

How can we explain the differences in regulatory attitudes toward Airbnb and the Short-Term Holiday Rental sector in central European cities? Assessing the impact of the growth of the 'Sharing Economy' in European Cities.

Payne, Joshua

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Master Thesis

Assessing the impact of the growth of the 'Sharing Economy' in European Cities.

How can we explain the differences in regulatory attitudes toward Airbnb and the Short-Term Holiday Rental sector in central European cities?



An analysis of Visegrád Group members of the European Cities Alliance on Short-Term Holiday Rentals (Krakow, Prague, Warsaw, and Budapest)

Joshua Payne: S3299267

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Leiden University, The Netherlands

Supervisor: Dennie Oude Nijhuis

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 $^{{}^{1}\} Prague\ Mayor\ Zden\`{e}k\ H\r{r}ib\ in\ attendance\ at\ a\ `StopAirbnb'\ event.\ Image\ used\ with\ permission.\ Jakub\ Pl\'ihal/Aktu\'aln\'{e}.cz.$

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Chapter I: Introduction

The peer-to-peer short-term rental marketplace, Airbnb, is often seen as one of the poster children for the 'Sharing' or 'Disruption' economies that have emerged in the wake of the 2008 global financial crisis.² The platform offers the ability to book a property in nearly every country and territory on earth via its web and app-based software, unrivalled by its traditional competitors in terms of scale.³ The lodging offered to the guest is not, however, from a property that Airbnb owns or even leases (as would be the case for a traditional hotel). Instead, the unit is sourced directly from another Airbnb user through its 'sharing economy' peer-to-peer solution – acting only as the intermediary platform between host and tenant. Property owners looking to rent out part – or all – of their property can use Airbnb to easily advertise their space to an ever-increasing number of customers – most of whom are looking for unique accommodation experiences on a short-term basis. This process, in theory, offers a mutually beneficial relationship for a range of stakeholders: hosts have the opportunity to earn supplementary income through their excess housing space; users can experience a city or town 'like a local', and Airbnb can receive a small amount from each transaction for facilitating the exchange.⁴ Researchers have long argued that the expansion of the San Francisco-based tech company – even standing at less than two decades old – is the most disruptive, transformative development in recent history for urban planning and the housing market.⁵

Today, it is difficult to overestimate the size of Airbnb and the wider Short-Term Holiday Rental (hereafter STHR) market, despite the novelty of the concept. Independent data analytics company AirDNA estimates the industry to be worth approximately \$140 billion – a number comparable to the entire GDP of an EU member state such as Hungary.⁶ Its scale as a company puts Airbnb firmly in the category of 'tech giant', mentioned in the same breath as Uber, Google, and Meta – and has developed a brand identity so strong that it too is used as a verb as well as a noun.⁷ The foundation of this lodging category has provided a new and significant threat to the traditional holiday accommodation providers in the hotel industry due to its disruptive nature, adaptability, and low costs associated with scale. However, it has also become the subject

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² Daniel Guttentag, 'Airbnb: Disruptive Innovation and the Rise of an Informal Tourism Accommodation Sector', *Current Issues in Tourism* 18, no. 12 (2013): 1192–1217.; Walter Isaacson, 'How Uber and Airbnb Became Poster Children for the Disruption Economy', *The New York Times*, 19 June 2017, sec. Books, https://www.nytimes.com/2017/06/19/books/review/wild-ride-adam-lashinsky-uber-airbnb.html. ³ 'Airbnb Second Quarter 2022 Financial Results', *Airbnb Newsroom* (blog), 3 August 2022, https://news.airbnb.com/en-uk/airbnb-second-quarter-2022-financial-results/.

⁴ Dimitri Ioannides, Michael Röslmaier, and Egbert van der Zee, 'Airbnb as an Instigator of "Tourism Bubble" Expansion in Utrecht's Lombok Neighbourhood', *Tourism Geographies* 21, no. 5 (20 October 2019): 822–40, https://doi.org/10.1080/14616688.2018.1454505.; Guttentag, 'Airbnb: Disruptive Innovation and the Rise of an Informal Tourism Accommodation Sector'.

⁵ Mark K. Cassell and Anni Michelle Deutsch, 'Urban Challenges and the Gig Economy: How German Cities Cope with the Rise of Airbnb', *German Politics*, 3 February 2020, 1–22, https://doi.org/10.1080/09644008.2020.1719072.; Natalie Stors and Sebastian Baltes, 'Constructing Urban Tourism Space Digitally: A Study of Airbnb Listings in Two Berlin Neighborhoods', *Proceedings of the ACM on Human-Computer Interaction* 2, no. CSCW (1 November 2018): 166:1-166:29, https://doi.org/10.1145/3274435.

^{6 &#}x27;About Us: Data Science Meets Real Estate Investing in Vacation Rentals', AirDNA, accessed 1 August 2022, https://www.airdna.co/about; 'Hungary GDP - Worldometer', accessed 4 August 2022, https://www.worldometers.info/gdp/hungary-gdp/.

gdp/.

⁷ Nilay Patel, 'Why the Future of Work Is the Future of Travel, with Airbnb CEO Brian Chesky', The Verge, 16 November 2021, https://www.theverge.com/22783422/airbnb-pandemic-ceo-brian-chesky-interview-travel-decoder-podcast.

of intense academic debate regarding its broader societal impact – particularly concerning its effects on Urban settlements popular with tourists.⁸

For its staunchest supporters, the advent of Airbnb has been a revolutionary phenomenon that has the capacity to change the way people live and travel – opening the opportunity to stay in a variety of homes almost anywhere on earth, while providing a lucrative income source for local economies and countless small-time hosts. For its critics, Airbnb is a blight on cities: ruining neighbourhood cohesion, taking homes away from local people during a period of unrelenting rent increases, and ushering in an age of overtourism. For policymakers in cities, however; the entrenched (and often diametrically opposed) positions held by various STHR stakeholders provide only a painful regulatory headache – requiring careful navigation in their attempts to strike a fair balance between community interests and economic benefit, among several other stakeholders with competing interests.

This thesis looks at this situation in four central European cities – Prague, Krakow, Budapest, and Warsaw – to better understand the motivations behind their respective policy responses to the challenges and opportunities that have emerged due to the rise of the STHR sector. This thesis focuses primarily upon the local government response when discussing regulation – much of the policy implemented concerning the STHR market has been done at a granular level, usually with cities making the call on how best to manage the phenomenon. ¹² In some instances, this regulation can even be set on a hyper-local district scale, as is the case in central Budapest. ¹³ However, there are now calls for wide-reaching rules to be implemented through national and supranational structures – such as at the European Commission level – to support cities and communities trying to cope with the regulatory challenge of STHRs. ¹⁴ Very recently, there has also been a noticeable increase in cooperation between city leadership looking to lobby legislative bodies so as to further the scope of their regulatory powers – an interesting development when attempting to better understand and explain the diversity of regulatory responses from European cities. ¹⁵

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⁸ Georgios Zervas, Davide Proserpio, and John W. Byers, 'The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry', "Journal of Marketing Research 54, no. 5 (2017): 687–705.; Martin Thomas Falk and Yang Yang, 'Hotels Benefit from Stricter Regulations on Short-Term Rentals in European Cities', "Tourism Economics 27, no. 7 (1 November 2021): 1526–39,

https://doi.org/10.1177/1354816620918769.;Daniel Guttentag, 'Progress on Airbnb: A Literature Review', Journal of Hospitality and Tourism Technology 10, no. 4 (1 January 2019): 814–44, https://doi.org/10.1108/JHTT-08-2018-0075.

⁹ Carole Cadwalladr, 'Airbnb: The Travel Revolution in Our Spare Rooms', *The Observer*, 16 September 2013, sec. Travel, https://www.theguardian.com/travel/2013/sep/16/airbnb-travel-revolution.;'Travel Revolution in Data', *Airbnb Newsroom* (blog), 9 November 2021, https://news.airbnb.com/travel-revolution-in-data/.

¹⁰ Adam R. Szromek, Zygmunt Kruczek, and Bartłomiej Walas, 'The Attitude of Tourist Destination Residents towards the Effects of Overtourism—Kraków Case Study', Sustainability 12, no. 1 (January 2020): 228, https://doi.org/10.3390/su12010228.

¹¹ Sandra Marques Pereira, 'Regulation of Short-Term Rentals in Lisbon: Strike a Balance between Tourism Dependence and Urban Life', Urban Research & Practice, 7 December 2020, 1–28, https://doi.org/10.1080/17535069.2020.1842901.

¹² Shirley Nieuwland and Rianne van Melik, 'Regulating Airbnb: How Cities Deal with Perceived Negative Externalities of Short-Term Rentals', *Current Issues in Tourism* 23, no. 7 (2 April 2020): 811–25, https://doi.org/10.1080/13683500.2018.1504899.

¹³ 'Responsible Hosting in Hungary - Airbnb Help Centre', Airbnb, accessed 3 August 2022,

https://www.airbnb.co.uk/help/article/2447/responsible-hosting-in-hungary.

¹⁴ Natasha Lomas, 'EU Considers Single Rules for Regulating Vacation Rental Platforms', *TechCrunch*, 29 September 2021, https://social.techcrunch.com/2021/09/29/eu-considers-single-rules-for-regulate-vacation-rental-platforms/.

^{15 &#}x27;Short Term Rentals: Cities Ask Europe's Help - Eurocities', 14 July 2022, https://eurocities.eu/latest/short-term-rentals-cities-ask-europes-help/.

Despite the broad agreement between large European cities that more needs to be done concerning STHR regulation, there is little consensus on *how* exactly to implement an effective and enforceable policy response – and this diversity in approach has begun to draw academic interest. However, there has also proved to be little consensus in the conclusions drawn from those researchers who have attempted to explain precisely *why* this diversity in response to the same general issue has emerged in European cities. This analysis of Prague, Krakow, Budapest, and Warsaw looks to contribute to this area of research – as it looks to understand what factors are influencing this difference in regulatory response in central European urban areas.

Though the COVID 19 pandemic caused major disruption in the growth of the short-term holiday rental sector, with Airbnb founder and CEO Brain Chesky claiming that the company lost 80% of its business in just 8 weeks, the long-term impact effects on Airbnb and the wider sector appear to be minimal. 16 In 2022, Airbnb posted its strongest results in terms of booking numbers.¹⁷ This recovery may be surprising given the relatively untested nature of the service, as well as the trend of ever-increasing prices for the properties on the platform – with average nightly fees in Q2 2022 up 40% from the pre-pandemic level according to the company. 18 Indeed, in 2020 and 2021, there were reports of some larger-scale Airbnb operators facing major financial problems due to the pandemic and having to leave the platform altogether.¹⁹ Given the recovery outlined in their financial results in 2022, it can be assumed that the growth of STHRs has not faltered despite the many current challenges faced by the tourism sector, ranging from the COVID-19 pandemic, to rising inflation, to the growing debate surrounding the negative social impacts of mass tourism among other concerns.²⁰ In comparison to Airbnb, the pandemic had an altogether different impact on some other sharing economy model businesses, with record numbers of deliveries on services such as Uber Eat, Deliveroo, and Glovo in Europe – showing increased demand as well as increased riders due to job losses in other sectors.²¹ Many academics have in fact argued that the pandemic has led to an acceleration in the pace of development for what is already an exponentially growing sharing economy model throughout a number of industries including accommodation platforms such as Airbnb.²² Because of this, the need for policymakers to provide a clear structure for both businesses and consumers is becoming more urgent as time progresses.

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¹⁶ David Rubenstein, Airbnb CEO Brian Chesky interview with David Rubenstein, 17 March 2022, https://www.youtube.com/watch?v=GP0f3M57uao.

¹⁷ 'Shareholder Letter: Q1 2022. Investor Relations | Airbnb | Financials', accessed 2 August 2022, https://investors.airbnb.com/financials/default.aspx#quarterly.

¹⁸ Dave Lee, 'Airbnb Benefits from High Booking Prices and Predicts "Strong" Summer', Financial Times, 2 August 2022, https://www.ft.com/content/3517fe65-378a-44a3-96b1-62b367919e72.

¹⁹ Carolyn Johnson and Josh Davis, 'Airbnb Hosts Struggle With Loss of Reservations, Income Due to Pandemic', *NBC Los Angeles* (blog), accessed 3 August 2022, https://www.nbclosangeles.com/news/local/airbnb-hosts-struggle-with-loss-of-reservations-income-due-to-pandemic/2357744/; Jelke R. Bosma, 'Platformed Professionalization: Labor, Assets, and Earning a Livelihood through Airbnb', *Environment and Planning A: Economy and Space* 54, no. 4 (1 June 2022): 595–610, https://doi.org/10.1177/0308518X211063492.

²⁰ Spyros Avdimiotis and Ioulia Poulaki, 'Airbnb Impact and Regulation Issues through Destination Life Cycle Concept', *International Journal of Culture, Tourism and Hospitality Research* 13, no. 4 (1 January 2019): 458–72, https://doi.org/10.1108/IJCTHR-03-2019-0044.

²¹ Dominika Polkowska, 'Platform Work during the COVID-19 Pandemic: A Case Study of Glovo Couriers in Poland', *European Societies* 23, no. sup1 (19 February 2021): S321–31, https://doi.org/10.1080/14616696.2020.1826554.

²² Sing Yun Wong, 'COVID-19-Induced Digitalization in the Labour Market: A Systematic Review', *Studies of Applied Economics* 40, no. 2 (1 June 2022), https://doi.org/10.25115/eea.v40i2.7235.

This chapter continues with a brief background of the academic literature, highlighting the ongoing debates and research 'gaps' in section 1.1. These debates have been considered when choosing the research questions set out in section 1.2, designed to address current areas of weakness within the literature.²³ This chapter then concludes with a structural outline for the rest of the thesis in section 1.3.

1.1 Research area - current issues

Though the 'home-sharing' concept has evolved considerably since its conception, the benefits of Airbnb and the novel STHR market described by researchers such as Guttentag – highlighting 'cost-savings, household amenities, and the potential for more authentic local experiences' - still maintain relevance today.²⁴ The negative externalities too, have changed little in the past decade despite the meteoric rise of Airbnb and other sharing economy companies. 'increased traffic, noise, residential maintenance of rental properties' as well as the cause of lessening 'community bond[s] in a residential neighbourhood' are still cited as some of the main reasons behind opposition toward Airbnb, nearly a decade on from Gottlieb's article in early 2013.²⁵ A key reality has also remained constant that naturally leads to this tension between various stakeholders – that 'occupiers of short-term rentals are not connected to the community or local government and therefore are not invested in protecting the neighbourhood from disturbances.'²⁶

Of course, there have been divergences from the original concept discussed in early academic works that should be noted: the majority of rentals in all four selected cities for this study are private apartments, rather than spare rooms.²⁷ Airbnb prices have risen considerably as the market has matured, as so has the consistency of the experience – due to what academics describe as the 'professionalisation' of the industry.²⁸ This professionalisation has added another layer of complexity to an already multi-faceted academic debate, as policymakers attempt to differentiate between professionals (who are accused of reducing housing supply, and commercialising or gentrifying residential neighbourhoods), and regular 'sharing economy' hosts.²⁹ Given the evolving regulatory situation in European cities, and the fact that there has been no cohesive transnational regulatory method adopted to combat the issue, comparisons between cities and their policy decisions can offer valuable insights toward how best to approach the challenge in the future. Similarly, understanding which factors may lead to increased regulation in a city is useful for platforms and businesses, as they are then able to mitigate these concerns before services are severely restricted or banned.

²³ Guttentag, 'Progress on Airbnb'.

²⁴ Guttentag, 'Airbnb: Disruptive Innovation and the Rise of an Informal Tourism Accommodation Sector'.

²⁵ Charles Gottlieb, 'Residential Short-Term Rentals: Should Local Governments Regulate the "Industry"?', Planning & Environmental Law 65, no. 2 (1 February 2013): 4–9, https://doi.org/10.1080/15480755.2013.766496.

²⁶ Gottlieb.

²⁷ 'Airbnb Data - Prague', AirDNA - Airbnb & Vrbo Data, accessed 2 August 2022, https://www.airdna.co/vacation-rental-data/app/cz/default/prague/overview; 'Airbnb Data - Warsaw', AirDNA - Airbnb & Vrbo Data, accessed 2 August 2022, https://www.airdna.co/vacation-rental-data/app/pl/default/warsaw/overview; 'Airbnb Data - Budapest', AirDNA - Airbnb & Vrbo Data, accessed 2 August 2022, https://www.airdna.co/vacation-rental-data/app/hu/default/budapest/overview; 'Airbnb Data - Krakow', AirDNA - Airbnb & Vrbo Data, accessed 2 August 2022, https://www.airdna.co/vacation-rental-data/app/pl/default/krakow/overview.

²⁸ Yolanthe Fawehinmi, 'Has Airbnb Become More Expensive than Hotels?', *The Telegraph*, 2 June 2022, https://www.telegraph.co.uk/travel/news/has-airbnb-become-expensive-hotels/; Bosma, 'Platformed Professionalization'.

²⁹ Javier Gil and Jorge Sequera, 'The Professionalization of Airbnb in Madrid: Far from a Collaborative Economy', *Current Issues in Tourism*, 7 May 2020, 1–20, https://doi.org/10.1080/13683500.2020.1757628.

With few comparative analyses undertaken in relation to regulatory attempts of the Short-Term Holiday Rental sector in general, this thesis has been designed to fill a research gap in the literature surrounding Airbnb. Unfortunately, due to the attention offered to cities such as Amsterdam, Barcelona, and Berlin, many other large urban areas on the continent have had little academic attention. The focus has often been directed toward those western European cities that take a far more aggressive approach to STHR regulation, perhaps due to their more diverse and resilient income streams that can afford to be more hostile to the sector, and thus cannot provide a comprehensive representation for the continent.

1.2 Study aims

This thesis takes a comprehensive look at the diverse set of challenges faced by central European cities due to the growth of the Short-Term Holiday Rental (STHR) sector as part of the wider 'sharing economy' boom. It assesses how some cities are attempting to regulate and manage this phenomenon using a Most Similar Systems Design (MSSD) approach, and offers a number of potential explanations for the divergence in the current structural and mitigatory regulatory endeavours taken by the respective political bodies of central European regional capitals - namely: Prague, Krakow, Budapest, and Warsaw. These cities have much in common – and are all part of a wider region that has followed a historically similar socioeconomic path. Although there are several obvious benefits to the increased tourism within these cities, there are a number of challenges that are beginning to threaten liveability for locals. Issues such as the rising cost of living, increased antisocial behaviour, as well as a lack of affordable housing and residential amenities among a host of other issues – have led these four central European cities to cooperate in a grouping known as the European Cities Alliance on Short-Term Holiday Rentals.³⁰ This grouping of capitals and large cities across the continent have consistently attempted to lobby the European Commission, Parliament, and Council of Ministers to give cities more power to regulate an industry that, in the view of the European Cities Alliance on Short-Term Holiday Rentals (hereafter ECASTHR), has little regard for zoning laws or community cohesion – though often with little success.³¹

Despite this willing cooperation on the issue between the four cities via this group, the current direction each city has taken to regulate (or avoid stifling) the sector has been somewhat different – despite the issue being largely the same for each city and all identifying it as such. This research, looking at the pressures faced by these four cities in particular, will continue to grow in importance: as the STHR sector continues to spread in central and eastern European cities and challenges mount, understanding what has led to the diversity in approaches arising from the growth of the tourism sector in similar environments becomes a useful point of reference. Similarly, the identification of issues faced by cities and the processes taken to resolve them offers a useful platform to look into the effectiveness of measures as time progresses.

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^{30 &#}x27;Short Term Rentals'.

^{31 &#}x27;22 Cities Call for Stronger European Regulation of Holiday Rental Platforms - Eurocities', 4 March 2020,

https://eurocities.eu/latest/22-cities-call-for-stronger-european-regulation-of-holiday-rental-platforms/.; Daniel Boffey, 'Airbnb Should Be Seen as a Digital Service Provider, ECJ Advised', *The Guardian*, 30 April 2019, sec. Technology,

https://www.theguardian.com/technology/2019/apr/30/airbnb-should-be-seen-as-a-digital-service-provider-ecj-advised.

Research Questions and Objectives

The primary research question, as set out on the title page of this thesis, is as follows: *How can we explain the differences in regulatory attitudes toward Airbnb and the Short-Term Holiday Rental sector in central European cities?* In order to answer this question, I have divided this research into two parts – firstly to observe which regulatory measures are in place (and what has led to their implementation), and secondly to attempt to explain why there is a diversity in their approach. Given this, my research questions are as follows:

- a) What regulatory approaches do Visegrád Group members of the ECASTHR use to attempt to manage the emergence of the short-term holiday rental market?
- b) Why are there differences in the regulatory attitudes toward Airbnb and the Short-Term Holiday Rental sector in Visegrád Group members of the ECASTHR?
 - a. Do socioeconomic factors play a role in regulatory attitudes toward the STHR market?
- b. How do stakeholders influence policymakers in Visegrád Group members of the ECASTHR? This should provide a clear direction in which to take to answer my primary research question. This research question, in turn, should provide useful insight into the wider research field posed by Aguilera et al. in their comparison of Paris, Barcelona, and Milan:

Discussion on wider significance

These questions, while valuable in their own right, are part of the much larger body of academic research dedicated to the growth of the sharing economy – a powerful phenomenon that is transforming many aspects of our society and the structure of the labour market. Below is an excerpt of a speech given by former McDonald's CEO Stephen Easterbrook at the Boston College Chief Executives Club in February 2017, highlighting the number of industry areas being affected by this phenomenon, and the speed at which it is occurring.

"If this very same group was sat here five years ago, [...] and we were to say: who would guess in five years' time, that the largest taxi company in the world does not own a single car and does not employ a single driver? You'd have shaken your head. Or that the largest department store in the world doesn't have a single storefront? Or that the largest provider of overnight accommodation does not own a single hotel, doesn't own a single room, doesn't actually own a single bed—that's Airbnb. Or that the largest distributor of films does not own a single movie theatre or cinema, doesn't have a single screen, Netflix. The reason I say this is not because technology is disrupting the world, which clearly it is. But why is it relevant to a business like ours?

These were really traditional industries getting disrupted. This wasn't the creation of new industries. It was technology disrupting the bricks and mortar of the hotel industry [...]. So in amongst that somewhere, was -I thought - a warning signal, that we are in a very traditional business, and you might as well expect it to get disrupted. And there's a really good chance that just technology will be part of the disrupting mechanism. So, the attitude was: do you wait to get disrupted [...] or move before you get caught?"³³

^{&#}x27;Why have cities adopted such diverse forms of regulation, while facing the same phenomenon induced by similar firms?'32

³² Thomas Aguilera, Francesca Artioli, and Claire Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European Cities: A Comparison of Barcelona, Paris and Milan':, *Environment and Planning A: Economy and Space* 53, no. 7 (23 July

^{2019): 1689–1712,} https://doi.org/10.1177/0308518X19862286.

33 'Stephen J. Easterbrook', Speech: CEO Stephen Easterbrook speaks to the Boston College Chief Executives Club, 2 February 2017, https://www.bc.edu/bc-web/schools/carroll-school/sites/ceo-club/ceoclub-newsletter/stephen-j-easterbrook.html. (Accessed 1st March 2020).

This disruption is not a historical act of 'industrial digitalisation' that occurred in the wake of the smartphone boom in the late 2000s, as was the case for many of these sharing economy platforms.³⁴ As time has progressed, it is clear that more industries will continue to be disrupted by the growth of the sharing economy, and regulators are struggling to keep pace in those industries as they are in the STHR market which is the target of this thesis.

Given the scale of this sharing economy phenomenon, it is therefore understandable as to why member states such as those discussed in this thesis – and the European Union more widely – have had difficulty regulating those industries that have rapidly appeared, expanded, and adapted in such a wide variety of sectors, including Airbnb and the STHR market. As these industries continue to evolve, cities will be able to draw on the impact of regulation during previous sharing economy industrial disruptions in order to respond more efficiently. This has already been shown to be the case with the rise of e-scooter startups, as cities had learned from their experiences with the expansion of other sharing economy businesses and implemented robust regulation quickly, often to great effect.³⁵ Consequently, academic study on policy responses to Airbnb and the STHR in cities, as well as the wider sharing economy, is a critically important area of research and this thesis aims to contribute to the body of knowledge that surrounds it.

1.3 Structural Outline

The structure of this thesis is as follows. Firstly, this introduction chapter has comprised an outline of the sharing economy, the development of Airbnb, and the academic debate that has surrounded the platform and the STHR market. It has also outlined problem areas of the current STHR literature, and how this thesis looks to address some of these issues. It described the research questions I have designed to attempt to fill an area in which there has been little research undertaken, as well as the significance of the research in order to justify its necessity. The chapter following looks at the body of research that has already been conducted with regard to Airbnb and is relevant to my focus. Particularly, it focuses on the few articles that have conducted similar comparisons in regulatory response and policy decisions to the STHR market in European cities in order to build upon their work. Once complete, chapter three contains the overall research design and methodology for the study. It offers explanations with regard to where I have diverged from the current research methods that have been utilised in this area, as well as which approaches have been emulated. Chapter four conducts a comparative analysis with regard to the regulatory attitudes adopted toward Airbnb in each of the four cities: attempting to identify, categorise and under the development of response (Research Question I). Chapter five then attempts to explain the differences in regulatory response, utilising a wide range of qualitative resources, and supported through publicly available socioeconomic data (Research Question II). Finally, chapter six offers a summary of the findings from this thesis and concluding remarks.

³⁴ Andrew T. Bond, 'An App for That: Local Governments and the Rise of the Sharing Economy', Notre Dame Law Review Online 90 (2015

³⁵ Johana Bhuiyan, 'Scooter Diplomacy: Uber's Aggressive Tactics Are Not Going to Work for Bird and Lime - Vox', Vox News, 30 August 2018, https://www.vox.com/2018/8/30/17690056/scooters-bird-lime-san-francisco-santa-monica-permits-uber-lyft.

Chapter II: Literature review

This literature review attempts to evaluate the current body of research regarding regulatory steps taken in response to the rise of the short-term holiday rental market, as part of the wider sharing economy phenomenon in European cities. Thus, this chapter first aims to summarise the current academic debate surrounding the sharing economy and short-term holiday rental sector more generally, and once complete, focuses specifically upon current assessments of the STHR market in European cities. This includes those who have undertaken comparative assessments of regulation attempts within the wider European market in a collection of cities, as well as researchers who have attempted case studies on single cities on the continent – including the four chosen in this study. It also incorporates a small note on the current body of work focusing on the impact of the COVID-19 pandemic on the sector, both on an international scale and in my target cities. This approach should provide a clear view of the current assessments of the sharing economy and short-term holiday rental market, while also summarising the approaches taken by academics to understand and compare the regulatory environments in various European cities.

Though there has yet to be a comprehensive analysis between Prague, Krakow, Budapest, and Warsaw in relation to their respective regulatory approaches for the STHR market, the current body of research available that focuses specifically upon the sharing economy in each city provides a useful foundation to undertake my analysis, while providing some useful data that I was unable to obtain due to the financial constraints of the study. The small number of other comparative regulatory studies taken with other European cities have also been particularly useful for this thesis, as they have offered a number of different perspectives to assess the diversity in regulatory attitudes. These studies have also given me the ability to compare research frameworks undertaken in these existing pieces of literature, which has been an invaluable resource when crafting my own research design. The unfortunate shortage of existing literature specifically related to comparisons of regulatory attitudes toward the STHR sector must be noted, however. Similarly, due to the COVID-19 pandemic, many of the issues discussed with regard to the growth of Airbnb and similar companies were indirectly mitigated due to a lack of cross-border travel – and thus research focused elsewhere within the sharing economy (notably the rise of food delivery services and their business models).³⁶ However, with the return of tourism, both city regulators and academics are once again turning their attention to the challenges faced by the sector's growth as was the case in 2019 - with both Prague and Budapest mulling more restrictive measures to alleviate the impact of increased tourism capacity.³⁷

³⁶ A useful way to observe this phenomenon is to refer to the number of citations made for a seminal piece of STHR literature over time. See: Daniel Guttentag, 'Article Citation Report - Airbnb: Disruptive Innovation and the Rise of an Informal Tourism Accommodation Sector', Google Scholar, accessed 1 August 2022,

 $https://scholar.google.com/citations?view_op=view_citation\&hl=en\&user=leHMz50AAAJ\&citation_for_view=leHMz50AAAJ:20sOgNO50MEC.\\$

³⁷ For the Czech Republic, see: 'Chystá Se Nový Plán Na Regulaci Airbnb. Podnikatelům Hrozí Milionové Pokuty - Seznam Zprávy', accessed 2 August 2022, https://www.seznamzpravy.cz/clanek/ekonomika-byznys-reality-chysta-se-novy-plan-na-regulaci-airbnb-podnikatelum-hrozi-milionove-pokuty-209091.

For Hungary, see: 'A kormány és a főváros is korlátozná a rövid távú lakáskiadást, átalakulhat a belvárosi ingatlanpiac', 24.hu (blog), 3 July 2020, https://24.hu/belfold/2020/07/03/airbnb-lakas-budapest-tiltas-turizmus/.

By first clarifying the broader literature surrounding the STHR market – and then narrowing the focus of this review to those who have undertaken similar regulatory comparisons or relevant single-city case studies – this chapter has been written in order both to provide a summary of the current state of academic research for European cities and STHR regulation, but also to demonstrate where my thesis can add value to this body of research.

Terms and Definitions

Term/Organisation	Definition/Description
STHR	Short-Term Holiday Rental –
	A property unit, such as an apartment, offered on a short-
	term basis rather than a long-term traditional rental
ECASTHR	European Cities Alliance on Short-Term Holiday Rentals:
	A group of twenty-two cities across Europe, aiming to lobby
	the European Commission for increased regulatory powers
PM-STR	Platform-Mediated Short-Term Rental –
	A Short-Term Rental in which the property owner and tenant
	have been connected via an online platform (e.g., Airbnb)
Visegrád Group/V4	The cultural and political grouping of the following central
	European member states: Hungary, Czechia, Slovakia,
	Poland.
Superhost	An Airbnb host that averages at least 4.8 stars on its property
	listings, giving the individual 'superhost' status.
Sharing Economy	Businesses that attempt to 'collaboratively make use of
	underutilised inventory through fee-based sharing'. ³⁸
VRBO	An alternative STHR provider and the main competitor to
	Airbnb – low uptake in target cities.

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 $^{^{\}rm 38}$ Zervas, Proserpio, and Byers, 'The Rise of the Sharing Economy'.

2.1 Wider assessments on Airbnb, the Short-Term Holiday Rental sector, and the sharing economy in Europe

Given the nature of Airbnb and the STHR market, much of the research undertaken by academics has been interdisciplinary. Experts from fields such as Political Science, Urban Studies, Hospitality, Tourism, Economics – amongst a number of others – have attempted to better understand the peer-to-peer STHR phenomenon that has emerged in the past decade. Due to this relatively recent emergence of Airbnb and therefore its effects on the widespread adoption of the STHR concept, the vast majority of academic literature surrounding the phenomenon is contemporary by nature – and this body of research will continue to grow (though there was a notable temporary decline in new research during the COVID-19 pandemic).³⁹ Early explorations conducted by academics such as Guttentag and Gottlieb very clearly identified some of the defining features of STHR debate – and these works have been used as a springboard into which various categories of academic discussion now take place. 40 Indeed, despite the evolution of the sector in the past decade, including regulatory changes, mass expansion, and professionalisation; much of this early research still offers a useful insight into the operations of Airbnb. Contemporary research has of course included a number of articles, investigations, and conference papers based around the Airbnb phenomena, but a number of books have also been released that have observed the growth of the sector and its wider societal impact, both from a labour perspective but also from urban development and the future direction of the housing market.41

A significant amount of the current literature discusses the Airbnb and STHR phenomenon as a part of the wider sharing economy debate - with references to collaborative consumption and the disruptive nature of the platform often taking centre stage.⁴² However, in recent years, this once settled notion has again become a point of debate. Indeed, the question is now being asked by academics and researchers as to whether Airbnb should still count as part of the wider sharing economy, due to its level of professionalisation and the proliferation of multi-unit property manager platforms on the service. 43 This concept of professionalisation also has serious implications for the debate surrounding the regulation of the practice, with much of the once lenient regulation in cities being justified so as not to affect users that – as argued by Airbnb – use the platform to 'make ends meet', now make up a smaller portion of hosts and thus may no longer be relevant.⁴⁴

Though it is true that much of the academic exploration done on Airbnb – including the work that I am undertaking – is based around cities, there is a significant amount of scraped open-source data and analysis to suggest that the vast majority of listings are based around urban centres, and is therefore where the vast

³⁹ Guttentag, 'Article Citation Report - Airbnb: Disruptive Innovation and the Rise of an Informal Tourism Accommodation Sector'.

⁴⁰ Guttentag, 'Airbnb: Disruptive Innovation and the Rise of an Informal Tourism Accommodation Sector'.; Gottlieb, 'Residential Short-Term Rentals'.

⁴¹ See for example José Van Dijck, Thomas Poell, and Martijn De Waal, The Platform Society: Public Values in a Connective World (Oxford University Press, 2018); Lily M. Hoffman and Barbara Schmitter Heisler, Airbnb, Short-Term Rentals and the Future of Housing (London: Routledge, 2020), https://doi.org/10.4324/9780429279768.

⁴² Łukasz Bugalski, 'The Undisrupted Growth of the Airbnb Phenomenon between 2014-2020. The Touristification of European Cities before the COVID-19 Outbreak', Sustainability 12, no. 23 (January 2020): 9841, https://doi.org/10.3390/su12239841.

⁴³ Ersin Demir and Gözde Emekli, 'Is Airbnb No Longer a Sharing Economy Platform? Evidence from Europe's Top 10 Airbnb Destinations', Anatolia 32, no. 3 (3 July 2021): 470-88, https://doi.org/10.1080/13032917.2021.1890626.

⁴⁴ Nicole Gurran and Peter Phibbs, 'When Tourists Move In: How Should Urban Planners Respond to Airbnb?', Journal of the American Planning Association 83, no. 1 (2 January 2017): 80-92, https://doi.org/10.1080/01944363.2016.1249011.

majority of challenges for the service as well as communities exist.⁴⁵ Academics have observed how the sharing economy phenomenon has found a particularly receptive audience in cities - which has given birth to the concept of 'platform urbanisation' – in which sharing economy companies adapt specifically for cities in order to become integral parts of their operation.⁴⁶ Given that the sharing economy is effectively designed around the notion of peer-to-peer exchange, the idea that areas with a higher concentration of people have more relevance to the debate may be unsurprising, however (though still notable when looking at the development of regulatory attitudes in Europe). A single study has been undertaken specifically to look at the international regulatory development timeline of Airbnb, in order to better understand how the company grew, but specifically regarding how cities reacted to the various regulatory frameworks that the company had to navigate with little capital and expertise in the area.⁴⁷ Unfortunately, this longitudinal study made no mention of the four target cities that form the basis of my research.⁴⁸ Despite this, the investigation offers useful insights for my study of the development of various regulatory attitudes in V4 cities – particularly in their categorisation of regulatory responses.⁴⁹

One of the many gaps in the current body of research on Airbnb and the wider market relates to this regulation. Indeed, the Short-Term Holiday Rental market has become a particularly difficult problem for legislators, as they attempt to strike a balance between maintaining the quality of life for residents while reaping the economic benefits of increased tourist capacity in city neighbourhoods.⁵⁰ Some cities, such as Berlin, took up this challenge through an initial outright ban of the service altogether, and then once lifted, endeavoured with a number of different regulatory methods to stem the expansion of the industry.⁵¹ Others, such as Warsaw, maintain no specific regulations on the practice within city limits, though remain part of a group of cities lobbying the European Union for support.⁵² What remains to be understood by academics, however, is what particular factors are leading to this diverse response in European cities despite the problems faced being broadly similar.

2.2 Comparisons between European Cities - seminal literature

One of the key pieces of literature for this review is the comparative review of Barcelona, Paris, and Milanundertaken by Aguilera et al., written with the intention to highlight the great variety of policy responses in European cities toward the growth of the Short-term rental market, and the lack of research undertaken to

⁴⁵ Czesław Adamiak et al., 'Airbnb Offer in Spain—Spatial Analysis of the Pattern and Determinants of Its Distribution', *ISPRS International Journal of Geo-Information* 8, no. 3 (March 2019): 155, https://doi.org/10.3390/ijgi8030155.; Bulcsú Remenyik et al., 'Overtourism in Budapest: Analysis of Spatial Process and Suggested Solutions', *Regional Statistics* Vol. 11 (21 April 2021): 1–19, https://doi.org/10.15196/RS110303.

⁴⁶ Jathan Sadowski, 'The Internet of Landlords: Digital Platforms and New Mechanisms of Rentier Capitalism', *Antipode* 52, no. 2 (2020): 562–80, https://doi.org/10.1111/anti.12595.

⁴⁷ Dorine von Briel and Sara Dolnicar, 'The Evolution of Airbnb Regulation - An International Longitudinal Investigation 2008–2020', *Annals of Tourism Research* 87 (1 March 2021): 102983, https://doi.org/10.1016/j.annals.2020.102983.

⁴⁸ von Briel and Dolnicar.

⁴⁹von Briel and Dolnicar.

⁵⁰ Dimitris Balampanidis et al., 'Informal Urban Regeneration as a Way out of the Crisis? Airbnb in Athens and Its Effects on Space and Society', *Urban Research & Practice* 14, no. 3 (27 May 2021): 223–42, https://doi.org/10.1080/17535069.2019.1600009.; Tomaso Duso et al., 'Airbnb and Rental Markets: Evidence from Berlin', SSRN Scholarly Paper (Rochester, NY, 2021), https://doi.org/10.2139/ssrn.3849867. 51 Stors and Baltes, 'Constructing Urban Tourism Space Digitally'.

⁵² Kristóf Gyódi, 'Airbnb and the Hotel Industry in Warsaw: An Example of the Sharing Economy?', Central European Economic Journal 2, no. 49 (1 December 2017): 23–34, https://doi.org/10.1515/ceej-2017-0007.

understand this.⁵³ Their piece, 'Explaining the diversity of policy responses to platform-mediated short-term rentals in European cities: A comparison of Barcelona, Paris and Milan', is one of the only other comparison pieces identifying and attempting to understand the variety of policy and regulatory responses in different European cities available in the public domain. At the time of its completion in 2019, to the author's knowledge, there were 'no [other] comparative studies of the local politics and regulatory policies surrounding PM-STR' [platform-mediated short-term rentals].⁵⁴ Since 2019, there are now a small number of other articles that have followed a similar philosophy of comparing a smaller number of cities and their attempts to deal with the rise of the STHR, such as Cassell and Deutsch who looked at different cities within Germany in 2020, or Gyódi's analysis on the wider characteristics of Airbnb networks in four European cities (including Warsaw),⁵⁵ This thesis looks to add to this growing body of research in order to better understand the regulatory approaches of different European cities, and has done so using a most-similar approach that has yet to be undertaken in important cities that are often overlooked in international comparisons. Though there has not yet been a peer-reviewed study attempting to compare any of the four chosen cities and their respective regulatory attitudes, there was a small conference paper written by researchers from Jan Evangelista Purkyně University in Ústí nad Labem (Czechia) that included exclusive Short-term rental data for these cities to assess the broader situation in the region.⁵⁶ This piece has been a useful point of reference for this thesis, and has aided my attempt to consider socioeconomic data as part of my wider analysis of potential factors.⁵⁷

There has also been a body of work that has looked closely at how different cities, European or otherwise, are attempting to deal with some of the challenges posed by the growth of the STHR – though do not go so far as to theorise why the diversity in responses may have emerged as the above-mentioned articles attempt to answer.⁵⁸ Though there is increasing academic attention being given to the Short-term holiday rental sector as the tourism market re-emerges post-COVID-19, it is clear that this is a particular problem area within the current body of research which needs to be addressed. It has led to a lack of credible hypotheses to the question asked in the original article from Aguilera et al.– how is it possible to explain 'such a geographical diversity of reactions, and of subsequent scales and forms of regulation, of PM-STR in European cities?' with the wider view to answer, 'Why have cities adopted such diverse forms of regulation, while facing the same phenomenon induced by similar firms?'⁵⁹ As I found when researching the short-term holiday rental sector more generally, much of the academia (somewhat understandably) focuses on the impact of the sharing economy in particular cities or regions as individual case studies on policy impacts or

⁵³ Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European Cities'.

⁵⁴ Aguilera, Artioli, and Colomb.

⁵⁵ Cassell and Deutsch, 'Urban Challenges and the Gig Economy'.; Kristóf Gyódi, 'Airbnb in European Cities: Business as Usual or True Sharing Economy?', *Journal of Cleaner Production* 221 (1 June 2019): 536–51, https://doi.org/10.1016/j.jclepro.2019.02.221.

⁵⁶ Peterka, Aleš, and Radek, 'Short-Term Rental Platforms: Airbnb in V4 Countries'.

⁵⁷ Peterka, Aleš, and Radek, 'Short-Term Rental Platforms: Airbnb in V4 Countries'.

⁵⁸ Nieuwland and van Melik, 'Regulating Airbnb'. von Briel and Dolnicar, 'The Evolution of Airbnb Regulation - An International Longitudinal Investigation 2008–2020'.

⁵⁹ Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European Cities'.

the wider growth of the sector.⁶⁰ While these pieces are incredibly useful to better understand the impacts of the sharing economy in these particular cases, and constitute a valuable segment of the wider literature, the lack of comparison with other cities or regions has meant that they often do not consider why policy responses are *different* to those facing many of the same challenges within the STHR market. This, of course, may not be the goal for many of these pieces. However, the very idea that geographically, culturally, and often economically similar cities are reacting so differently when faced with the same general challenge poses the somewhat obvious question – *what* is causing this diversity in regulatory approach within European cities?

In the Aguilera et al. article, they chose the cities of Barcelona, Paris, and Milan to utilise a 'Most-Dissimilar' case with regard to regulatory outputs.⁶¹ This is to say that the authors chose three cities in Europe with regard to how stringently they have attempted to regulate the short-term rental market. The article based around German cities in comparison offers something closer to a most-similar systems approach due to focusing upon a single state, but the experiences of Berlin and Munich have both been very different economically and also socially and with regard to their housing markets.⁶² Berlin is of course a unique case compared to any other city in Europe due to its experience during the cold war and its housing dilemma – leading to numerous academics studying its response to the growth of the STHR market.⁶³ Through the comparative analyses undertaken by the other authors in this field is very valuable, I noticed that much of their problems with regard to the analysis stem from the sheer number of influences a city has with regard to its regulatory attitudes and approach, as well as the rhetoric being different from reality.

These findings were important when informing my own research design. Because of the sheer number of variables that had to be discussed or simply not interacted with in regard to their (very different) cities, I decided to choose my comparison cities using a different method, so as to avoid many of these possible pitfalls and allow the inclusion of more factors, such as tourism data and socioeconomic influences. I decided to select those cities all of whom had declared the growth of the Short-term holiday rental market a challenge (as evidenced by their membership of the ECASTHR) and had as similar as possible experiences in their development in order to isolate as many factors as possible – effectively using a 'Most Similar System Design' with regard to the selection of my cities, rather than selecting based upon the most different regulatory cases. Though this has meant that the four cities that I have selected (Prague, Krakow, Budapest, and Warsaw) likely have less overall regulatory diversity than the three cities chosen by Aguilera et al. or in the International longitudinal analysis on regulatory development, I feel that my chosen research parameters allow a clearer look at what specific features have led to those more nuanced differences in regulatory attitudes – both from the political perspective, but also from stakeholders in the STHR market.⁶⁴

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⁶⁰ An example of this is a comprehensive look at the Airbnb market in Berlin, in which the authors of the working paper assess the impact of two policy interventions on the STHR market and their effects. See Duso et al., 'Airbnb and Rental Markets'.

⁶¹ Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European Cities'.

⁶² Cassell and Deutsch, 'Urban Challenges and the Gig Economy'.

⁶³ Duso et al., 'Airbnb and Rental Markets'; Stors and Baltes, 'Constructing Urban Tourism Space Digitally'; Cassell and Deutsch, 'Urban Challenges and the Gig Economy'.

⁶⁴ von Briel and Dolnicar, 'The Evolution of Airbnb Regulation - An International Longitudinal Investigation 2008–2020'.

2.3 Assessments on the Short-Term Holiday Rental sector in European cities

Though there have been very few direct comparisons with regard to regulatory attitudes within cities in the STHR sector, or even research comparing the general STHR climate in different areas, there is a significant body of research that has looked more generally at all four of the V4 members of the ECASTHR. Though the lack of comparisons is unfortunate, these studies have proved valuable when undertaking my own research – and the academic focus from researchers in each country provides some useful insight into which issues are at the fore. In Prague, academic attention largely falls upon the impacts of the short-term housing market in the city – unsurprisingly so given the increase in house prices in the city as discussed in chapter five. 65 In Krakow, it appears the STHR has been mostly considered as part of the wider issue of overtourism that some feel is impacting the city in a number of ways,66 Budapest has also looked at the impact of overtourism in the city more generally, but much of the analysis has followed Prague in looking at the impact on the property market.⁶⁷ Research in Budapest has looked at STHR with regard to the geographical spread of lets within the city, discussing claims that Airbnb spreads the burden of tourism across a wider area.⁶⁸ Indeed, it is often the case that some urban areas within a city can see the economic benefits more than others, while others have to deal with the negative externalities associated with mass tourism (or overtourism) within a city. Warsaw appears to have had a different framing of the discussion compared to the other three cities; its lack of regulation of the sector has led academics to analyse the impact of such a decision from local authorities.69

There have been a number of detailed case studies with regard to regulatory attitudes and responses in single European cities, too – particular focus on those that would come under the 'strict' regulatory category as described by Aguilera et. al. in their article. Bosma's paper on the process of professionalisation, for example, looks at the regulatory changes and hurdles faced by hosts in Berlin who rely on the platform for full-time income - including the response to an outright ban between 2016 and 2018. Indeed, due to the controversy surrounding Berlin's unique regulatory battle with Airbnb, a number of studies have taken place specifically on the city and its neighbourhoods. Despite the objective curiosities posed by the regulatory attitudes within the city, I decided to exclude the city from this study – along with Vienna and Bratislava –

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⁶⁵ Sandra Bestakova, 'The Influence Of Short-Term Rental On Rental Housing Prices In Prague', *Proceedings of Business and Management Conferences*, Proceedings of Business and Management Conferences (International Institute of Social and Economic Sciences, July 2019), https://ideas.repec.org/p/sek/ibmpro/8512235.html.

⁶⁶ Joanna Kowalczyk-Aniot, 'Tourismification of the Housing Resources of Historical Inner Cities. The Case of Krakow' 35 (24 June 2019), https://doi.org/10.25167/sm.1014.

⁶⁷ Řemenyik et al., 'Overtourism in Budapest'; Gábor Dudás et al., 'The Visualization of the Spatiality of Airbnb in Budapest Using 3-Band Raster Representation', *Geographia Technica* 12 (31 May 2017): 23–30, https://doi.org/10.21163/GT_2017.121.03; Betsabé Pérez Garrido et al., 'Addressing the Phenomenon of Overtourism in Budapest from Multiple Angles Using Unconventional Methodologies and Data', *Sustainability* 14, no. 4 (January 2022): 2268, https://doi.org/10.3390/su14042268; Bori Simonovits, Boglárka Zách, and Csenge Kondorosy, 'Participation, Trust, and Risks Associated with Peer-to-Peer Accommodation Platforms: How Did the COVID-19 Crisis Affect Airbnb Budapest in 2020?', *Intersections. East European Journal of Society and Politics* 7, no. 3 (29 December 2021): 178–200, https://doi.org/10.17356/ieejsp.v7i3.790.

⁶⁸ Dudás et al., 'The Visualization of the Spatiality of Airbnb in Budapest Using 3-Band Raster Representation'.

⁶⁹ Gyódi, 'Airbnb and the Hotel Industry in Warsaw'; Radoslaw Trojanek et al., 'The COVID-19 Pandemic, Airbnb and Housing Market Dynamics in Warsaw', *Critical Housing Analysis* 8 (18 June 2021): 72–84, https://doi.org/10.13060/23362839.2021.8.1.524; Gyódi, 'Airbnb in European Cities'.

⁷⁰ Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European Cities'.

⁷¹ Bosma, 'Platformed Professionalization'.

⁷² For example: Duso et al., 'Airbnb and Rental Markets'; Stors and Baltes, 'Constructing Urban Tourism Space Digitally'.

due to the fact it did not meet the Most-Similar System criteria that I have employed in my research design (see Chapter III). Despite this, the case studies that have been undertaken on Berlin have enormous value for those looking to understand STHR regulation in European cities. A good example to highlight the focus on individual country responses to the growth of the sharing economy is the IRSDACE project, 'Industrial Relations and Social Dialogue in the age of the Collaborative Economy'. This CEPS Project, funded by the European Commission's Directorate-General for Employment, Social Affairs, and Inclusion (DG EMPL), released seven reports documenting the current situation in the following countries: Belgium, France, Germany, Slovakia, Hungary, Spain, and Denmark.⁷³ Though not specifically focusing upon cities and STHR, these works highlight the increasing attention the sharing economy and its impacts on different areas is receiving from academics.

Though the impacts of the COVID-19 pandemic on the tourism industry are ongoing, and will likely continue to be felt in the future due to the economic fallout, early indications from 2022 indicate a strong rebound of the sector across Europe. Airbnb themselves have indicated in their latest shareholder letter that Q1 2022 was their best performing quarter in history – with revenues 70% higher than Q1 2021, and 80% higher than 2019 (pre-pandemic).⁷⁴ Though the fallout is still ongoing, there has already been a number of studies looking at the impact of COVID-19 on the industry, including in target cities – though this is an area in which research will continue to develop.⁷⁵

https://doi.org/10.3390/ijerph19148730; Simonovits, Zách, and Kondorosy, 'Participation, Trust, and Risks Associated with Peer-to-Peer Accommodation Platforms'.

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^{73 &#}x27;IRSDACE', CEPS (blog), 22 June 2017, https://www.ceps.eu/ceps-projects/industrial-relations-and-social-dialogue-in-the-age-of-collaborative-economy-irsdace/; Tibor T. Meszmann, 'Industrial Relations and Social Dialogue in the Age of Collaborative Economy (IRSDACE) - National Report Hungary', Central European Labour Studies Institute (CELSI) No. 27 (December 2018), https://www.celsi.sk/media/research_reports/RR27.pdf.

^{74 &#}x27;Shareholder Letter: Q1 2022. Investor Relations | Airbnb | Financials'.

⁷⁵ Joanna Kowalczyk-Aniot, Marek Grochowicz, and Robert Pawlusiński, 'How a Tourism City Responds to COVID-19: A CEE Perspective (Kraków Case Study)', Sustainability 13, no. 14 (January 2021): 7914, https://doi.org/10.3390/su13147914.Trojanek et al., 'The COVID-19 Pandemic, Airbnb and Housing Market Dynamics in Warsaw'; Joanna Kowalczyk-Aniot, Karolina Kacprzak, and Ewa Szafrańska, 'How the COVID-19 Pandemic Affected the Functioning of Tourist Short-Term Rental Platforms (Airbnb and Vrbo) in Polish Cities', International Journal of Environmental Research and Public Health 19, no. 14 (January 2022): 8730,

Chapter III: Research design and methodology

This chapter addresses the research design and methodological decisions that were made in order to conduct this study on the diversity in regulatory attitudes in European cities. Firstly, the rationale for conducting this research is discussed as part of an introduction to the wider research design. It next outlines the process undertaken in order to select the cities of Prague, Krakow, Budapest, and Warsaw for the comparative analysis of regulatory attitudes toward the STHR market. In particular, it highlights why these central European cities were chosen over other European regions and then discusses the process in which the cities of Bratislava, Berlin, and Vienna were excluded from this central European city comparison. Following these two points of clarification, the Research Design and Methodology are then discussed in detail. Namely, this section elaborates upon the most-similar system design utilised in this analysis, accompanied by wider choices such as the wider research philosophy and theoretical approach. It also discusses why some decisions made have intentionally diverged from the methodological approaches undertaken by similar studies in the existing literature. The chapter ends with the methods by which I have collected various types of data used to conduct this study and how it has been used to inform potential explanations to the research question, along with some general notes on decisions made, the accuracy of any online sources, and influences on the region.

3.1 Rationale and city selection

This study has been undertaken, using the below-justified research design choices, in order to best offer answers to the research questions posed in the introduction chapter of this thesis. These research questions, 'What regulatory approaches do Visegrád Group members of the ECASTHR use to attempt to manage the emergence of the short-term holiday rental market?' And 'Why are there differences in the regulatory attitudes toward Airbnb and the Short-Term Holiday Rental sector in Visegrád Group members of the ECASTHR?' have been formulated with the ultimate goal of being able to better understand the factors that have led to differences in regulatory response between similarly positioned European cities. This is in order to contribute to the body of academic literature surrounding the STHR phenomenon and the diversity in regulation in European cities – attempting to fill one of the significant research gaps as outlined in my literature review, as well as the wider literature review on Airbnb undertaken by Guttentag in 2019.⁷⁶ This research makes up part of the wider field of assessing the growth of the sharing economy and its effects on European cities, an area of study that will continue to grow in importance as these structures spread into other business categories, as well as their continued disruption of traditional industry.

To select these cities, I decided to focus on central Europe due to the current lack of literature surrounding the region (with the notable exception of Berlin). As I wanted to approach this comparative analysis through a most-similar system design, I first looked at the members of the European Cities Alliance on short-term holiday rentals (ECASTHR) – those cities that had all lobbied the European Union to receive more powers

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⁷⁶ Guttentag, 'Progress on Airbnb'.

to combat the growth of the STHR market.⁷⁷ This meant that each city was – theoretically – actively attempting to tackle the rise of STHR – and as Bratislava was not a member of the alliance, I excluded it from the study. I also wanted to select cities that had followed a similar economic development path since the second world war, and in this case, all of the Czech Republic, Hungary, and Poland matched such criteria. Namely, all three states faced the imposition of a command economy in post-war Europe as Soviet satellite states; all are current members of the Visegrád Four socioeconomic grouping, and all transitioned into capital-oriented globalised economies – crystallised by European Union accession in 2004. All three countries have opted to remain outside of the Eurozone, and all four cities have become popular tourist destinations during the time of growth in the STHR sector in the past decade.⁷⁸ With an improved economic outlook due to the wider post-cold war European integration – with tourism adding a vital revenue stream – these cities are seeing faster and more comprehensive development than almost anywhere else on the continent. However, each city has recognised the need to act due to the unprecedented growth of short-term holiday rentals and sharing economy platforms, and thus are ideal candidates to compare.

3.2 Research Design and Methodology

At the highest level, this thesis aims to use a comparative content analysis of four cities with similar experiences to further this area of research, following the norms set by Aguilera et al. and replicated by other academics.⁷⁹. To do so, this research has been undertaken through a 'most-similar system' (MSS) design approach in order to isolate as many variables as possible when looking at possible explanations for different policy responses to the growth of the STHR market. This diverges from the methods undertaken by other researchers, but I believe in doing so adds a valuable new perspective to the discussion. Given the nature of attempting to offer possible explanations for the diversity in regulatory attitudes from different city policymakers, this study naturally adopts an interpretive research perspective. This approach gives me the ability to generate theory from one type of data I am using in my content analysis such as primary interview evidence, and then building upon the knowledge gained from another - such as socioeconomic data or reports. Though this research relies upon some quantitative data to inform the discussion, this comparative content analysis gives me the opportunity to utilise the widest variety of data points (both qualitative and quantitative) in order to help form explanatory frameworks for the diversity in regulatory approaches – though still approaches this research through a qualitative lens. It takes a different approach to the sociological methods used by Aguilera et. al. however, due to disagreeing with their notion that socioeconomic factors do not play a major role - and thus considers it in my analysis.80

In terms of frameworks to conduct the analysis, it categorises the relevant shareholders who are concerned with regulation in line with current research in the sector. These are as follows (excl. policymakers themselves):

Cities'.

^{77 &#}x27;22 Cities Call for Stronger European Regulation of Holiday Rental Platforms - Eurocities'.

⁷⁸ Peterka, Aleš, and Radek, 'Short-Term Rental Platforms: Airbnb in V4 Countries'

 ⁷⁹ Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European Cities'; von Briel and Dolnicar, 'The Evolution of Airbnb Regulation - An International Longitudinal Investigation 2008–2020'.
 ⁸⁰ Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European

- a) Professional Hosts
- b) 'Regular' Hosts
- c) Residents associations
- d) The Hotel industry
- e) Sharing economy platforms
- f) Sharing economy advocates⁸¹

This is supplemented by those who implement legislation on a European level, as well as local businesses and regular users of the platform. These stakeholders can also play an important role in regard to the discussion on regulation, as their experiences and decisions are equally intertwined and should be discussed.

For categorisation on the strength of the response, this thesis has opted to create a new set of categories, as the MSS design approach does not suit the categories utilised in former pieces. For example, in the research conducted by Aguilera et. al, they describe the idea of three classes of regulatory output in European cities that primarily focuses on stringency – weak (in their case Milan), intermediate (in their case Paris), and finally strong (in their case Barcelona).⁸² They also identify the categories in which the debate surrounding Airbnb and the sharing economy have been framed in each city – naming the following policy sectors: Tourism (Barcelona and Milan), Housing and Land Use (Paris), Urban Planning (Barcelona), and the wider 'sharing economy' (Milan).⁸³

I have put the cities instead into three regulatory response categories in relation to the current regulatory direction of each city: Laissez Faire (in the case of Warsaw), collaborative (in the case of Krakow), and finally combative (in the cases of both Prague and Budapest). These differentiations are relative – as all four cities are closer with regard to regulation strategy (at least for now) than the cities used in the analyses from Aguilera et al., Cassell and Deutsch, or Gyódi-84 These categorisations will be supplemented with my own classification, to be defined as mitigatory responses to negative STHR externalities. This, I feel, offers another dimension with which to better understand the suite of legislative tools being utilised by local governments in order to manage the phenomenon. It opts not to categorise cities in their process of framing the issue, as the research I have conducted suggests that this has developed over time due to other factors. As discussed elsewhere, I have divided this research into two parts – firstly to observe which regulatory measures are in place, and then to attempt to explain why there is a diversity in their approach. These two questions will each be undertaken in separate chapters, as the regulatory approaches must first be understood in order to explain their differences.

81 Aguilera, Artioli, and Colomb.

⁸² Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European Cities'

⁸³ Aguilera, Artioli, and Colomb.

⁸⁴Aguilera, Artioli, and Colomb; Cassell and Deutsch, 'Urban Challenges and the Gig Economy'. Gyódi, 'Airbnb in European Cities'.

'STHR' vs 'STR' when referring to properties offered by Airbnb and other platforms.

Though much of the literature in the space refers to the 'Short-Term Rental' (STR) market when discussing the Airbnb phenomenon, I have decided to opt for the narrower 'Short-term Holiday Rental' (STHR) description where appropriate.⁸⁵ This has been an intentional decision, which has taken two key pieces of information into consideration.

Firstly, and most importantly, this term is in line with the description of the industry employed by the European Cities Alliance on Short-Term Holiday Rentals (ECASTHR), to which all four of the chosen cities are party to.86 Though these terms have in the past been used interchangeably in most areas, I believe that their differentiation is important with regard to the study of Airbnb and this market. In the wake of the COVID-19 pandemic, the way that individuals are utilising platform-mediated rental platforms are changing. In a recent interview, Airbnb CEO Brian Chesky disclosed that approximately 20% of bookings on the platform are now longer than a month - highlighting what may lead to a new category of rental guest for researchers.⁸⁷ In their second-quarter 2022 financial results, Airbnb claim that this longer-term stay is their fastest growing category with regard to trip length compared to before the pandemic.⁸⁸ Given that this is a phenomenon only seen in the last two years, researchers have as yet had little need to differentiate these two types of users. However, with this new phenomenon, there is a new question for cities and national governments alike with regard to regulating this new category of guests for a number of reasons. Primarily, many of the negative externalities offered by the influx of 'STHR' users may not be the case with the rise of short-term tenants such as 'digital nomads' who utilise the platform to act more like a resident within the city (albeit still temporary). This type of guest category, a short-term resident rental (to which I term 'STRR') Other questions, such as the impact of this growth on day cap regulation (as mooted by Hungary), may in fact encourage Short-Term holiday rentals - as those looking for residential stays are forced to look elsewhere. 89 This type of guest category, which may be classified as a short-term resident rental (to which I term 'STRR'), this may offer an interesting distinction between the two types of tenant identified by the Airbnb platform going forward, and whether cities try to respond differently to each group.

3.3 Data Collection

This thesis has employed a variety of data points in order to better understand the regulatory attitudes in the chosen cities in order to conduct the comparative content analysis. As the actions and attitudes of stakeholders are critically important in the development of policy responses in the STHR, I have tried to speak directly to stakeholders through interviews wherever possible. This has provided me with novel data points for the study—and allowed a better understanding of the perspectives of key stakeholders in the region. I have used this data in combination with a variety of other qualitative sources, in which I use data available

85 See Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European

Cities'; Gottlieb, 'Residential Short-Term Rentals'; Peterka, Aleš, and Radek, 'Short-Term Rental Platforms: Airbnb in V4 Countries'.

86 '22 Cities Call for Stronger European Regulation of Holiday Rental Platforms - Eurocities'.

87 David Rubenstein, The David Rubenstein Show.

^{88 &#}x27;Airbnb Second Quarter 2022 Financial Results'.

^{89 &#}x27;Emerging Europe; Budapest Becomes Latest City to Clamp down on Airbnb', Emerging Europe, 15 July 2020, https://emerging-europe.com/business/budapest-becomes-latest-city-to-clamp-down-on-airbnb/.

to confirm or dispute their observations. For those who I was unable to reach out to directly, I have used a combination of other qualitative data available online. This has included news reports, interviews taken with third parties, and analysis undertaken by another academic research.

In terms of any numerical or statistical data used for comparative purposes, all of this has been collected using publicly available information available online. These sources include European Union statistics taken from EUROSTAT, and national demographic data from the respective national statistical offices. In terms of data found on Airbnb listings, this data is privately held by the company. However, I have used two online data services, A) AirDNA and B) InsideAirbnb, that have used data scraping techniques to collect the relevant data for all four target cities. ⁹⁰ This set of data should be possible to collect for all major cities on the continent who are attempting to resolve challenges in relation to STHR, and thus this study can be replicated in other urban area comparisons.

3.4 Study Limitations

Given that this piece is my research project as part of my master's programme, this study has some unavoidable limitations that I have attempted to mitigate to the best of my ability. Given this, future research should be able to build upon this study if their circumstances are different with regard to my particular constraints. One of the primary limitations surrounding this piece is the time constraints of the analysis period. As Airbnb and the wider expansion of the Short-Term Holiday is still a relatively new phenomenon, and final regulatory frameworks by no means resembling what may be their final form in at least one of the four target cities, this piece would ideally have included a longer-term longitudinal study of the regulatory developments in Visegrad Group member cities of the European cities' alliance on short-term holiday rental market grouping. As that is impossible due to the deadline that arises from a master's programme, this piece instead focuses on understanding and explaining the current regulatory attitudes of these cities toward Airbnb using a cross-sectional analysis. It attempts to identify and explain the current differences, in relation to both the development of those attitudes from the perspective of the last decade of growth and the impacts of the COVID-19 pandemic, and also from the current socioeconomic factors in each of those cities – with reference to the concept of the 'politicisation' of the phenomenon, discussed by Aguilera et al. in 2019.91 By undertaking my study in this way, I hope to be adding to the literature in a number of meaningful ways both by providing value to any academics who wish to undertake a study similar to the one described in the future, but also to add to the current body of literature that is attempting to explain the difference in regulatory attitudes in their current form across European cities - especially due to the fact that this research area has had an unfortunate shortage of academic attention in what is a critical field (as discussed in the literature review – see chapter II).

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^{90 &#}x27;AirDNA | Short-Term Rental Data Analytics | Vrbo & Airbnb Data', accessed 1 August 2022, https://www.airdna.co/; 'InsideAirbnb: Data from Prague', accessed 3 August 2022, http://insideairbnb.com/prague/.

⁹¹ Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European Cities'.

Another inevitable limitation that comes from completing this study at a masters level is based upon financial and access limitations. Much of the data for Airbnb lettings is kept private by the company – something that has been a source of frustration for many stakeholders, including current Prague mayor Zdeněk Hřib.⁹² Fortunately, some researchers have created tools and taken the time to scrape public information from Airbnb's listings to create reports on their operations such as Murray Cox, the founder of Inside Airbnb – a collection of publicly available data on listings described as a project that 'provides data and advocacy about Airbnb's impact on residential communities'.⁹³ In the case of my study, InsideAirbnb unfortunately only has the data for the city of Prague. Their team, very understandably, gives priority to funded requests due to the amount of work required for each city analysis.⁹⁴ With the financial challenges naturally faced due to the nature of the project, I was unable to secure this data and thus had to look at other reference points (discussed in Chapter II). One of these services, AirDNA, offers publicly available market data on a number of different cities, including all of my chosen cities.⁹⁵ Though this data is designed specifically for property managers, this data has helped me overcome some of the restraints caused by the financial challenges of being unable to afford requests elsewhere.

Notes:

Access dates:

I have endeavoured, as far as is practically possible, to ensure that all information in this study is up to date at the time of thesis submission. Access dates for websites refer to the last date that I have personally confirmed that information is still consistent with claims made by this study. Any changes to websites made after this access date have not been considered.

Impact of global events:

The COVID-19 pandemic has likely had an effect upon the accuracy of tourist data collection that took place in a number of cities in 2020 and 2021, and city statistical offices have often made this clear in their publications. ⁹⁶ I have opted to show this data in the thesis for illustrative purposes (to show COVID-19 has likely had a negative effect of tourism and thus may have had an effect on calls to regulate the STHR market), but it has not been used to draw any conclusions or used in any kind of statistical comparison. All data that has likely been affected by the COVID-19 pandemic has been indicated with an asterisk (*).

Due to Russia's invasion of Ukraine in February 2022, all four cities have seen a surge of refugees enter their city, having significant effects on their demographics and housing supply that has yet to be fully understood.

⁹² Jakub Plíhal, 'Ztratili Jsme Domov. Bytový Protest Proti Airbnb Navštívil Hřib, Mluví Už i o Zákazu | Aktuálně.Cz', Aktuálně.cz - Víte, co se právě děje, 16 February 2020, https://zpravy.aktualne.cz/domaci/foto-bytovy-protest-protiairbnb/r~3f036e76500111eab2630cc47ab5f122/.

⁹³ Murray Cox, John Morris, and Taylor Higgins, 'About InsideAirbnb', InsideAirbnb, accessed 1 May 2022, http://insideairbnb.com/about/.

⁹⁴ Data Requests', accessed 1 August 2022, http://insideairbnb.com/data-requests/.

 $^{^{95}}$ 'About Us: Data Science Meets Real Estate Investing in Vacation Rentals'.

⁹⁶ Note from Hungarian Central statistical office:

^{&#}x27;Due to the coronavirus epidemic, data provision is incomplete and therefore data cannot be fully compared'. See:

[&]quot;27.1.1.26. Capacity and Arrivals at Other Profit-Oriented Accommodation Establishments, 31 December', accessed 3 August 2022, https://www.ksh.hu/stadat_files/tur/en/tur0025.html.

Though this thesis discusses the potential effects of this increase in population on stakeholders in V4 cities, it is difficult to draw any conclusions on this phenomenon at the time of publishing.

Chapter IV: Regulatory attitudes – how are cities reacting to the growth of Airbnb?

This chapter sets about answering the first research question mentioned in the methodology section. Namely, it aims to look at the regulation that has, or may soon, be implemented in each of Prague, Krakow, Budapest, and Warsaw. To do this, the chapter will first aim to explain the development of Airbnb as a company, and how its decisions could have led to regulatory intervention. Secondly, it will follow the timeline of response from each city; identifying when attempts were made to regulate the sector. It will do so with reference to the four key types of regulatory change mentioned in von Briel and Dolnicar's longitudinal investigation, as well as the six key stakeholders referenced by Aguilera et al. in their study.⁹⁷

4.1 Background to Airbnb and the 'sharing economy': why do cities feel the need to regulate?

Airbnb is one of the foundational players responsible for the growth of the new type of economic structure now present in several sectors, often described as the 'sharing economy'. As defined by Zervas et al., the sharing economy can be broadly described as peer-to-peer platforms that 'collaboratively make use of underutilised inventory through fee-based sharing'. This innovation, in many ways, is the digitalisation and formalisation of practices traditionally undertaken between communities in the physical world, that have now been allowed to scale through the medium of web 2.0 and the internet era with members outside of that immediate community. In the property of the propert

From the humble beginnings of two men trying to 'make ends meet' in San Francisco by offering air mattress accommodation on their living room floor, all the way to managing a multi-billion dollar company, the well-documented rise of Airbnb (originally 'Airbed and Breakfast') and the STHR in which it has championed has been nothing short of extraordinary. Aided by the ushering in of a globalised internet age that allowed the ability to scale without the need for a physical footprint, Airbnb was perfectly positioned to gain market share in the wake of the global recession – despite a lot of investor scepticism in its founding years. Researchers of the platform's rise have often illustrated the incredible speed at which the company has scaled to define and dominate the sector that it pioneered: the company went from 880,000 bookings in 2011 to 100 million bookings in 2017 – a growth rate of over 11,000% in just six years. In 2022, Airbnb has managed to emulate that 100 million bookings figure in just a single quarter – highlighting its ever-increasing scale and dominance of the STHR sector it has created, as well as an impressive recovery from a pandemic

⁹⁷ von Briel and Dolnicar, 'The Evolution of Airbnb Regulation - An International Longitudinal Investigation 2008–2020'. Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European Cities'.

⁹⁸ Zervas, Proserpio, and Byers, 'The Rise of the Sharing Economy'.

⁹⁹ Zervas, Proserpio, and Byers.

¹⁰⁰ Hoffman and Heisler, Airbnb, Short-Term Rentals and the Future of Housing.

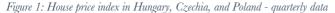
^{101 &#}x27;A Letter from Co-Founder Joe Gebbia', Airbnb Newsroom (blog), 21 July 2022, https://news.airbnb.com/a-letter-from-co-founder-joe-gebbia/.

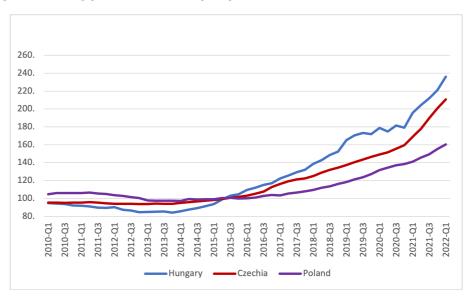
¹⁰² Hoffman and Heisler, Airbnb, Short-Term Rentals and the Future of Housing.; John Ebejer, 'Urban Heritage and Cultural Tourism Development: A Case Study of Valletta's Role in Malta's Tourism', Journal of Tourism and Cultural Change 17, no. 3 (4 May 2019): 306–20, https://doi.org/10.1080/14766825.2018.1447950.

 $^{^{\}rm 103}$ Cassell and Deutsch, 'Urban Challenges and the Gig Economy'.

that has been a challenge for all travel-orientated firms.¹⁰⁴ Its geographic footprint is among the most diverse of any company in history, with 6 million active listings registered on a platform that operates in 100,000 towns and cities in over 220+ countries and regions.¹⁰⁵ Boasting a property portfolio ranging from a nineteenth-century castle in Germany to an entire category dedicated to treehouse stays, the platform has the power to disrupt the traditional hotel industry through the ability to offer unique stays across the globe in areas where building a hotel may not be economically viable.¹⁰⁶

Unlike many companies in the sector, all three founders of the platform are still actively involved in the day-to-day running of the business. ¹⁰⁷ The similarly disruptive 'sharing economy' company, ride-hailing service Uber, had been forced to cut their ties with founder Travis Kalanick after a series of scandals threatened to engulf the company – with reports ranging from privacy violations to a toxic work environment. ¹⁰⁸ This controversy is in sharp contrast to the development path of Airbnb. The faces of the co-founders – Joe Gebbia, Nathan Blecharczyk, and Brian Chesky – are still prominently displayed on the 'about us' section on their website, with the three managing various sectors of the business. ¹⁰⁹ Despite this relatively positive founder story and business culture, there are several controversies and criticisms surrounding the company and its practices. Because of the growing number of cities facing a 'boom' in house prices – while at the same time dealing with surging tourist numbers – Airbnb is often blamed for investors repurposing residential properties into short-term hotel units and thus reducing local housing capacity. ¹¹⁰ This is an area in which the four cities in this analysis have been particularly impacted.





^{104 &#}x27;Airbnb Second Quarter 2022 Financial Results', 2.

^{105 &#}x27;About Us', Airbnb Newsroom (blog), accessed 3 July 2022, https://news.airbnb.com/about-us/.

^{106 &#}x27;Treehouse Rentals', Airbnb, accessed 24 July 2022, https://www.airbnb.com/united-states/stays/treehouses.; 'Airbnb Heritage Tour', accessed 23 July 2022, https://www.interrail.eu/en/about-us/interrail-news/airbnb-heritage-tour.
107 'About Us - Airbnb'.

¹⁰⁸ Kate Conger, 'Uber Founder Travis Kalanick Leaves Board, Severing Last Tie', *The New York Times*, 24 December 2019, sec. Technology, https://www.nytimes.com/2019/12/24/technology/uber-travis-kalanick.html.

^{109 &#}x27;About Us', Airbnb Newsroom (blog), accessed 3 July 2022, https://news.airbnb.com/about-us/.

¹¹⁰ Agustin Cocola-Gant and Ana Gago, 'Airbnb, Buy-to-Let Investment and Tourism-Driven Displacement: A Case Study in Lisbon', Environment and Planning A: Economy and Space 53, no. 7 (1 October 2021): 1671–88, https://doi.org/10.1177/0308518X19869012.

Source: Eurostat data browser¹¹¹

As shown in figure 1, all three countries in which the chosen cities are situated in have seen rapid price increases in their housing markets since 2015.¹¹² Indeed, Czechia and Hungary have the two steepest percentage increases in property prices across the entirety of the EU27, and thus are likely to look to mitigate this impact in a more aggressive manner than Poland for example.¹¹³ Though this is nationwide data, as analysis from Meszmann has demonstrated, these increases in house prices are likely to affect major urban areas even more significantly.¹¹⁴ The founders have at times admitted their shortcomings with regard to planning for the impact their platform has had on communities and cities, as demonstrated by the below quotation from CEO and founder Brian Chesky:

I want to acknowledge something: if I could have done Airbnb all over again, I would've designed Airbnb with more stakeholders in mind, including communities. I was 26. I didn't really understand some of the things I understand today. When you're behind, it takes a while to catch up.'115

This likely has a basis in truth considering the growth of the platform and the process of development that it has taken, as discussed earlier in the thesis. What it does also emphasise, however, is that the growth of the company and the impacts that it may have had surprised everyone – even its creators. Given this, the fact that countries were somewhat slow to introduce comprehensive regulatory responses is largely unsurprising.

4.2 Regulatory enactment in target cities

After conducting research into the regulation in each city, I have identified two key areas of regulatory structures surrounding the STHR market: a) regulating the actions of hosts to formalise the sector or dissuade proliferation, and b) enacting legislation to mitigate the negative externalities associated with the increased number of tourists within a particular city. Though Airbnb and the STHR market are clearly not solely responsible for the increase in tourist numbers throughout European cityscapes, I believe that this type of regulatory response should be included within the wider discourse. Given the frequency in which the phenomenon is blamed for overtourism by various stakeholders in the STHR market, such as the ECASTHR or parliaments, these attempts to mitigate guest behaviours – and particularly in the night-time economy – can offer an insight into how cities are trying to strike a balance between finances and quality of life for residents. 116

^{111 &#}x27;Statistics | Eurostat', accessed 5 August 2022, https://ec.europa.eu/eurostat/databrowser/view/tipsho40/settings_1/table?lang=en.

^{112 &#}x27;Statistics | Eurostat'.

^{113 &#}x27;Statistics | Eurostat'.

¹¹⁴ Meszmann, 'Industrial Relations and Social Dialogue in the Age of Collaborative Economy (IRSDACE) - National Report Hungary'.

¹¹⁵ Patel, 'Why the Future of Work Is the Future of Travel, with Airbnb CEO Brian Chesky'.

¹¹⁶ Pérez Garrido et al., 'Addressing the Phenomenon of Overtourism in Budapest from Multiple Angles Using Unconventional Methodologies and Data'; Farhad Manjoo, "Overtourism" Worries Europe. How Much Did Technology Help Get Us There?', *The New York Times*, 29 August 2018, sec. Technology, https://www.nytimes.com/2018/08/29/technology/technology-overtourism-europe.html.

As mentioned by Bosma, despite the lack of publicly available data on Airbnb listings, much of the research so far has taken place using quantitative data - with a shortage of qualitative study. 117 This is vitally important for the STHR market precisely because regulators are attempting to differentiate professional hosts from their 'regular' equivalent, and therefore the needs of both categories must be better understood. This attempt to differentiate the two types of hosts when implementing regulation is the case for example in Prague. 118 In this case, new legislation has been drafted in order to contain the activities of professional hosts, while at the same time introducing an income threshold so as not to punish residents who may use the platform to provide supplementary incomes with spare rooms or similar; though as of yet this legislation has not been enacted. 119

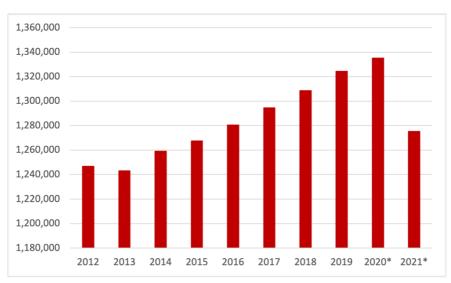


Figure 2: City of Prague Population history

Source: CZSO - Czech Statistical office¹²⁰

Given the consistently increasing population in Prague (excl. covid figures), with around 100,000 more residents in just eight years, it is surprising that the regulatory approach Prague chose to take likely would not release homes onto the market, but instead allow the industry to operate on a smaller scale. This is particularly pertinent, given that one of the main reported lobbying priorities for Airbnb includes advocating for 'favourable regulations that allow homeowners and tenants to take part in 'home-sharing' practices through digital platforms' when cities are looking to restrict large-scale operations. ¹²¹ This is a far different approach taken in comparison to the draft legislation in Budapest. Instead of targeting professional hosts, the legislation that has been proposed would instead limit the number of days that a property can be rented out through the platform as in some western European cities – thus effectively forcing property owners to look for a different way to occupy their property. ¹²² There have been a number of claims made about how this

¹¹⁷ Bosma, 'Platformed Professionalization'.

¹¹⁸ 'Czech Ministry Mulling Stricter Regulations for Airbnb Rentals', 18 July 2022, https://www.expats.cz/czech-news/article/czech-ministry-mulling-new-regulations-for-airbnb-rentals.

¹¹⁹ 'Czech Ministry Mulling Stricter Regulations for Airbnb Rentals'.

 $^{^{120}}$ 'All about Territory VDB', accessed 5 August 2022, https://vdb.czso.cz/vdbvo2/faces/en/index.jsf?page=profiluzemi#profil31550=page%3Dpozice-profilu%26rqup%3DA%26pvo%3DPU-DEM-

OB1%26z%3DT%26f%3DTABULKA%26clsp%3D31550%26katalog%3D31550&w=.

¹²¹ Bosma, 'Platformed Professionalization'.

¹²² 'Emerging Europe; Budapest Becomes Latest City to Clamp down on Airbnb'.

legislation received the support of both political sides of the debate in Hungary, but it has been suggested that it was due to two different stakeholder groups lobbying two sides of the debate. Fidesz, the right-wing populist party, had likely been receptive to claims from the hotel industry with regard to the sector's growth in Hungary – with the liberal politicians trying to address the concerns of residents in populated areas in which their voter base often comes from.¹²³

However, this is not the first time in which legislation has been mooted in either city to combat the increase in tourism. Prague first announced that it was to implement measures against the service nearly four years ago, and has yet to do so (though the legislation has evolved and updated in this time).¹²⁴ This difference between rhetoric and reality is a common theme in all four of the cities discussed in this thesis. Warsaw for example is a member of the ECASTHR, lobbying the European commission in order to gain increased regulatory control or information with regard to Airbnb, and yet as of writing this thesis it still maintains no specific rules or even a registration system – with it being referenced in literature as a possible example of the outcome of 'sharing economy' businesses in an unregulated city. 125 Krakow, despite being the first of the four cities to work with other European tourist hotspots (who almost all now have far stricter restrictions), is the only city out of the four to maintain a full information sharing agreement with Airbnb – and does not appear to be regulating against professional hosts mentioned through ECASTHR letters. 126 Despite all of the combative rhetoric surrounding its decision however, regulation has not yet been implemented within the city of Prague. Similarly, the legislation passed in Hungary is yet to be applied to Budapest or any other city. Krakow has no new legislation planned despite growing criticism, and Warsaw does not look to be implementing new regulation soon. Indeed, it may be the case that cities are managing their public image with regard to implementing measures, as much as the actual act of implementation. Another possible explanation is the difficulty each city is facing with regard to implementation, and thus cannot follow through on its attitudes toward the sector.

In terms of the implementation of mitigatory measures however, all four cities have put into place methods to curb some of the negative externalities said to be caused by overtourism facilitated by the rise of the STHR sector — and there is some evidence to suggest some convergence in this response category. Both Krakow and Warsaw had several long-standing legislative measures implemented to decrease the number of antisocial incidents, and in a sign of convergence, Budapest and Prague have set about implementing similar legislation around public drinking to stem neighbourhood complaints. 127 This is a clear example of how cities

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¹²³ 'Emerging Europe; Budapest Becomes Latest City to Clamp down on Airbnb'; Pérez Garrido et al., 'Addressing the Phenomenon of Overtourism in Budapest from Multiple Angles Using Unconventional Methodologies and Data'.

^{124 &#}x27;Airbnb Facing Tighter Rules in Prague to Combat Towering Rents', Bloomberg. Com, 6 November 2018,

https://www.bloomberg.com/news/articles/2018-11-06/airbnb-facing-tighter-rules-in-prague-to-combat-towering-rents; Christian Smigiel, 'Why Did It Not Work? Reflections on Regulating Airbnb and the Complexity and Agency of Platform Capitalism', *Geographica Helvetica* 75, no. 3 (19 August 2020): 253–57, https://doi.org/10.5194/gh-75-253-2020.

¹²⁵ Gyódi, 'Airbnb and the Hotel Industry in Warsaw'.

¹²⁶ 'Airbnb Signs Landmark Partnership with the City of Krakow', *Airbnb Newsroom* (blog), 16 September 2020, https://news.airbnb.com/airbnb-signs-landmark-partnership-with-the-city-of-krakow/.

^{127 *}Confirmed: Prague's Ban on Public Drinking Expanding to over 1,000 Places', 27 May 2022, https://www.expats.cz/czechnews/article/prague-s-ban-on-public-drinking-expanding-to-over-1-000-places; Deutsche Welle (www.dw.com), 'Budapest Moves to Make Party Tourism a Thing of the Past | DW | 24.07.2020', DW.COM, accessed 8 August 2022, https://www.dw.com/en/budapest-moves-to-

across Europe are trying to balance the interests of stakeholders while maintaining the economic benefits of tourism – in other words, to maintain the economic gain of large numbers of tourists but more effectively managing their behaviours to keep residents onside.

4.3 Note on regulatory update in Prague

Between the time of completing this thesis and its submission, significant new announcements have been released to the public with regard to Airbnb regulation in the city of Prague. Much of the legislation that has been described as 'mooted' or 'proposed' in this thesis has now been presented to the public by the Ministry of Regional Development, and will likely be implemented next year. Though this is of course a significant development in regulatory approaches for the sector in Central Europe; it is consistent with my findings in Chapter IV that Prague should be seen as opting for a 'combative' attitude toward the growth of the STHR market in recent years and is looking toward restricting professional hosting companies. It may also support the notion that cities are struggling to implement their desired policies due to the various difficulties associated with implementation – discussed in the following chapter.

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make-party-tourism-a-thing-of-the-past/a-54307202.Grazyna Plichta, 'The Influence of Overtourism and Short-Term Rental on the Real Estate Market on the Example of the City of Krakow', *World of Real Estate Journal (Świat NIeruchomości)* 106, no. 4 (2018): 8, https://doi.org/10.14659/worej.2018.106.008; Remenyik et al., 'Overtourism in Budapest'.

^{128 &#}x27;Přísnější Pravidla. Ministerstvo Chystá Regulaci Airbnb v Česku', Radio Prague International, 4 August 2022,

Chapter V: Explaining the diversity in regulatory attitudes in similar urban environments – why has each city taken a different approach?

This chapter, as set out in the methodology section, will attempt to answer the second research question regarding why exactly each city has taken a different approach to the regulation of Airbnb and the STHR market. To do so, it will attempt to represent the view of the various stakeholders so as to understand their perspective with regard to STHR regulation, and look at methods utilised to influence policymakers – as well as using the evidence from the regulatory attitudes in each city seen in chapter four to understand how regulators have been influenced. It will then use this information, combined with the various socioeconomic and open-source data on rentals provided by AirDNA, InsideAirbnb, and the various statistical agencies from each city, in order to theorise as to why there has been a different response in each city looked at by this study.

5.1 The impact of stakeholders

In the summer of 2019, Ten EU cities took to writing an open letter warning the European Union that they felt action needed to be taken in order to combat the growth of the short-term holiday rental market, including the city of Krakow.¹²⁹ As time has progressed, letters have continued to flow from a grouping of European cities to the commission asking for more assistance to manage the increasing challenge cities feel the STHR market is becoming to their cities. This grouping of concerned local governments has now been formalised through the founding of the European Cities Alliance on short-term holiday rentals. The original informal grouping of ten cities has now expanded to twenty-two – and includes all four of the cities looked at by this study - working together as part of the ECASTHR to force policy change at the European level to help with the rising challenges brought about from the growth of Airbnb. 130 One of the key arguments offered by the Alliance as to why they would like more support references issues such as 'widespread pattern of long term housing rentals being converted into STHR', and thus the lack of supply is leading to 'rents and house prices putting many European households under escalating financial pressure'. 131 What is also noticeable is their direct reference to feedback from residents in their cities, claiming that inhabitants are increasingly voicing concerns about nuisances from STHR properties.¹³² As written in the report, 'In addition to the adverse effects on the liveability of certain neighbourhoods and soaring rents and house prices, they report 'noise disturbance, health hazards, and even the slow disappearance of convenience stores'. 133 Academics have also noted the growing fear that the proliferation of Airbnb can degrade the quality of life for residents within high-density neighbourhoods, regardless of the effects on the capacity itself. 134

 $^{^{129}}$ Jon Henley and Jon Henley Europe correspondent, 'Ten Cities Ask EU for Help to Fight Airbnb Expansion', *The Guardian*, 20 June 2019, sec. Technology, https://www.theguardian.com/cities/2019/jun/20/ten-cities-ask-eu-for-help-to-fight-airbnb-expansion. 130 'Short Term Rentals'.

^{131 &#}x27;22 Cities Call for Stronger European Regulation of Holiday Rental Platforms - Eurocities'.

^{132 &#}x27;22 Cities Call for Stronger European Regulation of Holiday Rental Platforms - Eurocities'.

^{133 &#}x27;22 Cities Call for Stronger European Regulation of Holiday Rental Platforms - Eurocities'.

¹³⁴ Cassell and Deutsch, 'Urban Challenges and the Gig Economy'.

The primary stakeholder with regard to regulation is, of course, the local governments that implement the policy. To understand their perspectives, and the wider ECASTHR, I conducted an online interview with Lodewijk Noordzij, a policy officer at Eurocities. The Alliance on short-term holiday rentals comprises the 22 member cities who have shown concern toward the STHR market, and 'Eurocities' – included to represent the wider base of over three hundred members who may need regulatory support or wish to cooperate further with the alliance in future. ¹³⁵ 'Eurocities' plays a vital role in the alliance, and according to their representative have a lot of responsibility with regard to its organisation – fulfilling roles such as the facilitation of meetings of the ECASTHR. ¹³⁶ One of the most important roles it faces is with regard to publishing the positions of the alliance. This can be shared through a number of means, but usually take the form of a policy paper or statement – though other forms such as essays have been utilised. ¹³⁷ In their words 'Eurocities helps with defining a common position for European cities on the topic, and by establishing policy requirements in line with this common position'. ¹³⁸ Given the amount of regulatory diversity just between the four rather similar cities analysed in this thesis, the idea of coming to a single common position between twenty-two very different urban areas appears to be a difficult endeavour. When questioned about this, the representative gave the following response:

For cities, it was fairly easy to align goals. Cities have taken different approaches to try and tackle the challenges they face, but among these, some are very similar. More importantly, the issue of illegal short-term holiday rentals, or the challenge of adequately regulating holiday rentals on the local level, is very particular and common among the cities. This helps to formulate common positions.' 139

This is a clear distinction regarding the regulatory approach of the respective cities on a local level compared to a European level. Despite their varying approaches to the issue, each city clearly identifies several areas in which it is possible to collaborate on. When questioned about the idea of a single European regulatory approach, this was not an area in which Noordzij could answer on behalf of member states. However, in his personal opinion, the focus may be better utilised elsewhere. In response, he replied:

Generally adequate access to data held by online platforms or effective notification systems (with authority for local administrations vis-à-vis businesses, or improved access -speed- to arbitration mechanisms) for local administration in support of enforcement of local rules would provide cities important tools to tackle the issue.' 140

This, despite not being an official position, provides important insight into the work of the ECASTHR. As the organisation has been focused on tools to enable sufficient responses on a local level as outlined in their

¹³⁵ Meszmann, 'Industrial Relations and Social Dialogue in the Age of Collaborative Economy (IRSDACE) - National Report Hungary'.

¹³⁶ Lodewijk Noordzij, Interview with Eurocities representative, Online, 18 July 2022.

¹³⁷ Noordzij.

¹³⁸ Noordzij.

¹³⁹ Noordzij.

¹⁴⁰ Noordzij.

recent open letter, cities with vastly different approaches to their regulatory response can still work together to further their ability to manage the growth of the wider STHR sector.¹⁴¹

The other major stakeholder with regard to regulating the STHR market is of course the platforms that pioneered and now dominate the industry. These businesses leaders in the 'disruption economy', including Airbnb, have been said to have grown and operated under a mantra derived from a phrase popularised by the late Rear Admiral Grace Hopper:

"It's easier to ask forgiveness than it is to get permission". 142

Incidentally, Hopper was in fact a pioneer in computer science and at the forefront of computer development for over four decades - adding an almost poetic symmetry to the development of the internet-based disruptive force of the sharing economy. 143 This concept of entering a market and waiting for regulation to come has been discussed as a method of expansion for Airbnb both by journalists and commentators early into Airbnb's enlargement, but it has also been discussed by contemporary academics who have investigated the growth of the company and its regulatory development in a longitudinal study. 144 As pointed out by Guttentag at the time of his earlier research, many Airbnb rentals were illegal under outdated legislation – and destination cities were effectively forced to decide how to respond to this as the service grew. 145 This was likely an intentional decision by Airbnb, and as Neil Irwin commented in the New York Times in 2014 when commenting on this phenomenon, one of the most important lobbying methods to city regulators is the users themselves. 146 Though there are many platforms that offer short-term holiday rentals, and in some countries, this is a competitive market, this is not the case in these central four central European countries. Indeed, the latest data available from analytics company AirDNA suggest that Airbnb has over 80% of the market share in Prague, Krakow, Budapest, and Warsaw, 147 For this reason, when looking at platforms as referred to by Aguilera et al., this thesis focuses specifically on Airbnb due to its dominance. However, the experiences of other disruptive sharing economy companies can help to understand their opinions toward regulation.

What is perhaps surprising is how oftentimes the company has little to no communication with government figures, even within a city where it has a significant footprint. Indeed, as highlighted by Meszmann in their analysis of the collaborative economy, this was the case in Hungary. He Meszmann pointed out at the time of writing that 'Airbnb is present as a global company in Hungary only, that is, it is not registered as a company

^{141 &#}x27;Short Term Rentals: Cities Ask Europe's Help - Eurocities', 14 July 2022. https://eurocities.eu/latest/short-term-rentals-cities-ask-europes-help/

^{142 &#}x27;CHIPS Articles: About Grace Hopper', accessed 1 August 2022, https://www.doncio.navy.mil/chips/ArticleDetails.aspx?ID=2265.

^{143 &#}x27;CHIPS Articles: About Grace Hopper'.

¹⁴⁴ For an example of a news article from the time, see: Neil Irwin, 'For Start-Ups Looking to Disrupt Regulated Industries, the New Strategy Is: Ask Forgiveness, Not Permission.', *The New York Times*, 22 April 2014, https://www.nytimes.com/2014/04/23/upshot/for-start-ups-looking-to-disrupt-regulated-industries-the-new-strategy-is-ask-forgiveness-not-permission.html.

For Longitudinal study, see: von Briel and Dolnicar, 'The Evolution of Airbnb Regulation - An International Longitudinal Investigation 2008–2020'.

¹⁴⁵ Guttentag, 'Airbnb: Disruptive Innovation and the Rise of an Informal Tourism Accommodation Sector'.

¹⁴⁶ Irwin, 'Ask Forgiveness, Not Permission.'

^{147 &#}x27;Airbnb Data - Krakow'; 'Airbnb Data - Budapest'; 'Airbnb Data - Prague'; 'Airbnb Data - Warsaw'.

¹⁴⁸ Meszmann, 'Industrial Relations and Social Dialogue in the Age of Collaborative Economy (IRSDACE) - National Report Hungary'.

in the country.¹⁴⁹ Until May 2018, there were no interactions between the company and the Hungarian state.'¹⁵⁰ Though this is somewhat surprising, especially considering the data shows significant users of STHR platforms in the country in 2018 (approaching three million guests on Airbnb and similar platforms, see figure 4).

Indeed, a view that I often find absent or underrepresented from the various forms of academic analysis of regulatory development however is the perspective of the platform itself. Given the novel nature of both the business and the market sector itself, it is Airbnb – as well as the city policymakers – that have been surprised by the growth of the sector. Peer-to-peer business models, such as Airbnb and Uber, have of course often failed to align with the regulatory frameworks that are present in a location upon their arrival. 151 This is principally because the local laws were written at a time when the phenomenon of STHR was not possible to scale in any meaningful way. 152 Because of this lack of a suitable framework, the companies and their investors were effectively taking a significant risk in order to bring their sharing economy platforms to market, and this approach is taken across various sectors. This mentality of acceptable risk-taking is clear to see across industry-leading sharing economy firms - 'Failing fast is fine', as described by Daniel Bos (Director of Data and Analytics at Just Eat Takeaway) in a recent interview, is a motto often used within JET - one of the first companies to attempt a platform-mediated food delivery business within the sharing economy. 153 Daniel described how this culture of experimentation is part of the 'disruption economy' due to the likelihood of being the first to try a number of innovations - and this has been seen in Airbnb and other 'sharing economy' businesses throughout the years.¹⁵⁴ Airbnb founder and CEO Brian Chesky has often mentioned in interviews his initial unwillingness to discuss with cities who wish to restrict the services, and would rather just let them make their own decisions. 155 Now however, Airbnb has the opposite view – with their desire to maintain their presence in markets even if there is little financial incentive, as Chesky argues that many people rely upon this income stream. This marks a sharp contrast to Uber Eats for example, which has often exited markets with little-to-no notice – even when there was no pressure from legislators to do so – as was the case in Prague. 156

Despite some criticism within the media, from politicians, and from local residents about the spread of Airbnb units in Polish cities – particularly in the case of large-scale property managers as they are perceived to restrict housing supply – the situation for hosts on the ground in Krakow appears to be very different to the

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¹⁴⁹ Meszmann, 'Industrial Relations and Social Dialogue in the Age of Collaborative Economy (IRSDACE) - National Report Hungary'.

¹⁵⁰ Meszmann, 'Industrial Relations and Social Dialogue in the Age of Collaborative Economy (IRSDACE) - National Report Hungary'.

¹⁵¹ Guttentag, 'Progress on Airbnb'.

¹⁵² Cassell and Deutsch, 'Urban Challenges and the Gig Economy'.

¹⁵³ Ed Palmer, 'Data Is Truth. With Daniel Bos', Just Eat Takeaway Podcast, accessed 1 August 2022, https://careers.justeattakeaway.com/global/en/-wearejet.

¹⁵⁴ Palmer.

¹⁵⁵ Brian Chesky, Interview With Airbnb CEO Brian Chesky, interview by Leigh Gallagher, 14 March 2017, https://www.youtube.com/watch?v=GFMeuSIhIYg.

¹⁵⁶ 'Prague Morning: UberEats to Leave the Czech Republic in June', *Prague Morning* (blog), 4 May 2020, https://www.praguemorning.cz/ubereats-to-leave-the-czech-republic/.

rhetoric.¹⁵⁷ As mentioned in the previous chapter, the city has actively worked to share data with Airbnb across a variety of sectors – becoming the first city in the entirety of Central and Eastern Europe to do so in September 2020.¹⁵⁸ For some hosts, the situation appears to be getting less - rather than more - difficult to operate in the city since the introduction of the service and regulatory changes, and the situation continues to improve since the signing of the partnership. Indeed, Krakow is home to one of the largest - if not the largest - private hosting companies operating through the Airbnb platform. 'Mikobnb' is a Short-term holiday rental business that has been operating exclusively in the city since 2015, and represents a company that has thrived through the sharing economy's disruption to the traditional hotel-based accommodation market in central Europe.¹⁵⁹ After approaching the company online, a representative from Mikobnb agreed to take part in an email interview in order to understand the current situation for large hosts with regard to regulatory development.

With over one hundred apartments in central Krakow, and approximately 145 individual listings on Airbnb (as of August 2022), the company operates what they estimate to be the largest Airbnb hosting operation in terms of guest fulfilment on the planet. Miko, the founder of the group, was highlighted in an article by Airbnb as one of the best 'superhosts' on the platform in 2018 - meaning that a host that averages at least 4.8/5 stars in its reviews, and in return receives exclusive privileges through the platform. Despite operating on all of the major STHR services, such as Booking.com and Expedia, the 'Miko and Friends' company has over 11,200 reviews just on the Airbnb platform – and has achieved a near-perfect set of reviews. In the email interview, a Mikobnb representative disclosed to me that they have now served approximately 110,000 guests in the Krakow area since their founding in 2015 - which they believe to be more than any other private host on the platform anywhere on earth. Their properties range from one-bedroom studios with little more than a bathroom and a sink, to 200m2 apartments capable of hosting 20 guests at once. One of the platform anywhere on earth.

Berlin, Amsterdam, and Barcelona have often been cited as difficult cities to operate as an Airbnb host, due to more rigorous regulatory frameworks including 30 or 90-day limits on rentals for each property – forcing hosts to look for longer-term tenants and taking their listing elsewhere. This, for example, is the direction of travel that many full-time hosts in Budapest fear the city will take after legislation was passed in the summer of 2020 to allow number-of-day caps on short-stay properties. Though there are no such hosting time

¹⁵⁷ Jaroslaw Plichta, 'The Co-Management and Stakeholders Theory as a Useful Approach to Manage the Problem of Overtourism in Historical Cities – Illustrated with an Example of Krakow', *International Journal of Tourism Cities* 5, no. 4 (1 January 2019): 685–99, https://doi.org/10.1108/IJTC-12-2018-0107.

^{158 &#}x27;Airbnb Signs Landmark Partnership with the City of Krakow'.

¹⁵⁹ Noemi Łazowska, Email Interview with Noemi Łazowska - Erasmus Advisor at JustHome.pl/Mikobnb, Email, 28 July 2022.

^{160 &#}x27;Miko And Friends:)'s Profile', Airbnb, accessed 3 August 2022, https://www.airbnb.ie/users/show/8551077.

¹⁶¹ 'Not All Superheroes Wear Capes: Celebrating Our Superhosts Around the World', *Airbnb Newsroom* (blog), 10 December 2018, https://news.airbnb.com/not-all-superheroes-wear-capes-celebrating-our-superhosts-around-the-world/.

¹⁶² 'Mikohab: Profile'

¹⁶³ Łazowska, Email Interview with Noemi Łazowska - Erasmus Advisor at JustHome.pl/Mikobnb.

^{164 &#}x27;Airbnb: Miko and Friends:)'s Listings', Airbnb, accessed 3 August 2022, https://www.airbnb.ie/users/show/8551077.

¹⁶⁵ Falk and Yang, 'Hotels Benefit from Stricter Regulations on Short-Term Rentals in European Cities'.; Hoffman and Heisler, Airbnb, Short-Term Rentals and the Future of Housing.

 $^{^{\}rm 166}$ 'Emerging Europe; Budapest Becomes Latest City to Clamp down on Airbnb'.

limits in Krakow as in other European cities, not all of the apartments operated under Mikobnb remain on the platform year-round. During the interview, the employee disclosed that they voluntarily allocate approximately 30% of their property portfolio to international students that are studying in Krakow temporarily, for example with the Erasmus programme¹⁶⁷. For these properties, a unit would remain on the STHR market during the peak summer season (July to September, approximately 90 days), and are offered to international students during the academic year.¹⁶⁸

Given that international students also provide an important revenue stream to both the city and in some cases the University, there is certainly an argument to be made that these services are fulfilling demand -both in terms of student accommodation and tourist capacity - while keeping units free. This is certainly not the case with the traditional hotel chains or youth hostels: the former would be unwilling to let their unused rooms outside of the peak season to students, and the latter does not offer the amenities or privacy desired by the vast majority of medium-term tenants. This business model, in sharp contrast to the traditional holiday accommodation industry, is dynamic - with the ability to offer more demand for medium-term rents on short notice if tourism is affected. During the first and second waves of the COVID-19 pandemic in 2020-2021, tourism was stifled due to a closure of both external borders (to prevent importing the virus) and internal amenities (to prevent community spread). This meant that even the domestic tourism market in Poland, which had managed to soften the blow to tourism in later waves, had been restricted. Mikobnb relied heavily upon its experience in the student rental service to offer more apartments to international students that were exempt from travel restrictions, and thus could enter Poland legally and fill units in the city - highlighting their sustainable growth model. ¹⁶⁹

When asked about the biggest changes to the industry that have had an effect on the business, the representative from Mikobnb mentioned the rising cost of utility bills in recent years as the leading issue, rather than any kind of regulation that came from Krakow's agreement with Airbnb.¹⁷⁰ Indeed, the Mikobnb representative felt that hosting had become easier over time due to more effective tools offered by Airbnb as a platform, though it is unknown whether this has anything to do with the agreement between Krakow and the company.¹⁷¹

In Prague, concerned resident associations – as well as organised campaign groups – clearly continue to have the ear of policymakers, as noted by Mayor Zdeněk Hřib's attendance at a StopAirbnb event (See title page). ¹⁷² In this event, Hřib made very clear that his issue with the STHR sector is the lack of information that they provide to the city, rather than their presence. ¹⁷³ This is an illuminating piece of information given the development of the regulatory direction in the city, as well as in the ECASTHR. As mentioned by the

¹⁶⁷ Łazowska, Email Interview with Noemi Łazowska - Erasmus Advisor at JustHome.pl/Mikobnb.

¹⁶⁸ Łazowska.

¹⁶⁹ Łazowska.

¹⁷⁰ Łazowska.

¹⁷¹ Łazowska.

¹⁷² Plíhal, 'Ztratili Jsme Domov. Bytový Protest Proti Airbnb Navštívil Hřib, Mluví Už i o Zákazu | Aktuálně.Cz'.

¹⁷³ Plíhal.

Eurocities representative, the city of Prague has been particularly active in the alliance since 2020 – with the cities pushing the commission to negotiate with Airbnb to release some basic data to all cities.¹⁷⁴ In the case of my research, I have found that in the case of Prague, the rhetoric surrounding the over-tourism issue in the city is far more focused on the *type* of tourist that has been attracted to the city in recent years, rather than the number. For Prague, an influx of 'Alco-tourism' has led the city to focus on increasing the attractiveness of the region to a different demographic which is seen to be less of a nuisance to residents.¹⁷⁵ Given the critical importance of tourism to major cities in Europe, this is one way that cities are attempting to mitigate the impact of the increased supply of short-term holiday units. It appears the 'quality' of visitors is a particular area which Aguilera et al. appear to have overlooked when discussing the rhetoric regarding citizen mobilisation and regulatory response in these three cities, and feel this has led them to take the view that 'socioeconomic conditions', while not entirely disregarded, are not a major factor in regulatory response.¹⁷⁶

Another interesting finding from the longitudinal study on the evolution of Airbnb Regulation is the fact that long-term impacts of regulations on host numbers appear to be minimal in cities where strict regulations were implemented. The Evidence suggests that listing numbers are quick to recover, but only after a short-term shock to supply due to hosts pulling their listings – fearing that they may be breaking the law. This goes some way to show that regulation will not affect one of the key drivers of unhappiness from stakeholders in V4 cities – the number of properties taken off the market due to repurposing as Short-Term Holiday Rentals. If this information is known by city authorities, it could significantly affect their decision-making – given that they may lose revenue but with no tangible benefit for concerned stakeholders. This all suggests that the cities may have little interest in reducing the number of tourists, but rather maintaining the balance between stakeholders while maximising revenue. Given the fact that approximately 65% of Airbnb's listings are concentrated in just the districts of Prague 1, 2 and 3 (Prague is divided into 22 districts - see Annex 1), this would go some way to corroborate the idea that any effects on housing prices, in particular, are endemic to the central areas of these four cities – and evidently so in the case of Prague. This may mean that regulation would only affect housing availability in a small number of districts if strict controls were to come into place, and evidence from elsewhere suggests that these reductions in listings are temporary.

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¹⁷⁴ Lodewijk Noordzij, Interview with Eurocities representative, Online, 18 July 2022.

¹⁷⁵ Paul Tullis, 'After a Year Without Rowdy Tourists, European Cities Want to Keep It That Way', Bloomberg.Com, 17 August 2021, https://www.bloomberg.com/news/articles/2021-08-17/amsterdam-prague-and-barcelona-see-tourism-silver-lining-in-covid-lockdowns.
¹⁷⁶ Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European Cities'.

¹⁷⁷ von Briel and Dolnicar, 'The Evolution of Airbnb Regulation - An International Longitudinal Investigation 2008–2020'.

¹⁷⁸ von Briel and Dolnicar

^{179 &#}x27;InsideAirbnb: Prague'.

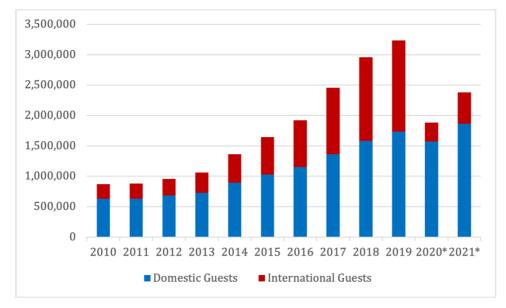


Figure 3: Hungary: Arrivals at other profit-oriented accommodation establishments (STHR)

Source: KSH – Hungarian Central Statistical Office¹⁸⁰

A factor I feel was overlooked from the sociological perspective undertaken in research conducted by Aguilera et. al was the impact of the *rate* of tourism change in European cities, rather than the overall number of 'tourist flows' as mentioned in their article.¹⁸¹ This is due to the fact that in their group of cities, Paris has historically always had one of – if not the – the highest number of tourist inflows in Europe, and thus the impact of the short-term holiday rental market may have had a much less significant impact on the rate of numbers. Indeed, it may be that the *rate* of change in tourism levels within Paris caused by the STHR market may be far lower than in Barcelona or Milan due to its high watermark, whereas the sharp rise in tourism levels in Barcelona may have led to more widespread opposition and regulatory change. This is a phenomenon that, when looking at the four cities in this study, may have played a major role in recent developments in regulatory attitude – with evidence from Hungary suggesting that STHR is a major contributing factor to tourism growth.¹⁸²

Agency and Influence

"One time I met a politician, and they said, 'you're ruining my city' and I said, 'can you tell me more'.

He said — let's turn on the internet — and then pointed to a television. So [through meeting with city representatives] it became very clear that people had fundamentally different amounts of understanding about Airbnb" 183

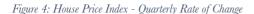
Airbnb CEO Brian Chesky – 2018

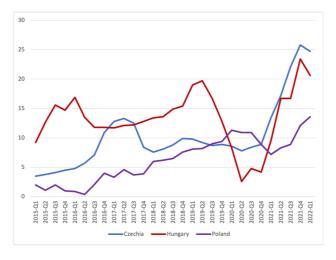
¹⁸⁰ '27.1.1.26. Capacity and Arrivals at Other Profit-Oriented Accommodation Establishments, 31 December'. For full data, see Annex III.
¹⁸¹ Aguilera, Artioli, and Colomb, 'Explaining the Diversity of Policy Responses to Platform-Mediated Short-Term Rentals in European Cities'.

^{182 &#}x27;27.1.1.26. Capacity and Arrivals at Other Profit-Oriented Accommodation Establishments, 31 December'.

¹⁸³ Brian Chesky, CODE 2018: Interview with Airbnb CEO Brian Chesky, interview by Kara Swisher and Dan Frommer, 30 May 2018, https://www.youtube.com/watch?v=nc90n-6dQRo.

Though a comical example, the reality is that the experience of the Airbnb CEO in a meeting with a policymaker highlights a number of important points. Clearly, the individual agency of policymakers in central European cities has appeared to have played a significant role in the speed at which regulation has been implemented, and perhaps even the nature of the regulation that has been proposed (whether combative or constructive). In the cases of Prague and Budapest, the clear interest of the policymakers within the city to regulate the sector has been followed by an increase in combative legislation proposals, even if they do not become law. Therefore, the most important impact on regulatory direction is likely the least complicated: the agency of those who make the decision, and their susceptibility to the lobbying effects on various stakeholders. However, as seen by the growth of the industry in the past decade and the sheer scale at which it operates in the four cities chosen for this study, this change in regulatory attitudes is by no means separated from the socioeconomic realities in their urban areas. It can also be seen that these attitudes now have the ability to spread transnationally through the rise of the ECASTHR. In the interview undertaken with a Eurocities representative, perhaps the most revealing piece of information provided was simply that Prague had recently become an active member of the group.¹⁸⁴ At the same time as this, the ECASTHR made the point that increased sharing of data is a priority for cities. 185 During this period, the mayor of Prague also attended an activist event discussing solutions for STHRs and debated the issue of hidden information from Airbnb. 186 Because of this combination of qualitative sources, I believe that a reasonable assumption can be made that the individual agency of Prague Mayor Zdeněk Hřib made a significant impact on regulatory approaches in Prague, but also within the ECASTHR. Similarly, the resident stakeholders that managed to successfully garner his attention through the organisation of an official event likely had a direct impact on regulatory diversity in European cities.





Source: Eurostat data browser187

¹⁸⁴ Noordzij, Interview with Eurocities representative.

^{185 &#}x27;Short Term Rentals'.

¹⁸⁶ Plíhal, 'Ztratili Jsme Domov. Bytový Protest Proti Airbnb Navštívil Hřib, Mluví Už i o Zákazu | Aktuálně.Cz'.

¹⁸⁷ 'Statistics | Eurostat'.

Given the increased attention to the regulation in Prague and Budapest, it can be assumed that socioeconomic factors may play a role in decision-making, as seen by the alarming increase in house prices in the above figure. Specifically, it appears that the *rate* at which the neighbourhoods within these cities are changing is driving a mobilisation of stakeholders who wish to improve their current situation – but legislators in some cities are more receptive than others. This would likely support a theory offered by Wilson et al., who argued that the *rate* of immigration increases can lead to an increased amount of nativism in a country. ¹⁸⁸ Though this theory is not directly transferable, there is logic behind the notion that change can be more problematic than the actual outcome for many stakeholders, and this could be the case for tourism levels in central European cities. ¹⁸⁹

As pointed out by Balampanidis et al. in their study of Airbnb in Athens, it is not yet credibly possible to draw definite conclusions with regard to the long-term impacts of the platform on Urban Environments. ¹⁹⁰ Regulations are by no means settled; an increase in remote workers will inevitably change the way the STR platform will be utilised, and both states and cities will adapt depending on various socioeconomic conditions. However, what is also true is that the debate and controversy surrounding Airbnb is having real-world effects on regulatory decisions by policymakers, as stakeholders from respective sides of the debate continue to lobby decision-makers.

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¹⁸⁸ Chris Wilson, Sanjal Shastri, and Henry Frear, 'Does the Scale or Speed of Immigration Generate Nativism? Evidence from a Comparison of New Zealand Regions', *Journal on Migration and Human Security* 10, no. 1 (1 March 2022): 1–22, https://doi.org/10.1177/23315024211057840.

¹⁸⁹ Chris Wilson, Sanjal Shastri, and Henry Frear, 'Does the Scale or Speed of Immigration Generate Nativism? Evidence from a Comparison of New Zealand Regions', *Journal on Migration and Human Security* 10, no. 1 (1 March 2022): 1–22, https://doi.org/10.1177/23315024211057840.

¹⁹⁰ Balampanidis et al., 'Informal Urban Regeneration as a Way out of the Crisis?'

Chapter VI: Findings and Concluding remarks

6.1: Findings

This thesis has made a number of comparisons concerning the regulatory attitude toward Airbnb in central European cities. It has revealed that those responsible for implementing regulation within each city have opted to take different approaches to the rise of the STHR market, despite the study selecting cities through a Most-Similar System in which the number of variables that were present in former comparative studies had been decreased significantly. It has been shown that these cities can be categorised into three general approaches to policy decisions in order to regulate the sector from a structural standpoint – Laissez Faire (in the case of Warsaw), collaborative (in the case of Krakow), and finally combative (in the cases of both Prague and Budapest).

In terms of the implementation of mitigatory measures, all four cities have put into place methods to curb some of the negative externalities said to be caused by overtourism facilitated by the rise of the STHR sector — and there is some evidence to suggest some convergence in this response category. Both Krakow and Warsaw had several long-standing legislative measures implemented to decrease the number of anti-social incidents. In contrast, Budapest and Prague have set about implementing similar legislation around public drinking to stem neighbourhood complaints. This is a clear example of how cities across Europe are trying to balance the interests of stakeholders while maintaining the economic benefits of tourism, leading to the first key finding of this thesis: 1) European cities are opting to legislate against the *impacts* of the short-term holiday rental market *in combination* with more robust structural legislative changes to appease as many stakeholders as possible.

As for legislation explicitly targeted toward STHR, this thesis disagrees with the notion offered by Aguilera et al. that the 'process of politicisation' is a primary driver in the diversity of STHR regulatory responses across Europe. Though this can certainly be a contributing factor and has been shown to be so in the western European cities looked at in their research, the situation in central Europe appears different. Since the initial positive response to Airbnb, driven by the clear economic benefits that come with the expansion of tourism supply as well as the revolutionary nature of the peer-to-peer 'sharing economy', tourist numbers have now exploded across the region and stakeholders have become increasingly vocal about the negative externalities that they feel they have experienced¹⁹¹. This leads to the second key finding of this thesis: While media attention and framing play an important role in narrative creation surrounding STHR, 2) Socioeconomic factors can indeed play a significant enabling role in facilitating change in regulatory attitudes in different cities. The evidence offered in this thesis is rather to do with the *rate* at which noticeable changes in the community or lived experience of stakeholders have occurred, such as a noticeable *increase* in tourism levels or real estate rises, rather than the *presence* of mass tourism or high property prices. This offers an explanation as to why both Polish cities have taken different approaches to the rise of STHR than Prague or Budapest – which are seeing population increases and faster house price rises than Krakow or Warsaw. The nature of a

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¹⁹¹ Plichta, 'The Influence of Overtourism and Short-Term Rental on the Real Estate Market on the Example of the City of Krakow'.

city itself, too, appears to have an impact on the response – even if many features are similar in the case of those chosen by this study. As Krakow has long been seen to be geared toward tourists, it appears to take a less invasive approach to regulation it deems necessary. This is despite facing many of the same challenges as other cities, and also becoming the first of the four to collaborate with other European cities in lobbying the Commission for increased powers. This may be due to its reliance upon the industry for economic growth, its experience dealing with high amounts of tourists relative to its size, and its cooperation with Airbnb with regard to negative externalities - unlike the other three urban areas. This is consistent with the analysis taken by Wilson et al. and their study on Nativism and Immigration – which I believe is relevant to discuss given the natural similarities between attitudes toward immigration and tourism – particularly concerning othering and the impact of narrative upon outlook. 192

In terms of how minor differences in experience can lead to a significant change in regulatory attitudes, this thesis finds that 3) The agency of individual policymakers in central European cities can go some way to cause divergence in regulatory developments. Both the mayors of Prague and Budapest have made their personal opinions clear on the subject of STHR regulation, and both are now mulling the enactment of policies that they feel will be the most beneficial to stakeholders. Indeed, Czech media have very recently reported that the implementation of new regulations in Prague is to come into place next year. 193 Given this, it must also be noted that the agency of an individual with the capacity to implement change can, of course, be impacted by countless variables (that are far beyond the scope of this study), however; 4) Both the scale of mobilisation, as well as the competency of the organisation from a given stakeholder, can have a significant impact on the success on lobbying efforts. This is true both on a city level, with groups such as StopAirbnb in Prague (Czech Republic) and the hotel industry in Budapest (Hungary), but also on a European level – as the answers given by the Eurocities representative in this investigation highlight.

The research design and methodological approaches adopted by this thesis have been slightly different to the few other studies in the category, though adopting a similar comparative analysis to look for explanations for diversity in regulatory attitude. Firstly, it considered wider socioeconomic factors as a possible influence – and found it to be a potential factor in policy development. Given my findings, I hope socioeconomic factors are taken into consideration in future research. Secondly, this study opted for two definitional differences. It opted to employ the term 'STHR' (short-term holiday rental) instead of 'STR' (short-term rental) – primarily to follow the same language as the Alliance, but also to account for possible future differentiation in regulation between those using the Airbnb platform for holidays, or short-term residential renters - to which I have termed 'STRR'. The paper used the term 'attitude' instead of 'approach' in the primary research question, chosen to enable discussion surrounding the differences between the opinion of policymakers and the actual regulation they had succeeded in putting into place. Thirdly, it paid attention to regulatory response that indirectly mitigates the effects of the STHR, and incorporates this into the wider city response. I also believe that adopting a most-similar systems design when selecting cities to compare has proved valuable, and could

¹⁹² Wilson, Shastri, and Frear, 'Does the Scale or Speed of Immigration Generate Nativism?'

^{193 &#}x27;Přísnější Pravidla. Ministerstvo Chystá Regulaci Airbnb v Česku'.

be repeated with other cities. Given this, I hope to have set out meaningful alterations to the research design as well as the methodological approach in this field, so that this research can be conducted and replicated throughout a number of cities and regions to better understand STHR policy responses.

6.2: Concluding remarks

To conclude, this thesis has undertaken a novel comparative analysis to explain the diversity in regulatory attitudes for STHRs using the cities of Prague, Krakow, Budapest, and Warsaw. By looking at the issue through the perspective of similar central European population centres, the comparison has demonstrated that the experiences of cities outside of well-researched areas (such as Berlin or Barcelona) can prove valuable to the current body of literature that is attempting to understand which factors are influencing the diversity in regulatory responses across the continent. Through conducting this research, this thesis has made a number of key findings that should prove useful to those who wish to build on the current body of literature on STHRs through one of the substantial number of areas that have yet to be discussed sufficiently.

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Annexes

I: Airbnb Market in Prague – InsideAirbnb Data¹⁹⁴

Neighbourhood	Number Of Listings	Percentage Of Total Listings	Entire Homes	Percentage Entire Homes
Praha 1	2,464	37.2%	1,985	80.6%
Praha 2	1,159	17.5%	879	75.8%
Praha 3	701	10.6%	542	77.3%
Praha 4	202	3.0%	135	66.8%
Praha 5	538	8.1%	412	76.6%
Praha 6	252	3.8%	195	77.4%
Praha 7	291	$4.4^{\circ}/_{\circ}$	237	81.4%
Praha 8	364	5.5%	286	78.6%
Praha 9	75	1.1%	57	76%
Praha 10	224	$3.4^{\circ}/_{\circ}$	156	69.6%
Praha 11	30	0.5%	19	63.3%
Praha 12	16	$0.2^{\circ}/_{\circ}$	10	62.5%
Praha 13	45	0.7%	29	64.4%
Praha 14	28	$0.4^{\circ}/_{o}$	17	60.7%
Praha 15	24	$0.4^{\circ}/_{\circ}$	16	66.7%
Praha 16	8	0.1%	3	37.5%
Praha 17	12	$0.2^{\circ}/_{\circ}$	9	75.0%
Praha 18	9	0.1%	3	33.3%
Praha 19	0	$0.0^{\circ}\!/_{\!o}$	0	$0.0^{\circ}\!/_{\! o}$
Praha 20	3	$0.0^{\circ}\!/_{\!o}$	1	33.3%
Praha 21	6	0.1%	4	66.7%
Praha 22	7	0.1%	4	57.1%

II: Quarterly house Price index in Hungary, Czechia, and Poland since Q1 2010.

(2015 Annual Price Index = 100)

Time	Hungary	Czechia	Poland
2010-Q1	94.69	95.20	104.60
2010-Q2	94.21	95.40	105.87
2010-Q3	93.75	95.10	106.02
2010-Q4	91.99	95.20	105.95
2011-Q1	91.73	95.40	105.88
2011-Q2	90.97	95.90	106.57
2011-Q3	89.75	95.30	105.41
2011-Q4	89.34	94.40	104.92
2012-Q1	90.21	93.90	103.50
2012-Q2	87.12	94.00	102.82
2012-Q3	86.39	93.80	101.41
2012-Q4	84.67	93.70	100.29
2013-Q1	84.95	93.60	97.70
2013-Q2	85.14	94.10	97.52
2013-Q3	85.26	94.00	97.43

¹⁹⁴ 'InsideAirbnb: Prague'.

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2014-Q1 85.75 95.00 97.15 2014-Q2 87.55 95.80 99.30 2014-Q3 89.19 96.60 98.66 2014-Q4 91.22 97.30 98.89 2015-Q1 93.60 98.30 99.06 2015-Q2 98.69 99.40 100.43 2015-Q3 103.06 100.60 100.63 2015-Q4 104.65 101.70 99.88 2016-Q1 109.39 103.00 100.00 2016-Q2 111.97 105.10 100.84 2016-Q3 115.20 107.70 102.73 2016-Q4 116.95 112.80 103.86 2017-Q1 122.24 116.20 103.33 2017-Q2 125.48 119.10 105.44 2017-Q3 129.23 121.20 106.50 2018-Q1 138.65 125.00 109.48 2018-Q2 142.52 128.70 111.95 2018-Q3 148.49 131.90	1 2012 04	04.10	02.00	07.40
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2019-Q2 170.54 140.60 121.10 2019-Q3 173.22 143.40 123.59 2019-Q4 171.88 146.40 127.06 2020-Q1 178.74 149.00 131.66 2020-Q2 174.90 151.50 134.31 2020-Q3 181.59 155.40 137.06 2020-Q4 179.08 159.50 138.42 2021-Q1 195.67 168.90 141.16 2021-Q2 204.12 177.60 145.50 2021-Q3 211.90 189.80 149.28	2018-Q4	152.32	134.40	116.11
2019-Q3 173.22 143.40 123.59 2019-Q4 171.88 146.40 127.06 2020-Q1 178.74 149.00 131.66 2020-Q2 174.90 151.50 134.31 2020-Q3 181.59 155.40 137.06 2020-Q4 179.08 159.50 138.42 2021-Q1 195.67 168.90 141.16 2021-Q2 204.12 177.60 145.50 2021-Q3 211.90 189.80 149.28	2019-Q1	165.03	137.20	118.34
2019-Q4 171.88 146.40 127.06 2020-Q1 178.74 149.00 131.66 2020-Q2 174.90 151.50 134.31 2020-Q3 181.59 155.40 137.06 2020-Q4 179.08 159.50 138.42 2021-Q1 195.67 168.90 141.16 2021-Q2 204.12 177.60 145.50 2021-Q3 211.90 189.80 149.28	2019-Q2	170.54	140.60	121.10
2020-Q1 178.74 149.00 131.66 2020-Q2 174.90 151.50 134.31 2020-Q3 181.59 155.40 137.06 2020-Q4 179.08 159.50 138.42 2021-Q1 195.67 168.90 141.16 2021-Q2 204.12 177.60 145.50 2021-Q3 211.90 189.80 149.28	2019-Q3	173.22	143.40	123.59
2020-Q2 174.90 151.50 134.31 2020-Q3 181.59 155.40 137.06 2020-Q4 179.08 159.50 138.42 2021-Q1 195.67 168.90 141.16 2021-Q2 204.12 177.60 145.50 2021-Q3 211.90 189.80 149.28	2019-Q4	171.88	146.40	127.06
2020-Q3 181.59 155.40 137.06 2020-Q4 179.08 159.50 138.42 2021-Q1 195.67 168.90 141.16 2021-Q2 204.12 177.60 145.50 2021-Q3 211.90 189.80 149.28	2020-Q1	178.74	149.00	131.66
2020-Q4 179.08 159.50 138.42 2021-Q1 195.67 168.90 141.16 2021-Q2 204.12 177.60 145.50 2021-Q3 211.90 189.80 149.28	2020-Q2	174.90	151.50	134.31
2021-Q1 195.67 168.90 141.16 2021-Q2 204.12 177.60 145.50 2021-Q3 211.90 189.80 149.28	2020-Q3	181.59	155.40	137.06
2021-Q2 204.12 177.60 145.50 2021-Q3 211.90 189.80 149.28	2020-Q4	179.08	159.50	138.42
2021-Q3 211.90 189.80 149.28	2021-Q1	195.67	168.90	141.16
	2021-Q2	204.12	177.60	145.50
2021 04 221 06 200 60 155 15	2021-Q3	211.90	189.80	149.28
2021-Q1 201.00 200.00 155.15	2021-Q4	221.06	200.60	155.15
2022-Q1 235.95 210.60 160.30	2022-Q1	235.95	210.60	160.30

III: '27.1.1.26. Capacity and Arrivals at Other Profit-Oriented Accommodation Establishments, https://www.ksh.hu/stadat_files/tur/en/tur0025.html.

Year	Domestic Guests	International Guests	Combined	
2010	633,243	236,221	869,464	
2011	631,482	245,993	877,475	
2012	685,180	268,722	953,902	
2013	727,044	333,568	1,060,612	
2014	891,880	471,683	1,363,563	
2015	1,028,992	613,744	1,642,736	
2016	1,153,051	767,540	1,920,591	
2017	1,362,373	1,093,265	2,455,638	
2018	1,582,891	1,373,274	2,956,165	
2019	1,735,821	1,499,447	3,235,268	
2020*	1,573,087	311,409	1,884,496	
2021*	1,865,883	514,012	2,379,895	

 $IV: Praha\ demographic\ trends.\ ^{195}\ 'All\ about\ Territory\ VDB',\ accessed\ 5\ August\ 2022,\ https://vdb.czso.cz/linearitory\ August\ 2022,\ https://vdb.czso.cz/linearit$

Year	Population	Males	Females	0-14	15-64	65+	Average
2012	1,246,780	605,484	641,296	170,253	856,494	220,033	41.9
2013	1,243,201	602,613	640,588	175,353	842,806	225,042	42.0
2014	1,259,079	610,376	648,703	182,500	846,961	229,618	42.0
2015	1,267,449	614,669	652,780	188,832	844,932	233,685	42.0
2016	1,280,508	621,565	658,943	194,897	846,980	238,631	42.0
2017	1,294,513	629,550	664,963	201,232	850,044	243,237	41.9
2018	1,308,632	638,009	670,623	206,668	854,866	247,098	41.9
2019	1,324,277	647,286	676,991	210,847	862,264	251,166	41.9
2020*	1,335,084	653,654	681,430	212,824	869,149	253,111	42.0
2021*	1,275,406	623,121	652,285	203,472	820,761	251,173	42.3

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 $^{^{\}rm 195}$ 'All about Territory VDB'.