and platforms are numerous and overlapping, and these motivations shape the types of novel activity that play out in the market, as well as their impact. Finally, the STR market challenges existing urban planning policies, particularly zoning regulations, that not only seek to separate commercial activities from residential activities but also restrict most housing to be nothing other than single-family homes. To be effective, regulations must build on such understandings (Johal and Zon 2015).

Composed of a large number of small-scale independent service providers (i.e., hosts), consumers (i.e., guests), and arm's-length digital platforms that mediate connections and activity, the STR market also reflects economic and social dynamics that have posed unique challenges for policymakers. Specifically, attempts at regulation have been hindered by a tendency among scholars and regulators to characterize various forms of STR market activity as regulatory violations (i.e., illegal activity), when in fact market dynamics often produce what can be described more accurately as "regulatory fractures" (Sassen 1994; Zale 2016). Regulatory fractures occur when existing regulatory frameworks apply to a new mode of activity in an incomplete fashion. Such cases are problematic not only because they undermine the intent and effectiveness of the existing regulation, but also because they curtail the potential benefits of the new mode of activity. In the case of the STR market, the fractures occur because the regulatory frameworks that are being applied translate poorly, to both the platform-facilitated peer-to-peer model, as well as the disparate drivers and forms of participation in the STR market and their resultant impacts (Zale 2016).

In this paper, we draw on a breadth of sharing economy and STR literature to set out a nuanced picture of market players, their motivations, and the dynamics among them. We then use the concept of regulatory fractures to illuminate the ways in which the activity and market dynamics we describe are not simply generative of externalities, but also constitute and produce spaces that confound dominant regulatory frameworks and thus complicate efforts to address these externalities. We begin by providing background on the rise of the platform-mediated STR market, tracing a path from the founding of Airbnb in San Francisco to the present day. We then build a more nuanced picture of the market through an assessment of drivers of participation and dynamics among market actors—that is, hosts, guests, and platforms. We emphasize both the extent to which digital STR platforms are more than passive facilitators of market activity, and in fact actively shape the market and the regulatory space, as

well as the complications that arise in the context of a three-sided market that is growing in scale. Next, we consider the various costs and benefits associated with the platform-mediated STR market and explore how market externalities relate to spaces of regulatory fracture. In particular, we illustrate the challenges that arise when governments frame such externalities using language of regulatory violations and address market activity using traditional tools. Ultimately, we conclude that the effective management of the platform-mediated STR market hinges on the ability and willingness of policymakers to both reconceive of the STR market and the activity that plays out within it, as well as reimagine or innovate beyond typical and longstanding regulatory approaches.

THE RISE OF THE PLATFORM-FACILITATED STR MARKET

While home sharing is not a new activity, with the practice of homeowners hosting lodgers and boarders dating back as far as the 1700s (Modell and Hareven 1973), what is novel is the digitally mediated expansion of the practice, in form and extent, such that a distinct STR market has emerged in recent years. It is the result of this evolution—the existing platform-facilitated STR market—that is the focus of this paper. To trace the origins of the evolved STR market, many turn to the emergence of peer-to-peer accommodation giant Airbnb. The Airbnb concept dates back to 2007, when two roommates decided to rent out space and air mattresses in their San Francisco apartment upon realizing that hotel rooms were in short supply due to an international conference being held locally (Aydin 2019; Kayata 2015). Building on this initial idea, they developed Air Bed & Breakfast, a digital platform, which by 2011—after a process marked by trial and error, rejections by potential investors, and participation in various accelerator programs—reached one million nights booked in a single day, now under the new name, Airbnb (Reuters 2020).

Though Airbnb may be ubiquitous, other STR platforms—among them Expedia, Booking.com, HomeStay, Onefinestay, and Vrbo—are also key facilitators of home-sharing activity, matching hosts and guests from all corners of the globe. Many serve particular market niches: Vrbo, for example, mainly lists vacation properties, while Onefinestay serves luxury travellers in select cities across North America and Europe (Glusac 2017). Additional services exist on the margins of the STR market. Examples include Couchsurfing, a platform predicated on an exchange of free accommodation (Rodgers 2019); Handiscover, which focuses on people with special needs and people living with a disability (Handiscover 2020); Springwise, a co-operative platform that seeks to “work with neighbourhoods to make short-term rentals sustainable” (Springwise 2020); and PadSplit, a platform that connects people facing housing insecurity to low-cost options (Shieber 2020).

Over the past decade, these platforms have provided the backbone for a proliferation in the number and variety of STR accommodation on offer and have supported the rapid growth of the market’s global consumer value, which is estimated to have increased from US\$40 billion in 2010 to US\$115 billion in 2019 (Geerts 2019). When the COVID-19 pandemic struck, home-sharing activity was severely impacted: Airbnb

bookings alone dropped by 80 per cent in April 2020 and the company's valuation sank to \$26 billion (Cao 2020). However, current signs suggest that the market is recovering, even as the pandemic persists. Airbnb has rebounded and continues to dominate the STR marketplace, boasting upwards of seven million listings in more than 220 countries and over 100,000 cities (Airbnb 2020b; Glusac 2020). In addition, Airbnb's recent IPO corresponded with a first-day valuation of as high as \$100 billion (Carville, Roof, and Tse 2020). Taken together, market growth in recent years and current signs of recovery indicate widespread and international demand for what the STR market has to offer. It is unsurprising that such rapid growth over a short period has not only resulted in regulatory pressures, but also made it difficult for regulators to keep up with the scale and scope of the market.

Of particular note is the fact that the scale of the platform-facilitated STR market is on an order of magnitude larger than the market that existed prior to the creation of digital peer-to-peer accommodation platforms (Key Cafe 2019). What the platforms have done is made it easier for market participants to find and interact with each other, as the platforms serve as matchmaker between prospective hosts and guests, and also reduce information, search, and transaction costs (Barron, Kung, and Proserpio 2018; Quattrone et al. 2016; Einav, Farronato, and Levin 2016). Further, STR platforms reduce the risk of engaging in STR activities, as they act as a verification and a validation mechanism for both parties (Hawlitschek, Teubner, and Weinhardt 2016). Today, it is as simple—if not simpler—to find an STR as it is to find a hotel anywhere in the world. However, the entry of peer-to-peer accommodation giants, such as Airbnb, has not only resulted in the expansion of STR activity across the globe, it has also produced a new set of tensions in a pre-existing market.

NETWORK PARTICIPANTS: PLATFORMS, HOSTS, AND GUESTS

Integral to developing a sophisticated understanding of the platform-facilitated STR market in its current form is a consideration of the evolution and growth of the market, as well as the types of activity this has produced. This process involves analyzing what motivates platforms, hosts, and guests to participate in the STR market, in order to gain insight into why the STR market has developed as it has and to add texture to descriptions and classifications of market activity. Such understandings are also key to crafting appropriate regulatory responses, as different activities present distinct types and levels of risk, community impact, and market disruption.

PLATFORM PARTICIPATION

As we describe above, platforms such as Airbnb are key to the functioning of the platform-facilitated STR market as they enable, verify, and validate transactions between guests and hosts. However, platforms are not just passive and charitable market participants. Indeed, a core objective of platforms more generally is to create network effects (Parker and Van Alstyne 2005), and in the context of the STR market, platforms actively pursue this goal. Direct network effects occur when the value of the good or service being provided increases with the number of users. In the case of STR platforms, network effects are two-sided: value increases as a result of growth in the

number of host *and* guest users. How do STR platforms create these direct network effects? STR platforms want to attract guests to both use their website or application and book accommodation; they achieve this by not only engaging a multitude of hosts, but also attracting diverse hosts (and thus a vast array of accommodation types). Put another way, platforms are as focused on increasing the diversity and novelty of STR accommodation listed on their applications as they are in simply growing their host networks.¹ Importantly, STR platforms are motivated to protect their ability to benefit from network effects, and may do so by reducing incentives for competitors to enter the market or grow their market share, or by combating any actions that could impede their ability to sustain and increase network effects in all geographic markets.

Avenues also exist through which platforms can foster indirect network effects, which are produced when complementary products or services add to the value of a platform. For example, STR platforms will engage in various partnerships and activities that may not appear, at first blush, to benefit their business models, but which do from an indirect network effect perspective, as such partnerships ultimately increase both the number of hosts and guests, as well as the diversity of products on offer. For example, in recent years Airbnb has launched two offshoots of its accommodation service: Experiences, through which guests can access activities such as cooking classes and animal encounters, guided by local experts (Carey 2018); and Trips, which reorients the platform as a travel company to help guests book a flight, a place to stay, dinner reservations, city tours, and specialized guided experiences (Carey 2018; Arikoglu 2017). Further, in 2018 Airbnb announced the creation of Airbnb Plus, aimed at travellers who wish to stay in an STR but also desire hotel-quality amenities (Carey 2018). More recently, the platform both hired a former CEO of Virgin America “to strike more partnerships in the transportation industry” (Griffith 2019), and acquired the platform HotelTonight to help its guests book rooms in boutique and independent hotels (Clark 2019).

The above underscores both the extent to which platforms are active participants in the STR market, as well as the importance of considering platform activity in any regulatory approach. However, in many STR market conceptualizations, platforms are sidelined as tangential or passive actors; similarly, their role is often unaccounted for in regulatory approaches, and traditional regulatory frameworks are ill-suited to their inclusion. Writing about the sharing economy more broadly, Zale (2016) locates the source of regulatory fracture in the three-sided nature of markets for STRs and ride-sharing (in contrast with the traditional two-sided model of industry-consumers or employer-employees around which most regulation has been developed). Several unique features of this three-sided model produce areas and activity ripe for regulatory fracture. First, platforms have interests that can be at odds with those of their existing hosts. Notably, STR platforms have a direct interest in increasing the number of hosts

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There are, however, limits on the diversity and novelty of offerings. All STR platforms have rules against unauthorized parties and events, the solicitation or participation in prostitution and human trafficking, and facilitating any and all illegal activities as defined by jurisdiction where the dwelling is located. In addition, periodic limits on activities have been enforced by various platforms, particularly during the COVID-19 pandemic and the 2021 U.S. presidential inauguration. However, for the most part, platforms tend to rely on the complaint-based model of enforcing these standards and limitations, rather than policing listings and guests making bookings.

not only across geographic markets, but also within them, thereby creating competition among hosts within their own platform. Second, platforms have an interest in marketing specific locations to guests in an effort to encourage more hosts to enter the market in the specific location, which results in the attraction of more guests. Third, platforms have a vested interest in responding to competitive concerns in order to maintain their network dominance. For example, when Handiscover was launched, Airbnb responded by both collaborating with U.S.-based advocacy organizations to develop new accessibility filters for its platform, as well as acquiring Accomable, an accessible travel start-up that links persons with disabilities to accommodation that meets their needs (Airbnb 2018). In all cases, this drive to grow the network increases the likelihood and degree to which any associated negative externalities from this growth will impact the affected community.

HOST PARTICIPATION

In disentangling the diverse forms and drivers of STR host activity, it is helpful to first demarcate the two extremities of the supply side of the STR market. On one end is home sharing in the purest sense, where locals host guests for free, motivated by the opportunity to participate in the sharing economy ideology of “collaborative consumption.” On the other end is the complete commercialization² of the practice, as evidenced by companies operating highly profitable businesses dedicated to buying multiple properties for the sole purpose of turning them into STRs. What is less understood and discussed is that, between these two market poles, hosts engage in a range of practices (renting a room or suite in one’s home to a student studying abroad or spending one’s holiday in another family’s unoccupied vacation property, as two examples) and are driven by overlapping social, economic, and practical motivations. It is also within this intermediary space that the greatest nuance exists. The presence of not only the two extremes, but also a continuum between these extremes, is another potential source of regulatory fracture, since those who consider themselves engaged in collaborative consumption may not consider regulations framed around business and commercial activity in the STR market as applying to them.

Given estimations that nearly one-third of sharing economy participants are socially motivated, Bucher, Fieseler, and Lutz (2016, 323) assert that “sociability” is the strongest factor shaping sharing behaviour. Considering the origin of the practice of lodging and boarding was to provide the benefits of a surrogate family to young men who had left their family home, this sociability driver of home sharing has deep social, cultural, and historical ties (Modell and Hareven 1973). Similar drivers of participation, such as personal alignment with the sharing economy ethos, can be observed among hosts operating in the STR market. Such individuals might view listing a room or suite in their home on an STR platform as a novel way of meeting new people or engaging with travellers or students of different cultural backgrounds. Others are drawn to the sharing aspect of the process, whereby they can support more sustainable travel by making use

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We use the term commercialization to refer to STR activity that is a professional and profit-motivated business operation.

of unused space in their homes or enhance the tourist experience by acting as personal guides with local knowledge and connections (Karlsson and Dolnicar 2016, 160).

Those who are drawn to host in the STR market by social and other intrinsic factors often engage in operations that correspond with the least commercialized market activity: listings are frequently for a room or space in a primary residence at a low fee or are otherwise offered at no expense. Couchsurfing is perhaps the first digital platform to have been built upon this notion of collaborative consumption in the travel realm; however, the sharing economy ethos is also a driver of supply on platforms such as Airbnb, where one can find low-fee listings for a spare room.

Furthermore, for many hosts, the social and other intrinsic benefits are a welcome complement to income generated by an STR listing. In one U.S.-based study of host motivations, Lampinen and Cheshire (2016, 1675) found that, while the opportunity to earn money was a theme across responses, it was rarely the sole reason for participation: many hosts also cited intrinsic benefits, such as interaction with guests and the gratification associated with being a good host. In examining the existing evidence, Crommelin et al. (2018, 38) reached similar conclusions, stating that for most hosts, participating in the STR market “is a way to earn additional income, whilst supporting a business model that is seen to offer social or cultural benefits as well.”

Importantly, the majority of these socially driven operations—in which the host is present and engaged or motivated by the prospect of sharing resources—do not pose competitive challenges to other accommodation markets, such as hotels (though in some cases, they may compete with bed and breakfasts or hostels), nor do they threaten to worsen issues of affordability and undersupply in LTR markets. Furthermore, they are least likely to be implicated in discussions regarding over-tourism and negative community impacts.

While social motivation is present in the STR market, it would be naive to suggest all activities in the STR market are not chiefly profit-driven. In fact, the majority of hosts are profit-motivated to some extent, and some run highly commercialized STR operations. Indeed, those who list entire properties and/or approach STR hosting as a business—that is, those seemingly drawn more to the economic advantages of the practice, rather than its social elements—have come to dominate the STR hosting space. In Canada, for example, entire homes and apartments (rather than rooms, suites, and other shared spaces) represented 63.7 per cent of total listings and generated 86.3 per cent of total STR market revenue in 2017 (Ayotte, Barclay, and Sinclair 2019). Yet, even in a space increasingly dominated by commercialized activity, there remains considerable complexity. In reality, there is much variance among hosts driven to participate for economic reasons, and a consideration of these differences and the types of operations associated with them paints a picture of a heterogeneous market, with varying degrees of impact. In this category, economic reasons for participation are generally divided into those seeking to supplement their primary income and those looking to build an STR business.

Many hosts find that participation in the STR market is an effective way of supplementing their primary income, and that renting out vacant space—a spare

bedroom, a guest suite, a vacation property, or a second residence—for a fee is a way of monetizing and gaining more value from assets that are sitting idle (Smith 2018). Even within this group, hosts make such decisions for various reasons. For example, STR hosting has been presented as a strategy to keep up with mortgage payments or weather the effects of a financial shock (Jefferson-Jones 2015; Macleod 2019; DeMola 2020; A.W. Allen 2019). As Forgacs and Dolnicar (2017, 166) note, the option to earn income as an STR host can become a lifeline in the face of structural economic changes, a decline in middle-class jobs, the rise of the gig economy, and an increase in part-time or fissured work. In such instances, individuals are likely renting out rooms or suites in their primary residences, or only listing their primary residence when out of town. Hosts have also noted that listing their home while on vacation helps to pay for a portion of travel costs (Bivens 2019b). Others have spare space and are capitalizing on the option to list it on an STR platform: for example, some have noted they have a suite that is often used to host visiting family members and friends, which they list on an STR platform when it is not being used for such purposes (Moffat 2019).

Those with second properties, such as vacation cottages and timeshares, may also decide to host in the STR market when their assets are sitting unused—in some cases, to recoup operating costs, in others to earn a small profit. Further, property owners who have been forced to temporarily relocate, but who still own property in their former city, in some cases prefer to keep their home instead of incurring the high transaction costs of selling it. In other cases, homeowners prefer to have their home occupied in the short term while they attempt to sell. Instances of the latter have become widespread enough that some realtors now offer STR listing and property management services as part of a sale-listing agreement. In such situations, the option of listing in the STR market may also be preferable to renting to long-term tenants, given the rules, responsibilities, and relative inflexibility of becoming a landlord versus an STR host.

The second category of hosts are those who own at least one unoccupied property for the sole purpose of renting it for profit; such hosts can be said to be engaging in pure business activity. In some cases, these hosts see profit-making opportunities in the STR market and end up expanding their ownership across several STR-focused properties. In recent years, the prospect of building an STR business in this way has grown in attractiveness, such that two-thirds of hosts operating in the U.S.-based STR market now either manage or have ownership of multiple listed properties; such hosts have also been responsible for much of the growth in market supply in recent years (Shadel 2020). Thus, it appears as though a minority of the activity taking place in the STR market reflects activity that either aligns primarily with the original home-sharing ethos of collaborative consumption or constitutes hosts renting out spare space in their primary residence to earn supplemental income.

Given this trend, some have argued that Airbnb and other platforms are evolving into glorified travel-booking sites, citing in particular a rise in the number of professional hosts operating several listings. Indeed, those engaging in the STR market in a business-like manner can be considered direct competitors of hostels, bed and breakfasts, and hotels, depending on the nature and price point of their listings. In

addition, many such hosts could list properties in the LTR market instead but choose to operate in the more lucrative STR market for profit reasons, a decision that implicates STR hosts in conversations about a decline in the affordability and availability of housing. The trend towards STR commercialization raises additional questions for the neighbourhoods in which market activity unfolds, both in terms of over-tourism and community preservation, as well as impacts on municipal public finance, safety, zoning, and shared public services.

However, considering host activity and motivations from this angle raises two key points. First, it is important to remember that the asset being rented in the STR market is owned by an individual host and not the platform itself: while the platform is interested in fostering and accessing benefits associated with network effects, it is the hosts who are choosing to make their asset(s) available in the market. This complex relationship regarding asset ownership is another feature that distinguishes the STR market from traditional two-sided markets (Zale 2016). Second, as the STR market has grown, property management companies have emerged to facilitate, for a fee, all aspects of the STR hosting process. Though such companies do not own the properties they manage, they are oftentimes responsible for overseeing listings and a host's online presence. Put differently, property managers simplify the participation of property owners in the STR market by reducing transaction costs. When several hosts hire the same property manager, it can appear as though that property manager is in fact the host—and more importantly, the owner—of multiple units. As a result, there is the potential for conflation of the emergence of property management in the STR space with the rise of mega-hosts and highly commercialized STR activity—that is, those who have turned STR ownership into a business, listing many properties at a given time. There are differences between these two activities, both in terms of their nature and their impact. This complexity also creates regulatory challenges, as in some senses it represents the existence of not a three-sided market, as noted by Zale (2016), but potentially a four-sided market, in which property managers constitute an additional (and growing) actor that must be considered in regulatory frameworks.

GUEST PARTICIPATION

Clearly, hosts compose only one side of the STR market—after all, supply does not exist without demand. Guests, who account for the demand side of the market, opt for STRs as their accommodation of choice in a number of scenarios, spanning leisure, business, and personal/situational travel. Who are the guests who use STRs? Research indicates that travel *purpose* is a reliable determinant of STR use—and similarly, that some forms of travel remain associated with traditional hospitality markets. For example, in a survey of nearly 1,000 Canadian and American Airbnb users, 80.3 per cent of respondents noted that they were travelling for leisure, while 8.7 per cent were visiting friends or family, 7.5 per cent were attending a convention, conference, or major event, and 3.5 per cent were travelling on business (Guttentag 2016, 93). These results are supported by additional research that finds that STR guests (compared with hotel guests) were more likely to be on holiday (Volgger et al. 2018, 314) and that STRs pose less of a threat to hotels when it comes to capturing the short-stay business travel market (Zervas, Proserpio, and Byers 2017; Nowak et al. 2015). While this demonstrates that

STRs are a popular choice for tourists, demand for STRs is also driven by individuals travelling for work reasons (e.g., academics on longer research stays) and people whose personal situations require they relocate temporarily (e.g., those requiring accommodation during out-of-town medical stays or families forced out of homes due to personal emergencies). Naturally, this demand shapes STR supply.

Characteristics of prospective guests also influence STR use and preferences. Airbnb (2016) has noted that roughly 60 per cent of all bookings through the platform are by millennials (generally defined as those born between 1981 and 1996), citing popularity among this group as a driver of recent growth. Further, Tussyadiah (2015) found the consumer side of the STR market to be characterized by those who are highly educated, have higher incomes, travel often, and are open to alternative accommodation and innovation in the travel space. Lutz and Newlands (2018) uncovered substantial differences between American consumer markets for shared-room and entire-home listings, with guests who are younger, single, lower-income, and open to social interaction more likely to seek out shared rooms, and older adults and families with higher incomes more inclined to opt for entire homes.

Research indicates that those who choose to participate in the STR market as guests do so for various reasons (see Tussyadiah 2015; Böcker and Meelen 2017; So, Oh, and Min 2018), and these motivations can be understood as falling more specifically into the categories of price, location, access to household amenities, and desire to have an “authentic experience” (Nowak et al. 2015; Jang et al. 2019; Guttentag 2015). Hardy and Dolnicar (2017, 175-177) offer a typology of guests, which spans cost-savers, socializers, localizers, and utilitarians,³ while Guttentag et al. (2018) place STR users in five motivation-based cluster profiles: money-savers, home-seekers, collaborative consumers, pragmatic novelty-seekers, and interactive novelty-seekers.⁴ Building on this research, we consider three general drivers of STR use: economic, practical, and social.

A common narrative surrounding the growth of the STR market is grounded in the affordability of accommodation relative to other options, such as bed and breakfasts and hotels. Indeed, Zervas, Proserpio, and Byers (2017) note instances of hotels in communities with large Airbnb presence lowering their prices in order to compete with STR listings. In addition, several studies (Böcker and Meelen 2017; So, Oh, and Min 2018; Tussyadiah 2015; Nowak et al. 2015; Guttentag et al. 2018) find that price is the primary driver of STR use. Guttentag et al. (2018) conclude that, despite claims that ethical considerations and the sharing economy ethos are key drivers of STR use, the basic desire to spend less money is the central motivator for people to pursue the

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Cost-savers seek low-cost accommodation and have little interest in other aspects of STRs. Socializers use STR platforms to connect with people, before and during travel. Localizers want authentic experience and immersion in local culture. Utilitarians are focused on specific needs (e.g., large, private property, amenities, pet-friendly listing).

⁴

Money-savers are motivated by the relatively low cost of STRs. Home-seekers are attracted to the amenities and atmosphere of a home and often rent entire dwellings. Collaborative consumers are drawn to the sharing economy ethos of sustainability, authentic experience, and support for local residents. Pragmatic novelty-seekers are drawn to both the novelty of the STR experience and the opportunity to access household amenities. By contrast, interactive novelty-seekers are attracted by both novelty and the prospect of interacting with their host and local residents.

comparatively low-cost option of an STR. Further, the importance of low cost does not only emerge when examining STR use within the context of the accommodation sector: when compared to other sharing-economy subsectors—car sharing, tool sharing, ride sharing, and meal sharing—the salience of economic considerations was highest in the accommodation subsector (Böcker and Meelen 2017). However, when examining motivations among subsections of the population, the picture is more nuanced. For millennials in China and Germany, for example, economic benefits have the smallest effect, compared with normative and values-based factors (Amaro, Andreu, and Huang 2019). Therefore, important cultural factors are also at play.

Though price is a central factor in STR use, many travellers also turn to the market for practical reasons. For example, access to household amenities, such as a washing machine, and a number of other home benefits, such as privacy, separate bedrooms, and the ability to cook, have been found in the literature to be key drivers of STR use (So, Oh, and Min 2018; Guttentag et al. 2018). Further, studies indicate that STRs could serve a market niche in the area of family (and multi-family) travel, given the characteristics, preferences, and needs of families—particularly those with young children—as well as the fact that some STRs have been developed specifically for such demographic groups (Lin 2020; Hardy and Dolnicar 2017; Hajibaba and Dolnicar 2017).

In addition, in one survey of Airbnb use trends, Nowak et al. (2015, 16-17) found that roughly one-third of respondents picked location as one of the most important factors leading them to use the platform. This aligns with the assertion that travellers choose STRs—rather than hotels or other forms of accommodation—for their proximity to amenities, services, and neighbourhoods (Guttentag et al. 2018, 354). As Grisdale (2019, 14) illustrates, in Toronto, significant STR activity occurs in areas that are primarily residential and that have few hotel options.

The characteristics and flexibility described above also make STRs more appealing—and perhaps better options—for longer-term visitors, such as academics on research stays or families who require accommodation during an out-of-town medical procedure. Some suggest that STRs may also be better suited than traditional forms of accommodation to meeting the accessibility needs of persons living with a disability (Boxall, Nyanjom, and Slaven 2018). Finally, others have argued that STRs could form part of a solution to addressing problems of ongoing undersupply of shelter space and safe housing for survivors of domestic violence (Crisan 2020).

Several studies indicate that novelty, access to local experience and expertise, and alignment with the sharing economy ethos are also factors driving STR use among travellers (Tussyadiah 2015; Hardy and Dolnicar 2017; Guttentag 2015; Guttentag et al. 2018). STRs can be distinguished from other types of accommodation based on their social elements: not only does booking through Airbnb or Vrbo provide guests a “home away from home”—potentially at a lower cost—it often promises access to local expertise and connection, both through engagement with hosts and immersion in local communities. Further, individuals are drawn to the novel aspects of many STR listings: the opportunity to sleep “loch-side” on a Scottish croft, in a windmill in Amsterdam, or in a luxury treehouse in the American South. Others still like the idea of participating in more “ethical” or sustainable travel, whether through a reduced carbon footprint

(compared with hotel energy and utilities use) or by putting money back into the pockets of locals (Tussyadiah 2015).

However, So, Oh, and Min (2018) found factors of authenticity and social interactions—including the desire to engage with local communities—to be inconsequential when considered alongside other motivations. This aligns with the findings outlined above regarding cost, location, and access to household amenities, and particularly those in Guttentag et al. (2018), which suggest that practical benefits of STRs outweigh their experiential appeal. In other words, people seek out other aspects offered by STRs, such as authenticity or novelty, conditional on their practical needs or desires being satisfied. What is perhaps most salient in observing both the growth of the STR market, as well as consumer demand for STR accommodation, is that traditional accommodation markets are not meeting consumer preferences.

SUMMARY

What the above analysis reveals is that platforms are incentivized to grow their network of hosts and guests to obtain and maintain what has been termed “first-scaler advantage” (Hoffman 2015). However, when considering the participation and motivations of hosts and guests, the existing literature that treats the STR market as a monolith—intractably indivisible and uniform in nature—is not appropriate. As we illustrate, considerable heterogeneity and nuance exists in the platform-facilitated STR accommodation space, and STR activity unfolds in myriad ways, for a number of reasons, and among diverse actors with varying motivations and heterogeneous preferences. As a result, any regulation that treats all hosts, guests, or activities as uniform or homogenous will fail. It is also the case that the STR market fills an important gap in the accommodation market, opening travel opportunities and experiences that would otherwise not exist.

COSTS AND BENEFITS OF THE STR MARKET

The dynamics that play out within the platform-facilitated STR market, including through the interaction of large networks of hosts and guests, produce a series of costs and benefits not only for market actors, but also for communities, other sectors (e.g., hotels), and regulators. It is important to understand these externalities, as the purpose of regulation is, in part, to address costs while maintaining benefits. Keeping in mind the heterogeneity of STR market activity, we discuss the costs and benefits of platform-facilitated STR market growth below.

COSTS

As illustrated above and elucidated in particular through our discussion of drivers of host and guest participation, the home sharing that takes place in the platform-facilitated STR market can be considered unique activity, but also overlaps existing LTR and hospitality accommodation markets. This causes significant tensions and has produced calls for stronger regulations and the introduction of tax measures. Furthermore, STR activity produces negative externalities in the communities in which

it takes place, spurring advocacy for stricter rules to protect neighbourhood safety, integrity, and order. We provide the evidence for each of these costs below.

a. Disruption in Existing Markets

The STR market has had the biggest impact on the LTR market and the traditional accommodation sector, given it is these markets that the STR market overlaps. In terms of the LTR market, the rise of STRs has resulted in the disruption of local housing markets in communities around the world—or, at the very least, provoked charges of such impacts. Although an increase in the number of STR listings in a given area does not reduce the overall accommodation stock, it does produce both a distributive impact (i.e., by changing how the stock is allocated across different housing markets) and a redistributive impact (i.e., by shifting economic benefits away from local renters and hotel operators, towards travellers and property owners) (Woolley 2016). In many jurisdictions, the impacts of these shifts have provoked criticism of STR platforms in particular, which have been accused of exacerbating housing affordability and availability issues by both making it easier to engage in STR activities and encouraging the growth of hosts and guests (Cocola-Gant and Gago 2019; Lima 2019; Lee 2016).

Some suggest that the balance of local accommodation stock is shifting away from LTR units, given the financial incentive that exists for property owners to operate in the STR market. Guttentag (2016) and Guttentag and Smith (2017) found evidence of landlords having evicted long-term tenants after deciding to list a unit in the STR market, and Barron, Kung, and Proserpio (2018, 6) suggest that some non-owner occupants of LTRs may also be listing their units on Airbnb. Cardoso and Lundy (2019) estimated that more than 31,000 homes across Canada in 2018 were rented in the STR market with such regularity that they were likely removed from the LTR stock, and at least 40 per cent of those homes were located in Montreal, Toronto, and Vancouver, which are cities with low LTR vacancy rates that predate the STR boom. Such jurisdictions are characterized by a notable confluence of tight rental markets and concentrated STR activity (largely due to their size and reputations as tourist destinations). As a result, they—and similar jurisdictions worldwide—may also be more reactionary in the face of an expanding STR market, even though STRs were not the original cause of the dearth of LTR options.

Further, many have connected the growth of the STR market with an increase in rents in LTR markets worldwide, especially in big cities and popular tourist destinations (Barron, Kung, and Proserpio 2018; Lima 2019; Ayoub et al. 2020; García López et al. 2019; Gandhi et al. 2019; Horn 2017; Horn and Merante 2017; Lee 2016). Underscoring this point, Chen, Wei, and Xie (2018) found that rents have declined in jurisdictions that have placed a cap on the number of STR properties a single host can manage.

Many studies (Smith 2018; Lee 2016; Lima 2019; Wachsmuth and Weisler 2018) suggest the growth of the STR market in various localities has in fact exacerbated issues of housing supply and affordability, in some cases removing LTR units from the housing stock. However, there is growing evidence to suggest that the actual narrative is much more complicated and the presence of STR platforms is but one factor in a housing crisis. First, some of the STR listings are actually tenants, not owners, of LTR units. In

some cases, the listing is temporary, available only while the tenant is travelling, for example, or on a short-term basis to bridge an inflexible fixed-term lease agreement to the end of the tenancy. In other cases, individuals are renting multiple properties solely for the purpose of re-renting these spaces as STRs, usually without disclosing their intentions to the landlord (Prowse Chowne LLP Team 2018; Fishman n.d.; GuestReady 2019; Knight 2018; learnbnb n.d.; Airbnb n.d.). The former set of activities gives tenants more flexibility regarding the use of their living space, and likely supports affordability and accessibility to LTR spaces, while the latter is more concerning in terms of removing needed LTR stock. Regulations that confound these two different types of activity can, inadvertently, remove flexibility in rental arrangements that support long-term tenants and the maintenance of LTR stock.

Second, housing affordability problems predate Airbnb and the rise of the STR market more broadly—especially for low-wage workers and those employed precariously (Woolley 2016). Other more prominent contributors to housing supply and affordability constraints are single-use and single-family home zoning regulations (Glaeser and Gyourko 2002) and the policy tilt in favour of homeownership (The Canadian Real Estate Association 2021). In addition, these two aspects—zoning regulations and views of home ownership—are also factors that drive opposition to STRs in residential communities. Thus, policymakers must take care in evaluating the perceived impacts of home-sharing activity on local housing markets: while it is likely that the growth of the STR market is exacerbating access to affordable housing in some jurisdictions, it should be considered neither the sole culprit nor the driving force.

In addition, absent from discussions in much of the literature is a consideration of the complexity and nuance in host type that we illustrated in the previous section. For example, researchers conclude that multi-hosting implies profit-oriented activity (Adamiak 2019, 6), but fail to distinguish among multiple residence owners, timeshare owners, those who have hired a professional STR management or concierge company to oversee their property listing, and corporate multi-hosts, instead grouping such hosts together despite their differences in nature and impact. As a result, though the existence of multi-unit hosts may indeed point toward an increased commercialization of this sector, the existence of property managers overseeing units for individual owners—an entirely different phenomenon from corporate multi-hosting—may be a significant factor driving market growth. This again raises the importance of distinguishing between entities that exist to take on host responsibilities on behalf of a property owner (i.e., property managers), and hosts who own, manage, and have full control over the use of multiple properties (i.e., corporate multi-hosts). When this distinction is not highlighted, policymaking suffers.

When considering the impacts of STR market growth, it is vital to note that many people consider Airbnb to be a substitute for traditional accommodation options (Guttentag 2017), especially the more affordable segments of the hotel market (Frenken and Schor 2017, 6). It is for this reason that a growing STR market might have an adverse impact on hotel occupancy rates, average daily rates, and revenue per room (Dogru, Mody, and Suess 2019). For example, one study spanning the top 10 American cities found that a 2.05 per cent increase in the average Airbnb supply

corresponded with a 3.7 per cent drop in hotel profits (Farronato and Fradkin 2018). Perhaps unsurprisingly, those in the hotel industry have responded with claims of unfair competition, citing an absence of regulatory and tax requirements for STR operators (Benner 2017; Vigliotti 2019). Others have raised concerns regarding guest security, health, and fire safety (Guttentag 2017). To the extent that STRs are either competing with or filling a void in the accommodation market but are not subject to the same regulatory requirements as the existing sector, there is certainly cause for concern in terms of competitive fairness. However, as detailed above, guests are turning to the STR market because existing accommodation markets are not satisfying consumer preferences. From this perspective, STRs are filling a void in the market and the disruption to the accommodation sector is the result of failure of traditional providers to both understand and accommodate shifting consumer preferences. Accordingly, regulation must strike a balance between protecting an uncompetitive industry and ensuring an even playing field. These tensions point to a context that is fertile ground for regulatory fractures.

b. Community Impacts

Critics assert that the persistent growth of the STR industry is changing the nature of communities, particularly those that are susceptible to over-tourism and gentrification. For example, locals in Lisbon, Portugal lament the loss of a sense of community due to over-tourism and an extension of the geographical bounds of tourist activity into residential neighbourhoods (Cocola-Gant and Gago 2019). Residents of American mountain towns also report a declining sense of community due to a substantial rise in the number of STRs and a revolving door of vacation travellers; in some cases, this trend has also produced a shift in community composition marked by an exodus of families and declining school enrolments (DeMola 2020; Macleod 2019; A.W. Allen 2019). Similar issues have been documented in Chicago's Black and Hispanic neighbourhoods, which are losing residents due to the conversion of LTR units to STRs (Smith 2018, 581), and in Edinburgh, Scotland, where communities are facing bank, library, and post office closures as a result of families leaving neighbourhoods overtaken by STRs (Evans et al. 2019, 51). Other cities report a link between the increase in STR listings and a decline in housing affordability, which has resulted in many families deciding to relocate, as well as in a reduction in local amenities (Clancy 2020; Lee 2016; Zou 2019).

An increase in the number of STR listings in a given area does not add amenities in neighbourhoods, as increased services are generally linked instead to new builds, increased property tax revenues, and community amenities agreements with developers. Rather, STRs intensify the use of existing facilities and services (Oskam and Boswijk 2016; Evans et al. 2019), often in areas that are primarily zoned for residential use. Further, many residents in STR-heavy neighbourhoods complain of unwanted noise, garbage disposal, and criminal behaviour as a result of STRs (Bivens 2019a; Gurran and Phibbs 2017; Povich 2019; Frenken et al. 2020; Frenken and Schor 2017). In Canada, the growth of the STR market has produced particular issues linked to drug use (Seth 2017), human trafficking (McIntosh 2018; Peng 2018), and violent crime

(Nicholson and Ho 2019; News 2019; Amin 2019; Crawford 2019; Willing 2019; Bingley 2019; Ireton 2020; Britneff and Connolly 2020; Ignatenko 2020).

As a result, people are sensitive to the prospect of STR growth in their neighbourhoods: a 2018 survey found that 62 per cent of Canadians would be concerned if a neighbouring home was rented out regularly through Airbnb or another STR platform, while half of survey respondents said that the presence of STRs in their neighbourhood would make them feel less safe (Nanos 2018, 2). According to the same survey, Canadians are most concerned about not knowing who or what kind of people will be renting an STR (50 per cent); other issue areas were noise and disturbance, security, crime, and safety, and potential negative impacts on neighbourhood stability and sense of community (Nanos 2018, 10). These concerns resemble those that led to the dismantling of the historical practice of lodging and boarding, a practice that was named “the lodger evil” by the end of the 19th century and eventually became associated with a lower-class practice (Modell and Hareven 1973). However, when considering the diversity of STR hosts and guests, it is important to note that the validity of these concerns are not generalizable to STRs writ large, and instead reflect issues associated with a particular type of guest and host, as well as neighbour, neighbourhood, and community preferences that are themselves tied to regulations and are another source of regulatory fractures.

These negative neighbourhood externalities can be managed with proper attention to policy, regulation, and partnerships. For example, Tourism Nova Scotia partnered with hosts and STR platforms to offer guests the opportunity to stay in unique heritage Nova Scotian homes as a reason to come to Nova Scotia (Helder 2019). Glasgow, Scotland formed a strategic partnership with STR platforms to help regenerate part of the city’s West End, which brought more visitors and tourists into the city as a result (Evans et al. 2019). Lisbon created special incentives to let investors buy abandoned and declining properties for the purposes of creating STRs; the subsequent physical upgrades helped increase home prices in the neighbourhood and increased tourism due to the increased availability of good places for tourists to stay (Cocola-Gant and Gago 2019). Therefore, there are opportunities for strategic partnerships between cities and STR platforms to build communities.

c. Discrimination

While the platforms operating in the STR market provide the digital infrastructure that connects guests and hosts, hosts have full control over whether to accept or decline bookings requested by guests. Further, hosts are able to access the profiles—which often include photos and other identity-based information—of prospective guests when bookings are requested; similarly, guests looking at listings are able to view host profiles before choosing to book. While they are an important part of the risk-reduction element of STR platforms, these features enable discrimination on the basis of certain aspects of identity, and thus create barriers to access for diverse groups (Schoenbaum 2016). These discriminatory views are often based on the same community values that create and reinforce neighbour and neighbourhood homogeneity, which are strengthened by regulations themselves, including single-use residential zoning (Gold

2020). While anti-discrimination laws in many jurisdictions prohibit hotel operators from discriminating on the basis of race, colour, religion, sexual orientation, disability, etc., such that guest identity has little place in hotel transactions, the functioning of the STR market remains predicated on the characteristics of not only hosts and guests, but also the community.

Evidence suggests that race shapes both access and profitability for guests and hosts in American Airbnb markets. For example, Edelman, Luca, and Svirsky (2017, 2) found that guests with distinctly African American names were less likely to receive positive responses to booking requests, while Edelman and Luca (2014, 9) found that non-Black hosts were able to charge 12 per cent more than Black hosts for similar listings—and, in some cases, rejected prospective Black guests, even if it meant lost revenue. Others note that American Airbnb hosts are less likely to approve requests from travellers with disabilities (Ameri et al. 2020). Further, in the midst of the COVID-19 pandemic, Airbnb hosts in New Zealand cancelled reservations from Chinese guests given perceived risk of contracting the virus (NZ Herald 2020).

Legal frameworks remain outdated in the face of the above challenges, a reality that reveals another instance of regulatory fracture. Given the prevalence of discriminatory practices described above, it is possible that some guests and hosts purposefully shifted to accessing and/or operating on STR platforms because the STR space is neither governed nor regulated to the same extent as the traditional accommodation market—perhaps as a result of limitations of traditional legal approaches—which means discriminatory practices have a better chance of going unnoticed or unpunished. Riles (2014) calls such behaviour “regulatory arbitrage,” which is a practice driven by the belief that either laws and regulation are not applicable or that enforcement is highly unlikely.

BENEFITS

The platform-facilitated STR market is also associated with several benefits. That the STR market has grown to the extent it has means complementary activities that support the market have also erupted, and the benefits of such activities have largely been felt within local communities, including through increased economic activity. STRs have also filled important gaps in the accommodation market and have provided a flexible housing supply in cases of one-time events. Finally, the STR market has fostered competition-driven innovation within the traditional accommodation space. These benefits must be considered alongside costs in developing comprehensive understandings of the STR market. We provide the evidence for each of these benefits below.

a. Economic Benefits

The growth of STR activity in a given jurisdiction can have knock-on effects, which produce broader economic benefits, particularly in the local economy. One way this happens is in providing new opportunities for local businesses and their employees. For example, rental units must be cleaned and maintained, as well as checked for compliance with safety standards, and such tasks are often contracted out to a local business, rather than completed by the host (Sigala and Dolnicar 2017). The expansion of the STR market has also sparked the creation of a handful of additional service-

based companies, such that an entire supply chain now supports STR activity (Evans et al. 2019, 38). This includes companies such as GuestPrep, a cleaning and laundry service for Airbnb hosts; Keycafe, which facilitates guest entry and access to keys without the host having to be present; and Airbnb management services, which provide hosts pricing and listing advice, as well as services, such as listing management and digital guest welcome books (Sigala and Dolnicar 2017, 81-82). This is on top of the various entities that exist to help study the sector, including AirDNA, which provides STR data and analytic services to help optimize listings (AirDNA 2021).

b. Filling Gaps Left by Existing Markets

The growth of the STR market has expanded the number and type of accommodation on offer, thereby satisfying unmet demand. For example, many STR listings offer guests the promise of an authentic travel experience off the beaten path (Zenker, Braun, and Petersen 2017), which is a service that is not well supplied by other markets. Further, STR listings have emerged to fill an accommodation gap for people who require lodging sufficient to meet their needs over the course of medical treatment, a research stay, or a family vacation. In such cases, the opportunity to stay in an STR with a full kitchen, separate bedrooms, laundry facilities, and other household amenities, represents a service that hotels and bed and breakfasts struggle to offer.

STRs have also been presented as a solution for meeting event-specific infrastructure needs, particularly during large-scale sporting events, such as the Olympic Games, which bring in a sudden and temporary influx of tourists. While such surges in demand have typically been managed through the use of university dorms and cruise ships (Fairley and Dolnicar 2017), or through long-standing partnerships among hotels, municipalities, convention centres and other businesses (Miller 2016), STRs offer a solution that is preferable to building permanent accommodation—particularly in smaller areas, such as mountain towns. For example, STRs accounted for the equivalent of 257 hotels during the 2016 Rio Olympics and 46 hotels during the 2018 PyeongChang Winter Games (IOC 2019). STRs can also help drive tourism in smaller and rural locations worldwide that do not have large accommodation sectors, such as Slovenia (Forgacs and Dolnicar 2017, 165), which can in turn support economic revitalization and diversification.

More novel are the growing partnerships STR platforms are forging with governments—and even non-government organizations—in an effort to provide solutions to social issues. For example, in Canada and around the world, the COVID-19 pandemic has resulted in a significant increase in instances of domestic violence (Owen 2020; Casert and Charlton 2020). As a result, emergency shelters, many of which were at capacity prior to the public health crisis, do not have enough space to house those in need. Crisan (2020) suggests that STRs could be leveraged to address these shelter shortages—and indeed, Airbnb has recently partnered with governments and social service organizations to offer no-cost temporary accommodation for people fleeing domestic violence (Airbnb 2020a, 2020c). This model could be expanded to temporarily house youth aging out of foster care, as well as persons experiencing homelessness, as recommended by Green, Kesselman, and Tedds (2021).

c. Growing Competition

The growing popularity of STRs has pressured businesses operating within the traditional accommodation sector to innovate in order to remain competitive. Within this context, hotels appear to be borrowing practices from successful STR platforms and are developing new products to capture some of the STR market (Fox 2017). For example, Accor Hotels has launched a new brand called JO&JOE, which links those seeking accommodation with small, affordable spaces that also allow them to meet with locals and make connections (P. Allen 2019). After a successful 2017–18 pilot project, Marriott launched its Homes & Villas program as a complement to existing offerings (Spinks 2019). In other cases, hotels have opted to use STR platforms, such as Airbnb, to expand their market reach. Further, traditional accommodation giants have become major STR investors: Accor Hotels recently purchased the luxury vacation rental platform Onefinestay, as well as Squarebreak, which offers home rentals across a wider price spectrum, and Travelkeys, a beach condominium management service (Weed 2018). This suggests that actors in the traditional accommodation market are adjusting to the expansion of the STR market in ways that appear to benefit the consumer—if not all players involved.

DISCUSSION

In the past several years, governments and regulatory bodies have become increasingly involved in the policy and legal discussions surrounding the STR market, largely because of pressure to address real or perceived costs and negative externalities associated with the expansion and commercialization of home sharing activity. However, governments have been plagued by challenges as they attempt to apply existing regulatory frameworks and policy tools to a novel market, the dynamics and operation of which are inherently different from traditional models (P. Allen 2019). Given the complexity of the market and differences in how various forms of market activity contribute to costs, it is evident that not all STR activity merits the same regulatory treatment. Accordingly, governments must be cautious in adopting one-size-fits-all regulatory frameworks. Yet, many authorities have introduced regulatory measures that either treat the STR market as a uniform monolith, or mimic approaches taken elsewhere without considering the differential nature of the market in their jurisdiction. To develop and implement effective regulations, jurisdictions will need to dedicate time and resources to gaining more nuanced and sophisticated understandings of their local STR markets, and to defining clear policy and regulatory objectives regarding platform-mediated home sharing in their communities.

We have outlined here the importance of conceiving of platforms as active participants in the STR market. Given the central role of platforms in spurring the rise of the STR market and shaping market dynamics, regulatory approaches that set platforms to the side or ignore them outright are doomed to fail. We have demonstrated the extent to which the growth of the STR network is both driven by and provides direct benefit to the platform, and have further illustrated how it is this growth that has produced many of the negative externalities that have fostered in communities the desire to impose regulations on market actors. In considering how authorities might respond to such

externalities, we emphasize that traditional approaches are unlikely to be successful. One reason for this is because such tools and frameworks were adopted in the context of two-sided markets, and thus are not suited to the dynamics that characterize the three- (or four-) sided STR market. Indeed, existing frameworks often ignore the role of the platforms outright. Further, authorities must also understand that regulation can itself threaten network effects and undermine the value of platforms as a result. It is for this reason that dynamics between platforms and regulators were highly contentious during the early years of STR market growth (Guttentag 2017).

To maintain their network dominance and to avoid formal regulation, STR platforms—especially Airbnb—have increasingly engaged in various activities linked to obtaining the social licence to operate (Baumber, Scerri, and Schweinsberg 2019).⁵ The concept of social licence invokes the language and spirit of regulatory licensing—that is, formal approval granted by an authoritative body, such as a government agency—to highlight the ways in which entities, such as corporations, pursue within communities widespread social acceptance or sanction of their activities. In some cases, the existence of social licence is leveraged by entities to argue for regulatory approval of their activities; in others, companies point to social licence to invalidate the need to impose formal regulation or argue that existing regulation is superfluous. In the STR context, examples include Airbnb’s introduction of a suite of programs through which hosts can offer free stays to those requiring emergency housing, as well as the refusal of STR platforms to lodge travellers to Washington, D.C. for the 2021 presidential inauguration, given the attack on the U.S. Capitol only weeks before.

As regulatory pressures have grown, STR platforms have become less adversarial and more amenable to working with governments. This is rooted, at least in part, in a desire to shape and influence regulation, and to ultimately ensure new rules do not undermine a platform’s ability to maintain network dominance. While the motivation may be questionable, it does create a context in which to consider co-regulation (Zale 2016), a model through which some regulatory responsibilities could be delegated to the platform itself. In a model of co-regulation, platform responsibilities could include collecting and remitting fees and taxes (Anderson 2016, 19), requiring a host to have a business licence before a listing is posted, ensuring that an STR is in an area that is zoned accordingly, limiting highly commercialized hosts, making sure that both guests and hosts follow established norms, sharing data and information with governments to help inform regulations, and so on (Arlidge 2020). Indeed, elements of such a model are observable in several jurisdictions already. As detailed by Doelker (2010), co-regulation is not a new concept and is often found in industries and sectors that are connected to governments, including telecommunications, environmental protections, media and broadcasting, and the internet, and the European Union has gone as far as to set out a framework for considering and pursuing co-regulation (Hans-Brewdow-Institut 2006).

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Interestingly, the origins of many of these socially focused ventures can be traced to the goodwill of hosts, not the platform.

What is clear from the use of co-regulation in other sectors is that, for a co-regulation model to work, governments must be able to trust that regulations will be consistently applied and enforced by those to whom the regulations apply. There must also be evidence that shared objectives exist between platforms and authorities, as well as a commitment to cost-benefit sharing from both parties. Co-regulation often fails when the costs imposed on the regulated entity are neither well understood nor offset by benefits of the approach. Such issues could be addressed through the establishment of agreements related to regulatory certainty, which would enable STR platforms to maintain innovative practices. Consistent with other research (Cosh and Hughes 2003; Morgan, Henrion, and Small 1992; Liu 2010; Hans-Brewdow-Institut 2006; Modell and Hareven 1973), Uzunca and Borlenghi (2019, 937) suggest that the certainty offered through rules and an effective legal framework fosters increased supply and a thriving STR market in a way that benefits the platform.

Another way to encourage effective co-regulation would be for jurisdictions to share with platforms revenue raised through the imposition of tourism levies. A tourism levy is effectively a toll on tourists. Such levies are applied to the rental cost of temporary accommodation and the revenues generated are typically given to a tourism association or government agency to support initiatives related to local tourism. If governments were to extend such a levy to STR use, an agreement could be reached such that the revenues generated from STRs would be allocated to the various platforms for the same reasons—as the platforms are actively engaged in supporting local tourism as a way to grow their networks. Since STR market participants, activities, and dynamics differ considerably from those present in the traditional tourism accommodation market, such a partnership could lead to a growth in benefits to the local community, while also lessening burdens associated with co-regulation for platforms.

We have also detailed how host participation in the STR market spans pure home sharing at no cost, on one extreme, to fully commercial multi-unit hosting on the other, and a range of activities in between. Many hosts, therefore, are unsophisticated players who do not conceive of their participation as business activity, while others view STR operation as a full-time business venture. This considerable variability also means that the impacts and consequences of home sharing activities are diverse. Thus, it is vital that regulators understand the heterogeneity that exists, both in terms of STR hosts as well as their motivations for engaging in the market, prior to designing and implementing regulations—particularly those directed specifically at hosts. Licensing is one area in which failure to grasp this nuance could undermine regulatory effectiveness. Many hosts are driven by social motivations—the desire to meet travellers from around the world or support sustainable tourism, as examples—and are unlikely to consider their STR operation as formal business activity. In such cases, the imposition of regulations that require a host to obtain a business licence (rather than regulations that use the language of “operating permit,” for example) may serve as an unintended barrier to registration and compliance among certain hosts who do not think rules apply to their market activity.

Within this landscape, we noted that hosting—that is, the involvement in STR rental activity—has historical roots. As detailed by Modell and Hareven (1973), the practice

of opening up one's home to extended family members and non-kin (e.g., boarders, lodgers, apprentices, strangers, immigrants) alike, was originally a normal activity among the majority of households. It was not until the early 1900s that the practice began to fall into disrepute, driven by changing morals and notions of the family, growing socio-economic class divisions, and the emergence of single-use and single-family home zoning regulations (Whitnall 1931; Modell and Hareven 1973). From this perspective, the regulatory fractures that we outlined here are the result of a zoning paradigm that created the STR divisions, based in part on moral concerns, that persist today. And this origin should be considered by policymakers in reacting to the regulatory fractures.

Finally, regulators will need to carefully consider competitive concerns from existing players as a reason for, and purpose behind, regulations. It is apparent that the STR market fills key gaps in the accommodation market and also provides flexible accommodation infrastructure for event-specific needs. Where it has competed with the traditional accommodation market directly, it has forced the market to innovate, resulting in further gaps being bridged. However, points of regulatory weakness remain in terms of how existing regulations regarding health, safety, and tax compliance apply to the activities in the STR market, and such regulatory gaps may drive unfair competition. Such gaps reflect the presence of regulatory fractures—spaces in which traditional regulatory tools are ill-suited to handling novel or emerging activity—and it is through this lens, and with an understanding of the uniqueness of the STR market, that new regulatory approaches must be developed.

CONCLUSION

Although home sharing is not a new phenomenon, the rapid growth of STR platforms in recent years has revolutionized the STR market, expanding it in scale and scope. STR demand is growing, not only because accommodation in the market is often cheaper than a hotel, but also because it promises additional benefits, such as the space, comfort, and amenities of a private home, the ability to access local communities and lifestyle, and opportunity to meet new people. Supply of STRs is also expanding, both because people enjoy sharing unused space with tourists from around the world, and because operating an STR is a promising opportunity to generate income. The STR platforms that facilitate this interaction between demand (guests) and supply (hosts) have greatly reduced the transaction costs associated with home sharing. They do this by providing insurance against risks (Airbnb's Host Guarantee program is one example), reducing the information and search costs (by providing an easy-to-navigate digital platform), and acting as an intermediary between and guarantor of sorts for the two interacting sides.

In this paper, we draw on a breadth of literature to present a nuanced picture of STR market players, their heterogeneity and motivations, and the dynamics among them, placing particular emphasis on the extent to which digital STR platforms are active participants that shape both the market and the regulatory space. Analyzing the STR market through the lens of regulatory fractures, we both demonstrate the

complications that arise in the context of a three-sided market that is growing in scale, as well as consider the ways in which such a market does not simply generate externalities, but also confounds dominant regulatory frameworks, complicating efforts to address its costs. Going forward, effective management of the STR market in any jurisdiction will hinge on two factors: first, the ability of policymakers to not only reconceive of the STR market and the activity that plays out within it as three-dimensional and heterogenous, but also use such conceptions to better understand local markets; and second, the willingness of authorities to innovate beyond longstanding regulatory approaches to adopt policy and regulatory tools that address spaces of regulatory fracture.

REFERENCE LIST

- Adamiak, Czeslaw. 2019. "Current State and Development of Airbnb Accommodation Offer in 167 Countries." *Current Issues in Tourism*. <https://doi.org/10.1080/13683500.2019.1696758>.
- Airbnb. 2016. *Airbnb and The Rise of Millennial Travel*. <https://www.airbnb.com/wp-content/uploads/2016/08/MillennialReport.pdf>.
- . 2018. "Airbnb Highlights New Accessibility Filters and Features for Guests with Disabilities Worldwide." Last modified March 15, 2018. <https://news.airbnb.com/airbnb-highlights-new-accessibility-filters-and-features-for-guests-with-disabilities-worldwide/>.
- . 2020a. "Airbnb Ireland Offers Free Accommodation for Domestic Violence Survivors." Last modified June 24, 2020. <https://news.airbnb.com/en-uk/airbnb-offers-free-accommodation-for-domestic-violence-survivors/>.
- . 2020b. "Fast Facts - Airbnb Newsroom." <https://news.airbnb.com/fast-facts/>.
- . 2020c. "Supporting Domestic Violence Survivors in California." Last modified May 29, 2020. <https://news.airbnb.com/supporting-domestic-violence-survivors-in-california/>.
- . n.d. "How should I talk to my landlord about hosting on Airbnb?" Accessed July 28, 2021. <https://www.airbnb.ca/help/article/806/how-should-i-talk-to-my-landlord-about-hosting-on-airbnb>.
- AirDNA. 2021. "About Us: Data Science Meets Real Estate Investing in Vacation Rentals." Accessed September 18, 2021. <https://www.airdna.co/about>.
- Allen, Anne Wallace. 2019. "Research Shows Large Short-term Rental Presence in Ski-resort Communities." *VTDigger*. September 19, 2019. <https://vtdigger.org/2019/09/19/research-shows-large-short-term-rental-presence-in-ski-resort-towns/>.
- Allen, Peter. 2019. "How the Sharing Economy Is Transforming the Short-Term Rental Industry." *Knowledge@Wharton* (blog), *University of Pennsylvania*. February 14, 2019. <https://knowledge.wharton.upenn.edu/article/short-term-rentals-the-transformation-in-real-estate-and-travel-set-to-check-in/>.
- Amaro, Suzanne, Luisa Andreu, and Shenhua Huang. 2019. "Millenials' Intentions to Book on Airbnb." *Current Issues in Tourism* 22 (18): 2284-2298. <https://doi.org/10.1080/13683500.2018.1448368>.
- Ameri, Mason, Sean Edmund Rogers, Lisa Schur, and Douglas Kruse. 2020. "No Room at the Inn? Disability Access in the New Sharing Economy." *Academy of Management Discoveries* 6 (2): 176-205. <https://doi.org/10.5465/amd.2018.0054>.
- Amin, Faiza. 2019. "Violence Aftershock Following Shootings at Airbnb Rental." *City News*. October 13, 2019. <https://toronto.citynews.ca/2019/10/13/violence-aftershock-following-shootings-at-airbnb-rental/>.

- Anderson, John. 2016. *An Over-the-Top Exemption*. Canadian Center for Policy Alternatives. https://www.policyalternatives.ca/sites/default/files/uploads/publications/National%20Office/2016/06/Over_the_Top_Exemption.pdf.
- Arikoglu, Lale. 2017. "Airbnb Goes Luxe With New High-End Rentals." *Condé Nast Traveler*. February 17, 2017. <https://www.cntraveler.com/story/airbnb-goes-luxe-with-promise-of-new-high-end-rentals>.
- Arlidge, John. 2020. "Inn Trouble: Why Airbnb is Going Back to Basics." *The Weekend Australian Magazine*. August 22, 2020. <https://www.theaustralian.com.au/weekend-australian-magazine/inn-trouble-why-airbnb-is-going-back-to-basics/news-story/83366eaa4c9b570d20a5eeffec4ad59c>.
- Aydin, Rebecca. 2019. "How 3 Guys Turned Renting Air Mattresses in their Apartment into a \$31 billion Company, Airbnb." *Business Insider*. September 20, 2019. <https://www.businessinsider.com/how-airbnb-was-founded-a-visual-history-2016-2>.
- Ayotte, Catherine, Andrew Barclay, and Amanda Sinclair. 2019. *Measuring Private Short-term Accommodation in Canada*. Ottawa: Statistics Canada. <https://www150.statcan.gc.ca/n1/en/pub/13-605-x/2019001/article/00001-eng.pdf?st=bpRzEtbF>.
- Ayoub, Kassoum, Marie-Laure Breuillé, Camille Grivault, and Julie Le Gallo. 2020. "Does Airbnb Disrupt the Private Rental Market? An Empirical Analysis for French Cities." *International Regional Science Review* 43 (1-2): 76-104. <https://doi.org/10.1177%2F0160017618821428>.
- Barron, Kyle, Edward Kung, and Davide Proserpio. 2020. "The Effect of Home-Sharing on House Prices and Rents: Evidence from Airbnb." *Marketing Science* 40(1): 23-47. <https://doi.org/10.1287/mksc.2020.1227>
- Baumber, Alex, Moira Scerri, and Stephen Schweinsberg. 2019. "A Social Licence for the Sharing Economy." *Technological Forecasting & Social Change* 146: 12-23. <https://doi.org/10.1016/j.techfore.2019.05.009>.
- Benner, Katie. 2017. "Inside the Hotel Industry's Plan to Combat Airbnb." *The New York Times*. April 16, 2017. <https://www.nytimes.com/2017/04/16/technology/inside-the-hotel-industrys-plan-to-combat-airbnb.html>.
- Bingley, Matthew. 2019. "Another Toronto Airbnb Party Ends in Gunshots Prompting Calls for Action." *Global News*. December 17, 2019. <https://globalnews.ca/news/6304537/toronto-airbnb-party-gunshots/>.
- Bivens, Josh. 2019a. *The Economic Costs and Benefits of Airbnb*. Washington, DC: Economic Policy Institute. <https://epi.org/157766>.
- . 2019b. *The Economic Costs and Benefits of Airbnb: No Reason for Local Policymakers to Let Airbnb Bypass Tax or Regulatory Obligations*. Washington, DC: Economic Policy Institute. <https://www.epi.org/publication/the-economic-costs-and-benefits-of-airbnb-no-reason-for-local-policymakers-to-let-airbnb-bypass-tax-or-regulatory-obligations/>.

- Böcker, Lars, and Toon Meelen. 2017. "Sharing for People, Planet or profit? Analysing motivations for Intended Sharing Economy Participation." *Environmental Innovation and Societal Transitions* 23: 28-39. <https://doi.org/10.1016/j.eist.2016.09.004>.
- Boxall, Kathy, Julie Nyanjom, and Janine Slaven. 2018. "Disability, Hospitality and the New Sharing Economy." *International Journal of Contemporary Hospitality Management* 30 (1): 539-556. <https://doi.org/10.1108/IJCHM-09-2016-0491>.
- Britneff, Beatrice, and Amanda Connolly. 2020. "Police ID Man Killed in Shooting at Ottawa Airbnb Rental; 2 Young Men, teen in Serious Condition." Global News. January 8, 2020. <https://globalnews.ca/news/6381270/ottawa-shooting-gilmour-street/>.
- Bucher, Eliane, Christian Fieseler, and Christoph Lutz. 2016. "What's Mine is Yours (for a nominal fee) - Exploring the Spectrum of Utilitarian to Altruistic Motives for Internet-mediated Sharing ." *Computers in Human Behavior* 62: 316-326. <https://doi.org/10.1016/j.chb.2016.04.002>.
- Cao, Sissi. 2020. "Why Airbnb Filed to Go Public At the Worst Possible Time." *Observer*. August 20, 2020. <https://observer.com/2020/08/airbnb-file-confidential-ipo-valuation-drop-pandemic-market/>.
- Cardoso, Tom, and Matt Lundy. 2019. "Airbnb Likely Removed 31,000 Homes from Canada's Rental Market, Study Finds." *The Globe and Mail*. June 20, 2019. <https://www.theglobeandmail.com/canada/article-airbnb-likely-removed-31000-homes-from-canadas-rental-market-study/>.
- Carey, Meredith. 2018. "Airbnb Plus Is for People Who Hate Airbnb." February 22, 2018. <https://www.cntraveler.com/story/airbnb-plus-is-for-people-who-hate-airbnb>.
- Carville, Olivia, Katie Roof, and Crystal Tse. 2020. "Airbnb to Boost IPO Price Range, Aims for \$42 Billion Value." *Bloomberg*. December 6, 2020. <https://www.bloomberg.com/news/articles/2020-12-07/airbnb-said-to-boost-ipo-price-range-aims-for-42-billion-value>.
- Casert, Raf, and Angela Charlton. 2020. "Global Push to End Domestic Violence, Worse Amid COVID-19." *AP News*. November 20, 2020. <https://apnews.com/article/international-news-pandemics-violence-coronavirus-pandemic-france-438ab8d652eddd44ce0e3772d9c755c3>.
- Chen, Wei, Zaiyan Wei, and Karen Xie. 2018. "The Battle for Homes: Is Home Sharing Disrupting Rental or Housing Markets?" Chen, Wei and Wei, Zaiyan and Xie, Karen, The Battle for Homes: How Does Home Sharing Disrupt Local Residential Markets? (June 2021). Available at SSRN: <http://dx.doi.org/10.2139/ssrn.3257521>
- Clancy, Michael. 2020. "Tourism, financialization, and short-term rentals: the political economy of Dublin's housing crisis." *Current Issues in Tourism*: 1-18. <https://doi.org/10.1080/13683500.2020.1786027>.
- Clark, Kate. 2019. "Airbnb Officially Owns HotelTonight." *TechCrunch*. April 15, 2019. <https://techcrunch.com/2019/04/15/airbnb-officially-owns-hoteltonight/>.

- Cocola-Gant, Augustin, and Ana Gago. 2019. "Airbnb, Buy-to-let Investment and Tourism-Driven Displacement: A Case Study in Lisbon." *EPA: Economy and Space* 0 (0): 1-18. <https://doi.org/10.1177/0308518X19869012>.
- Cosh, Andy D., and Alan Hughes. 2003. "Innovation Activity: Outputs, Inputs, Intentions and Constraints." In *Enterprise Challenged*. Eds. Andy D. Cosh and Alan Hughes. Cambridge: ESRC Centre for Business Research. 45-56.
- Crawford, Blair. 2019. "'Does it Take Two People Getting Shot to Bring Attention to This?': Short-term Rental Meeting Draws a Crowd." *Ottawa Citizen*. April 15, 2019. <https://ottawacitizen.com/news/local-news/short-term-rental-meeting-draws-a-crowd/>.
- Crisan, Daria. 2020. "The Domestic Violence Crisis and COVID-19: Can Short-Term Rentals Help?" *The School of Public Policy Publications* April: 1-2. <https://www.policyschool.ca/wp-content/uploads/2020/04/Economic-Policy-Trends-Domestic-Violence.pdf>.
- Crommelin, Laura, Laurence Troy, Chris Martin, and Sharon Parkinson. 2018. *Technological Disruption in Private Housing Markets: The Case of Airbnb*. Melbourne: Australian Housing and Urban Research Institute Limited. <http://www.ahuri.edu.au/research/final-reports/305>.
- DeMola, Pete. 2020. "As Lake Placid Celebrates 40th Anniversary of Winter Olympics, Community Faces a Housing Crisis." *The Daily Gazette*. February 16, 2020. <https://dailygazette.com/article/2020/02/16/as-lake-placid-celebrates-40th-anniversary-of-winter-olympics-community-faces-a-housing-crisis>.
- Doelker, Andrews. 2010. "Self-regulation and Co-regulation: Prospects and Boundaries in an Online Environment." Master of Laws (LLM) Thesis. University of British Columbia. <https://dx.doi.org/10.14288/1.0071207>.
- Dogru, Tarik, Makarand Mody, and Courtney Suess. 2019. "Adding Evidence to the Debate: Quantifying Airbnb's Disruptive Impact on Ten Key Hotel Markets." *Tourism Management* 72: 27-38. <https://doi.org/10.1016/j.tourman.2018.11.008>.
- Dolnicar, Sara. 2017. *Peer-to-Peer Accommodation Networks : Pushing the Boundaries*. Oxford: Goodfellow Publishers. <https://doi.org/10.23912/9781911396512-3454>
- Edelman, Benjamin G., and Michael Luca. 2014. "Digital Discrimination: The Case of Airbnb.com." Harvard Business School Working Paper. https://www.hbs.edu/risk/Publication%20Files/Airbnb_92dd6086-6e46-4eaf-9cea-60fe5ba3c596.pdf
- Edelman, Benjamin G., Michael Luca, and Dan Svirsky. 2017. "Racial Discrimination in the Sharing Economy: Evidence from a Field Experiment." *American Economic Journal* 9 (2): 1-22. <https://www.aeaweb.org/articles?id=10.1257/app.20160213>.
- Einav, Liran, Chiara Farronato, and Jonathan Levin. 2016. "Peer-to-Peer Markets." *Annual Review of Economics* 8: 615-635. <https://doi.org/10.1146/annurev-economics-080315-015334>

- Evans, Anna, Eddy Graham, Alasdair Rae, Douglas Robertson, and Regina Serpa. 2019. *Research into the Impact of Short-term Lets on Communities Across Scotland*. Glasgow: Government of Scotland. <https://www.gov.scot/publications/research-impact-short-term-lets-communities-scotland/>.
- Fairley, Sheranne, and Sara Dolnicar. 2017. "Supporting Events." In *Peer-to-Peer Accommodation Networks: Pushing the Boundaries*. Ed. Sara Dolnicar. Oxford: Goodfellow Publishers. 109-119.
- Farronato, Chiara, and Andrey Fradkin. 2018. "The Welfare Effects of Peer Entry in the Accommodation Market: The Case of Airbnb." *National Bureau of Economic Research Working Paper Series* No. 24361. <http://www.nber.org/papers/w24361>.
- Fishman, Stephen. n.d. "Tenants: How to Make Airbnb Work for You and Your Landlord." *NOLO* (blog). <https://www.nolo.com/legal-encyclopedia/tenants-how-make-airbnb-work-you-your-landlord.html>.
- Forgacs, Gabor, and Sara Dolnicar. 2017. "The Impact on Employment." In *Peer-to-Peer Accommodation Networks: Pushing the Boundaries*. Ed. Sara Dolnicar. Oxford: Goodfellow Publishers. 160-169.
- Fox, Jena Tesse. 2017. Opinion: In Defense of Airbnb. *Hotel Management*. November 17, 2017. <https://www.hotelmanagement.net/own/opinion-defense-airbnb>.
- Frenken, Koen, and Juliet Schor. 2017. "Putting the Sharing Economy into Perspective." *Environmental Innovations and Societal Transitions* 23: 3-10. <https://doi.org/http://dx.doi.org/10.1016/j.eist.2017.01.003>.
- Frenken, Koen, Arnoud van Waes, Peter Pelzer, and Magda Smink. 2020. "Safeguarding Public Interests in the Platform Economy." *Policy & Internet* 12: 400-425. <https://doi.org/10.1002/poi3.217>.
- Gandhi, Avi, Grace Zhou, Joonhwan Park, and Sanjana Sidhra. 2019. *Regulating Short Term Rentals - State Actions and Local Government Solutions*. Ithaca: Department of City and Regional Planning, Cornell University. s3.amazonaws.com/mildredwarner.org/attachments/000/000/623/original/9df5b51eb90ac4b21eac598ed2672d86.
- García López, Miquel-Àngel, Jordi Jofre Monseny, Rodrigo Martinez Mazza, and Mariona Segú. 2019. *Do Short-Term Rental Platforms Affect Housing Markets? Evidence from Airbnb in Barcelona*. Barcelona: Institut d'Economia de Barcelona. <http://hdl.handle.net/2445/140501>.
- Geerts, Wouter. 2019. *The Short-Term Rental Ecosystem and Vendor Deep Dive 2019*. August 2019. Skift.com. https://cdn2.hubspot.net/hubfs/449646/Reports/skift%20short-term%20rental%20EXCERPT.pdf?__hstc=154084455.c452cf6c5e4d44b3e8478f83ca544890.1556620601980.1571247836548.1571270533931.370&__hssc=154084455.1.1571270533931.
- Glaeser, Edward L., and Joseph Gyourko. 2002. *The Impact of Zoning on Housing Affordability*. Cambridge: Harvard Institute of Economic Research. <https://law.yale.edu/sites/default/files/documents/pdf/hier1948.pdf>.

- Glusac, Elaine. 2017. "The Other Airbnbs: Alternative Home-Sharing Rentals." *The New York Times*. March 13, 2017. <https://www.nytimes.com/2017/03/13/travel/airbnb-alternative-home-share-rentals.html>.
- . 2020. "The Future of Airbnb." *The New York Times*. September 24, 2020. <https://www.nytimes.com/2020/09/24/travel/airbnb-pandemic.html>.
- Gold, Allyson E. 2020. "Community Consequences of Airbnb." *Washington Law Review* 94 (4): 1577-1637. <https://digitalcommons.law.uw.edu/cgi/viewcontent.cgi?article=5086&context=wlr>.
- Green, David A., Jonathan R. Kesselman, and Lindsay M. Tedds. 2021. *Covering All the Basics: Reforms for a More Just Society*. Vancouver: BC Basic Income Expert Panel. https://bcbasicincomepanel.ca/wp-content/uploads/2021/01/Final_Report_BC_Basic_Income_Panel.pdf.
- Griffith, Erin. 2019. "Airbnb Acquires HotelTonight to Expand Travel Portfolio." *The New York Times*. March 7, 2019. <https://www.nytimes.com/2019/03/07/technology/airbnb-hotel-tonight.html>.
- Grisdale, Sean. 2019. "Displacement by Disruption: Short-term Rentals and the Political Economy of 'Belonging Anywhere' in Toronto." *Urban Geography*: 1-27. <https://doi.org/10.1080/02723638.2019.1642714>.
- GuestReady. 2019. "A Tenant's Guide to Renting Your Space on Airbnb." *GuestReady's Airbnb Hosting Blog* (blog). January 9, 2019. <https://www.guestready.com/blog/airbnb-as-tenant-landlord-sublet/>.
- Gurran, Nicole, and Peter Phibbs. 2017. "When Tourists Move In: How Should Urban Planners Respond to Airbnb?" *Journal of the American Planning Association* 83 (1): 80-92. <https://doi.org/10.1080/01944363.2016.1249011>.
- Guttentag, Daniel. 2015. "Airbnb: Disruptive Innovation and the Rise of an Informal Tourism Accommodation Sector." *Current Issues in Tourism* 18 (12): 1192-1217. <https://doi.org/https://doi.org/10.1080/13683500.2013.827159>.
- . 2016. "Why Tourists Choose Airbnb: A Motivation-based Segmentation Study Underpinned by Innovation C oncepts." Waterloo: Department of Recreation and Leisure Studies, University of Waterloo. https://uwspace.uwaterloo.ca/bitstream/handle/10012/10684/Guttentag_Daniel.pdf?sequence=1&isAllowed=y.
- . 2017. "Regulating Innovation in the Collaborative Economy: An Examination of Airbnb's Early Legal Issues." In *Collaborative Economy and Tourism: Perspectives, Politics, Policies and Prospects*. Eds. Dianne Dredge and Szilvia Gyimothy. Springer International Publishing. 97-128.
- Guttentag, Daniel, and Stephen Smith. 2017. "Assessing Airbnb as a Disruptive Innovation Relative to Hotels: Substitution and Comparative Performance Expectations." *International Journal of Hospitality Management* 64: 1-10. <https://doi.org/10.1016/j.ijhm.2017.02.003>.

- Guttentag, Daniel, Stephen Smith, Luke Potwarka, and Mark Havitz. 2018. "Why Tourists Choose Airbnb: A Motivation-Based Segmentation Study." *Journal of Travel Research* 57 (3): 342-359. <https://doi.org/10.1177%2F0047287517696980>.
- Hajibaba, Homa, and Sara Dolnicar. 2017. "The Multi-Family Travel Market." In *Peer-to-Peer Accommodation Networks: Pushing the Boundaries*. Ed. Sara Dolnicar. Oxford: Goodfellow Publishers. 205-214.
- Handiscover. 2020. "About us." <https://www.handiscover.com/en-gb/about/>. Accessed November 28, 2020.
- Hans-Brewdow-Institut. 2006. *Final Report: Study on Co-regulations Measures in the Media Sector* (Hamburg, Germany). https://ec.europa.eu/archives/information_society/avpolicy/docs/library/studies/coregul/final_rep_en.pdf.
- Hardy, Anne, and Sara Dolnicar. 2017. "Types of Network Members." In *Peer-to-Peer Accommodation Networks: Pushing the Boundaries*. Ed. Sara Dolnicar. Oxford: Goodfellow Publishers. 170-181.
- Hawlitsek, Florian, Timm Teubner, and Christof Weinhardt. 2016. "Trust in the Sharing Economic." *Die Unternehmung – Swiss Journal of Business Research and Practice* 70 (1): 26-44. <https://doi.org/http://dx.doi.org/10.5771/0042-059X-2016-1-26>.
- Helder, Lucia. 2019. "Two Sides to Airbnb for Tourism Nova Scotia." *The Signal*. November 27, 2019. <https://signalhfx.ca/two-sides-to-airbnb-for-tourism-nova-scotia/>.
- Hoffman, Reid. 2015. "Expertise in Scaling Up is the Visible Secret of Silicon Valley." *Financial Times*. September 15, 2015. <https://www.ft.com/content/39001312-4836-11e5-af2f-4d6e0e5eda22>.
- Horn, Keren, and Mark Merante. 2017. "Is Home Sharing Driving Up Rents? Evidence From Airbnb in Boston." *Journal of Housing Economics* 38: 14-24. <https://doi.org/10.1016/j.jhe.2017.08.002>.
- Ignatenko, Margaryta. 2020. "Initial Evidence Suggests Airbnb Shooting was a Murder-suicide, Police Say." *The Toronto Star*. February 4, 2020. <https://www.thestar.com/news/gta/2020/02/04/initial-evidence-suggests-airbnb-shooting-was-a-murder-suicide-police-say.html>.
- IOC. 2019. "IOC and Airbnb Announce Major Global Olympic Partnership." November 18, 2019. <https://www.olympic.org/news/ioc-and-airbnb-announce-major-global-olympic-partnership>.
- Ireton, Julie. 2020. "Calls for City to Enforce Law to Tackle 'Ghost Hotel' Abuses." CBC News. January 10. <https://www.cbc.ca/news/canada/ottawa/short-term-rental-illegal-ottawa-shooting-call-to-enforce-bylaw-1.5421458>.
- Jang, Jichul, Juwon Choi, Hyeongjin "Harry" Jeon, and Juhyun Kang. 2019. "Understanding U.S. Travellers' Motives to Choose Airbnb: A Comparison of Business and Leisure Travellers." *International Journal of Tourism Sciences* 19 (3): 192-209. <https://doi.org/10.1080/15980634.2019.1664006>.

- Jefferson-Jones, Jamila. 2015. "Can Short-Term Rental Arrangements Increase Home Values?: A Case for Airbnb and Other Home Sharing Arrangements." *The Cornell Real Estate Review* 13: 12-19. <https://papers.ssrn.com/abstract=2714051>.
- Johal, Sunil, and Noah Zon. 2015. *Policymaking for the Sharing Economy: Beyond Whack-A-Mole*. Toronto: Mowat Centre, University of Toronto. https://munkschool.utoronto.ca/mowatcentre/wp-content/uploads/publications/106_policymaking_for_the_sharing_economy.pdf.
- Karlsson, Logi, and Sara Dolnicar. 2016. "Someone's Been Sleeping in my Bed." *Annals of Tourism Research* 58: 156-170. <http://dx.doi.org/10.1016/j.annals.2016.02.006>.
- Kayata, Erin. 2015. "Where did Airbnb get its Name?" *The Boston Globe*. October 31, 2015. <https://www.bostonglobe.com/lifestyle/travel/2015/10/31/where-did-airbnb-get-its-name/Q548q7zU2iIRvMcJllsXP/story.html>.
- Key Cafe. n.d. "The History of Short-Term Rentals." *Keycafe Blog (blog)* <https://blog.keycafe.com/the-history-of-short-term-rentals/>.
- Knight, Spencer. 2018. "Using Your Rental Property to Host on Airbnb." *LawDept Blog (blog)*. July 19, 2018. <https://www.lawdepot.com/blog/using-your-rental-property-to-host-on-airbnb/>.
- Lampinen, Airi, and Coye Cheshire. 2016. "Hosting via Airbnb: Motivations and Financial Assurances in Monetized Network Hospitality." Paper presented at Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI'16). May 7, 2016. <http://dx.doi.org/10.1145/2858036.2858092>.
- Learnbnb. 2015. "How to Get Landlord Permission to Host on Airbnb." *Airbnb for Beginners (blog)*. October 22, 2015. <https://learnbnb.com/airbnb-landlord-permission-negotiation/>.
- Lee, Dayne. 2016. "How Airbnb Short-Term Rentals Exacerbate Los Angeles's Affordable Housing Crisis: Analysis and Policy Recommendations." *Harvard Law & Policy Review* 10 (1): 229-253.
- Lima, Valesca. 2019. "Towards an Understanding of the Regional Impact of Airbnb in Ireland." *Regional Studies, Regional Science* 6 (1): 78-91. <https://doi.org/10.1080/21681376.2018.1562366>.
- Lin, Pearl M. C. 2020. "Is Airbnb a Good Choice for Family Travel?" *Journal of China Tourism Research* 16 (1): 140-157. <https://doi.org/10.1080/19388160.2018.1551167>.
- Liu, Baoding. 2010. *Uncertainty Theory: A Branch of Mathematics for Modeling Human Uncertainty*. Berlin, Heidelberg: Springer.
- Lutz, Christoph, and Gemma Newlands. 2018. "Consumer Segmentation Within the Sharing Economy: The Case of Airbnb." *Journal of Business Research* 88: 187-196. <https://doi.org/10.1016/j.jbusres.2018.03.019>.

- Macleod, Tyler. 2019. "The Long-Term Effects of Short-Term Rentals: An Examination of the Mountain Town Housing Crisis." *Snowboarder*. January 25, 2019. <https://www.snowboarder.com/transworld-snowboarding-archive/snowboarding-features/long-term-effects-short-term-rentals-examination-mountain-town-housing-crisis/>.
- McIntosh, Emma. 2018. "Airbnb Rentals Used for Human Trafficking, Toronto Police Say." *Toronto Star*. February 22, 2018. <https://www.thestar.com/news/crime/2018/02/22/airbnb-rentals-used-for-human-trafficking-toronto-police-say.html>.
- Miller, Stephen. 2016. "First Principles for Regulating the Sharing Economy." *Harvard Journal on Legislation* 53 (1): 147-202.
- Modell, John, and Tamara K. Hareven. 1973. "Urbanization and the Malleable Household: An Examination of Boarding and Lodging in American Families." *Journal of Marriage and Family* 35 (3): 467-479. <https://www.jstor.org/stable/pdf/350582.pdf?refreqid=excelsior%3Aa6390146b123638c65c64cedde526b52>.
- Moffat, Mike P. 2019. "Ottawa Citizen's AirBnB Hit Piece. How NOT to do Policy Analysis." *Mike Moffat* (blog). November 13, 2019. <https://mikepmoffat.medium.com/ottawa-citizens-airbnb-hit-piece-how-not-to-do-policy-analysis-34e09711d502>.
- Morgan, Millett Granger, Max Henrion, and Mitchell Small. 1992. *Uncertainty: A Guide to Dealing with Uncertainty in Quantitative Risk and Policy Analysis*. New York: Cambridge University Press.
- Nanos. 2018. *Views of Canadians on Online Short-term Rentals Through Platforms like Airbnb*. Toronto: Hotel Association of Canada. <https://www.nanos.co/wp-content/uploads/2018/09/2018-1208-Hotel-Association-AirBnB-August-Populated-report-with-Tabs.pdf>.
- Nicholson, Katie, and Jason Ho. 2019. "Toronto 'Mansion Party' Shooting Victim Sues Airbnb, Property Owner." CBC News. November 28, 2019. <https://www.cbc.ca/news/canada/toronto/airbnb-toronto-shooting-lawsuit-1.5377498>.
- Nowak, Brian, Thomas Allen, Jamie Rollo, Vaughan Lewis, Lin He, Amanda Chen, Wilson W Ng, Michael Costantini, Owen Hyde, Kevin Liu, Mark Savino, Baset A Chaudry, Anne M. Grube, and Ed Young. 2015. *Global Insight: Who Will Airbnb Hurt More - Hotels or OTAs?* Morgan Stanley Research. <https://docplayer.net/28102842-Global-insight-who-will-airbnb-hurt-more-hotels-or-otas.html>.
- NZ Herald. 2020. "Kiwi Airbnb Hosts Turn Away Chinese Guests Amid Coronavirus Rears." January 31, 2020. https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12305102.
- Oskam, Jeroen, and Albert Boswijk. 2016. "Airbnb: The Future of Networked Hospitality Businesses." *Journal of Tourism Futures* 2 (1): 22-42. <https://doi.org/10.1108/JTF-11-2015-0048>.
- Owen, Brenna. 2020. "'Back to Square One': Calls to Domestic Violence Lines Jump Again as Coronavirus Surges." Global News. October 15, 2020. <https://globalnews.ca/news/7398324/coronavirus-canada-gender-based-violence/>.

- Parker, Geoffrey G., and Marshall W. Van Alstyne. 2005. "Two-Sided Network Effects: A Theory of Information Product Design." *Management Science* 51 (10): 1494-1504. <https://doi.org/10.1287/mnsc.1050.0400>.
- Peng, Jenny. 2018. "Your Airbnb Could be Used for Sex Work, Police Say." *Star Metro Vancouver*. May 2, 2018. <https://www.thestar.com/vancouver/2018/05/02/your-vancouver-airbnb-could-be-used-for-sex-work-police-say.html>.
- Povich, Elaine S. 2019. "Wild Airbnb Parties Bring Calls for Crackdown." *Stateline* (blog). June 21, 2019. <https://pew.org/2WRcA69>.
- Prowse Chowne LLP Team. 2018. "Can A Tenant Rent Her Landlord's Apartment On Airbnb?". April 6, 2018. <https://prowsechowne.com/can-tenant-rent-landlords-apartment-airbnb/>.
- Quattrone, G; Proserpio, D; Quercia, D; Capra, L; Musolesi, M; (2016) Who Benefits from the "Sharing" Economy of Airbnb? Paper presented at *WWW 2016: 25th International World Wide Web Conference Montreal, Canada, April 11 - 15, 2016*. International World Wide Web Conferences Steering Committee Republic and Canton of Geneva: Geneva, Switzerland. <https://discovery.ucl.ac.uk/id/eprint/1483036/8/1602.02238v1.pdf>
- Reuters. 2020. "Airbnb says One Million Nights Booked in One Day." July 14, 2020. <https://www.reuters.com/article/us-health-coronavirus-airbnb-idUSKCN24F2XF>.
- Riles, Annelise. 2014. "Managing regulatory arbitrage: a conflict of laws approach." *Cornell International Law Journal* 47 (1): 64. http://scholarship.law.cornell.edu/cilj/vol47/iss1/3?utm_source=scholarship.law.cornell.edu%2Fcilj%2Fvol47%2Fiss1%2F3&utm_medium=PDF&utm_campaign=PDFCoverPages
- Rodgers, Greg. 2019. "What Is Couchsurfing? How to use Couchsurfing for Free Accommodation." *TripSavvy*. April 30, 2019. <https://www.tripsavvy.com/what-is-couchsurfing-1458737>.
- Sassen, Saskia. 1994. "The Informal Economy: Between New Developments and Old Regulations." *Yale Law Journal* 103 (8): 2289-2304. <https://digitalcommons.law.yale.edu/yj/vol103/iss8/8>.
- Schoenbaum, Naomi. 2016. "Gender and the Sharing Economy." *Fordham Urban Law Journal* 43 (4): 1023-1070. <https://ir.lawnet.fordham.edu/ulj/vol43/iss4/4>.
- Seth, Angie. 2017. "Ontario Family Shocked to Discover Airbnb Renters Using Basement to Distribute Drugs." *Global News*. November 3, 2017. <https://globalnews.ca/news/3843222/ontario-family-shocked-to-discover-airbnb-renters-using-basement-to-distribute-drugs/>.
- Shadel, JD. 2020. "Airbnb Can Survive the Pandemic. But can Airbnb hosts?" *The Washington Post*. July 16, 2020. <https://www.washingtonpost.com/travel/2020/07/16/airbnb-can-survive-pandemic-can-airbnb-hosts/>.

- Shieber, Jonathan. 2020. "PadSplit uses the Airbnb model to tackle the country's affordable housing crisis." *TechCrunch*. August 19 2020. <https://techcrunch.com/2020/08/19/padsplit-uses-the-airbnb-model-to-tackle-the-countrys-affordable-housing-crisis/>.
- Sigala, Marianna, and Sara Dolnicar. 2017. "Entrepreneurship Opportunities." In *Peer-to-Peer Accommodation Networks: Pushing the Boundaries*. Ed. Sara Dolnicar. Oxford: Goodfellow Publishers. 77-86.
- Smith, Diamond. 2018. "Renting Diversity: Airbnb as the Modern Form of Housing Discrimination." *DePaul Law Review* 67 (3): 581-606. <https://via.library.depaul.edu/law-review/vol67/iss3/6/>.
- So, Kevin Kam Fung, Haemoon Oh, and Somang Min. 2018. "Motivations and Constraints of Airbnb Consumers: Findings from a Mixed-methods Approach." *Tourism Management* 67: 224-236. <https://doi.org/10.1016/j.tourman.2018.01.009>.
- Sperling, Gene. 2015. *How Airbnb Combats Middle Class Income Stagnation*. Airbnb. https://www.cedarcityutah.com/wp-content/uploads/2015/07/MiddleClassReport-MT-061915_r1.pdf.
- Spinks, Rosie. 2019. "Marriott's Foray Into Short-Term Rentals No Longer an Experiment — It's a Business: Exec." *Skift.com*. December 5, 2019. <https://skift.com/2019/12/05/marriotts-foray-into-short-term-rentals-no-longer-an-experiment-its-a-business-exec/>.
- Springwise. 2020. "A Sustainable, Short-Term Rental Platform." <https://www.springwise.com/innovation/travel-tourism/fairbnb-home-sharing-rental>.
- The Canadian Real Estate Association. 2021. *The Homeownership Dividend for Canadians*. https://www.crea.ca/wp-content/uploads/2021/04/Homeownership-White-Paper_2021_ENG_Mar-30-1.pdf.
- Tussyadiah, Iis P. 2015. "An Exploratory Study on Drivers and Deterrents of Collaborative Consumption in Travel." In *Information and Communication Technologies in Tourism*. Eds. I. Tussyadiah and A. Inversini. Switzerland: Springer International Publishing.
- Uzunca, Bilgehan, and Andrea Borlenghi. 2019. "Regulation Strictness and Supply in the Platform Economy: The Case of Airbnb and Couchsurfing." *Industry and Innovation* 26 (8): 920-942. <https://doi.org/10.1080/13662716.2019.1633278>.
- Vigliotti, Marco. 2019. "Hotel Association Calls for Overhaul of Federal Tax Rules on Airbnb and Other Digital Platforms." *iPolitics*. July 18, 2019. <https://ipolitics.ca/2019/07/18/hotel-association-calls-for-overhaul-of-federal-tax-rules-on-airbnb-and-other-digital-platforms/>.
- Volgger, Michael, Christoff Pforr, Agnieszka Elzbieta Stawinoga, Ross Taplin, and Steve Matthews. 2018. "Who Adopts the Airbnb Innovation? An Analysis of International Visitors to Western Australia." *Tourism Recreation Research* 43 (3): 305-320. <http://dx.doi.org/10.1080/02508281.2018.1443052>.

- Wachsmuth, David, and Alexander Weisler. 2018. "Airbnb and the Rent Gap: Gentrification Through the Sharing Economy." *Environment and Planning A: Economy and Space* 50 (6): 1147-1170. <https://doi.org/10.1177%2F0308518X18778038>.
- Weed, Julie. 2018. "Blurring Lines, Hotels Get Into the Home-Sharing Business." *The New York Times*. July 2, 2018. <https://www.nytimes.com/2018/07/02/business/hotels-home-sharing-travel.html>.
- Whitnall, Gordon. 1931. "History of Zoning." *American Academy of Political and Social Sciences* 155 (2): 1-14. <https://www.jstor.org/stable/1018849>.
- Wilkerson, Mike, Lorelei Juntunen, Emily Picha, and Tina Morgan. 2016. *Housing Affordability Impacts of Airbnb in Portland*. ECONorthwest. <https://sharingcitiesalliance.knowledgeowl.com/help/housing-affordability-impacts-of-airbnb-in-portland>.
- Willing, Jon. 2019. "City committee votes in favour of proposals restricting short-term rentals." *Ottawa Citizen*. November 15, 2019. <https://ottawacitizen.com/news/local-news/dozens-sign-up-to-tell-councillors-what-they-think-about-proposed-crackdown-on-short-term-rentals>.
- Woolley, Frances. 2016. "What's Wrong with Airbnb?". *Worthwhile Canadian Initiative (blog)*. July 15, 2016. https://worthwhile.typepad.com/worthwhile_canadian_initi/2016/07/whats-wrong-with-airbnb.html.
- Zale, Kellen. 2016. "When Everything is Small: The Regulatory Challenge of Scale in the Sharing Economy." *The San Diego Law Review* 53 (4): 949.
- Zenker, Sebastian, Erik Braun, and Sibylle Petersen. 2017. "Branding the Destination Versus the Place: The Effects of Brand Complexity and Identification for Residents and Visitors." *Tourism Management (1982)* 58: 15-27. <https://doi.org/10.1016/j.tourman.2016.10.008>.
- Zervas, Georgios, Davide Proserpio, and John W. Byers. 2017. "The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry." *Journal of Marketing Research* 54 (5): 687-705. <https://doi.org/10.1509/jmr.15.0204>.
- Zou, Zhenpeng. 2019. "Examining the Impact of Short-Term Rentals on Housing Prices in Washington, DC: Implications for Housing Policy and Equity." *Housing Policy Debate* 30 (2): 269-290. <https://doi.org/10.1080/10511482.2019.1681016>.

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