



Governing Sharing Cities

A comparative case study of nine European cities

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Summary

As the foci of (digital) sharing start-ups and practices, cities are at the centre of epistemic and political debates about the sharing economy. All over the world city governments are seeking to respond strategically to the emergence and disruptive impact of the sharing economy. The ambiguous nature of the sharing economy leaves city authorities with urgent and complicated governance questions. The lack of empirical research into political activities to govern the sharing economy limits the space for a rational governance debate. This thesis addresses this lack by inquiring the policy discourse and governance actions of nine European cities with strategic plans to address the sharing economy. Currently, cities govern the sharing economy with a patchwork of different policy actions. To uncover how and why city authorities govern the sharing economy differently this thesis performed a comparative case study. Insights from transition theory; urban- and multi-level governance; and evolutionary economy have been combined to develop a guiding conceptual model. The results show that city governments frame different challenges and opportunities of the sharing economy to establish a rationale for governance actions. These discursive frames are shaped by national traditions, prior urban policies and political decisions, past socio-cultural movements, unplanned historical events and the current state of a city's economy and political context. The distinctive historical pathways together with the current city-specific context induce city authorities to frame the sharing economy differently. Additionally, city governments operate within a multilevel governance system, including vertical (e.g. higher government) and horizontal (e.g. global networks) interactions. The interdependencies of the multi-level governance context create significant differences in governance capacity to address the sharing economy. As such, urban governance of the sharing economy is concluded to be a path and place-dependent process causing cities to take different actions, roles and approaches to govern the sharing economy.

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1. INTRODUCTION

1.1. Empirical problem and research question

Worldwide, cities are becoming the prime locus of society. More than half of the world's population currently lives in cities and this trend is expected to continue (World Bank, 2016). These demographic changes influence the way in which society is organized. On the policy level, cities are increasingly positioned as central site of political action (McCornick et al., 2013). Nevens et al. (2013) describe cities as “*the operational units in which concrete actions can be envisaged, designed, (politically) facilitated and effectively rolled out.*” At the same time we are facing grand societal challenges such as global warming, aging populations, congested traffic and resource depletion (World Bank, 2016). Although these challenges transcend nations and continents, the slow pace of national and global action shifted the focus towards cities (Nevens et al., 2013). With the ability of city governments to form visions and strategies in accordance with scientific knowledge, and initiate actions locally, cities are increasingly perceived as an essential site when it comes to tackle these challenges (McCornick et al., 2013;).

In the past few years, several scholars started to perceive *the sharing economy* as a potential solution to global and urban challenges (Belk, 2014; Botsman & Rogers, 2010; Schor, 2014). The sharing economy, in which technology facilitates the sharing of underutilised capacity (such as goods, services, skills etc.), is used as an umbrella term for a variety of platforms and initiatives in different sectors (Hamari, et al., 2015). For profit and not-for profit sharing platforms such as Peerby, Blablacar, Airbnb and Airdnd facilitate the sharing of un-used assets such as tools, cars, rooms and meals. While reaching beyond cities, the sharing economy is especially gaining attraction in urban areas due to the existence of a large variety of potential sharers that live in close proximity (Cohen & Muñoz, 2015). Major cities such as Seoul, Milan and Amsterdam declared their strategic aim to become so-called *Sharing Cities*. These cities are seeking to respond strategically to the emergence of the sharing economy by stimulating the transition to a sharing infrastructure, society and economy (McLaren & Agyeman, 2015).

At the same time, the sharing economy has emerged as an innovative exchange model that is disrupting traditional market exchanges (Belk, 2014; Guttentag, 2015). The emergence of platforms such as Airbnb and Uber are associated with disputed practices and attempts to avoid existing local regulations (Woo & Bales, 2016). The exponential growth of a few large commercial sharing platforms, the growing number of economic sectors affected, and conflicting interests among involved stakeholders have made the sharing economy a contested topic full of public controversies and legal questions (Finck & Ranchordás, 2016).

Currently, cities are governing the sharing economy with a patchwork of different policy approaches, varying from adopting stringent regulatory provisions to active government-led programmes to facilitate sharing practices (McLaren & Agyeman, 2015). These political activities are of specific interest because the discourse on the sharing economy essentially focuses on new business models, consumers and civil society, while leaving political and governmental actors largely out of the discussion and research scope (Heinrichs, 2013). Additionally, the diversity of approaches across Europe are challenging the consolidation of the Single Market and urged the European Commission to develop non-binding guidelines with the aim to foster a unified approach concerning the sharing economy (Goudin, 2016). Hitherto, it remains unclear why cities take such different approaches when it comes to the sharing economy. Therefore, this thesis addresses the following research question:

RQ: How and why do city authorities govern the sharing economy differently?

1.2. Theoretical approach and contribution

In prior research on the sharing economy, scholars reached out to transition theories to better understand the topic, and the surrounding discourse (Heinrichs, 2013; Martin, 2016). From this perspective, the sharing economy is described as a niche of socio-digital experiments, with a “paradoxical potential” to stimulate sustainable practices and reinforce current unsustainable practices. There is a considerable need for (scientific) exploration on how the transition of the sharing economy niche could be steered towards sustainable outcomes (Gruszka, 2016; Martin, 2016). An urge to understand, and also stimulate transitions has contributed to a proliferation of academic and policy research. Transition scholars analyse how transitions come about (e.g. Geels, 2002; Rotmans, et al., 2001) regularly in sectors such as energy (Verbong & Geels, 2007), mobility (Nykqvist & Whitmarsh, 2008), and water (Brown, et al., 2009) with an increasing focus on governance, institutional issues (Smith, et al., 2005) and discourse analyses (Geels, 2014; Martin, 2016). However, the spatial scale often remains implicit or neglected in transition studies (Truffer et al., 2015). This study responds to this identified gap, by enriching the discourse-focused strand of transition research with the city as the space of exploration. It also adds to the nascent literature on the sharing economy (Cheng, 2016).

Understanding the role of city governments from a transitions perspective requires to take the different scales- and capacities of city authorities to take action into account (Bache & Flinders, 2004). In other words, understanding the capabilities of city governments to steer transitions into a favourable direction requires an understanding of actors at regional, national and supranational scales of action and the variety and coalitions of city-level actors (e.g., knowledge institutes, third sector, entrepreneurs). These actors influence urban governance both intentionally and unintentionally (Brenner, 2004). Therefore, this thesis analyses the role of city authorities through the lens of urban- and multi-level governance theory (Bache & Flinders, 2004; Bulkeley, 2010; Kern & Bulkeley, 2009). To better understand why city governments address and govern the sharing economy differently, this thesis draws on theoretical insights and assumptions from evolutionary economics. In the field of evolutionary economic geography, researchers have theorised how regions develop new growth paths, and why regions differ in their ability to do so (Boschma & Frenken, 2006). The concept of path dependency is used to understand how a city’s current economic, socio-cultural and political development path is shaped by its historical conditions (Musterd et al., 2011). Cities have distinctive historical pathways which will help to understand variation in the sharing economy discourse and governance.

This thesis thus combines three literature strands to develop a theoretical framework of urban governance: transition literature (Hodson & Marvin, 2010; Rotmans, et al., 2001), urban- and multi-level governance theory (Bache & Flinders, 2004; Bulkeley & Betsill, 2005) and evolutionary economic geography (Boschma & Frenken, 2006; Martin, & Sunley, 2006).

1.3. Research design

To uncover why city authorities govern the sharing economy differently, this thesis uses an explorative comparative case study design. The different actions and roles city governments employ to govern the sharing economy are regarded as the *dependent variable*; depending on discursive framings of city authorities. Both variables are contingent on the multi-level, path dependent context, including European and national policies, national constitutions, party systems, the local economy and political culture. The research question is divided into the following four sub questions:

1. *How do city authorities frame the sharing economy?*
2. *How do city authorities govern the sharing economy?*
3. *Why do city authorities frame the sharing economy differently?*
4. *Why do city authorities govern the sharing economy differently?*

A systematic desktop study was performed to identify which European cities have strategic plans or policies to govern the sharing economy. As such, the city of Amsterdam, Berlin, Bremen, Antwerp, Ghent, Copenhagen, Vienna, Barcelona and Milan were selected. The comparative analysis was guided by the theoretical framework and data was derived from public sources (e.g. strategy- and policy documents), grey literature and thirteen (skype) interviews with city authorities and local sharing economy experts.

1.4. Relevance

This study is both relevant for its empirical insights and the theoretical contribution. Cities all over the world are faced with the sudden growth and disruptive effects of the sharing economy. The contradictory framings associated with the topic leave city governments with pressing governance questions. Yet, scholars that have studied the sharing economy have not researched the role of city governments (Heinrichs, 2013; Martin, 2016; Gruszka, 2016). This thesis adds to the lack of empirical research into dominant policy discourses and (strategic) governance actions which is both urgent and important to create space for a rational governance debate.

This study contributes to theory by combining insights from multi-level governance, evolutionary economics and transition theory. In particular, by performing contextual-sensitive research in various urban contexts to develop a comparative understanding of the differences between urban contexts. This study conceptualizes how city authorities can use their governing capacity, develop discursive framings, strategic plans and policies to govern an emerging and paradoxical field of niche innovations. Therefore adding a city-level governance perspective to the nascent debate in the transition literature (Hodson & Marvin, 2010). As is demonstrated in this thesis, the developed framework proves useful in understanding urban governance of the sharing economy. Both the empirical and theoretical insights obtained in this study can be used by academics, governmental authorities and other actors engaged in the sharing economy.

1.5. Outline

This thesis is structured as follows. The background section elaborates on the emergence of the sharing economy in cities. The theory section describes the insights of the three different literature strands which led to the development of the conceptual model. The methodology section delineates the design of the research, the data selection and -collection process, as well as the coding and data analysis methods. The results section presents the empirical description of the selected cases, the comparative analysis and is structured according to research questions and propositions. In the conclusion section the main insights and the answer to the research question is given. In the discussion section the limitations, avenues for further research, theoretical contributions and policy recommendations are discussed.

2. BACKGROUND

2.1. The emergence of the sharing economy

At a time of many changes, including globalization, deregulation, de-centralization and privatization, cities are gaining more importance in terms of solving global challenges (McCormick et al., 2013; Sassen, 2011). Cities were once merely expected to provide services such as water and energy provision but today's cities need to be attractive, sustainable, smart, resilient and innovative from local, national and international perspectives (Jong et al., 2015). In the book *'If Mayors Ruled the World'* Benjamin Barber emphasizes that the world would be better off when governed by city governments. Cities are the sites where global governance challenges become tangible, urgent and practical and thereby constitute a frontier space in responding to urban and global challenges with various types of governance (Barber, 2013; Sassen, 2011). This can be observed in the strategic aims to govern the sharing economy.

Sharing is not a new phenomenon, as a matter of fact "*cities have always been about shared space, human interaction and encounter, and the exchange of goods and services through marketplaces and moneylending*" (McLaren & Agyeman, 2015). However, the development of ICT has enabled old and new forms of sharing on a much larger scale. In times of economic crisis, environmental degradation, resource shortages and movements against the Western consumer culture, the amount of sharing platforms and the popularity of the sharing economy increased rapidly (Ranchordás, 2015). Recent technological advancements support peer-to-peer collaboration, effectively connects strangers and enable the build-up of trust through online reviews (Belk, 2014; Hamari et al., 2015). As a consequence, the transaction costs of sharing exchanges have dropped enormously and sharing practices emerged as viable business models (Lamberton & Rose, 2012).

The sharing economy has been addressed in a large variety of fields and in each field a slightly different term and definition is used. The terms sharing economy, collaborative economy, gig-economy, collaborative consumption and on-demand economy are often used interchangeably. The choice of terminology and definition highlights the set of aspects an author or researcher is focussing on. Botsman (2013) defines the sharing economy as "*an economic model based on sharing underutilized assets from spaces to skills to stuff for monetary or non-monetary benefits.*" This definition has been criticized for being too broad since it includes marketplace exchanges, gifts and sharing interchangeably (Belk, 2014). Schor (2014) eliminates the business-to-consumer (B2C) part included in Botsman's definition by proposing the following definition: "*an economic activity that is Peer-to-Peer, or person-to-person, facilitated by digital platforms*". Meelen and Frenken (2015) only include underutilized assets in their definition: "*consumers or firms granting each other temporary access to their underutilized physical assets (idle capacity), possibly for money*". According to them assets can be unutilized while people, providing their skills and services, cannot be underutilized.

All of the above-mentioned definitions are partially appropriate, but there is not one, agreed upon, definition that fully captures the heterogenous sharing economy concept (Belk, 2014). Most scholars mainly focus on consumers, new business models and to a lesser extent, on the roles of governments and city authorities, and their power relationships within the sharing economy (Dredge & Gyimóthy, 2015). In this thesis, a precise definition is not given, rather the different ways city governments define and frame the sharing economy are analysed. The term sharing economy is mostly adhered to as it is the predominant concept used in the media and the academic literature (Martin, 2016).

2.2. The formation of *Sharing Cities*

The term *Sharing City* emerged to express the marriage of urban development with the sharing economy (Agyeman et al., 2013; Finck & Ranchordás, 2016). Sharing City Seoul is a popular example of an ambitious government-led program focused on transforming Seoul into the first sharing city of the world (Cohen & Muñoz, 2015). The city's strategy is based on three principles: facilitate citizen participation in the sharing economy, provide support to sharing start-ups and adjust laws to support the growth of the sharing economy (Cohen & Muñoz, 2015). Besides these goals, the city takes an active role by opening up municipal buildings and data sets for public use and creating tool- and book libraries in different areas of the city (McLaren & Agyeman, 2015).

In addition to cities aspiring to become a sharing city, cities all over the world are faced with the diverse set of potentials and challenges the sharing economy poses (Finck & Ranchordás, 2016). City governments are currently experimenting with different governance approaches, varying from active government-led programmes (e.g. initiating and coordinating public-private partnerships, stimulating experiments and encouraging discussion of where the sharing economy should be heading) to implementing strict regulations to hinder the operations of disruptive commercial sharing platforms (McLaren & Agyeman, 2015). The novelty and ambiguous nature of the sharing economy leaves city governments with complicated questions on how to politically approach the phenomenon (Finck & Ranchordás, 2016).

3. THEORETICAL FRAMEWORK

3.1. Transitions literature

Over the past two decades, researchers in the field of transitions theory have developed theories to explain how economies and societies are and could be transformed. Transitions are complex, long-term societal processes involving fundamental changes in culture, needs, practices and structures (Kemp et al., 2007). Examples of transitions are the shift from horse-drawn carriages to automobiles (see Geels, 2005) and from sailing ships to steamships (see Geels, 2002). Researchers have particularly focussed on the processes of transformative change by which societies could become more sustainable (Markard et al., 2012; Smith et al., 2010). A popular and widely applied theoretical model within transition theory is the Multi-Level Perspective (MLP) (Geels & Schot, 2007; Geels, 2012; Smith et al., 2005). The MLP explains transitions as originating from the interaction between multi-dimensional developments at three analytical levels: landscape, regime and niche level (Geels, 2002). The landscape level consists of deeply embedded structures which are generally slowly changing, such as societal values and culture. The regime level makes up the totality of prevailing sectors, practices, production and consumption systems, scientific knowledge, skills and procedures, and infrastructures as well as institutions serving the current needs in our society. The niche level is referred to as “*a protective space*” in which radical innovations emerge and can develop (Smith & Raven, 2012). The core idea is that within the niche internal momentum is created. For example, through support of powerful groups and learning processes, changes at the landscape level put pressures on the regime and destabilization of the regime provides windows of opportunity for the diffusion of niche-innovations (Geels, 2014). Drawing on the transition literature, Martin (2016) conceptualizes the sharing economy as a niche: “*a field of related innovations (i.e. sharing economy platforms) and the intermediaries who support and promote the development of these innovation (i.e. sharing economy advocates and investors)*”. From a transition perspective, this means that the sharing economy niche has the potential to transform current regimes that serve our needs. The exponential growth of sharing platforms, such as Airbnb and Uber are already disrupting prevailing market exchanges in the tourism and transport sector. Digital technologies seem to enable these platforms to outpace regime resistance in cities all over the world (Martin, 2016).

While the MLP is a popular model to analyse transitions, there is critique on it as well. An important criticism is the lack of attention to power and politics to implement guiding policies and manage transitions on an urban scale (Geels, 2014; Hodson & Marvin, 2010; Smith et al., 2005). This is remarkable, since city governments are increasingly trying to respond strategically to global pressures and attempt to “*purposively reconfigure socio-technical regimes at the scale of the city*” (Hodson & Marvin, 2010). It remains unclear what the multi-level perspective can contribute to understand urban transitions since the role of space is largely neglected.

3.1.1. Discursive frames, strategic plans and policy objectives

Researchers recently started to examine the role of discourse in steering transition processes (Geels, 2014; Hermwille, 2016; Smith & Raven, 2012). The term discourse is conceptualized as “*an ensemble of ideas, concepts and categories through which meaning is given to social and physical phenomena, which is produced and reproduced through an identifiable set of practices*” (Hajer & Versteeg, 2005). The sharing economy discourse can be considered as the collective expression of ideas that give meaning to- and even shape the sharing economy niche developments (Martin, 2016). Within transition theory two discourse approaches emerged, one focussing on the role of narratives and the other on discursive framing. Since the sharing economy is a highly disputed and ambiguous concept (Gruszka, 2016; Martin, 2016), discursive framings are expected to play an important role in suggesting specific desirable ways in which this field should develop. In prior research, Martin (2016) examined how discursive framing strategies, are employed by niche and regime actors to empower and resist the development of the sharing economy niche. Framing is defined as: “*the deliberative, communicative processes through which actors seek to position, mobilise a consensus around, and shape the development of, the sharing economy*” (Martin, 2016). He identified four frames that empower (1-4) and two that resist (5-6) the growth and development of the sharing economy niche: (1) an economic opportunity; (2) a more sustainable form of consumption; (3) a pathway to a decentralised, equitable and sustainable economy; (4) creating unregulated marketplaces; (5) reinforcing the neoliberal paradigm; and, (6) an incoherent field of innovation (Martin, 2016).

Just as regime and niche actors, city governments can participate in discourse to advance a specific framing, to define problematic or desirable consequences and establish a rationale for taking action and address the topic (Healey, 2006; Kivimaa, & Mickwitz, 2011). Discursive frames can create systems of meaning which organise collective understanding, interpretations and mobilise attention (Woolthuis et al., 2013). With the use of discursive frames city authorities can influence their context and negotiate favourable conditions. If frames resonate with the values and concerns of citizens, key investment agencies, and the private sector, they create space for action (Woolthuis et al., 2013). Especially when new phenomena are framed as solutions to commonly accepted problems, support and legitimacy for new or changed policy objectives and urban governance action is created.

Additionally, city authorities increasingly develop strategies to create collective power to guide transitions in a favourable direction (Hodson & Marvin, 2010). In the smart city literature, strategy-making is described as pivotal to stimulate a transition, because a popular strategy makes a city well-known to the world and act as a magnet to attract new resources, investments and talent (Nam & Pardo, 2011; Vanolo, 2013). A strategy is also a public promise that a city government makes to urban inhabitants and external actors or organizations. Urban strategies that resonate with the understanding, values and concerns of many city actors, have the highest potential to inspire them and create support and legitimacy for governance action (Healey, 2006).

Framings and strategic plans may lead to a political agenda and new or changed policy objectives (Healey, 2006). Policy objectives are at the heart of urban political choice and emerge from a complex interplay of multiple actors across various levels of policy, including informal governance actors engaged in the collective process of discussion and negotiation (John, 2003). They do not emerge in isolation from other policies. In fact, mutual interdependency exists and interactions happen across policies at different levels, domains and between instruments over time (Kay, 2006). With discursive framings and strategies city governments seek to develop coalitions and mobilise power to reach arenas where significant authoritative power is exercised (Hodson & Marvin, 2010). Differences in governance actions are to a large extent explained by the underlying policy objectives (Pierre, 1999). City governments enter governance with an agenda, specific framings and get involved in governance to attain their developed plans and goals.

Governments can play a wide variety of different roles in steering transitions, ranging from being simply absent to being the key coordinator of public and private action (Rotmans et al., 2001). The extent to which city governments are able to steer transition with discursive framings, strategic plans and policy objectives depends on the context city authorities are embedded in. *“The structuring of governance—the inclusion or exclusion of different actors and the selection of instruments—is not value neutral but is embedded in, and sustains, political values above and beyond the city government”* (Pierre, 1999). Urban governance of the sharing economy should therefore not be analysed as an act of conscious design, instead it must be understood as a situated practice with its outcome deeply structured by the specificities of the city.

3.2. Urban and multi-level governance

In the late twentieth century, the sphere of government was perceived as separate from the market and civil society (Healey, 2006). However, both political research and practical examples highlight that governance is much more integrated (Kearns & Paddison, 2000). Policy communities, in which government actors work together with representatives of business, voluntary groups and interest associations, have blurred the boundaries between public and private sectors (Fischer, 2003). Nowadays, governance activity is perceived as driven by, and executed through, a nexus of complex interactions, linking the spheres of the formal government, the market and civil society in diverse ways (Healey, 2006). While there are many different perspectives and interpretations of the term governance, generally speaking it refers to processes through which collective goals are defined and pursued in which the government is not the only actor (Betsill & Bulkeley, 2006). The development of an urban governance perspective involves recognizing the roles of nongovernmental actors as well as the role of higher level governments, and the complex interactions between them, in the process of governing. These actors influence urban governance actions both intentionally and unintentionally (Brenner, 2004). A governance approach is particularly relevant in the context of global issues such as the sharing economy, where governance actions are various and include institutions and processes that transverse scales as well as networks of actors (Betsill & Bulkeley, 2006). Applied to the sharing economy, urban governance refers to the ways in which public, private, and civil society actors - hereafter referred to as city actors - collectively articulate objectives, exercise influence and mobilize forces to govern the sharing economy.

Despite the fact that nongovernmental actors play an increasingly important role in governance processes, their actions still need to be steered. Governance need to be led towards constructive and effective coordination by the government (Capano et al., 2015). The government is not just one of the many actors in governing urban and global issues such as the sharing economy. Instead governments are a core element of governance, and may choose to allow a higher degree of freedom to other nongovernmental actors with regard to the objectives to be pursued and the means to be employed (Betsil & Bulkeley, 2006; Capano et al., 2015; Pierre, 1999). Although governance at the city-level cannot be reduced to the city government, understanding the role of city governments is essential for an understanding of the variety in urban governance of the sharing economy.

In the field of urban climate governance, the multi-level governance concept has proven to be helpful to examine how climate change is governed by city authorities within and across different governance scales (Bulkeley & Betsill, 2005; Bulkeley, 2010; Corfee-Morlot et al., 2011; Kern & Alber, 2009). The multi-level governance concept emphasises the connections and interdependency between vertical and horizontal tiers of governance (Bulkeley, 2010). Vertical governance refers to the way city governments interact with- and are dependent on higher governing bodies at regional, national, European and international scales. Horizontal governance refers to how local authorities collaborate horizontally with other city authorities, increasingly across borders and continents (Bulkeley, 2010). To understand the capacity of city governments to- and how cities govern global issues, the governing capacity and -roles are commonly discussed concepts (see for example Burch, 2010 and Bulkeley, 2010).

3.2.1. Governing capacity

Bulkeley (2010) refers to various factors that determine a city governments' governing capacities, including the city governments' internal organisation and the available resources and rules. City governments' internal organisation dynamics include how and where sharing economy rules and resources are located (i.e. in one or several departments) and whether a clear division of responsibility exists within departments and sectors. Since the sharing economy is a crosscutting issue (Finck & Ranchordás, 2016), it requires the engagement of multiple departments (e.g. mobility, tourism, economics). Some cities might install a sharing economy manager to effectively coordinate between departments. The internal resources and rules can enable or constrain the development and implementation of strategic plans, policies and governance actions (Bulkeley, 2010; Burch, 2010). Examples are the internal access to sufficient human and financial resources, as well as useful information, expertise and knowledge on how to address the sharing economy. To acquire these resources, city governments can organize trainings, hire new personnel or learn from- and draw upon resources of other city departments (Lenhart, 2015).

The multi-level governance system entails “*differing sets of power relations operating in the relationships between these scales of action and these power relations between different scales of action are variably constituted and organised in respect of different cities*” (Hodson & Marvin, 2010). In other words, city government's resources and rules are dependent on multilevel spatial and institutional configurations. These institutional frameworks and the specific constituted power relations define the scope of urban governance action (Pierre, 1999). The ability of city governments to enact and govern global issues such as the sharing economy is influenced by its relative autonomy with regard to higher governing levels (Bulkeley, 2010).

In addition to the city's internal organisation, resources and rules, city governments can draw on rules and resources of other authorities to develop framings and realise their strategic plans and policy objectives (Bulkeley, 2010). Drawing on the rules and resources of other authorities refers to how or to what extent city authorities use resources from other vertical or horizontal governance levels. Vertically, higher levels of government may both constrain and provide opportunity structures for urban governance. National and European authorities may support city governments by providing financial subsidies, initiating pilot projects, or offering technical guidance to city authorities (Kern & Bulkeley, 2009). Higher level policies and laws also guide framings, strategies, policy objectives and governance actions of city governments (Bulkeley, 2010). While vertical governance often refers to how higher levels of decision-making influence urban governance action, it also includes the role and actions of city authorities to influence and shape national or international governing bodies to adapt their strategies and policies (Corfee-Morlot et al., 2011).

Horizontally, collaboration and dialogues within city networks may promote city authorities to learn and share resources (Kern & Alber, 2008). Increasingly, cities are forming networks to join forces to solve global issues (McCornick et al. 2013). The UN Settlements Program, C40 cities and ICLEI – Local Governments for sustainability, are examples of global networks that facilitate cities to learn and collaborate in order to address sustainability issues. Such global networks provide links for the sharing of knowledge about best practices and different forms of urban governance in response to global challenges (Bulkeley, 2010). Learning from other cities is crucial for city governments to strategically address novel challenges (Martin & Simmie, 2008).

City governments can also draw on the resources of citizens and local stakeholders (Bulkeley, 2010). Citizens and local stakeholders can present valuable insights, expertise and other capacities. Collaboration with citizens and local stakeholders in governance processes ensures that local expertise is not overlooked. Moreover, co-creating policies promotes the diffusion of a city's strategy and fosters helpful citizens behaviour (Ansell & Gash, 2008). This way, drawing upon resources from citizens and local stakeholders extends the governing capacity of cities.

Thus, according to the multi-level governance literature, city governments do not operate in a vacuum, but within a multilevel system, including vertical (e.g. higher government) and horizontal (e.g. city networks) interactions, which influence a city's governing capacity (Bulkeley, 2010; Burch, 2010). Given the complexity of the sharing economy, vertical- and horizontal support (e.g. financial subsidies, legal advice, best practices) and external expertise from local stakeholders such as scientific institutions, are expected to be important to create governing capacity to address the phenomenon.

Although, the multilevel governance model "*highlights the complexity of the state and the reduced ability of national level state institutions to control the policymaking process*" (Bulkeley & Betsill, 2005). National politics and state traditions remain one of the most powerful factors in explaining variation in urban governance actions (Pierre, 2005; Corfee-Morlot et al., 2011) The national level strongly influences different aspects of urban governance, including national politics and strategies of local resource mobilization. Even in policy sectors in which significant power is allocated to cities, city authorities tend to follow national political and ideological ideas (Pierre, 1999). It is thus important to acknowledge the significance of the national context within which urban governance is embedded.

3.2.2. Governing roles

Drawing on the multi-level governance literature, urban climate governance scholars distinguish four different roles city governments can take to govern climate change, namely the consumer, enabler, provider and regulator role (Bulkeley & Kern, 2006; Kern & Alber, 2009). These governing roles represent different modes and methods in which city authorities address climate change, working internally in their own organisation, as well as collaborating externally with stakeholders, citizens and other authorities. Most city authorities demonstrate a combination of different roles. *Table 1* provides an overview of the governing roles.

Table 1. Overview governing roles

Role	Mode	Explanation
Consumer	Self-governing	How local authorities manage their own activities including consumption.
Enabler	Governing through enabling	How city governments coordinate or facilitate partnerships with and between private stakeholders, or encourage citizens and stakeholder engagement.
Provider	Governing by provision	How city governments provide infrastructure or other city services.
Regulator	Governing by authority	How local authorities exploit their legal powers to manage and govern specific issues.

To summarize, the governing capacity and role(s) city authorities take are influenced by the multi-level governance system. *Figure 1* illustrates the multi-level governance system¹.

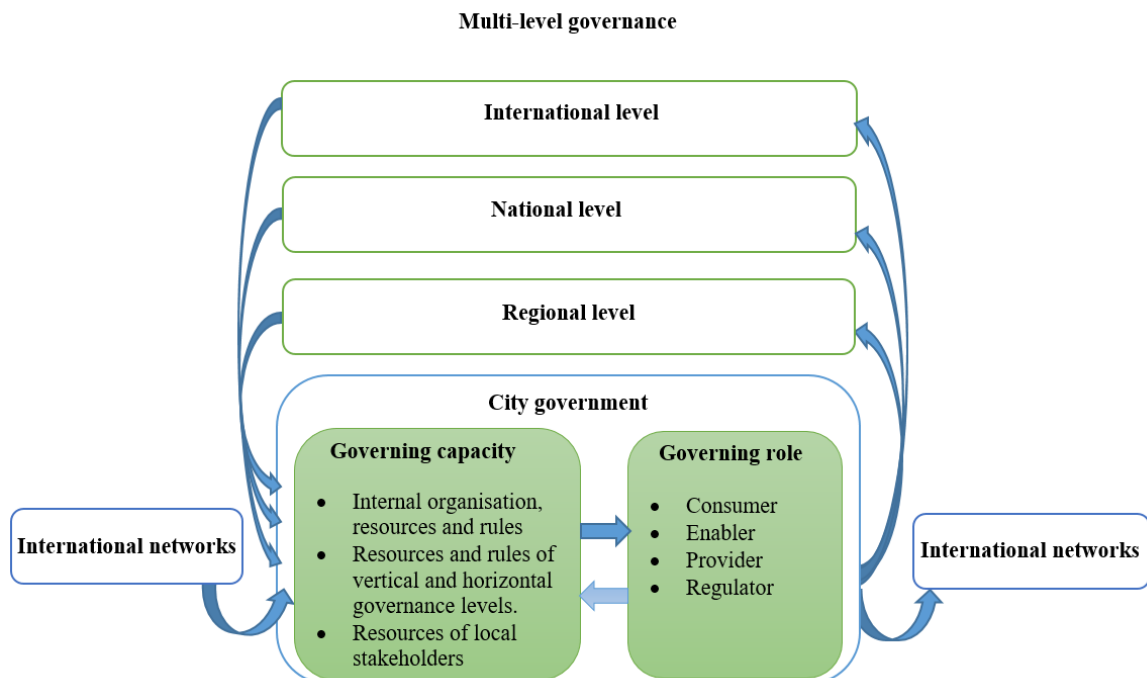


Figure 1: Multi-level governance framework

¹ It is important to keep in mind that the multi-level governance framework is developed to study urban climate governance. Since addressing the sharing economy is different than climate change, governing capacities and -roles are also expected to differ. The multi-level governance approach is therefore merely used as a guiding framework.

3.3. Evolutionary economic geography

In the evolutionary economics literature, the notion of path dependency has been introduced to account for the influence of past events that set the stage for possible paths of a firm, industry, technology or city in the future (Wolfe, 2009). A path dependent process is one whose outcome evolves as a consequence of the process's own history. The concept is very general in scope, referring to developmental sequences and social dynamics, not only in the field of economics but also in anthropology, political science and sociology studies (Martin & Sunley, 2006). The notion of path dependence should not be understood as historical determinism in which the present is totally derived from the past. Instead it emphasises the context-specific, locally contingent nature of self-reinforcing development, particularly the quasi-fixedness of geographical patterns of institutional forms and economic structures (Martin, 2010).

Faced with changes, policy makers often have a strong tendency to use or adapt solutions that have been used in the past (Couch et al., 2011). In other words, policy making is highly path dependent (Wolfe, 2009). New policies are adopted in a context of pre-existing policy mixes. The past policy discourses shape the design of future policy interventions - regulatory instruments, programmes of investment and management (Uyarra, 2010). Prior practices and directions may resist new discourses or create a valuable basis for further development.

The laws, regulations and policies that form the political context are also referred to as formal institutions. Formal institutions are explicitly defined rules and regulations, i.e. the prescribed patterns of interaction. Informal institutions are described as the socially embedded implicit rules of the game, which lead to specific routines, habits, and practices (Edquist, 1997). Together formal and informal institutions form the backbone of governance, since they define the different modes of coordination and interaction between the formal government with market and civil society (Pierre, 1999). Hereby institutions form the highly inter- and path dependent political and socio-cultural context, and strongly guide the actions of city governments (Martin & Sunley, 2006). Socio-cultural developments are the result of multi-actor processes and governments cannot easily steer and push through developments in a top-down manner (Rotmans et al., 2001).

Finally, evolutionary economics state that the current state of a city's economy is dependent on the path taken to it, and the present form will shape its future development (Simmie & Strambach, 2006). Increasing returns providing positive feedback and acceptance of prevailing production activities and institutions cause self-reinforcing processes. These processes tend to lead to the lock-in of a city's economy (Wolfe, 2009). Once a city establishes itself in a particular set of production activities, this lock-in may over time become solid rigidities that prevent adaptation to niche innovations (Simmie & Strambach, 2006). To summarize, the inter- and path dependent political, socio-cultural and economic context city authorities are embedded in, influences a city governments freedom to act and guides their actions (Pierre, 1999).

Path dependence is not equally relevant and strong everywhere (Simmie & Sunley, 2006). The challenge is to reconcile the significance of prior events in endowing a city with its economic, political and socio-cultural context, while allowing a role for city actors to respond to niche innovations (Wolfe, 2009). Garud and Karnøe (2001) introduce the concept of path creation to emphasize that city actors, which they call institutional entrepreneurs, can actively shape paths. In fact, actors are embedded in the economic, political and social structures that they jointly create. Knowledgeable actors have the capacity to reflect on their context and mindfully deviate from existing structures (Garud & Karnøe, 2001). The capacity of actors to generate new pathways or renew older ones depends largely on the degree to which they can access, develop and use leading edge knowledge (Hassink 2005; Martine & Simmie, 2008). The access to this knowledge within cities is based on complex links between the economic variety and diverse linkages between city actors, global networks and higher levels of authority (Martin & Simmie, 2008).

Economic diversity is an important indicator of the stock of knowledge present in the local economy (Hassink, 2005). The stock of knowledge available in a city is a base from which city actors draw their resources or knowledge with which to explore, justify, develop and test new ideas (Slembeck 1997). Researchers studying the governance of smart cities stress that the content of smart governance strategies largely depends on the match of new technologies to the knowledge and attitude of the relevant actors (Bolívar, 2016). Since knowledge evolves through accumulation, new knowledge does not easily diffuse between cities. Knowledge generally spills over to cities that share a knowledge base, that is, cities that are endowed with related industries (Frenken & Boschma, 2007). In diversified urban economies different pieces of knowledge can be recombined in new ways, which might lead to new economic paths (Jacobs, 1970). In other words, cities with specialisations in various sectors have a greater chance of developing new sectors closely related to them because they have a diverse knowledge base (Martin & Simmie, 2008). Given the complexity and novelty of the sharing economy, city authorities are expected to be better equipped to draw on external resources and knowledge in cities endowed with a diverse knowledge base.

3.4. Conceptual model and propositions

As shown in *figure 2*, the actions city authorities (can) take to govern the sharing economy niche into a favourable direction are contingent on the multi-level, path dependent governance context. The bold text in the conceptual model visualizes *sub-question 1* and *2*: ‘*How do city governments frame and govern the sharing economy?*’ The governing capacity, discursive framings, strategic plans and policy objectives related to the sharing economy are expected to steer governance actions and roles. All these factors are however, interdependent on both the multi-level governance system and the historical, economic, political and socio-cultural context city governments operate in. Differences in framings are expected to emerge because the capacity of city authorities to absorb new knowledge and develop discursive framings is dependent on past events that set the stage for possible paths of a city in the future (path dependency). Each city faces its own distinctive development trajectory, related to and interdependent on the city specific context and the multi-level governance system. This answers *sub-question 3*: ‘*Why do city governments frame the sharing economy differently?*’.

How city authorities govern transitions is both directly and indirectly shaped by the city’s governing capacity, framings, strategic plans and/or policy objectives. The city governments’ actions are always limited and contingent on city-specific context and the multi-level governance system. These contextual factors can create windows of opportunity and sets limits for urban governance. With the use of discursive framings city governments can deviate from prior (political) paths and steer their governance actions and roles. Differences in framings, governing actions and roles will occur since urban governance is a continuously evolving, place-dependent process, embedded in the interdependencies of the city- and the multi-level (governance) context. Moreover, urban governance is not a linear step-by-step process, all the factors are interdependent, changes in one part of the process feedback to the other parts (as indicated by the grey arrows in *figure 2*). Thus, every experience of city authorities governing the sharing economy, between and within countries, and in different time periods is expected to be different. This answers *sub-question 4*: ‘Why do cities govern the sharing economy differently?’.

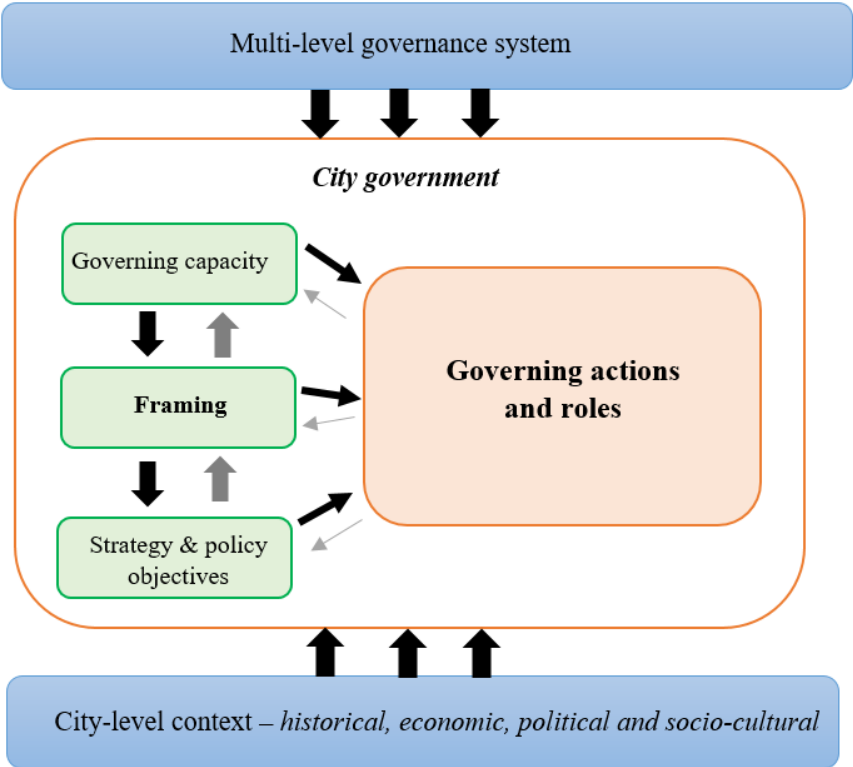


Figure 2: Conceptual model – multi-level, path dependent urban governance of the sharing economy

Building on the combined insights from transition literature, multi-level governance theory and evolutionary economic geography the following propositions are deduced:

- Proposition 1:** *How city governments frame and govern the sharing economy is influenced by national politics and traditions.*
- Proposition 2:** *Prior political decisions and policies guide how the sharing economy is framed and governed.*
- Proposition 3:** *How the sharing economy is framed and governed is contingent on the city-specific path dependent political, socio-cultural and economic context*

Proposition 4: *How the sharing economy is framed and governed is influenced by the city's local economy:*

- A. *Cities with a diverse local economy will reveal governance actions in various sectors.*
- B. *Cities with a specialized economy will reveal governing actions confined to these specific sectors.*

Proposition 5: *Discursive framings influence the urban governance of the sharing economy: if city authorities frame the sharing economy as a solution to- or a causation of commonly accepted problems, space for governance action is created.*

Proposition 6: *Strategic plans and policy objectives influence governance actions: if city governments formulate strategies and policy objectives related to the sharing economy this supports and legitimates governance actions.*

Proposition 7: *How city governments frame and govern the sharing economy is influenced by their governing capacity which is:*

- A. *...dependent on their internal organisation, rules and resources.*
- B. *...guided by- and influencing European, national and regional law and policies.*
- C. *...dependent on the extent to which city authorities draw on resources from vertical and horizontal tiers.*
- D. *...influenced by the extent to which city authorities draw on resources from citizens and local stakeholders.*

4. METHOD

4.1. Research design

To explain what causes variation in how city governments govern the sharing economy, a theoretically anchored and empirical qualitative research has been conducted. A conceptual model of the multi-level, path dependent urban governance process was proposed in the previous chapter and qualitative comparative case study approach was used to test the model from interpretive observations. Qualitative case studies capture detailed accounts often unnoticed in quantitative data (Yin, 2013). A detailed explorative analyses is required to understand the variation in urban governance approaches (Denters & Mossberger, 2006). Additionally, the comparative method allows the controlling for contextual variables and for uncovering causal patterns of explanations “*by highlighting unique or non-path dependent findings*” (Pierre, 1999). Comparative case studies are considered suitable for studying the effects of different explanatory factors while remaining sensitive to the details of particular cases (Yin, 2013). Although cities are more or less unique, they display significant similar patterns: all cities within this thesis are exposed to- and reveal strategic attempts to govern the recent emergence of the sharing economy. All cities are also equally embedded in the European and their own national context. Comparison is thus both possible and critical to a scientific explanation of their differential urban governance approach.

To answer the research question, the research process has been divided into three phases. The first phase of the research was a systematic desktop study to analyse which European cities have strategic plans to govern (parts of) the sharing economy. The second phase was an in-depth desktop study to develop an understanding of the specific context the city authorities operate in. This led to the development of a comprehensive overview of the city’s historical development, current key sectors, the state of the political and institutional context and the larger multi-level governance system, in which city authorities are embedded. The third and final part was an explorative study to examine the local impact of the sharing economy, the consequent local (political) debates, the national and regional policies and regulations, the city’s governing capacity, framings, urban strategies and policy objectives as well as the governance actions and roles of the city authorities.

4.2. Case selection

In this thesis ‘*cities*’ are used as a basic unit of comparative analysis. ‘*City*’, ‘*city authorities*’ and ‘*city government*’ are used interchangeably and all refer to the actions of the municipality. The logic of case selection is based on purposive sampling driven by theoretical considerations. The case selection strategy was based on three criteria:

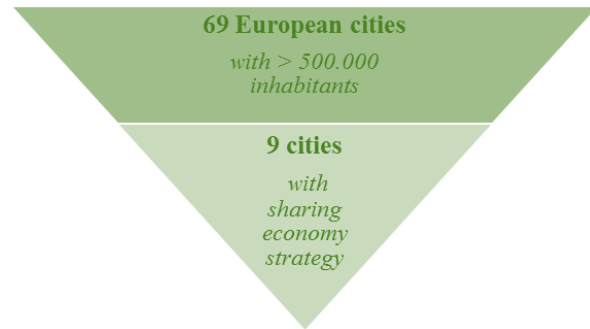
1. The city must be part of the European Union to ensure a comparable geographical cluster of countries. In addition, European cities reveal significant differences in how they govern the sharing economy (Goudin, 2016). By comparing relatively similar cities with few contextual differences but significant differences in the dependent variable, “*one is in a good position to uncover a causal relationship*” (Pierre, 1999).
2. Only cities with more than 500,000 inhabitants based on the latest census are part of the research scope.²

² An exception was made for the city of Ghent in Belgium. Ghent has less than 500.000 inhabitants but revealed a progressive governance approach with regard to the sharing economy. Therefore, Ghent has also been included in this study.

- The city is required to have strategic- or policy documents indicating specific plans or goals associated with the sharing economy. These documents have to be publicly available online in English or Dutch.³

The case selection strategy is based on the most-similar-system approach. This design allows a certain control for the effect of contextual variables while at the same time conducting empirical study in close proximity to theory (Pierre, 1999; Lijphart, 1971). Additionally, intra-national comparison was conducted to control for the embeddedness of cities in national institutional contexts, national policies and other factors related to political traditions and culture.

To identify which European cities had strategic plans or policies concerning the sharing economy, the municipality website of all 69 cities part of the European Union with more than 500.000 inhabitants were examined (see *appendix 1*). Additionally, online search engines such as Google, Google Scholar and Scopus have been used.



The specific search terms included:

- ✓ The city name
- ✓ Collaborative, sharing, shareable, commons, economy and/or consumption
- ✓ Strategy, policy, vision, strategic or (action) plan
- ✓ City, urban or local
- ✓ Municipality, government, governance, council or mayor

Figure 3: Case selection

This case selection strategy resulted in nine selected cities (see *figure 4*).

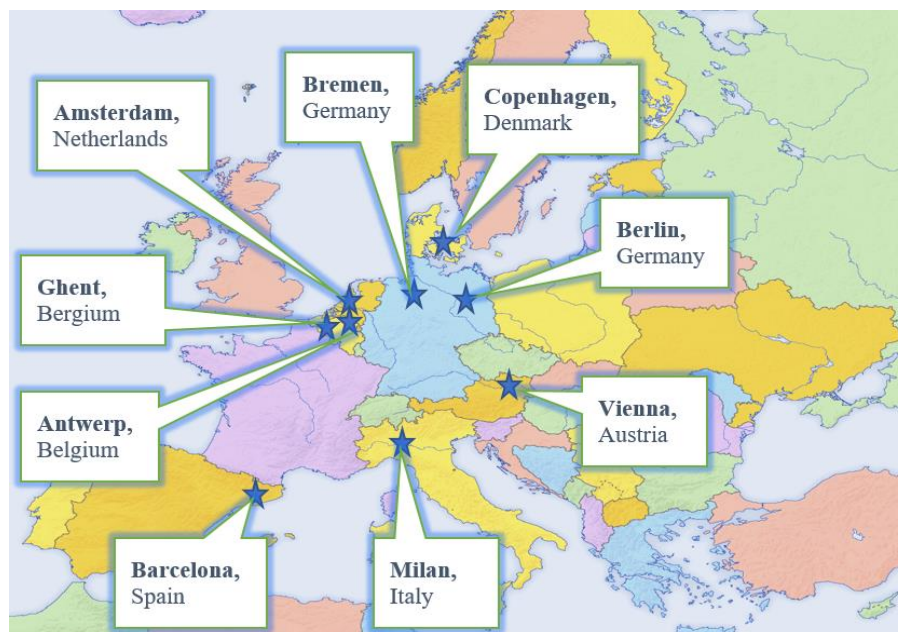


Figure 4: A visualisation of the selected cases

³ Cities that do not have English published strategy or policy documents are not included in the sample but this does not necessarily mean that these cities do not have strategic plans to address the sharing economy. Take for example, Paris in France where OuiShare Fest takes place every year to debate the rise of the sharing economy and the associated policy issues.

4.3. Data collection

For this research two types of data were used, namely texts and interviews. The data was collected from various sources: public sources, interviews with key authorities and experts and grey literature. These types and sources complement each other and allow for triangulation. Herewith, different data types and sources improve the validity and reliability of the comparative results (Yin, 2013).

4.3.1. Public sources

This thesis is largely based on the analysis of recent policy- and strategic documents related to the sharing economy produced by city- and national governments as well as the European Union and a number of public– private partnerships involved in the (political) sharing economy discourse. Policy- and strategic documents address salient issues, visions, plans, objectives and solutions. Therefore, these documents allowed a better understanding of the stance the governmental actors take towards the sharing economy. The governmental documents were central in the examination of how city governments frame the sharing economy and with which policy objectives.

Other public sources such as press releases, city reports, newspaper articles, online interviews, academic publications and expert blogs complemented the policy- and strategic documents by providing context and detail to the government-issued documents. Given the novelty of the topic, many references came from experts in the sharing economy field that are studying and following the developments, and from their online portals and magazines, such as Shareable.com, P2P Foundation, Collaborative Labs, and LabGov. These expert blogs and articles were important to reveal critical reflections on topics that government publications sometimes strategically not address. These informal sources provided alternative explanations, reasoning and perspectives to the framing strategies and objectives pursued by city governments. Furthermore, social media was used to keep up to date with the latest information and developments in the field. Various officials, experts and groups were followed on Twitter, Facebook and Linked-In. From December until April 2017 these social media sources have been checked twice a week for useful information.

4.3.2. Interviews

Semi-structured interviews are useful when having exploratory as well as explanatory comparative research goals (Creswell, 2009). Semi-structured interviews provide both flexibility and structure which are important prerequisites for explorative research guided by theory (Bryman, 2015). Although the aforementioned text sources offered solid initial information material about the empirical cases, these sources were not able to answer the ‘*why?*’ question. Interviews on the other hand were important for uncovering the reasoning behind framings policy objectives and governance actions, especially to explain the various perspectives, explanations and the interrelations. The interviews gave an increasingly comprehensive view by unravelling the motivations behind certain political decisions. Additionally, interviews were used to test and examine the propositions. Interviews were very valuable for this end and new alternative explanations emerged as well.

A total of thirteen in-depth semi-structured interviews with key government authorities and local experts has been conducted. **Table 2** gives an oversight of the interviewees, their positions and additional information. Using Skype helped greatly to interview key individuals in distant cities. All Skype interviews started with an elaborate introduction, if possible the camera was used and notes were taken to overcome limitations such as noticing nonverbal cues and establishing a good rapport.

Table 2. Overview of conducted interviews.

No.	Designation / description	Type	Date	Duration
1.	Program manager sharing economy, municipality of Amsterdam	In person	8-2-2017	60 minutes
2.	Director Economic Affairs, Labour and Statistics Vienna	Skype	13-2-2017	55 minutes
3.	Freelance Expert & Strategist on the Collaborative Economy and OuisShare Connector Berlin	Skype	15-2-2017	55 minutes
4.	Council Department for Economic Innovation and chair of Smart City & Sharing City projects Milan	Skype	16-2-2017	50 minutes
5.	City Councillor City of Ghent	In person	21-2-2017	40 minutes
6.	Project leader Stadslab2050 City of Antwerp	Skype	3-3-2017	55 minutes
7.	Head of Section, Department of Finance, municipality of Copenhagen	Skype	14-3-2017	55 minutes
8.	Sustainable Mobility Project Coordination for the City of Bremen	Phone ⁴	16-3-2017	60 minutes
9.	Project manager Start-up City municipality of Antwerp	Skype	20-3-2017	40 minutes
10.	Chief Strategy Officer of Ghent and Policymaker Creative Economy City of Ghent	Skype (group)	28-3-2017	55 minutes
11.	Mobility Consultant, Parking Policy at City of Antwerp	Skype	29-3-2017	45 minutes
12.	Director in the area of Other Economies and Proximity of Barcelona Activa (City Council)	Skype	29-3-2017	50 minutes
13.	Local sharing economy expert Vienna	Skype	3-4-2017	50 minutes

Appendix 2 provides the interview scheme used. The interview questions were slightly adapted to the specific city and to new insights, becoming more relevant along the research process. All interviews were fully recorded and transcribed. The audio files and full transcriptions have been kept, and access to them can be given on request. Furthermore, weekly meetings at shareNL and several events led to additional insights, conversations and discussions with knowledgeable actors in the field. *Appendix 3* provides an overview of the relevant events the researcher attended.

4.3.3. Grey literature

Grey literature generally refers to unpublished, non-commercial, hard-to-find information that organizations such as governments, professional associations, research institutes and think tanks produce. After the interview, the interviewees were asked for additional information materials. As some cities were still exploring how to govern the sharing economy, this resulted in draft-versions of strategic plans and policies as well as other internal documents which were not available online (yet). The grey literature was used to overcome bias presented by published information.

4.4. Coding and data analysis

The coding of data, wherein the data is labelled according to a set of categories to examine linkages, comparisons and contrasts, is inspired by the theoretical framework and the insights of the interviewees.

⁴ A phone interview was the only option for the interviewee.

This coding approach which attempt to capture a narrative’s flow and aligns with the theory, is generally preferred for comparative case study design (Bryman, 2015; Yin, 2013). In this study, urban governance was analysed, examining the governing capacities, framings, strategies and policy objectives leading to specific governance actions and roles. Since city governments operate within a multi-level governance and city-specific context, these contextual factors are also taken into account. These theoretical concepts were first operationalized (see *table 3* and *4*).

Table 3. Operationalization theoretical concepts

Concepts	Sub-concepts	Explanation
Governing capacity	Internal organisation, resources and rules	The person(s)/ department(s) in the city government responsible for addressing the sharing economy and their autonomy to do so.
	Vertical resources	The global networks the city government is part of and the cities they collaborate with and learn from with regard to the sharing economy
	Horizontal resources	The resources and rules regarding the sharing economy higher level authorities impose or make available.
	Local stakeholders	The resources, expertise and knowledge local stakeholders and citizens provide to the city government.
Framing		The specific characteristics, potentials and challenges of the sharing economy city governments emphasize.
Policy objectives		The formulated policy goals to govern the sharing economy.
Multi-level governance system		The institutional governance framework cities are embedded in.
City-level context	History	The historical development of the city.
	Politics	The political culture in the city.
	Economic	The key sectors in the city.
	Socio-cultural	Social developments and culture.

Table 4. Operationalization urban governance modes and roles

Role	Mode	Explanation	Actions
Consumer	Self-governing	How local authorities use sharing platforms to fulfil their needs.	<ul style="list-style-type: none"> • City authorities using sharing platforms.
Enabler	Governing through enabling	How city governments coordinate or facilitate the growth of sharing platforms and practices.	<ul style="list-style-type: none"> • Awareness and information campaigns. • Outreach, collaborate with-, convene and support sharing practices and initiatives with funds, advice or space.
Provider	Governing by provision	How city governments incorporate sharing into their strategies, services and provisions.	<ul style="list-style-type: none"> • City authorities offering their unused equipment or offer shared infrastructure.
Regulator	Governing by authority	How local authorities exploit their legal powers to manage and govern the sharing economy. Cities can develop policies that protect consumers, outline rules for sharing firms, and considerations for challenges faced by existing companies.	<ul style="list-style-type: none"> • Bans, taxes, fines or any formal documents regulating the establishment and operation of sharing initiatives.

The collected data was organised and analysed with the help of *Nvivo*. All data was screened for statements about the governing capacity, framings, strategic plans and policy objectives they aim to pursue as well as the actions and roles the city governments take in governing the issue. The contextual

factors of the city were also considered. These points were marked and labelled according to its content, based on the concepts from theoretical framework. Additionally, open coding was used to further uncover how the sharing economy is governed in the different cities. The open codes were constructed with words as close as possible to the words that the interviewees used. After all data was gathered, these open codes were compared and merged. The marking of the data led to several new codes (see *table 5*).

Table 5. The emerged codes through open coding process

Concepts	Sub-concepts	Explanation
Actions city authorities	Explorative actions	Research, map, asses and monitor initiatives, developments and the impact of the sharing economy in/on the city.
Role city government	Exploratory	City government is figuring out how to govern the potentials and challenges of the sharing economy.
Approach city authorities	Proactive	High effort to stimulate and steer the growth of the sharing economy by the city government.
	Reactive	Low effort to stimulate and steer the growth of the sharing economy by the city government.
Urban governance	Community-led	Initiative to stimulate and steer the emergence of the sharing economy largely comes from social entrepreneurs, non-profit and for-profit organisations, citizens and other non-governmental actors.
	City-led	Initiative and actions to stimulate and steer the emergence of the sharing economy mainly comes from the city government.

5. DESCRIPTIVE RESULTS

5.1 The city-specific, multi-level governance context

This section gives an overview of the multi-level governance system (see *table 6*) and the city-level historical, economic and political context (see *table 7*).

Table 6. Overview of the multi-level governance system

	AMSTERDAM	ANTWERP	GHENT	BERLIN	BREMEN	COPENHAGEN	VIENNA	BARCELONA	MILAN
National context	The Netherlands	Belgium		Germany		Denmark	Austria	Spain	Italy
Political system	Parliamentary constitutional monarchy	Federal parliamentary constitutional monarchy		Federal parliamentary republic		Constitutional monarchy and a parliamentary democracy	Federal parliamentary republic	Parliamentary constitutional monarchy	Parliamentary republic
Government tiers	Central, provincial and municipal	Regions, (language) communities, provinces and municipalities		Federal, state (Länder) and cities		Central, regional and municipal	State, provinces and municipality	State, communities, provinces and municipalities	Federal, regions, provinces and municipalities
Regional context	North Holland	Flemish region		City-State Berlin	City- State Bremen	Capital Region	Province Vienna	Community of Catalonia	Lombardy Region
		Province Antwerp	East Flanders Province					Province of Barcelona	Milan Province
Division of powers	Decentralised unitary state. Provinces and municipalities have extensive powers to their own internal affairs.	Unitary state in which the autonomy of local authorities differs depending on the region. Regions have legislative powers.		German states have a lot of local powers. City-states, have their own constitutions, parliaments and governments.		Highly decentralized. Regions and municipalities are powerful but have no legislative power.	Austria has nine autonomous provinces, they can shape and implement their own laws and policies.	Decentralized political system with powerful communities which have legislative powers.	Strong regional centralism. Provinces and municipalities enjoy more limited autonomy than regions.
Responsibilities city government	Roads, public transport, housing, local planning, environment, social affairs, economic development, education, health care, etc.	Services including waste management, local infrastructure, pre-primary education, social services, housing, and cultural affairs.		Areas like water, waste disposal, energy supply and such and additional tasks which have been allocated to them by the state.		Social services, employment policies, social welfare, child care, education, healthcare, environment, planning, tourism, transports, culture etc.	Independent administrative bodies, responsible for local spatial planning, police, traffic management etc.	Public administration with major competences in urban planning, public transports, tax collection, road safety, public space etc.	Administrative responsibilities such as spatial planning, transport, economic development, waste management, social welfare and education.

Table 7. Overview of the historical, economic and political context of the cases

	AMSTERDAM	ANTWERP	GHENT	BERLIN	BREMEN	COPENHAGEN	VIENNA	BARCELONA	MILAN
General	Capital city Netherlands	Most populous city in Belgium	Small sized metropolis	Capital city Germany	Working class/port city	Capital city Denmark	Capital city Austria	Second city Spain	Second city Italy
Population	813,562	513.915	251.984	3,563,000	652.182	606.057	1,840,226	1.602.386	1,369,000
Historical development	Rich history of trade and entrepreneurship related to its international port.	Industrial clusters closely related to a long history of port activities.	Industrial past with extensive port activities.	Industrial past and communist legacy.	Autonomous, industrial port city.	Originally a Viking fishing village, developed into an international trading centre with its important harbour. Long tradition of ambitious and active energy and climate policies.	Gateway between East and Western Europe. Has a strong communist legacy	Historical trading center became a strong industrial cluster (especially textile).	Industrious city, the production of armors and wool in the 12 th century led the Lombard region to become rich.
Key sectors	Financial and business services, tourism, trade and logistics, ICT, creative industry, life sciences and sustainability.	Chemistry, creative economy, diamond, logistics, ICT, retail and commercial services.	Automotive, logistics, metal processing, biotechnology.	Tourism, culture industries, life sciences, ICT and media, traffic and mobility	Logistics/ maritime economy, automotive and aerospace.	Tourism, retail, financial services, Life Sciences, ICT and cleantech. Increasingly food industry and wind energy.	ICT, Life Sciences, trade, public administration, research, tourism (conferences)	Financial services, ICT, commerce, tourism, health, textile, port, logistics.	Financial, commercial and juridical services, marketing and bio-health, fashion, ICT and design businesses.
City government	Governing majority of progressive liberal party D66, conservative liberal party VVD and left-wing, social-democratic party SP (2014-2018).	Coalition of Flemish nationalist (N-VA), Christian democratic (CD&V) and liberal democratic party (Vld) (2012-2018).	Coalition of social democratic party (s.pa), ecological party (Groen) and liberal democratic party (Vld) (2012-2018).	Centre-left Social Democratic Party (SPD) and the green party (Grüne) (2016-2021).	Centre-left Social Democratic Party (SPD) and the green party (Grüne) (2016-2021).	Left progressive with first the Social Democratic party and second the Red-Green Alliance (2013-2017).	First and second party: Social Democrats (SPÖ) and national-conservative Freedom Party (FPÖ)	The (minority) governing party is the left Barcelona in Common party. Second and third party are the Convergence and Union (CiU) and Citizens (Cs) (2015-2019).	Centre-left wing coalition (2011-2017).

5.2. Description of cases

This section describes the national, regional and urban regulations, policies and strategic plans regarding the sharing economy. Additionally, this sections elaborates on the local impact of the sharing economy as well as the governance actions city authorities take.

5.2.1. THE NETHERLANDS - AMSTERDAM

In 2015, the Dutch Minister for Economic Affairs announced that there should be more focus on the sharing economy and future-proof legislation (Ministry of Economic Affairs, 2015a; 2015b; 2016). Since digital platforms and the sharing economy are perceived as a source of innovation and sustainability the national government wants to stimulate the developments within a flexible legal framework. The Minister for Economic affairs advocates for a case-by-case approach, to examine how and whether existing rules should be clarified or additional legislation is needed. He promotes experimental tools such as the “*right to challenge*” and target regulations to provide sufficient flexibility in laws and regulations (Ministry of Economic Affairs, 2015b).

Both Uber, a private on-demand transport service, and Airbnb, a holiday rental service, have faced legal issues in the Netherlands. UberPOP, a low-cost carpooling service run by Uber, was found to be illegal by the country’s justice system and discontinued its services (Leeuwen, 2015). Since platforms such as Airbnb occur locally the central government places the responsibility on municipalities to experiment and respond to the trend. How Amsterdam governs Airbnb is perceived as a good example of a constructive way to implement policies that serve the interests of all stakeholders (Ministry of Economic Affairs, 2015b). So far, no other concrete major legal initiatives to regulate the sharing economy have been taken.

To summarize, the Dutch government is supportive of initiatives in the platform- and sharing economy and developing a future-proof legislative framework is on the national political agenda. At the moment the government takes a case-by-case approach and leaves room for municipalities to experiment and respond to this new trend. At the same time, the government wants to adhere to the guidelines the European Commission proposes (Ministry of Economic Affairs, 2016).

The sharing economy in Amsterdam

Amsterdam is home to a large variety of sharing platforms, including the borrowing platform Peerby, skills sharing platform Konnektid and car-sharing platforms MyWheels and Floop2 (Miller, 2015a). In the interview with a key authority involved in governing the sharing economy, the interviewee emphasized that Amsterdam is rich of “*sharing start-ups*” a several times. She explained that for nearly everything you can share, a platform exists. The interviewee emphasized that at the same time a lot of people are still unfamiliar with the concept or merely associate it with big commercial platforms such as Airbnb and Uber, “*conversations often focus on these two particular companies*”. The disruptive effect of these two giants receive a lot of critical media attention. As a consequence, not everyone is aware of the various potentials of the sharing economy the interviewee argued.

shareNL

In 2013, shareNL was founded in Amsterdam to serve as a knowledge and networking platform to support the development of the sharing economy (shareNL, 2016a). ShareNL provides research into the sharing economy as well as advise and connects start-ups, governments including the European Commission, academic institutes and cities both nationally and internationally. Their goal is to develop a sharing society where “*everyone has access to all products and services*” by addressing both the challenges and opportunities (shareNL, 2016a). Inspired by South Korea’s Sharing City Seoul project and their survey that showed a willingness to share of more than 84% of Amsterdam’s population, shareNL approached the Amsterdam Economic Board about the city’s potential to become a so-called *Sharing City* (Starritt, 2017). With a strong advocacy from shareNL, the city established itself as *Amsterdam Sharing City* on February 2015 (“Amsterdam Sharing City”, 2017). *Amsterdam Sharing City* represents a network of thirty ambassadors and community stakeholders who cooperate to explore the opportunities and challenges presented by the sharing economy. The network includes government officials, conventional businesses as well as sharing start-ups (“Amsterdam Sharing City”, 2015). With this partnership between shareNL and the city of Amsterdam, Amsterdam is referred to as the first European *Sharing City* and a pioneer in governing the sharing economy (McLaren & Agyeman, 2015; Miller, 2015a; Stokes, 2016).

Action Plan

In March 2016, the city government launched an Action Plan for the sharing economy (Gemeente Amsterdam, 2016a). The plan reflects the city’s vision to embrace the sharing economy and its aims to seize the opportunities while also addressing the challenges. The interviewee explained that the city is committed to “*making the most of this new form of economy*”. This means encouraging activities in the sharing economy that will benefit innovation, social inclusiveness, entrepreneurship and sustainability. The plan does not give an explicit definition of the sharing economy, instead the plan outlines the current activities and describes several characteristics. The interviewee emphasized that it is not relevant for the city to define what falls within the definition because it is an evolving concept.

“Defining the sharing economy doesn’t work, the phenomenon changes so fast that you have to rewrite your plan every few years”. (Interviewee 1)

Instead the plan highlights characteristics of the sharing economy, such as:

- Utilising unused capacity (i.e. goods, services, skills and premises) and/or using capacity more efficiently.
- New technological and electronic possibilities are used which makes it easier to measure and match data-driven issues and they additionally ensure a large scale/reach. This is driving an exponential growth potential of (the use of) the platform.
- By being connected online, either on a platform or as part of an online community, virtually everyone can become an entrepreneur.
- Data-driven technology enhances the transparency of transactions.
- Online identification, rating and reference systems (e.g. peer-to-peer reviews) create transparency and built up trust.
- Transactions almost always consist of an online component and a physical meeting, and some form of ‘payment’ which not necessarily involves money.
- The classic distribution or sales model of manufacturer to end user, via an intermediary (e.g. a shop), is changing. The intermediary is removed from the equation and often replaced by a virtual platform, where the end user can obtain goods directly from the provider.

The interviewee added to this:

“The characteristics important for the government are the shift from ownership to access, efficient use of resources and skills, the online and offline component, community building and quality control through review systems.” (Interviewee 1)

The city of Amsterdam welcomes the disruptive nature of these characteristics if they strengthen the city’s economy and can benefit its inhabitants (Gemeente Amsterdam, 2016a). The plan also elaborates on the perceived potential opportunities and challenges. According to the city, opportunities arise when sharing initiatives facilitate effective and sustainable sharing of scarce resources, allow cheaper and easier access to goods and services, increase safety, social engagement and cohesion. Challenges arise when the sharing economy causes greater income inequality, increase power imbalance, public nuisance, unfair competition and monopolistic industries (Gemeente Amsterdam, 2016a). Instead of just banning or permitting, the city aims to closely monitor, actively respond to the developments and to seize the opportunities this new field brings.

In order to do so, the interviewee explained that the city takes a pragmatic approach in governing the sharing economy. The city’s Action Plan outlines a five-point strategy:

- *Stimulating the sharing economy* by enabling collaboration between stakeholders and supporting pilot projects that help to solve urban challenges.
- *Leading by example* by launching its own pilot project for citizens to access city assets such as vehicles, office space and other tools free of charge.
- *An inclusive sharing economy for all local residents* through public-private partnerships. The city connects sharing platforms such as Peerby (asset-sharing) and Thuisafgehaald (meal-sharing) to the city pass in order to involve residents, especially elderly and low income families, to benefit from the sharing economy.
- *Adjust rules and regulations* to remove regulatory barriers while protecting the public interest.
- *Placing Amsterdam on the map as Amsterdam Sharing City* by participating and organizing global events. Amsterdam, for example, brought together cities around the world for the first Sharing Cities Roundtable and working with the New York Mayor’s Office to develop a regulatory approach to the home-sharing market (Gemeente Amsterdam, 2015).

Governing actions city of Amsterdam

The interviewee explained that the action plan is their policy and has already led to various actions by the city government:

- Partnerships with parties such as shareNL and Pakhuis de Zwijger to organize events, stimulate discussions about- and research into the potentials, risks and impact of the sharing economy.
- Initiate projects for example the city pass to foster social inclusion and sharing their own unused office buildings.
- Support and collaborate with sharing platforms:
 - The city organized an event in which sharing platforms were invited to co-develop helpful policies to seize the opportunities of the sharing economy.
 - Provide car-sharing companies such as MyWheels and Car-to-go with parking places and provide people who share their car with a permanent parking space (the interviewee emphasized that this pilot is in the early phase).
- Implement specific regulations for home sharing platform Airbnb:
 - Citizens are restricted to rent their room or apartment for a maximum of 60 days per year (Gemeente Amsterdam, 2016b).
- Placing Amsterdam on the map as *Sharing City*:
 - Partnership with shareNL.
 - Organized an international city-to-city event with city leaders from New York, Barcelona, Copenhagen, Vienna, Toronto and Seoul.
 - City marketing (see: “Amsterdam Sharing City”, 2017).

5.2.2. BELGIUM – ANTWERP AND GHENT

On the 6th of June 2016, the Belgian government approved a draft legislation for taxing the sharing economy proposed by the Minister of Digital Agenda and Telecom, Alexander De Croo. The law states that people who participate in the sharing economy, “*who provide services through an app or digital platform*”, will be taxed at a simple and reduced rate of 10% (De Croo, 2016). With this legislation the federal government wants to support the growth of sharing economy activities. Today, most activities in the sharing economy are taxed at a rate of 33%. The government starts with withholding 10% of the earnings from the sharing economy on the first of March 2017 (Steel & Racquet, 2017).

With the law the Belgium government recognizes the sharing economy as an additional way to earn income and provides a legal framework for activities currently happening in the so-called ‘*grey zone*’ (Steel & Racquet, 2017). Herewith, the law provides clarity while trying to limit fraud. The new law will apply to income up to 5.000 euro to prevent unfair competition with professional entrepreneurs and (small) businesses (De Croo, 2016). To ensure that the administrative charges will be minimal for the people who provide the services, the registered platforms have to withhold the taxes and send the information to the tax authorities. So individuals that render the services are not required to register with the Belgian Enterprises Register. With this straightforward new legislation for the sharing economy, the national government provides clarity and eases the use of (commercial) sharing services.

In Belgium the three regions are autonomous and have important powers. Both Ghent and Antwerp are part of the Flemish Region. Flanders is imposing new, more stringent rules for people who rent their house or apartment on Airbnb as from 1 April 2016 (Schuermans, 2016; Torfs, 2016). The Flemish Tourism Minister Ben Weyts (N-VA) states that Airbnb providers should register on the Flemish data bank for accommodation providers and follow a set of regulations:

- Arrange a liability insurance.
- Provide a document of good conduct to prove they have no police record.
- Meet fire safety regulations: providing smoke detectors, a fire extinguisher, an evacuation plan and instructions about what to do in case of emergency in four different languages.
- Declare the additional earnings in their annual tax form.
- Cities or local municipalities may add an extra tourist tax.

Inspired by shareNL, the Belgian knowledge and networking platform for the collaborative economy colaBE (previously called shareBE) has been launched by Samantha van den Bosch on April 26, 2017. Samantha previously worked for shareNL but has chosen to follow her own path, meaning colaBE will work independent from shareNL. It will be interesting to see how and whether colaBE grows into a similar knowledge and networking platform as shareNL.

The sharing economy in Antwerp

During the interview with the project leader of Stadslab2050, the interviewee explained that Antwerp has a strong start-up scene and some sharing initiatives such as FLAVR (meal sharing) are popping up. Although sharing initiatives started to pop-up, especially in the sectors of space, goods and mobility sharing, the interviewee emphasized that the amount of active sharing platforms with a lot of users is low. Overall, Antwerp is slower to adopt digital innovations and the city is less “*sensitive to hypes, especially when you compare Antwerp with Amsterdam*”. He explained that the market for digital sharing is still relatively small and the overall sharing sector not that big (yet). Currently sharing initiatives are a mixture of commercial and social oriented organisations (Bos, 2016). An example is *A’pen op wieltjes*, the sharing platform for children’s bikes.

Urban lab

Since the beginning of 2016, Stadslab2050 started to perceive the sharing economy as a pathway towards a more sustainable city (Bos, 2016). Stadslab2050 is an urban laboratory in which city authorities, businesses, universities and citizens jointly seek to learn about and get involved in new ways of dealing with urban challenges. Stadslab2050 focusses on innovative actions and experiments for a more sustainable city. On March 25, 2016 the Board of Mayor and Aldermen approved the proposed theme “*With the Sharing Economy towards a sustainable Antwerp*” (City of Antwerp, 2016). The goal of this project is to gather and engage different stakeholder in order to learn and experiment how the sharing economy can accelerate the transition to a sustainable city. To realize this project, Stadslab2050 reached out to experts in the sharing economy. Together with shareNL, Stadslab2020 started mapping the current sharing initiatives in the city (Bos, 2016).

Fragmented city governance

Although start-ups increasingly include some elements of the sharing economy in their business models, the interviewees explained that there is neither a generally accepted definition of the sharing economy within the city government, nor a clear vision about how the city wants to address it. The city government of Antwerp is still in the exploration phase with respect to (politically) addressing the sharing economy. As the interviewee formulated it: *“the concept as such, is not really on the radar in the internal urban organization, in the administration and politics.”* Stadslab2050 is trying to initiate a discussion, to figure out what the sharing economy can mean for Antwerp. The interviewee emphasized that there is no generally accepted definition, clear vision or a specific people addressing the topic within the city of Antwerp. He mentioned, *“Since the sharing economy is a broad and diverse umbrella, it remains a difficult question what to do with it and to what extent are we already acting upon it”*. He explained that the mobility departments works with car-sharing and the tourism department is faced with issues regarding sharing in the accommodation sector. Since the topic is currently addressed across different departments the interviewee emphasized that he did not exactly know how the city is currently governing the sharing economy. The governance of the sharing economy in Antwerp is *“very fragmented”*. Stadslab2050 aims to develop an integral vision to get the theme on the political agenda:

“We are in the process of making a note, in which we’ll address the definitional challenge, the challenges the city of Antwerp wants to work with. That note, is one of our next steps. First we want to figure out to what extent sharing economy principles are already used within our city services”. (Interviewee 6)

At Stadslab2050 they combine the definition of shareNL, the five characteristics of Nesta with a focus on the commons. ShareNL defines the collaborative economy as *“an economic systems of decentralized networks and marketplaces that unlock the value of underused assets by matching needs and haves, in ways that bypass traditional institutions”* (shareNL, 2016b). Stadslab2050 used the ecosystem shareNL created to classify the various collaborative economy initiatives per sector. Nesta identified the following characteristics of the collaborative economy (Stokes, et al., 2014):

1. Enabled by internet technologies.
2. Connecting distributed networks of people and/or assets.
3. Making use of the idling capacity of tangible and intangible assets.
4. Encouraging meaningful interactions and trust.
5. Embracing openness, inclusivity and the commons.

Smart City Strategy

The city of Antwerp has a strong political commitment to become a Smart City. On February 17, 2017 the city council approved the policy note of Antwerp Smart City (Digipolis, 2017). The approved note contains a citywide vision with clear priorities and the assignment of three coordinators: a smart city coordinator for internal- and external coordination as well as a person with technological expertise. With this note Antwerp decided to use smart technology solutions to solve urban challenges. Five priority themes are mobility, safety, efficient governance, smart citizens and sustainability. The goals of the Smart City Strategy are:

- Improve digitalisation of services.
- Improve the ecosystem for (digital) innovation.
- Stimulate collaboration between innovative businesses and businesses in the existing sectors (e.g. the harbour, retail, petrochemistry sector).
- Create added value for citizens, businesses, students and visitors of the city.
- Foster adoption of digital tools.

According to the project leader of Stadslab2050, the sharing economy fits in this Smart City Strategy, since new digital applications are also an important aspect of the sharing economy concept. To examine the role of the sharing economy within their Smart City Strategy, an additional interview with the project manager of Start-up City at the City of Antwerp was done. The interviewee explained the city of supports technical start-ups in their ecosystem for digital innovations. The city provides financial support, space, individual advice and matchmaking for technological start-ups and creative entrepreneurs in collaboration with the private sector. The sharing economy has the potential to play a role within the Smart City Strategy, but the topic is not yet addressed. According to the interviewee *“it is something political”*. Currently, the city is much more focussed on digital innovation and the circular economy. As the interviewee explains:

“The word sharing economy has something social while our government has another focus, in 2012 our government evolved from a governing social party to a mixture of the N-VA (Flemish nationalist party) and democrats.” (Interviewee 8)

Car-sharing plan

In the interview with a mobility consultant at the City of Antwerp, the interviewee explained that car-sharing plays an important role in the mobility policy and the city’s fleet management. The city just initiated a pilot project to make the unutilized municipalities fleet available for citizens outside office hours. The city is currently reaching out to car-sharing platforms to collaborate on this project.

“So actually two cabinets [mobility and fleet management] have worked together to use the municipality’s fleet more efficiently. This pushes back the costs for the city and parking pressure will be reduced. It is actually a combination of two policies aimed at using our vehicles more efficiently and to reap all the benefits of car-sharing.” (Interviewee 11)

The mobility consultant explained how the City of Antwerp further tries to stimulate car-sharing:

“We have created a framework for recognizing organizations with their own fleet. Who get benefits from the city such as free parking. These car-sharing platforms must therefore meet several criteria. Then they are officially recognized and they can claim benefits. For now there are two acknowledged platforms namely Cambio and Bolides”

The interviewee explained that an additional car-sharing strategy is currently being drafted, but still has to be approved by higher authorities. So within the mobility department, the City of Antwerp is taking active measures to stimulate car-sharing.

Governance actions City of Antwerp

An summary of the actions the City of Antwerp has already taken:

- Showing an interest in the sharing economy by approving Stadslab2050 to start elaborating on- and experiment with the issue.
- Stadslab2050 is doing research/mapping initiatives to propose a strategic plan/policy note.
- Providing financial support, space, individual advice for technological start-ups.
- Initiate a pilot project to utilize the municipality's unused car fleet.
- Opened a call to collaborate with car-sharing platforms.

All three interviewees explained that the city might take more measures to govern the sharing economy in other departments. Since there is not integral vision, the interviewees emphasized that they did not know what exactly is going on in the rest of the municipality. One of the interviewees explained that the city is also sharing unused office space from the municipality with social initiatives.

“While the municipality of Amsterdam promoted that they would develop Airbnb for their underutilized offices in the news, we thought this is Antwerp already doing for five years or so”.
(Interviewee 6)

The sharing economy in Ghent

During the interview with a City Councillor of Ghent, the interviewee explained that the city of Ghent is characterized by a lot of spontaneous bottom-up initiatives in different fields, also in the sharing economy. As the interviewee formulated it *‘there is a start-up culture and the city government supports initiatives as well’*. He emphasized that the city government takes a proactive approach in supporting open data, sustainable and social initiatives. However, this support is not specifically focussed at fostering the sharing economy.

“Up until today there is not a specific definition for the sharing economy, the city government supports a wide range of initiatives. An important step for the city government was asking Michel Bauwens to develop a strategic plan: Ghent city of commons.” (Interviewee 5)

The interviewee explains how the sharing economy was originally perceived as a very positive economic shift, but in the meantime causes a lot of discussion in the media especially about Airbnb. Citizens in Ghent are arguing this is not sharing anymore because people are buying houses to place them on Airbnb. In Ghent a lot of bottom-up initiatives but also *“the big players from America”* emerged. This causes discussions about how the city should respond to this issue.

“On the one hand we need regulations, these are on their way. On the other hand we question which initiatives should we support. Ghent is in the process of addressing this, we are in the phase of drafting and designing useful policy.” (Interviewee 5)

The discussions about Airbnb have crystalized a realization that the sharing economy is a container concept. Therefore, the city government hired Michel Bauwens to find out which initiatives the city should support.

Ghent as the commons city of the future

The 15th of March 2017, expert Michel Bauwens started a research about Ghent as the ‘*commons city of the future*’ (Stad Gent 2016b). Bauwens perceives the commons as a third mode of societal organisation, reaching beyond the market and state divide (Bauwens, 2016). The commons, both described as an idea and practice, has emerged as a new political, economic and social dynamic (Bauwens et al., 2017). Moreover, the commons are characterized by the combination of:

- A resource,
- A community gathered around it,
- A set of rules to care for the resource and the community.

In addition to the commons, Bauwens focusses on Peer to Peer (P2P) collaboration. P2P is explained as “*a type of social relations, non-hierarchical and non-coercive, taking place in human networks*” (Bauwens et al., 2017). According to Bauwens (2016), technological developments have enabled the scaling up and widespread use of these relations. Together, the commons and P2P form a system:

“Based on the practices and needs of civil society and the environment it inhabits, evolving away from obsolete, centrally planned systems or the competitive dictates of market economies” (Bauwens et al., 2017).

Bauwens (2016) believes that the commons and P2P enable new and efficient ways for civil society to collaborate which creates more decentralized power. Reaching beyond the market and state, the commons and P2P systems constitute a potential way to a collaborative, post-capitalistic society. The city government hired Bauwens to develop a transition plan that describes the options for efficient city interventions to reinforce citizen initiatives (Stad Gent, 2016b). Entrepreneurs in the field of the sharing economy are also be part of this research. The plan should offer a framework for regulation and support desirable initiatives within the sharing economy.

Prior value driven policies

In Ghent, urban policy and developments are strongly influenced by debates about low-traffic environments, climate neutrality, quality of life and innovative solutions. Within the city government, these challenges are high on the political agenda. In the policy document “*Communicatie, Onthaal, Beleidsparticipatie en Stadsmarketing 2014-2019*” the city government stated their mission:

“Ghent is an open, inclusive, smart and child-friendly city. It connects all forces to develop the city into a lasting and liveable whole and in doing so shapes the future. Ghent wants to be a creative forerunner in the transition towards a climate-neutral city. We are building an eco-friendly and diversified economy that brings welfare for all. By doing so, we develop a community of responsible citizens who can develop themselves freely and who can count on the necessary support.” (Stad Gent, 2014a)

This mission describes where the City of Ghent stands for and the aims the city has for the coming years. The document is used as a compass for policy making to which the city government and its partners are aligning their strategy (Stad Gent, 2015a). The city has a specific food strategy, ambitious climate plans and a special focus on being a child- and youth friendly city, as well as a smart city (Stad Gent, 2016a).

In their strategy to become a Smart City, Ghent emphasizes the human component and explicitly mentions technology not as a goal but as an “*enabler in function of solutions for social challenges*” (Stad Gent, 2016b).

The interviewees emphasized the way the city will govern the sharing economy is strongly connected to prior policies and existing political priorities. As one of the interviewee said: “*This research project [by Michel Bauwens] to prepare new legislation and so on, is largely in line with prior political paths*”. They explained that the decision to hire Michel Bauwens was the results of a political process. Because Michel Bauwens has such a broad focus including the (potential) impact of small bottom-up initiatives as well as big sharing platforms, a consensus to assign him was quite easily reached. The more disruptive business models such as Uber and Airbnb are not the main focus. The interviewees explained that the commons is a less politically contested topic than the sharing economy. Six years ago the city of Ghent hired the international expert Charles Landry to examine the creative economy of Ghent, to support the development of the city’s strategic plan. His insights resulted in the new policy domain: *creative economics*. The interviewees expect that the current research project with Michel Bauwens will also lead to promising insights which will potentially be used in the elections and future policy documents. As one of the interviewee formulated it: “*in the same way we were talking about creativity six years ago, we are now talking about the commons*”.

Car-sharing and international networks

Although the city is still in the exploration phase of developing a strategy and policy recommendations with regard to the sharing economy in general, the city Councillor for Transport already announced the Ghent Car-sharing Action Plan in October 2014 (“Autodeel Plan Gent”, 2015). This plan sets the goal to grow the amount of car-sharers from 4.000 to 20.000 by 2020. As one of the interviewees explained “*Ghent is not so big, so 20.000 is an ambitious goal*”. The city aims to increase the number of car-sharing stations, reduce the city car fleet and integrate car-sharing into new city developments (Stad Gent, 2014b).

The interviewees also emphasized that Ghent is actively involved in international networks and even leads the EURO CITIES network. In these networks Ghent learns a lot from other cities, for example from their best practices. The interviewees explain that this expertise feeds Ghent’s ambitious government plans.

Governance actions city of Ghent

The interviewees emphasized that the city government is increasingly taking the role of an incubator and co-creator of bottom-up initiatives. The city is still in the exploration phase of addressing the sharing economy and has taken the following first steps:

- Hired expert Michel Bauwens to start a research about the commons, including the sharing economy. The first phase of the project will focus on mapping all the (sharing) initiatives in the city.
- The city supports citizens initiatives including sharing practices for example with crowdfunding projects and “*the burgerbegroting*”.⁵
- The city is in the process of implementing the same regulations for Airbnb as Amsterdam.
- Implemented an ambitious car-sharing action plan which already led to several enabling actions including subsidies for people who sign up for car-sharing and the organization of campaigns to raise awareness.

⁵ See: <https://ookmijn.stad.gent/burgerbudget/voorstellen>

The interviewees emphasized that the way the city governs topics such as the sharing economy is strongly connected to “*what is already happening in the city*”. The city government is literally perceived as an enabler of the initiatives that are already in the city. The interviewees explain that the way Ghent governs the sharing economy is led by existing economic and social activities.

5.2.3. GERMANY – BERLIN AND BREMEN

Germany’s ruling parties drafted a joint motion calling on the national government to change current legislation to the digital age. The coalition wants a clear legal framework for the sharing economy before the end of the current parliamentary term in September (Heide, 2017).

In 2014, the German court introduced rules banning Uber’s basic UberPop service throughout the country. The UberPop services are illegal as it violates commercial passenger transport laws. Uber’s other services such as UberBlack, UberX and UberTaxi were unaffected by the law, since the drivers hold a professional licence. UberX and UberTaxi still operate in Berlin (Listly, 2017) In response, to the banning of UberPop, Uber has filed complaints with the European Commission alleging that they are in violation of freedom of establishment and freedom to provide services of the Treaty on the Functioning of the European Union (Gesley, 2016).

After years of negotiations, the German federal government produced a draft law to support German’s car-sharing market. As Transportation Minister Alexander Dobrindt Handelsblatt explained, “*The goal is to make it possible for the states to set up special parking places and free parking for car-share vehicles*” (Kimball, 2016). The national car-sharing policy has been enacted in April 2017 and aims to support regional states and municipalities to implement uniform rules and regulations beneficial for providers and users of car-sharing services (Jacobs, 2017).

The sharing economy in Berlin

According to a local expert in Berlin, entrepreneurs increasingly started to experiment with both online and offline sharing initiatives a couple of years ago. Moreover, he explained that the sharing economy has gone through several stages in Berlin. Initially repair cafés, urban gardening projects, social food and clothes sharing movements popped-up. The sharing economy became a popular concept and the media was very positive about it. As the interviewee mentioned:

“There was quite a lot going on but of course to make it sustainable bottom-up initiatives need support and support hasn’t really come through from the city level. So many are not operating anymore or on a much lower level.” (Interviewee 3)

Then big American platforms such as Uber and Airbnb settled in Berlin as well. As a consequence, the media started to focus on the negative and disruptive side of the sharing economy. People became more sceptical and critical about the concept, “*which is of course legitimate because I also see a lot of these problems. But each position is just too much seeing one side or the other side*”. Currently, the sharing economy in Berlin is “*quite a mixed bag*”. Car-sharing is growing and “*as a start-up capital of Europe*” a wide variety of start-ups are experimenting with sharing principles. As the interviewee explained:

“From the bottom-up level like the civic society there is a lot of openness and experimentation but they have a difficult time because there is not so much support from other levels. From the top-down level, the city government level.” (Interviewee 3)

The interviewee repeatedly emphasized that the city governments main focus is on the Smart City approach.

Berlin's Smart City Strategy

Berlin shows a clear political commitment to become a Smart City. In April 2015, the Berlin Senate agreed on the Smart City Strategy (City of Berlin, 2015). The aim of the strategy is to find solutions to the economic, ecological and social challenges Berlin faces through the use of intelligent technology.

The objectives of the strategy are:

- Increasing the resource efficiency and climate neutrality of Berlin by 2050.
- Creating a pilot market for innovative applications.
- Expanding the international competitiveness of the Berlin-Brandenburg metropolitan region.

The strategy distinguishes six areas of action: smart administration and urban society, smart housing, smart economy, smart mobility, smart infrastructure and public safety. Within the area of smart economy the sharing economy is mentioned:

“Local economic structures, e.g. for electricity, the Sharing Economy or exchange forums, are on the increase. People are increasingly becoming involved in producing things themselves, e.g. electricity or additive manufacturing, and are changing from being just consumers to being active players in the economy, so-called prosumers.” (City of Berlin, 2015)

In the strategy the sharing economy is referred to as both a political challenge and a technological advancement of increased importance. In the fields of mobility, energy and housing the sharing economy is specifically referred to as a tool to provide efficiency opportunities.

“Increasing digital networks and the trend to a “sharing economy” can make the most of mobility offers but can also contribute to the avoidance of high levels of traffic. People in Berlin are using new forms of mobility which improve the use of existing vehicles and infrastructure (e.g. car-sharing, public bike hire system), which increase safety and which contribute to a reduction in environmental impacts by being resource-efficient (e.g. individualised transport information). For the economy, this means new opportunities for jobs, for adding value and for more efficient, city-compatible transport logistics.” (City of Berlin, 2015)

Although the sharing economy is addressed in the Smart City strategy, the strategy does not provide a specific vision or action plan related to the topic. As the interviewee explained:

“There is no real vision about what the sharing economy first of all is, what it could be, what the advantages and disadvantages are. If there are discussions or investigations these are from my point of view very limited. Limited to the traditional or better established players and not including the civic society, which is and should play an important part in the sharing and collaborative economy.” (Interviewee 3).

Governing by authority

Since 2013, the city of Berlin passed a law that restricts the use of home-sharing platforms such as Airbnb, Wimdu or 9flats (Finck & Ranchordas, 2016). The legislation seeks to keep the rents in Berlin affordable and prevent housing shortages. The law prohibits the subletting of more than fifty percent of an entire home. This way entire homes are not allowed to be rented out, while tolerating the subletting of spare rooms. To sublet an entire apartment or home, approval is needed from the local district office (Finck & Ranchordas, 2016). In other words, in Berlin un-hosted home-sharing is illegal without a city permit while hosted home-sharing is legal. On April 30, 2016 the transitory period of the legislation expired so the city started to impose strict fines on host who do not comply with the regulatory framework. Also, in 2015 the court in Berlin decided that renters that sublet without the owner's prior authorization can be evicted without prior notice. The ban has been criticised by several hosts for serving the interests of the hotel industry rather than the people of Berlin (Finck & Ranchordas, 2016).

The interviewee was critical about the city's current approach which is mainly focused at regulating the sharing economy. According to the interviewee, the city should differentiate between sharing initiatives that have a positive effect on the city and the ones that do not. Based on that the city should decide which ones to support. In his words, the city government should:

“Regulate but also deregulate parts to hinder the negative and support the positive effects. But therefore you have to better understand and clarify what you consider positive and negative effects”. (Interviewee 3)

According to the interviewee, city authorities should first inquire what is already happening in the city. He explains that the city currently takes a top-down approach in which civil society and new economic players are by-passed. There should also be a more general understanding of the potential and risks of the sharing economy across departments. Now different aspects of the sharing economy are handled by a variety of distinct ministries and departments which understand it from *“the limited bureaucratic point of view of their department”*. To approach the sharing economy more strategically and holistically the city should assign specific people within the city government to examine the topic, communicate an integral vision and include civil society in their decision-making. As he explains:

“The sharing economy applied in the wrong context and with the wrong regulations around it, by the wrong players can be really harmful. So we should prevent this with the right actors, with the right goals. With the right algorithms in platforms they can be very helpful and efficient in creating more equality, more participation, more community-building, creating more trust and so on. But it needs the wright context and that is what city governments have to create.” (Interviewee 3)

However, at the moment the city government is mainly focussed at regulating the negative aspects and controlling the disruptive effects of the sharing economy. According to the interviewee the city is just not seeing the social and sustainable potentials for the city.

Car-sharing in Bremen

Bremen is a pioneer city when it comes to car-sharing. In the 1990s, the first car-sharing initiatives already started. *“It started as a collective of a small group of people. They said, ‘we only need the car sometimes so we do not want to buy one’.”* A few years later the city included car-sharing in the public transport pass, the co-called Bremer Karte (Hurley, 2014). The interviewee mentioned that Bremen’s citizens are not really car-dependent because of the compact city centre and the strong cycling culture. As a consequence, car-sharing already started 20-25 years ago.

In 2003, the city built its first on-street car-sharing station known as a *“mobil.punkt”*. This required some creative interpretation of the current traffic regulations because such an initiative was somewhat legally unsound under the German highway code (Hurley, 2014). *“We were definitely the first German city to devote public street space to the purpose of car sharing in 2003 already”*. In 2009, Bremen was the first European city to introduce a municipal car sharing action plan (*“Car-Sharing Aktionsplan Plan”*, 2009). With the clear vision to reduce the number of privately owned cars in the city, the city set the ambitious goal to achieve 20,000 active car-sharing users and replace 6,000 private cars by 2020. As the interviewee says, the Action Plan *“is our roadmap for increasing car-sharing use.”* The plan contains the following components:

- Creation of space for car-sharing stations on public street space
- Integration with public transport
- Awareness and information campaigns
- Integration with new (housing) developments
- (Own) Fleet Management

Car-sharing is also part of the most recent Sustainable Urban Mobility Plan (SUMP) which looks at 2025 for reaching their goals (Freie Hansestadt Bremen, 2014). This plan is a thorough analysis of the city’s transportation strengths and weaknesses, developing of test scenarios that were examined on costs and effects after which an implementation plan was drafted. Different knowledge partners and stakeholders as well as citizens were involved in the development of the plan.

Currently, Bremen has over 80 car sharing stations – more than 20 of them on public street space - which offer more than 270 cars to more than 12,000 users (Mobil.punkt, 2017). With the help of car-sharing, public street space in Bremen has been relieved from nearly 4,000 private cars. Bremen has won many awards for their proactive policy and is still attracting attention as a showcase as to how proactive policy can stimulate car-sharing services as a solution to urban transport problems (Mobil.punkt, 2017). Because of the positive impact of car-sharing on both urban transport and on the quality of the urban environment, car-sharing has become an essential part of urban transport strategies in Bremen.

The sharing economy in Bremen

It is clear that Bremen has been proactively supporting car-sharing with different plans and policies. However, the interviewee emphasized that the city does not, to her knowledge, take such a proactive approach with regard to the sharing economy in general. *“I tried to look if any other of our institutions or ministries promote or deal with that topic [the sharing economy]. I did not find anything specific, only superficially.”* She mentions that there a lot of private initiatives and start-ups implementing ideas of the sharing economy including book and food sharing initiatives as well as shared gardens with shared equipment. *“It is not on a large organized scale but it is more grassroots, bottom-up actions.”* The interviewee also noted that it depends how you define the sharing economy. *“There is a lot of discussion about ‘what is sharing?’”*. According to the interviewee, there is no formalized definition or strategy with regard to the sharing economy within the city government, except with regard to shared mobility.

Political support for car-sharing

According to the interviewee car-sharing is politically well supported in Bremen because of several reasons. The first one she mentioned was the issue of illegal parking and the abundance of unused cars in public space.

“We have a lot of public space devoted to or used by cars. Be it legally or illegally. It creates a lot of difficulties for us. It hinders pedestrians and cyclist, obviously. People with wheelchairs can’t get through the narrow streets because the cars are parked on the side walk. The excessive parking of cars also hinders trash collection vehicles and the fire vehicles. Especially at intersections, cars park illegally, preventing large vehicles from being able to turn around corners.”

In other words, car-sharing was perceived as a solution for the issues of (illegally) parked cars blocking the road and to regain public street space for citizens. Another factor she mentioned was the fact that Bremen suffered from the tax reform in the 1960s, leaving the city-state with large financial deficits.

“We do not have any money to throw around. So we have to be quite creative in our solutions. That is another reason why car-sharing has been efficient. Because if we for instance had to build parking garages for all the extra cars in the streets, it would need investments in the tenths or hundreds to millions of euros.” (Interviewee 8)

The city perceived car-sharing as an important and necessary saving for the city since they would not have to pay the cost of expensive new (underground) parking garages. She emphasized that sharing mobility has a clear public benefit and gain for the city government, *“It is in the municipality’s interest to make the extension of shared mobility and car-sharing possible”*.

Urban governance

The stimulation of car-sharing in Bremen was a long-term process, involving multiple stakeholders in both the planning and implementation phase. In implementing the Car-Sharing Action Plan, the City of Bremen took a holistic approach with the following actions:

- Developing a strategy so that car-sharing stations are allowed to be implemented at public spaces.
- Building car-sharing stations, often close to bus and train stations and with integrated bicycle parking to allow for easy switching between various transport modes.
- Making the integration of car-sharing into new housing developments possible.
 - Stimulating developers to integrate a car-sharing station on their property by providing mobility management opt-out alternatives to traditional parking norms
- Organizing and investing in information and awareness campaigns.
 - *“The most recent one we did was to make a film about Udo, he is our car sharing mascot who promotes the principle of ‘Use-it-don’t-own-it’.”*

5.2.4. DENMARK – COPENHAGEN

In March 2016, the majority of the Danish Parliament indicated to be in favour of a law change to tax sharing economy services such as Airbnb (Wenade, 2016). During the interview with the head of the Business and Growth Policies section within the municipality of Copenhagen, the interviewee explained that the Danish government is *“developing a strategy, a sharing economy policy”*. It has been pending for almost one and a half year now. *“But what I hear from them, is that it is really difficult to coordinate across different ministries and departments”*. The interviewee expects that, this year an initiative will be launched for businesses to get advice on legislation if they have an idea or business model with sharing economy principles.

Currently national-level regulations impede several sharing economy practices. Uber is closing its ride-hailing service in Denmark as a consequence of the proposal to strengthen taxi rules and a high court ruling late last year that ruled the company was an illegal taxi service (Ricadela, 2017). The interviewee also mentioned that a lot of initiatives in food sharing had to close down due to strict hygiene legislation from the central government.

The sharing economy in Copenhagen

The interviewee estimated that about 15% of all Danes used a sharing economy platform and 20-25% in Copenhagen within the last 12 months. She emphasized that *“overall the impact, or the presence of the sharing economy in Copenhagen is still somewhat small if you are not taking Airbnb into account.”* There are quite some small sharing initiatives, for example GoMore (ridesharing), MePloy (unskilled labour jobs) and OurHub (sharing in public space). These start-ups play an important role but at the same time a lot of institutions, whether they are public agencies, labour unions, start-ups or the municipality are still trying to figure out how to position themselves towards the sharing economy.

Since the beginning of 2015, the non-profit organisation called Sharing.Lab performs research into- and experiments with the sharing economy to figure out how it can empower urban communities (Sharing.Lab, n.d.). With a special focus on “*how small physical objects located in public spaces can serve as conversation starters and relationship-builders*” (Miller, 2015b). In collaboration with VIA University College, and supported by the Ministry of Housing, Urban and Rural Affairs they accumulate information on the sharing economy (Sharing.Lab, n.d.). Share.Lab initiated OurHub, a technology platform that makes it easy to have shared experiences in public space. It consists of a sharing box located in places such as a park, with built-in hardware technology that makes it easy to use your smartphone to access the objects. Sharing.Lab was launched to break through the “*huge political vacuum*”, to help policy makers develop citizen-centric solutions and to reduce barriers in the outdated regulations (Miller, 2015b). More recently, the first union for sharing economy businesses (i.e. SEDK) was founded in Copenhagen.

The interviewee added that, the impact of the sharing economy “*is actually not that big but there has been a lot of fuzz and media attention, discussions and debates about the sharing economy*”. There are people who really firmly believe in the sharing economy and people who don’t. She explains how the media attention for the sharing economy started really enthusiastic and got really critical a while later. As she elaborated: “*we had a lot of issues specifically with Uber and the labour unions they had a huge campaign with a lot of commercials*”. Around 2015 people started to notice that the sharing is not necessarily sustainable or socially inclusive and “*not necessarily a lot things that I think the first wave of sharing enthusiasts probably expected it to be*”. In the end of 2016, the discussions became more constructive again. The sharing economy is becoming part of the “*new normal*”, city authorities are now figuring out how to move ahead “*and then in a better direction*”.

A nuanced and complex issue

The interviewee explained how the sharing economy initially “*has been able to grow on its own without any interventions*”. However, with the emergence of disruptive international players such as Airbnb and Uber and the accompanying critical discussions and media attention “*it became a much more nuanced and complex theme*” for politicians. Critical dilemmas about working conditions, unfair competition and taxation arose concurrently the Danish politicians started to debate how to position themselves towards this. Around the same time, the city government started working with this. City authorities recognized that the sharing economy is not inherently good but can be governed this way. The interviewee explained “*the challenge or dilemma of figuring out, how can we let the sharing economy grow, flourish and expand in Copenhagen while at the same time protecting our idea of a welfare society.*” The city emphasizes the potentials for economic growth and innovation and believe that this potential can be achieved through increasing the professionalization in this field. As the interviewee explained:

“So for us, entrepreneurs and start-ups are important but what we expect to see is that established businesses will increasingly challenge their own business models and adapt some of the new ways of doing business. That is probably where we will see the biggest shift.”
(Interviewee 7)

The vision of the city government

The interviewee believes that the sharing economy should not be defined too narrowly. As she formulated: *“We kind of want to work with what is the overall trend here, what is movement and not spent too much time defining what the specific boundaries are.”* The city does not *“have a policy in the sense that it has been voted by the city council”* but the Lord Mayor has formulated a vision and some principals about the sharing economy. This functions as an overall definition or guidelines of what Copenhagen does within the sharing economy. The two overarching goals are:

- To become world leaders in the sharing economy and get traditional and established companies on board as well.
- Make sure that sharing economy develops in a reasonable and fair manner.

The last part, led the municipality formulate six principles for the sharing economy in Copenhagen:

1. Utilize the innovation and growth potential by supporting businesses in setting up, develop, launch and export new solutions that are creating economic growth while being beneficial to society.
2. Develop and implement sharing economy principles in a way that stimulates a more effective use of resources.
3. Discourage unfair business models based on poor salary- and work conditions.
4. Prevent that the sharing economy leads to tax evasion.
5. Support consumer rights, security and insurance.
6. Recognize that the sharing economy is not just about non-profit idealism but also a solid business model both for those who develop sharing economy platforms and for those using them.

The interviewee explained that this is the framework the city government works within and these points have been the main focus of their work so far. She also pointed out that the peer-to-peer element of the sharing economy is a crucial element for them and emphasized that new skills are required for entrepreneurs, established businesses, citizens and the public authorities as well.

Prior policies

The interviewee explained that there is no formal policy because *“There are other goals that are superior to that of the sharing economy.”* How Copenhagen works with the sharing economy is defined by other priorities. They already formulated a strategy to become CO² neutral in 2025, clear ambitions in terms of liveability and goals to become a smart inclusive city. These policies lead the way in how Copenhagen approaches the sharing economy. As the interviewee explained: *“what we facilitate and how we support the sharing economy will be based on whether this fits the other goals of Copenhagen.”*

Governance actions city of Copenhagen

Although the (political) discussions are already going on for a while, the interviewee emphasized that much more research is needed to know what precisely needs to be done by the city to turn the sharing economy into wishful outcomes. As the interviewee explained:

“Our role as a public agency and as municipality is probably to facilitate that this can grow in a sensible way, without suffocating it with a lot of new legislations, laws and regulations. While at the same time taking care of the needs of the residents of the city.” (Interviewee 7)

The city wants to facilitate the sharing economy but is still preparing for this phase. They first want to do additional research into it, to figure out the precise impact and to test the various and sometimes disputed assumptions. The city government prefers proven-driven governance and is still figuring out how to respond to the sharing economy. The interviewee elaborated on the plans of the city:

“So we decided from a municipal perspective we want to engage in educating and informing users of the sharing economy, on how to use it and how to approach the sharing economy. Basically we believe that this area should grow. We need to address the dilemmas, the doubts and misconceptions that are definitely out there. We need to figure out how to best facilitate the transaction made.” (Interviewee 7)

Additionally, the interviewee explained that the city traditionally has a key role in finding jobs for unemployed citizens. They are considering whether the city should become a customer of skill sharing platforms, specifically referred to as the gig- or on-demand economy, to prevent unemployment:

“Currently we are not buying or facilitating activities that are on-demand, gig economy jobs but maybe we could. That debate is emerging now. We need to be really aware, under which circumstances is this okay? When are on-demand jobs better than no jobs at all? Those criteria, we haven’t set them yet but we do know that we need to be mindful about it. And if we start using this we are also setting market standards.” (Interviewee 7)

Thus, the municipality wants to facilitate the potentials of the sharing economy, educate and inform their citizens and partner with labour unions or business organisations to allow this field to grow. However, the interviewee also emphasized that they are really mindful because their interventions can have major consequences. The interviewee explained *“before coming to that point we need to dive a bit further down in what are the perceived dilemmas.”* So more research is the first step for the city of Copenhagen.

5.2.5. AUSTRIA – VIENNA

So far, the national government has not implemented specific national policies or adjusted regulations regarding the sharing economy. Both interviewees emphasized that Vienna is ahead of other cities and the national government because *“most of the new economic events first happen in Vienna”*. One of them mentioned that the national government is currently looking into tax regulation because a lot of sharing platforms are not paying taxes in Austria.

The sharing economy in Vienna

Sharing initiatives such as car-, bike- and food sharing as well as neighbourhood garden projects and repair cafés are increasingly popping up in Vienna (Miller, 2015c). At the same time, the city already had a lot of shared facilities such as of public swimming pools, libraries and cooperatives too (Stadt Wien, 2016). As the Director Economic Affairs, Labour and Statistics Vienna explained in the interview: *“Even sharing your flat is not a new thing. Only the ease to do it on your mobile device is new”*. He added that, Vienna already started developing co-housing projects in which a lot of resources are shared twenty years ago.

To spread the word and stimulate sharing practices in Vienna, *Vienna Shares* was founded in the summer of 2014 (Share Vienna, n.d.). This non-profit organisation brings people together to share and exchange goods, skills and ideas with the aim to strengthen the community and reduce waste on a local level. The advent of big accommodation sharing platforms for example in the field of transport (Uber, Flynt, Checkrobin) and accommodation (such as Airbnb, Wimdu, 9Flats) induced critical reflections on the emergence of the sharing economy in the local media (Stadt Wien, 2016).

Smart City Strategy Vienna

Vienna shows a strong political commitment to become a Smart City. In 2011, the city launched the Smart City Wien Initiative under the supervision of Mayor Michael Häupl. Based on a broad stakeholder process the city developed a framework strategy which started in 2013 and extends to 2050 (City of Vienna, 2014). Concrete methods of application are still being developed in many areas but the overall goal for 2050 is clear:

“The best quality of life for all inhabitants of Vienna, while minimizing the consumption of resources. This will be realized through comprehensive innovation.” (City of Vienna, 2014).

The three main aims of the strategy are reducing resource consumption, increase the quality of life and fostering innovation. The strategy assigns priority to, and interlinks, the fields of energy, mobility, buildings and infrastructure. Each of the focus areas contains specific objectives. The strategy, defines a long-term umbrella strategy, establishing a conducive and structural framework existing alongside other established documents, plans and policies (City of Vienna, 2014).

Turning the sharing economy into a fair economy

To address the emergence of the sharing economy the city government assigned an internal working group and several meetings with stakeholder groups including the Vienna Economic Chamber, Vienna Business Agency, Chamber of Labour, Vienna Tourist Board and Federal Finance Ministry, housing and transport associations and trade unions (Stadt Wien, 2016). The working group is mainly focussed at legal issues. In collaboration with other experts such as from the University of Economics and Business the working group published the strategy document: *Turning the sharing economy into a fair economy in Vienna* (Stadt Wien, 2016). The strategy describes the two-sided view of the city government with regard to the sharing economy:

“Vienna is favourable to the innovative and participatory original idea of sharing . In the profit-oriented sector, especially in the field of accommodation, however, numerous media reports highlight the limits and difficulties of this new type of economy. This is exactly why the city of Vienna actively addresses this topic.” (Interviewee 2)

The interviewees both explained it is not important and rather hard to define the sharing economy since it is a *“plural economic phenomena”* (interviewee 2). Instead is more important to find out how to deal with the *“heterogenous topic”* (interviewee 13). The strategy document adds on this:

“Regardless of the ongoing scientific discussion about the exact conceptual definition of the terms “sharing economy”, “crowd working” or “on-demand economy”, it is clear that it is necessary to differentiate when dealing with these phenomena.” (Stadt Wien, 2016)

According to the interviewee from the city government sharing economy initiatives are assessed on the basis of their contribution to the Smart City goals:

“We are very open to new ideas or new forms of the economy but it has to fit with our strategic plans and ideas which means saving natural resources, maintaining the life quality and being innovative if it fits than there is a huge support of the city Vienna.” (Interviewee 2)

As stated in the strategy, Vienna aims to foster the innovative practices, especially those also reducing resource consumption but clear limits are drawn where the interests of the citizens, consumers and fair competition are affected (Stadt Wien, 2016). With this published strategy document the city communicated a clear message. As the interviewee from the city government explained: *“We want the sharing economy within the rules we give it.”*

Towards Vienna Sharing City

On March 15th, local sharing experts organized an event for various city-relevant stakeholders including representative of different level of city governance and companies interested in supporting sharing projects in the city. The interviewed local expert explained that the sharing economy is currently a highly contested topic in Vienna. During the event local experts tried to redefine sharing to protect it from *“over-economic framing”* and show how the sharing economy plays an important role in the already strong social sector in Vienna. As the interviewee explained: *“There are a lot of intercultural places, a lot of people are working on social inclusion.”* The experts presented their vision of Vienna as Sharing City. This vision outlines an important role for the city government to foster the social potentials and support sharing community meetings, neighbourhood sharing and other local sharing initiatives. As the interviewee formulated it:

“Not only in the sense of, giving certain regulations to commercial platforms but in essence also enabling this social sharing, the social inclusion of sharing, this community-based sharing, not necessarily a money related activity.” (Interviewee 13)

The interviewee explained that their vision to become a Sharing City will be a slow and complex political process since becoming a Smart City is currently the highest political priority in Vienna. She mentioned: *“to give you an idea, leading to this event took us over a year: for a four hour, half a day relaxed brunch event.”*

Governance actions city of Vienna

The city government takes a clear stance towards- and actively addresses developments within the sharing economy. An overview of the actions the city government has taken:

- Assigned a (temporary) working group within the city administration in 2015, especially focussed at legislation.
- Adjusted regulations - the Vienna Tourism Promotion Act (WTFG) has been amended:
 - Reporting obligation for platform operators as accommodation agencies.
 - Reporting requirement for accommodation providers obliging them to provide information on the accommodation addresses.
 - Fines will be raised (420 euro at present), for example, for providers who do not register accommodations.
 - Airbnb has to pay local taxes.
- Launched an information campaign about the legal framework in the accommodation sector to provide clear information about what is allowed in Vienna with regard to accommodation sharing.
- Funded Share Vienna to map the sharing initiatives in the city.
- Provides subsidies for innovative ideas, but this is not specific for sharing initiatives (Stadt Wien, 2016).

The city's main focus is on (de)regulating to ensure and remain a fair local economy. As the interviewee from the city government explained: "*it is not only regulating but also deregulating because sometimes you have old rules which do not fit the new situation*". The city supports sharing initiatives that contribute to the Smart City goals but stimulating (social) sharing is not a political priority.

5.2.6. SPAIN – BARCELONA

National and regional authorities in Spain and Catalonia have put regulatory roadblocks in place to restrict the operations of some international commercial sharing platforms (Moran, 2016; Listly, 2017). Since December 2014, UberPop services are illegal in Spain. Rideshare platforms caused a series of protests by taxi associations in Spain. The new legislation was due to drivers lacking proper administrative authorization and the fact that their activities constituted unfair competition (Listly, 2017). The Catalan government fined Airbnb and peer-to-peer accommodation platforms accusing them to violate the local laws stating that every flat that is rented to tourists needs to be registered with the Tourism Registry of Catalonia (Goudin, 2016). More recently, the Spanish Confederation of Bus Transportation (Confebús) sued ride sharing platform Blablacar for operating a public transport company without complying with legislation and herewith creating unfair competition. In February 2016, the Spanish court ruled against Confebús (Moran, 2016).

The sharing economy in Barcelona

As can be seen in *figure 5*, the sharing economy is "*flourishing*" in Barcelona (Moran, 2016). Barcelona is home to a wide range of sharing economy start-ups, including Sharing Academy (private tuition by and for students), Trip4real (share local travel experiences) and Letmespace (parking space and storage rental). Also big sharing companies like Airbnb and Socialcar have their headquarters located in the city and the global sharing economy event, OuisShare Fest, has been organized in Barcelona twice (Moran, 2016).

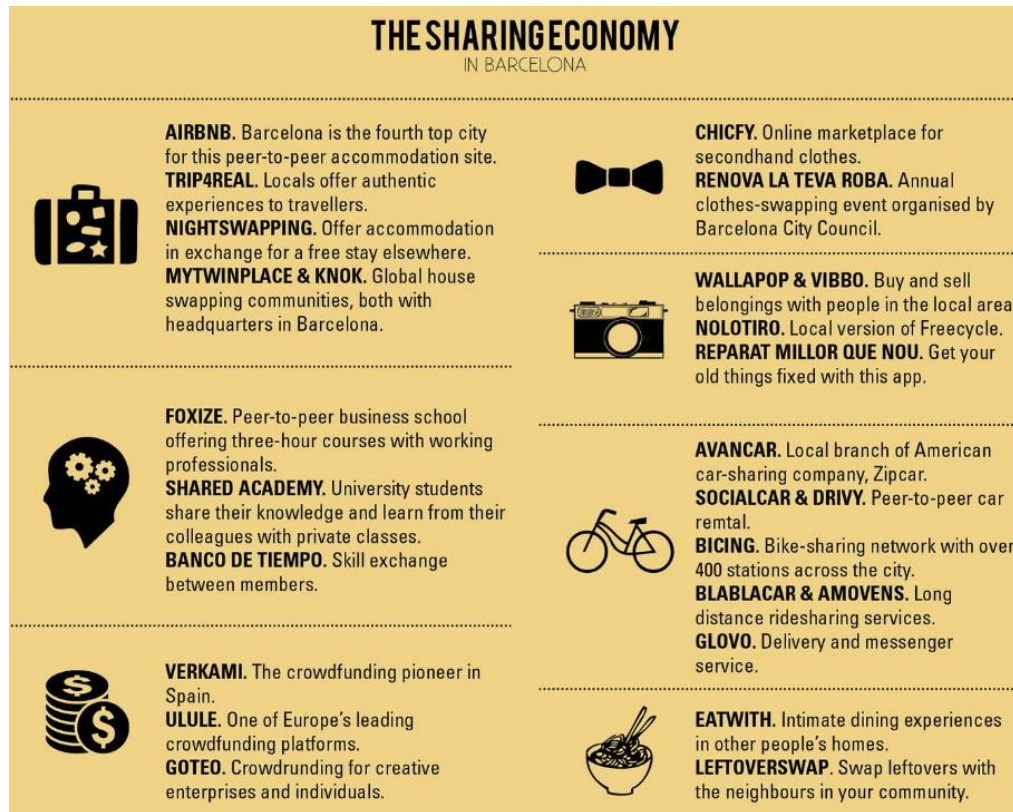


Figure 5: The Sharing Economy in Barcelona (Moran, 2016)

During the interview with the director in the area of Other Economies and Proximity of Barcelona Activa (i.e. Barcelona City Council), the interviewee explained there is a big alternative economy scene in Barcelona: *“that is a tradition that comes from the beginning of the 20th century or even the 19th century. There is always people looking for more kind of social or commons oriented ways of doing things”*. Barcelona is home to about 1.300 cooperatives, neighborhood projects, foundations, and other enterprises that have a democratic government system, comprising a remarkable 10% of the city economy (Bollier, 2016). With the recent digital developments a lot of free software and online communities emerged in Barcelona. The interviewee explained that these communities are collaboratively building valuable and alternative options to Microsoft and facilitate collaboration, *“there is like a big culture of that. So you have a big free software community. A big Wikipedia community.”*

The split attitude of the city government

Since May 2015, the government is led by the political party En Comú, which means Barcelona in Common (Ajuntament Barcelona, 2016). The minority governing party En Comú is especially interested in promoting the commons oriented collaborative economy. As a consequence, the city government of Barcelona reveals a contrasting attitude towards the broader sharing economy topic. On the one hand, the city government, aims to stimulate and expand the *“commons collaborative economy”*. That is, organizations that take a commons approach, which means that they are based on cooperatives, neighborhood projects, foundations, or enterprises that have a democratic government system, are privileged (Bollier, 2016). As the interviewee explained:

“We very much think that there is a lot of initiatives and a lot of practices within the collaborative economy phenomenon that are truly good, truly positive for the common interest and we as public administration should promote and support this.” (Interviewee 12)

On the other hand, the city government is determinant to address unregulated accommodation and illegal earnings through accommodation sharing platforms. In July 2014, Airbnb was fined €30,000 by the city council, followed by a €60,000 fine in December 2015 because the platform continued to advertise properties without a tourist license (Force, 2016). Other accommodation sharing platforms such as HomeAway were also heavily fined. The interviewee emphasized that the sharing- and collaborative economy are both ambiguous definitions. These definition are “*very hip, very fashionable and are being used for almost any kind of business that has something to do with a digital platform*”. In his city department of Other Economies and Proximity of Barcelona Activa they rather refer to collaborative economy and try to be a little more accurate in what they think the collaborative economy is. “*We do not have a real final definition or something because it probably does not exist.*” Instead they are developing a framework with a set of criteria to distinguish initiatives with a positive impact from initiatives which are actually business as usual or might even have a negative impact on the city. According to the interviewee it is important to have some sort of positive discrimination, so the city government does not promote or support “*wolves in sheep's clothing as we say here in Spain*”. The criteria are meant to develop a legal framework for the collaborative economy but for now only a draft version exists. The interviewee sent a PowerPoint presentation with some preliminary insights of the draft. **Figure 6**, depicts a classification of the different terms, including the sharing economy, within the current “*transformative economies*”.

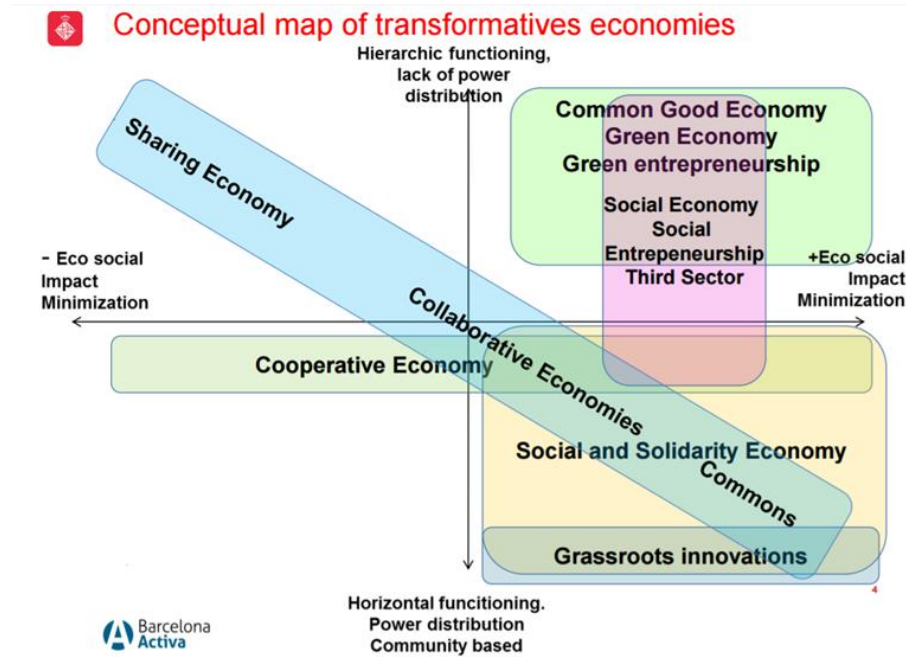


Figure 6: Draft Action Plan Collaborative policies for the Collaborative Economy (Porro & Fuster, 2017)

The interviewee explained that the criteria they drafted are mainly based on what kind of license, mode of production, revenue model, the type governance and the impact the initiative has. The city government is not interested in supporting platforms like Airbnb and Uber, the so-called “*unicorns*”. Instead they only want to support the growth of the commons collaborative economy and are “*very interested in something that is evolving now: platform cooperativism*”. His city department is trying to understand and connect with the scene of that. **Figure 7**, illustrates how they distinguish different initiatives in the collaborative economy.







	Open Commons  WIKIPEDIA  GOTEO	Unicorn  airbnb  UBER	Platform coops  lamond  cooperative
Type of economy	Not-for profit/Foundations Participative governance	Corporations Centralized governance	SME & cooperatives Participative governance
Type of technology	Free and Open Source Software	Over closed technology	Free and Open Source Software
Type of knowledge	Open data	Locked knowledge	Vary

Figure 7: Draft Action Plan Collaborative policies for the Collaborative Economy (Porro & Fuster, 2017)

So city authorities are currently working on a better assessment framework with a clear focus to stimulate and promote the commons collaborative economy. At the same time they are examining the impact of unicorn firms such as Airbnb and other new business models to figure out the best way to manage them.

Collaborative policy-making

The city government decided that stimulating the commons collaborative economy should be an act of co-creation with citizens (Miller, 2017). The city government established new systems to initiate and expand debates to create policies for the collaborative economy in a participatory manner. *Procomuns* started as an event in March 2016 to involve local stakeholders and citizens to propose policy recommendations to the city council. This open, participatory process resulted in *the Procomuns declaration* with 120 policy recommendations (Bollier, 2016). These have been sent to the Barcelona City Council. Now Procomuns organizes monthly meet-ups (Procomuns, n.d.). The city also developed a participatory democracy platform *Decidem Barcelona* to provide feedback on municipal policies (Decidem Barcelona, n.d.). Additionally, the city appointed a working group called *BarCola*, consisting of people from the city council and a variety of stakeholders and experts in the collaborative economy and commons-based peer production to keep track of the developments in this field and to recommend policies. BarCola meets almost every month (Bollier, 2016). With Procomuns, Decidem Barcelona and BarCola the city has developed an ecosystem of stakeholders providing the city government with their opinion and insights into the emerging collaborative economy. As the interviewee says: “*we do collaborative politics to support collaborative economics*”.

The "collaborative co-creation" policy approach led to different actions by the city government:

- The development the Commons Start-up Support Programme La Comunicadora, to support entrepreneurs in the collaborative economy. The city did a call for new initiatives, the thirty selected initiatives are provided with mentorship, legal advice, and match funding. The more commons-based initiatives are prioritized.
- A mapping of the city's underutilized infrastructure resources. It started with electronic devices such as computers so they can be put to collaborative use for social purposes outside the office hours.
- Started a €100,000 match funding program and developing a collaborative economy incubator.
- Support events to stimulate awareness and debate about the collaborative economy. The city funds OuiShare, supports the annual meeting of the city's cooperatives and supports events for example about do-it-yourself technology.
- Performing research into the collaborative economy to develop a framework for understanding its impact (Miller, 2017; Interviewee 12).

The interviewee further elaborated:

“So there is a framework of approach. There are concrete actions and organized activities. But still there is not, what I would call a strategic plan or an integral plan. That is mainly something that could evolve from this [BarCola] group and this [draft] framework of approach. But you know how it happens in the big municipalities, it is one thing to explain something and the other thing is to really have it integrated as something we all share and use. That is a process. That is not something that happens from one moment into the other.” (Interviewee 12)

Thus, the city government is developing a framework of approach to distinguishing favourable sharing initiatives from business as usual or with potential negative impact on the city. In the meantime the city already started to support the growth of several sharing initiatives. With the support of BarCola the city organized conferences, granted funds for events, research and OuiShare Fest, initiated the start-up support programme and their own project of utilizing the city's unused electronical equipment. Barcelona also regulates home-sharing with high fines and enforcement activities (e.g. by sending letters to residents asking them to report a property if they suspect it is being illegally rented to tourists). As the interviewee concluded:

“So this summarizes this kind of double proactive approach of addressing the challenges and opportunities. Being determinant with the challenges and being supportive of the opportunities.” (Interviewee 12)

5.2.7. ITALY – MILAN

The sharing economy has become, and is becoming, increasingly popular in the Italian society. According to a study conducted by researchers from the University of Pavia, digital sharing platforms have grown by 34.7 % between the years 2014 and 2015 (Leccese, 2016). In March 2016, the Innovation Parliamentary Intergroup, presented a law proposal on the Sharing Economy to the Chamber of Deputies of the Parliament (Leccese, 2016). This so-called “*Sharing Economy Act*”⁶ provides a legal framework to both regulate and tax these new practices as well as acknowledge and stimulate this growing phenomenon (Marasco, 2016). The main points of the law are:

- *Definition of the sharing economy and sharing economy businesses.* In the law the sharing economy is defined as an “*economic system generated by the optimization and shared allocation of space, time, goods and services through digital platforms*” (Marasco, 2016). A business falls within the scope of the Sharing Economy Act if it facilitates a connection between users and may provide “*added value services*” in addition to the connection (Leccese, 2016). But users must exclusively own the assets generating value for the platform. This way platforms that operate as intermediaries for professional operators, such as UberBlack are excluded from the law’s scope.
- *The Italian Competition Authority (AGCM).* The law endows the AGCM to monitor sharing economy businesses.
- *The Sharing Economy Registry.* In order to operate legally in Italy, sharing economy businesses have to register in the new Electronic National Register of Sharing Economy’s Digital Platforms which is open to the general public. AGCM can issue a fine which can reach to 25% of the income generated in the period the platform was not registered.
- *Taxes.* This is one of the main points of the law to guarantee fair fiscal incomes by taxing users of the sharing economy. The law states that users should indicate sharing-economy incomes up to €10,000 under “*non-professional income deriving from sharing economy*” at the income declaration form (Marasco, 2016). The tax rate will be 10% for these earnings. Incomes greater than €10,000 will be cumulated to the user’s professional incomes and will be taxed according to the relative tax rate.
- *Sharing economy businesses as withholding agencies.* Sharing economy businesses are assigned a new role: they should directly hold taxes due by users and forward them to the national government.
- *Stimulating sharing economy and best practices.* In addition to regulating and taxing, the law aims to foster the sharing economy. Therefore, the law states that the Parliament might adopt measures “*to spread sharing economy and remove regulatory, normative, and administrative obstacles*” (Leccese, 2016).

⁶ The proposed law is available (in Italian) at the online address http://www.makingspeechstalk.com/ch/comment_sea/?id_speech=45

The sharing economy in Milan

Already in 2013, a committee of researchers, urban experts and other stakeholders started working on the so-called *ShareExpo* initiative. The initiative aimed to promote sharing services and activities to tackle the presence of 20 million expected visitors at the International Exposition in 2015 (i.e. Expo Milano). With the advent of the event, Milan was the ideal testing location to experiment with sharing services and to raise awareness of this emerging sector (D'antonio, 2015). The first event entirely dedicated to the sharing economy, *ShareItaly* was also organised in Milan in 2013 (Bernardi & Diamantini, 2016). *ShareItaly* originated from the aim to examine the Italian sharing economy. The event brought together collaborative services, businesses, start-ups, and administration to brainstorm and exchange ideas and perspectives. Both initiatives played a big role in provoking the local debate and creating awareness of the sharing economy. Especially the organisation of *ShareExpo* gave an early reflection on- and accelerated the growth of the sharing economy in Milan. Before the event, the city's car-sharing program had already 200.000 users and its bike sharing program offered 3,500 bicycles (D'antonio, 2015).

Supportive city government

From the beginning the city government was very supportive towards the incitements of *ShareItaly* and *ShareExpo* and the consequent developments in the sharing economy. During the interview with the chair of Milano Smart- and Sharing City from the Milan Council Department for Economic Innovation, the interviewee emphasized that the city recognizes sharing services and start-ups as “*a growth sector for its local economy.*” Another important factor why the city government positively approaches the sharing economy is because of its social potential to “*build communities, strengthening local empowerment between and among citizens, NGO's, associations and so on*”. The bottom-up activities and developments within the sharing economy are in line with the city's political address, focussed at promoting social innovation and the Smart City (LabGov, 2016). The city perceived the sharing economy as a potential catalyst in this frame and started “*this policy activity*” as the interviewee said. The interviewee emphasized that “*the Smart City Strategy is a kind of umbrella strategy we have for the city of Milan and within this framework we have different topics, one is the sharing economy.*”

Collaborative policy-making

At the end of 2014, the city opened both a public consultation and an internal reflection on the sharing economy (Bernardi, 2016). The consultation aimed to collect ideas, demands and other information from citizens, businesses, start-ups, experts and activists through a questionnaire open for all city actors. An important outcome of the questionnaire was the fact that citizens demanded the city government to become an “*enabling platform*” of the sharing economy (Bernardi & Diamantini, 2016). That is, the city government was requested to:

- Map the relevant local players and experiences
- Inform and train citizens on topic
- Strengthen the forms of participation
- Promoting the creation of new sharing businesses
- Become an early adopter of sharing services itself
- Favour the dynamics of collaboration in its own services
- Clarify the legislative framework especially with regard to safety and taxation.

A lot of different actors, including academics, companies, entrepreneurs, activists, NGO's, citizens and other stakeholders within the field, gave their opinion which generated a large input of information. As the interviewee emphasized: “*This participatory process was quite important for the city of Milan because many actors were involved and interested in the concept of the sharing economy.*”

Milano Sharing City

The collaborative policy making process led to the *Sharing Economy Guidelines* which were approved by the city government in December 2014 (Bernardi, 2016). The guidelines clarify the administrative purpose and the role of the city government. Herewith the sharing economy became part of the city's political agenda. An Action Plan with Milan's strategy, activities and tools got adopted by the City Council and has led to various actions of the city government:

- *Events* – The city organized various events to cultivate dialogues, (critical) reflections and the sharing culture in Milan.
- *Inventory* – The city mapped the sharing initiatives.
- *Registry of sharing economy players* – A public official list, giving actors in the sharing economy an official stamp of approval and access to (co-working) space to organize events and meetings.
- *Research* - Promoted the development of research activities on the economic, environmental and social impacts of the sharing economy.
- *Funding* - Launched an experimental civic crowdfunding: with an allocation of over 400 thousand euros seeking to create and foster innovative, sharing and social projects. The city invested large amounts to regenerate buildings dedicated to (sharing) start-ups and social entrepreneurs.
- *Physical space* – Established the Collaboration House (i.e. Co-Hub) a place for operators in the sharing economy and others to meet, debate and discuss.
- *Common digital platform* – Developed a platform with publicly available data from public- and private actors.
- *Provider of shared space*: the city has set up 8 new shared gardens (34 thousand square meters), and realized 24 houses for the solidarity hospitality (Bernardi & Diamantini, 2016; LabGov, 2016)

The interviewee added that, the city opened the *Sharing Economy School*, to expand citizens digital and general knowledge about the sharing economy in collaboration with Co-Hub, Airbnb and other registered sharing economy actors. The interviewee mentioned that they are collaboratively launching several social and shared projects with Airbnb. The city also plays an important role in stimulating car- and bike sharing with their sustainable urban mobility plan (Bernardi & Diamantini, 2016). The city is in fact supporting and proposing such a wide variety of initiatives within the sharing economy that it is not possible to describe or even name all the initiatives (e.g. PianoCity, BookCity, Fuori Salone, Expo in Città, etc.). The interviewee has sent a presentation with additional data and visualizations about the current sharing economy in Milan (see *figure 8*).

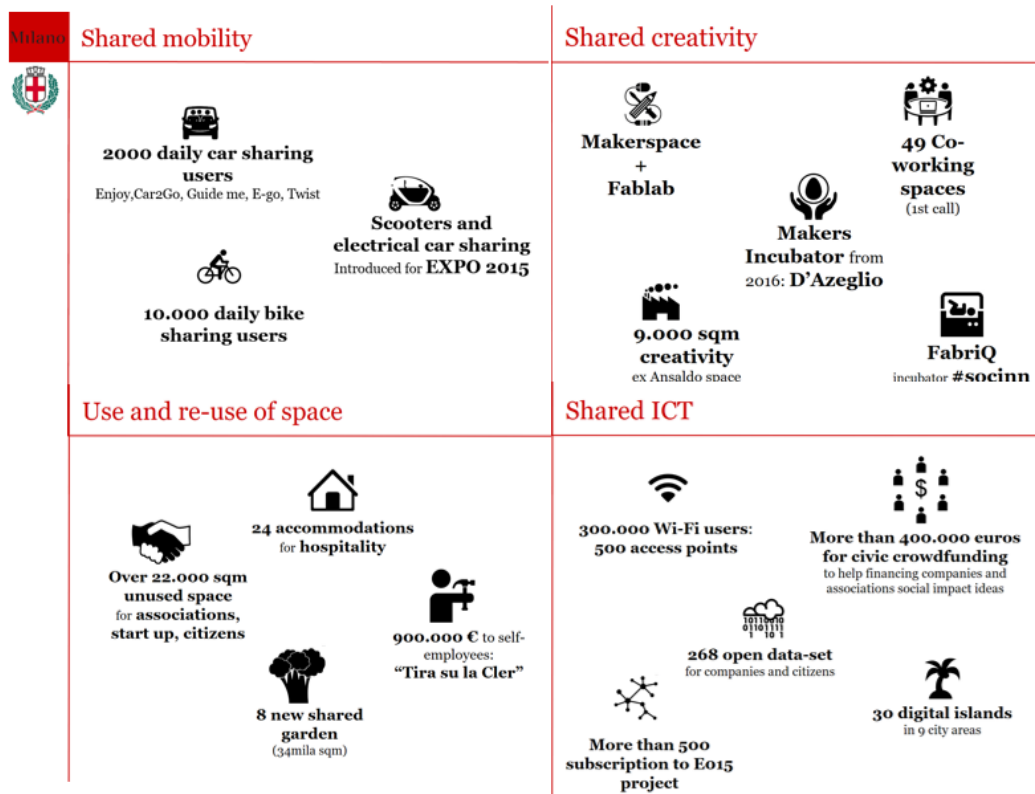


Figure 8: Presentation Milano Sharing City (Scopelliti, 2016)

To summarize, the city of Milan demonstrates a positive approach that respects a plurality of initiatives emerging from different actors and perspectives, without a planned coordination from the city. The interviewee emphasize that the city did not define the sharing economy, “we didn’t give a strict definition of what the sharing economy is”. Instead of stipulating regulations the city started with mapping what was happening in the city. In this loose system of governance, the city managed to foster the sharing economy in a non-traditional way (D’antonio, 2015). The bottom-up activities from the non-profit sector, citizens, and innovative businesses, supported by the city fuelled a network highly devoted to, collaboration, inclusion, social cohesion, participation, public-private-civic cooperation, active citizenship and strong public engagement (Bernardi & Diamantini, 2016).

5.3. Defining and framing the sharing economy

In this section *sub-question 1: How do city authorities frame the sharing economy?* will be answered.

5.3.1. Local debate and definitional challenge

The interviews and secondary sources revealed that the emergence of the sharing economy led to a lot of media attention and local debate in almost all cities⁷.

“There are some critical conflicts and discussions about it. But that is quite normal or ordinary because when a new approach of services and goods is entering the market it has to conquer its space and this usually causes some discussion between different players.” (Interviewee 4; Milan)

In fact, similar epistemic debates and trends in discourse were observed in these cities. At first the media attention started really enthusiastic. Then the emergence and rapid growth of Airbnb and Uber led to critical reflections and in several cities even to demonstrations and protests. As a consequence, the majority of the city authorities noticed that the sharing economy is not necessarily sustainable or socially inclusive while at the same time realizing it is not just a hype either.

As described in *table 8*, rather than drawing a straightforward definition or a ‘*for or against*’ picture, the city governments take a nuanced stance with regard to the sharing economy. At least one interviewee of every city emphasized the inherent definitional challenge, of this ‘*evolving*’ (1, 12), ‘*plural*’ (2, 4, 12), ‘*umbrella*’ (6), ‘*container*’ (10), ‘*ambiguous*’ (12) and ‘*heterogenous*’ (13) concept. Instead of proposing a clear-cut definition, most city governments frame the potentials, challenges and characteristics they want to work with, develop a certain frame of approach or a vision where the sharing economy should be heading. In fact, the ambiguity and complexity of the concept enabled city governments to define and frame the sharing economy in a large variety of ways.

Table 8. Overview of how city governments define and frame the sharing economy

	Defining and framing the sharing economy
Amsterdam	The College of Mayor and Alderpersons agreed on an Action Plan for the sharing economy. In this plan, the concept is not defined, instead the plan describes what is happening, highlights the characteristics (e.g. access over ownership, lowers barriers for entrepreneurs, review systems etc.), the opportunities (promotes innovation, fosters social engagement and public-private partnerships) and challenges (unfair competition, income inequality, risk of monopolies etc.) the city wants to address.
Antwerp	Within the city government there is neither a generally accepted definition of the sharing economy nor a clear vision about how to address it. The city commissioned Stadslab2050 to explore its potential. Stadslab2050 uses the definition of shareNL and Nesta with a focus on the commons. Since there is no integral vision or strategy within the government there are various viewpoints on the sharing economy in different departments.
Ghent	There is no specific definition within the city government. But the emergence of Airbnb crystalized a consciousness that the sharing economy is a big container term. Therefore the city assigned expert Michel Bauwens to develop a policy advice on which specific parts of the sharing economy the city government should address. The main focus of the research/policy advice is on stimulating the growth of the commons.

⁷ Except for Bremen and in Antwerp to a lesser extent.

Berlin	In the Smart City Strategy the sharing economy is referred to as both a political challenge and a technological advancement. The sharing economy is mentioned as a tool to provide efficiency opportunities in the mobility, energy and housing sector. However, the city government does not communicate a clear definition or integral vision of what the potential advantages and disadvantages are and how the city aims to address these.
Bremen	There is no clear definition or vision of what the sharing economy is within the city government. The city does have a clear vision with regard to car-sharing because of the clear public benefit/gain for the city. The city has a car-sharing action plan since 2009. The city's goal is to achieve 20.000 car-sharing users in Bremen and replace 6.000 privately owned cars by 2020.
Copenhagen	The Lord Mayor has formulated a vision and some principals about the sharing economy. The vision does not provide a straightforward definition, instead the city wants to work with the overall trend and not spent too much time defining what the specific boundaries are. The city recognizes the potential of the sharing economy for growth and innovation and formulated six principles as a framework for addressing the sharing economy: stimulate innovation and growth potential (1) as well as more effective use of resources (2), discourage unfair business models (3) and tax evasion (4), support consumer rights (5) and recognize the sharing economy as a solid business model (6). The aim is to figure out how the city can stimulate the sharing economy to grow, flourish and expand in Copenhagen while at the same time protecting their idea of a welfare society.
Vienna	City authorities want to focus on how to deal with the phenomenon and believe it is not important and perhaps even impossible to define the sharing economy. City authorities developed a strategy document in which they communicate a clear goal <i>to turn the sharing economy into a fair economy</i> . They want to stimulate initiatives that contribute to one of the three smart city strategy pillars: reducing resource consumption, increase the quality of life and fostering innovation. Otherwise the initiative has to adhere to the same regulatory framework as other businesses.
Barcelona	City authorities recognize the sharing economy as an ambiguous term and the need to be more accurate about which parts have a positive impact on the city. Within the Other Economies department city authorities are drafting a framework of approach with criteria to differentiate initiatives they want to support from "business as usual" or even undesirable initiatives. They distinguish the <i>commons collaborative economy</i> with platform cooperatives and other collaborative models from the so-called <i>unicorns</i> which are big commercial platforms such Airbnb and Uber. They want to stimulate the commons collaborative economy as well as assess the impact of the unicorns and find out how to manage them.
Milan	Consultation by citizens, experts and other stakeholders led to guidelines on the sharing economy. The sharing economy is not defined. City authorities consider the sharing economy as an interesting sector for the local economy and community building. All initiatives with some sort of sharing aspect in it are considered part of the sharing economy. They do not distinguish between for profit or not-for profit or other criteria. The city aims to become an enabling platform for the sharing economy.

Table 8 demonstrates that most of the city governments take a positive but critical stance towards developments within the sharing economy by recognizing both the potentials and challenges. The city of Amsterdam reveals the broadest perspective and frames the sharing economy as a means to:

- Stimulate innovation and economic growth
- Use resources more effectively and sustainable
- Stimulate community building and social cohesion
- Foster digital advancements and become a smart city
- Enable the growth of car-sharing
- Establish powerful monopolies
- Create unfair competition (tax evasion, outdated regulations etc.)
- Increase inequality
- Violate consumer rights, social security and privacy

Table 9 gives an overview of how city governments define and frame the sharing economy. The black and grey X’s visualize the largely overlapping potentials and challenges city governments highlight.

Table 9. *Defining and framing of the sharing economy by city governments*

		Amsterdam	Berlin	Bremen	Antwerp	Ghent	Copenhagen	Vienna	Barcelona	Milan
Potentials	Smart / digital	X			X	X	X	X	X	X
	Sustainability / efficiency	X	X		X		X	X		
	Economic growth / innovation	X			X		X	X		X
	Social / commons	X			X	X	X		X	X
	Car-sharing	X	X	X	X	X				X
Challenges	Unregulated marketplace	X					X	X	X	
	Powerful monopolies	X				X	X	X	X	X
	Inequality	X				X	X		X	X
	Social security/ consumer protection	X					X	X		

5.3.2. Discursive framing

As can be seen in the table, frames vary from highlighting the potentials for cities to become a more socially inclusive, sustainable, smart and innovative to the challenges of unregulated marketplaces, for social security and consumer protection. Although, city governments largely recognize the same potentials and challenges, significant variations are found in which potentials, challenges and characteristics they aim to address. The city governments strategically prioritize and frame different aspects of the sharing economy to establish a rationale for taking action and govern these specific issues. The city government of Ghent and Barcelona mainly emphasize the potentials to stimulate the growth of social-, bottom-up initiatives and the commons. These cities frame the sharing economy⁸ *as a means to foster the transition to a decentralized, post-capitalistic economy*. The city of Amsterdam and Milan also stipulate their interest in stimulating the social- and commons part of the sharing economy while prioritizing the innovation potential as well. The city government of Copenhagen and Vienna frame the *economic growth potential* but at the same time they emphasize challenges for their *local economy* caused by unfair competition, tax evasion and outdated regulations. Copenhagen additionally frames the risk of developments in the sharing economy *to impair their welfare system*. The city of Antwerp, Ghent, and Bremen reveal a sectoral focus by framing the potentials of- and goal to stimulate car-sharing in their strategic plans. These discursive framings are highlighted in **table 9** by the black X's.

When grouping these discursive frames together, three main categories can be identified. That is, the sharing economy as a means to:

1. foster the transition to a innovative, socially inclusive and commons-based city.
2. both stimulate growth and disrupt the local economy.
3. stimulate car-sharing and foster the transition to a car-free city.

Figure 9 visualizes discursive framing category with the associated cities.

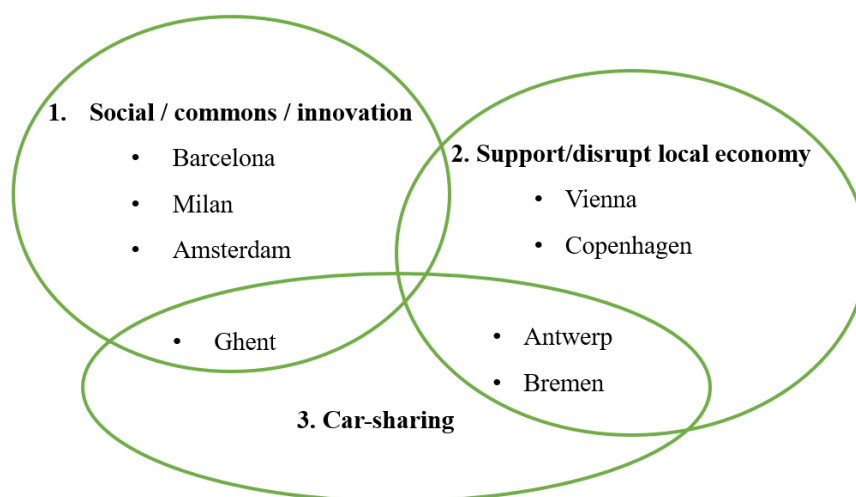


Figure 9: Main discursive framings of the sharing economy

⁸ The city of Barcelona rather refers to the (commons) collaborative economy.

To answer *sub-question 1* this section described how city authorities frame the sharing economy. The results show that the city of Amsterdam, Ghent, Barcelona and Milan predominantly frame the innovative, social and commons potentials. City authorities in Antwerp, Bremen, Copenhagen and Vienna frame the disrupting and growth potentials for the local economy and the city of Antwerp, Ghent and Bremen frame the car-sharing potentials.

5.4. Urban governance of the sharing economy

This section describes how city authorities govern the sharing economy to answer *sub-question 2: How do city authorities govern the sharing economy?*.

5.4.1. Perceived necessity to intervene

The majority of the interviews (1 t/m 8, 12 and 13) emphasized the necessity for city governments to address the sharing economy since the phenomenon does not inherently create a sustainable, social and fair economy or society. In fact, these interviewees see an important role for the city government in making it so. As the interviewees explain:

“We had to address it [the sharing economy] because a lot is happening and to include more people who can benefit from it, to broaden the potentials.” (Interviewee 1; Amsterdam)

“The sharing economy can be innovative but it is not automatically innovative, a lot the things we had before. It really depends what it is. If there are good ideas which can help us save natural resources and maintain the quality of life of Viennese people, than we are happy with it. If this is not the aim of the initiative then we will try to regulate it. (Interviewee 2; Vienna)

“The sharing economy should be governed properly so it can create more equality, more participation and community-building”. (Interviewee 3; Berlin)

“I do not know if it is fair to say that sharing economy will always be green or will always effect resource utilization, therefore we should be mindful”. (Interviewee 7; Copenhagen)

“You really rely on the support of the local governing environment. Not only in the sense of, adjusting certain regulations to commercial platforms but in essence also how they can enable this social sharing.” (Interviewee 13; Vienna)

Another interviewee explained that city authorities have to keep up with (digital) developments including the sharing economy. As he explains:

“If you do not keep up with these developments as city government even public administration has to chance to get disrupted” (Interviewee 6; Antwerp).

The perceived need to act, and the ambiguity of the urban phenomenon have left city governments at a crossroad.

5.4.2. Actions and roles city governments

Table 10, provides an overview of how cities govern the sharing economy. More specific, the actions and roles city governments take in addressing the sharing economy are described. In addition to the predefined roles, the large amount of explorative actions mentioned by the interviewees led to a new code namely the *explorative role*. That is, city authorities who are currently figuring out how to govern the sharing economy with research, mappings or monitoring the developments and impact on the city.

“An important question is, how should we govern this [the sharing economy], the city is currently figuring this out, but we are in the beginning phase of designing useful policies.” (Interviewee 5; Ghent)

“At the moment the sharing economy is not really on the political radar yet. So our goal as innovation lab is to start experimenting with the concept and to examine what the city can do with this theme and what the internal organisation is already doing”. (Interviewee 6; Antwerp)

“One thing we [the city government] need to do before actually building a solution and take actions, is collect more information on what drives people to participate in the sharing economy from the user perspective.” (Interviewee 7; Copenhagen)

Table 10. Governing actions and role of city governments

	Actions to govern the sharing economy	Role
Amsterdam	<ul style="list-style-type: none"> • <i>Enabling actions:</i> Support and collaborate with sharing platforms/start-ups (with space, funding or advice), partnerships to promote, educate, inform, convene and advocate (to higher levels of governance, citizens and other stakeholders) and initiate pilot projects (city pass for social inclusion). • <i>Provider actions:</i> Offer unused office spaces for social activities. • <i>Regulating actions:</i> Adjust regulations and enforce fines (Airbnb) 	Enabler, Provider and Regulator
Antwerp	<ul style="list-style-type: none"> • <i>Explorative actions:</i> Partnership with Stadslab250 to do research, map the initiatives and experiment with the concept and develop a policy advice. • <i>Consumer actions:</i> Initiate pilot project to use car-sharing platforms to utilize the municipality’s unused car fleet. 	Explorative, Consumer
Ghent	<ul style="list-style-type: none"> • <i>Explorative actions:</i> Research and mapping (by external expert Michel Bauwens). • <i>Enabling actions:</i> To stimulate car-sharing: awareness campaigns, subsidies and partnerships with car-sharing platforms. 	Explorative, Enabler
Berlin	<ul style="list-style-type: none"> • <i>Regulating actions:</i> Regulate (Airbnb’s services), enforce (with fines). 	Regulator

Bremen	<ul style="list-style-type: none"> • <i>Enabling actions</i> To stimulate car-sharing: information campaigns, promotional movie, support (with space and advice) and partner/ collaborate with car-sharing platforms, housing developers and other stakeholders. • <i>Regulating actions</i> Adjust regulations to enable car-sharing. 	Enabler, Regulator
Copenhagen	<ul style="list-style-type: none"> • <i>Explorative actions</i> Research, mapping and surveys (impact of the sharing economy). 	Explorative
Vienna	<ul style="list-style-type: none"> • <i>Enabling actions</i> Educate, inform (about new regulations Airbnb) and fund research projects and mappings of sharing initiatives (ShareVienna). • <i>Regulating actions</i> Regulating and deregulate (Tourism Act, open data and taxes). 	Enabler, Regulator
Barcelona	<ul style="list-style-type: none"> • <i>Enabling actions</i> Educate, promote (sharing economy school), support (start-up program, funding), convene (bring together stakeholders), partner and collaborate with sharing start-ups and other stakeholders (BarCola and Procomuns). • <i>Providing actions</i> Initiated a pilot project of utilizing unused electronical equipment of the municipality. • <i>Regulating actions</i> Regulate (home-sharing), enforce (fines and other enforcement activities). 	Enabler, Provider and Regulator
Milan	<ul style="list-style-type: none"> • <i>Enabling actions</i> Educate, advocate (to higher levels of government), support sharing start-ups and practices (with space, events, incubator program), convene (bring together stakeholders), partnerships and pilot projects with registered sharing economy actors. • <i>Providing actions</i> Providing shared infrastructure such physical and virtual space: open data, shared gardens. 	Enabler, Provider

As **table 10** indicates, the governing roles and actions city governments take to govern the sharing economy vary considerably. **Figure 10**, visualizes the various roles the city governments take to govern the sharing economy. The size of the city name indicates the amount of actions the government authorities take within the specific role. The more actions the city government takes the larger the size of the name.

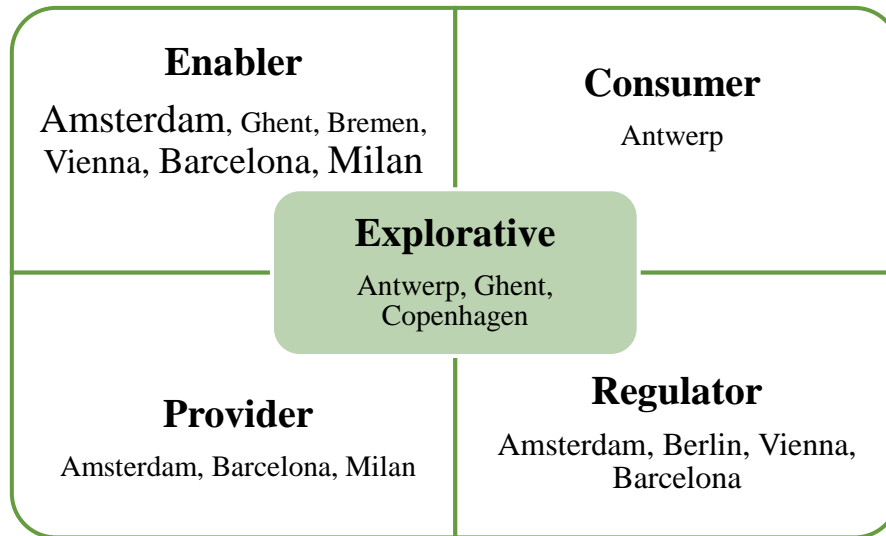


Figure 10: Various roles city governments take in governing the sharing economy

As can be seen in both *table 10* and *figure 10*, the city governments of Amsterdam, Vienna, Barcelona and Milan are currently taking the most actions (and roles) to govern the sharing economy. The interviewees of these four cities, explained that their city government *proactively* addresses the sharing economy. Antwerp, Ghent and Bremen are also taking various actions (and roles) but specifically to support the growth of car-sharing, (i.e. sector specific actions). Moreover, Antwerp and Ghent as well as Copenhagen are still exploring how to respond to the wider spectrum of the sharing economy with appropriate actions. These cities mainly respond with *explorative* actions. The interviewee from Berlin, the city that reveals the least governing actions, explained that the city government responds *reactively* to the sharing economy.

“You need to involve a lot of people, a lot of time and effort to get a good picture to be able to deal with it. Otherwise you are just reacting. Now they [city authorities in Berlin] are just reacting, out of their specific departmental views.” (Interviewee 3; Berlin)

5.4.3. Urban governance approach

When the governing actions are compared and the arguments of the interviewees are taken into account, a distinction can be made between *proactively-* and *reactively* approaching the sharing economy. The *proactive approach* indicates a high effort from city government to stimulate and steer the emergence of the sharing economy which is the case in Amsterdam, Vienna, Barcelona and Milan. Antwerp, Ghent, Bremen, and Copenhagen also take a proactive approach but then sector-specific or are proactively exploring how to address the sharing economy effectively. The *reactive approach* indicates a low effort from the city government to address the sharing economy as shown in the case of Berlin.

Two other concepts emerged from the insights of the interviewees about the driving force behind the growth of sharing economy in the city. Several interviewees (1, 4, 5, 10 and 12) emphasized that the sharing economy in the city of Amsterdam, Ghent, Barcelona and Milan is characterized by a lot of bottom-up initiatives and start-ups. The interviewees explained how non-governmental actors started with sharing initiatives and actions to stimulate sharing economy practices. These bottom-up initiatives emerged without government intervention from various city actors including non-profit organisations, (social) entrepreneurs, sharing experts and activists. The interviewees explained:

“Because of all these sharing initiatives and start-ups in the city, the municipality saw the potentials” (Interviewee 1; Amsterdam)

“Many actors were involved and interested in the concept of the sharing economy and requested us to take an enabling role.” (Interviewee 4; Milan)

“The city has a lot of bottom-up initiatives also in the sharing economy, these get support from the city government” (Interviewee 5; Ghent)

“A lot of focus is placed on stimulating these bottom-up initiatives.” (Interviewee 10; Ghent)

“It started with these free software communities” (Interviewee 12; Barcelona)

The initiative and growth of sharing economy practices in these city largely came from non-governmental actors. These cities reveal a *community-led* governance. As one of the interviewees formulated, the city government does not take:

“A command-control approach but more a kind of horizontal mindset in which the city government plays a co-creation role by stimulating and supporting the citizen initiatives.” (Interviewee 5; Ghent)

On the other hand, several interviewees (3, 6, 7 and 13) from Antwerp, Berlin, Bremen, Copenhagen and Vienna indicated a top-down approach, initiated by the city government as a consequence of a lack of bottom-up initiatives or to control the negative developments.

“The current smart city approach, a bit simplified but basically is a top-down approach. So you have the government connecting with big companies..” (Interviewee 3; Berlin)

“I think the municipality plays an important role because there are not so much sharing platforms with a lot of users.” (Interviewee 6; Antwerp)

“Overall the impact, or the presence of the sharing economy in Copenhagen is still somewhat small if you are not taking Airbnb into account.” (Interviewee 7; Copenhagen)

“In what they [the city government] can do they are actually active and they also try to regulate Airbnb, Uber and so on. I think that is indeed necessary but at the same time this type of sharing that we want to talk about [citizen- and social sharing initiatives] is not about regulation and this is kind of where the city’s actions stop.” (Interviewee 13)

In contrast to a *community-led* governance, the city government of Antwerp, Berlin, Bremen, Copenhagen and Vienna reveal a *city-led* governance of the sharing economy. **Figure 11**, visualizes the identified different approaches to govern the sharing economy.

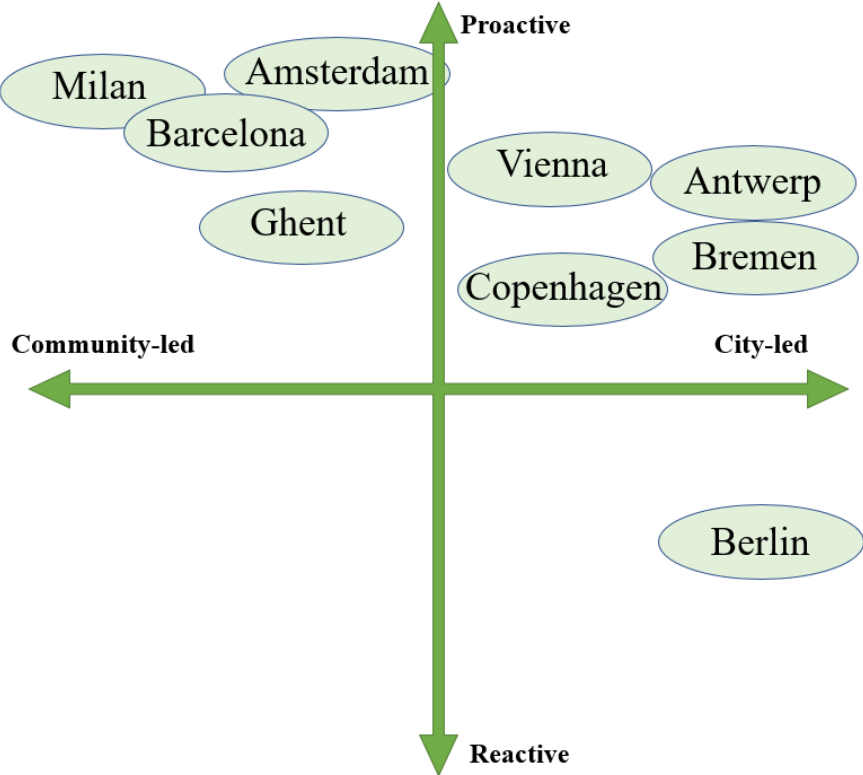


Figure 11: Overview urban governance of the sharing economy

To answer *sub-question 2* this section illustrated how city authorities govern the sharing economy. The results reveal that the city authorities govern the sharing economy with a patchwork of different actions, roles and approaches.

6. COMPARATIVE RESULTS

6.1. Factors inducing different discursive frames

This section compares the empirical findings and links them to the propositions to answer *sub-question 3: Why do city authorities frame the sharing economy differently?*.

6.1.1. National politics and traditions

Several interviewees emphasized (1, 2, 4 and 7) the significance of the national political culture in which city governments operate. The results reveal that city authorities often tend to follow national political and ideological ideas. As the interviewees explained:

“In the Netherlands we have the ‘polder model’⁹, so our policymaking process includes a lot of talking and discussing.” (Interviewee 1; Amsterdam)

“It is also the political culture in Austria. Austria is a very strictly regulated country, we have a lot of public things, public baths, public streets, public transportation systems, public housing systems.” (Interviewee 2; Vienna)

“Danes we [Danish people] are really well-known for our analyses, we kind of always have to figure out the entire thing before we do something.” (Interviewee 7; Copenhagen)

Especially in Austria and Denmark the national political culture revealed to guide how the city authorities frame the sharing economy. The interviewees explained how their strong public sector, labour unions and social welfare system guided how they address the sharing economy. As they formulated:

“Public libraries for example are probably the best example for sharing economy and public libraries where founded I don’t know 150 years ago.” (Interviewee 2; Vienna)

“We have a really strong labour union tradition and we pay a lot of taxes. That definitely pushes the overall approach in a more reluctant or protectionist way.” (Interviewee 7; Copenhagen)

Austria has a communist legacy with a tradition of strict regulations. Consequently, the city government embraces the sharing economy within the regulations they provide. Denmark is characterized by its Scandinavian welfare model and the city authorities frame the risk for tax evasion and employee protection. This is in line with *propositions 1*, stating that national politics and traditions influence framings and governance actions. However, the majority of the interviewees indicated that city governments are at the centre of sharing economy discourse and practices (1, 2, 7, 8, 10, 12 and 13). As a consequence, governance challenges and practical solutions regarding the sharing economy arise primarily at the city level. As an interviewee explained:

“A lot is going on at the local level because it is more in the realm of the city.” (Interviewee 3; Berlin)

Significant powers are allocated to city governments to address the sharing economy. As another interviewee noted:

“There is a lot of power in the hand of cities.” (Interviewee 13; Vienna)

⁹ The polder model is consensus decision-making, based on the praised Dutch version of consensus-based economic and social policy making.

Additionally, the intra-national comparison of Berlin and Bremen (Germany) as well as Antwerp and Ghent (Belgium) revealed different framings of the sharing economy. In fact, the progressive and early framings of the car-sharing potentials in Bremen were in sharp contrast to the car ownership culture in Germany. Cars have long been a symbol of status, independence and a key part of German identity. By stimulating car-sharing, the city government of Bremen diverged from this national culture. Currently car sharing is a popular mobility option in a lot of cities in Germany but Bremen was a pioneer in recognizing its potential. Ghent mainly differs from Antwerp in framing the social and commons potentials. This indicates that national politics and traditions have an impact on how city authorities frame the sharing economy but the influence is not decisive. The impacts are very local and rapid technological advancements empowering the growth of the sharing economy transcend national boundaries.

6.1.2. Prior urban strategies and policies

The majority of the interviewees (1-4, 6, 7, 10 and 13) emphasized that prior policies and strategic plans influence how they address the sharing economy. As the interviewees explain:

“We got a circular economy program, the sharing economy fits herein, as well as in the Start-up Amsterdam and smart mobility program. So there are multiple programs connected to- and guiding our sharing economy plan.” (Interviewee 1; Amsterdam)

“We are very open to new ideas or new economic forms but it has to fit with our strategic plans and ideas.” (Interviewee 2; Vienna).

“Other plans and policies such as our smart city policy function as a frame for specific sharing economy principles and goals.” (Interviewee 6; Antwerp)

“So there are a lot of other policies and strategies in place in Copenhagen wherein the sharing economy fits. This kind of leads the way in terms of how we work with the sharing economy.” (Interviewee 7; Copenhagen)

“What we see in the development of new legislation and policies for new advancements such as the creative- as well as the sharing economy, is that the content often closely aligns with already existing policies and development trajectories.” (Interviewee 10; Ghent)

The interviewees described how the sharing economy concept fits into various other strategic plans to become CO₂ neutral (Copenhagen), circular (Amsterdam and Antwerp), liveable (Copenhagen and Vienna), to deliver mobility as a service (Amsterdam, Berlin and Bremen) and in their strategic program to become a smart city (Amsterdam, Antwerp, Ghent, Berlin, Copenhagen, Vienna and Milan). The city governments focus on the specific characteristics of the sharing economy that are expected to enable the achievement of their already formulated goals. For instance, the policy objectives formulated in Vienna’s Smart City Strategy determine which sharing activities the city supports.

The ambiguity and heterogeneity of the concept allows the sharing economy to be fit into diverse strategic plans and policies in different fields. Since prior plans and policies already have political support, often with allocated resources for urban governance, most city governments frame the topic in such a way that it fits within these prior strategic plans and policies. In other words, the results reveal that political path dependency shapes how city authorities frame the sharing economy. This is in line with **proposition 2**, stating that prior political decisions and policies guide how the sharing economy is framed and governed. So discursive framings are contingent to historical political paths and decisions.

Especially smart city strategies were often emphasized as both high on the political agenda and as a framework of approaching the sharing economy. As several interviewees explained:

“The smart city strategy is a kind of umbrella strategy we have for the city of Milan and within this framework we have different topics, one is the sharing economy.” (Interviewee 4; Milan)

“Sharing and collaborative practices fit into that but this is not a priority. I mean the priority is definitely smart city.” (Interviewee 13; Vienna)

Interviewees from Antwerp, Berlin and Vienna described the strong political commitment to the smart city strategy as a hurdle to focus on the sharing economy. In contrast, Amsterdam, Ghent and Milan frame the sharing economy as a stimulus for the human aspect of smart city strategy. As one of the interviewees explains:

“The topic of the smart city is less appreciated for its technological aspects from a citizens’ perspective. Within this human smart city, the sharing economy represents a tool to improve the quality of life of citizens.” (Interviewee 4; Milan)

Political path dependency can both enable and constrain the development of discursive framings and strategic plans to govern the sharing economy. On the one hand, the ambiguity of the concept alleviates inclusion in prior policies and the political agenda. On the other hand, it constrains the potential to change policies and set new priorities.

6.1.3. Socio-cultural path dependency

In addition to political path dependency, several interviewees (1, 2, 5, 7, 10 and 12) noticed that framing the sharing economy is contingent to deeper historical developments. These historical events shaped the social culture of their city. As the interviewees said:

“It is culturally decided how someone understands the sharing economy. Cities just have a very different historical setting” (Interviewee 1; Amsterdam).

“The psychology of a city is largely determined by its history” (Interviewee 5; Ghent)

The interviewee from Ghent explained that throughout history cities develop a certain city-specific “DNA”. According to the interviewee, historical events and developments lead to a certain culture and mindset in the city. The interviewees from Ghent and Barcelona explained their specific framing of the social and commons part of the sharing economy by the historically developed DNA of their city. As the interviewees formulated it:

“Historically, Ghent is an industrial city where the first cooperatives, strong unions and socialist movements of Flanders have begun to emerge.” (Interviewee 5; Ghent)

“Throughout Ghent’s history, Ghent always stayed a city of its citizens” (Interviewee 10; Ghent).

“Barcelona has a very strong tradition of looking for alternatives in general. There is a big activist scene. There is a big alternative economy scene. That is a tradition that dates back to the beginning of the 20th century or even the 19th century. There are always people looking for a more social or commons oriented way of doing things.” (Interviewee 12; Barcelona)

The results indicate that the city government of Ghent and Barcelona frame the sharing economy largely in line with historical developments that shaped a culture of social (bottom-up) movements. This is largely in line with *proposition 3*: how the sharing economy is framed and governed is contingent on the city-specific path dependent political, socio-cultural and economic context. The path dependent socio-cultural context revealed to influence how the sharing economy is framed by the city authorities of Ghent and Barcelona. However, a long history of social movements in a city does not automatically lead to a framing of the social and commons aspect of the sharing economy. This can be seen in the case of Vienna. Vienna also has a strong tradition of social developments and public provisions. As one of the interviewees formulates:

“Vienna has this very strong social democratic path from the beginning of the 20th century where we had the so-called Red Vienna. There is a really strong social sector. There are a lot of intercultural places, a lot of people are working on social inclusion.” (Interviewee 13; Vienna)

These historical social developments in Vienna did not lead to a framing of the social potentials. Instead, the city government of Vienna frames the sharing economy as an economic opportunity and embraces sharing initiatives if they comply with the goals of their Smart City Strategy. This indicates that the influence of socio-cultural path dependency is not deterministic.

Another remarkable case is Milan. Throughout history Milan has developed into the city of fashion, design and finance and has a long history of wealth and excess. The city has a long reputation for expensive cars and clothing. However, the city government breaks with this culture of abundance and ownership, by framing the post-capitalistic potentials of the sharing economy. The city is stimulating sharing practices and testing digital, access- and commons-based governance approaches. The city of Milan deviates from its long capitalistic traditions. Herewith, the city of Milan reveals to deviate from its prior socio-cultural pathway.

To summarize, the results indicate that historical social movements and traditions in Ghent and Barcelona influenced how the city authorities currently frames the sharing economy. This indicates that political framings are contingent to the socio-cultural history of a city, but this is not deterministic as can be seen in the case of Vienna and Milan.

6.1.4. Historical events

The results revealed that historical city-specific events can catalyze certain policy decisions and change discursive framings. Two examples are:

- In May 2015, the city of Milan expected over 20 million visitors because of the International Exposition Expo and faced an extraordinary demand of services. To manage this, ShareExpo started to promote sharing services and activities. In advent of the event, the city’s car-sharing program already had 200.000 users and its bike sharing program offered 3,500 bicycles.
- In the beginning of the 21st century, Bremen faced a lot of issues with illegal parking and parking shortages in the compact city center. At the same time the city suffered a financial deficit. The city lacked the resources to build more (underground) parking places. Therefore the city government had to be creative in solving the issue. This led to the ambitious car-sharing action plan to foster car-sharing practices.

These random historical events initiated their progressive policy/strategic plan to address the sharing economy/stimulate car-sharing. This observation adds to *proposition 3* that specific historical events in a city influence how the sharing economy is framed. The results indicate that accidental or unplanned events can direct the decisions and paths city governments take and set the stage for possible decisions and paths in the future. The Expo in Milan catalysed experiments with sharing economy applications which led to an early awareness of the potentials by both governmental and non-governmental actors. As a consequence, the city of Milan got into an early political trajectory of stimulating and steering the growth of the sharing economy.

6.1.5. Current city government

The majority of the interviewees (1, 3-7, 10 and 13) further explained that addressing the sharing economy is a political process not merely linked to historical developments but also to the current urban political context. As the interviewees explained:

“This subject is part of the portfolio of Kasja Ollongren from D66 [democrats], she really has an eye for innovation. She sees the benefits of the sharing economy for innovation. So, that also means that we are positive about it and want to enable the innovative part to flourish.” (Interviewee 1; Amsterdam)

“Now we have a new city government which is with the red and green party so there is hope that this [the sharing economy] maybe gets a bit more attraction.” (Interviewee 3; Berlin)

“We are addressing this [the sharing economy], according to the political views we have.” (Interviewee 4; Milan)

“The political landscape in Copenhagen is quite left-wing in general. We have a political situation in which communities, welfare, social responsibilities and resource efficiency are highly prioritized. So in that sense I think the overall political environment towards this issue guides how we address it [the sharing economy].” (Interviewee 7; Copenhagen)

“The progressive parties are relatively strong in Ghent, that plays a role as well.” (Interviewee 10; Ghent)

These insights indicate that the current political context of a city influences how city authorities frame and address the sharing economy. When the political orientation of the cities is compared, a distinction can be made between cities with a progressive left-wing city government (Amsterdam, Ghent, Copenhagen, Barcelona and Milan) and cities with a more conservative right-wing city government (Antwerp and Berlin). The cities with a left progressive government reveal a significant openness to—and most of them even a specific focus on the social, commons or welfare aspects of the sharing economy. As one of the interviewee stated:

“There has been a political discussion at the moment the city government thought about hiring Michel Bauwens. But the discussion went smoothly because of his broad focus on the commons and all aspects involved; the bottom-up aspect, the citizens initiatives and so on. Because of this broad positive focus, it served the interest and ideologies of all parties. This led to the agreement.” (Interviewee 10; Ghent)

In contrast, both the interviewees from Antwerp and Berlin explained that their conservative right oriented city government associates the sharing economy with social movements. Therefore the topic is not a political priority. As one of the interviewees from Antwerp formulated it:

“The word sharing economy has something social while our government has another focus, in 2012 our government evolved from a governing social party to a mixture of the N-VA [Flemish nationalist party] and democrats.” (Interviewee 8; Antwerp)

This observation is also largely in line with **proposition 3** stating that the city-specific path dependent political, socio-cultural and economic context influences how the sharing economy is framed and governed. More specific, the political orientation of the current governing parties revealed to guide how city authorities frame the sharing economy. Overall, the cities with a left-wing government tend to frame the social and welfare aspects while right-wing governments focus on the economic growth and smart city potentials. Thus, the city-specific political context city governments operate in guides how the sharing economy is framed.

6.1.6. Key sectors and economic diversity within the city

In all cities, the sharing economy first and foremost emerged by itself. That is, sharing start-ups and practices started to pop-up without stimulation or intervention from public authorities. Several interviewees emphasized that the strong ICT sector and start-up scene in their city created a fertile ground for sharing start-ups to emerge (1, 2, 3, 6, 7, 9 and 12). As the interviewees explain:

“[The emergence of sharing start-ups] is also related to the talent available in our city. You need a lot of ICT people” (Interviewee 1; Amsterdam).

“There is a big start-up scene and increasingly their practices are peer-to-peer” (Interviewee 6; Antwerp)

“Barcelona has a very big ICT sector, which means that there is a big community of developers, designers and all that”. (Interviewee 12; Barcelona)

In other words, a strong ICT sector provides the necessary expertise to establish digital platforms in the city. The desktop study revealed that most of the nine selected cities have a strong ICT sector and start-up scene. The interviewees explained that the more sharing initiatives and platforms are popping-up in a city, the easier city authorities can draw on resources, knowledge and expertise from local actors, develop policies and partnerships to govern the sharing economy. This indicates a relationship between the presence of start-ups and specific sectors such as ICT in their city and the capacity of city authorities to frame and govern the sharing economy. As one of the interviewees explained:

“You need private partners in the city to leverage the necessary in-house knowledge, expertise and capacities to work within this new field” (Interviewee 9; Antwerp).

The cities of Ghent and Bremen are exceptions. Instead of a strong ICT sector and start-up scene these cities are characterized by industrial sectors including the automotive industry. It is notable that Ghent and Bremen both reveal an ambitious car-sharing strategy with proactive governing actions to enable the growth of car-sharing. This is in line with **proposition 4**, stating that the local economy influences how city authorities frame and govern the sharing economy. Specifically expecting that cities with a specialized local economy would reveal governing activities in line with their specialization. This shows that, at least in some cities, the framing of the sharing economy has been path dependent on the pre-existing economic specialization of the city.

The interviewee from Bremen explained the double effect of the automotive sector on their car-sharing policy:

“It has some advantages in the sense of new developments, pilot projects such as in the field of autonomous transport. You know autonomous transport is obviously a huge opportunity for shared mobility. [...] working with those kind of private companies is important but obviously has to be done with care, especially with conservative parties. We often have to listen to the argument that we can’t take cars out of the city because Daimler is the largest employer in the city.” (Interviewee 8; Bremen)

Other interviewees (3, 4, 7, 8 and 12) also emphasized the power of strong established companies and their lobbies against the disruptive effects of the sharing economy.

“The association of the hotels was against Airbnb because they consider it kind of a competitor without the same rules to follow.” (Interviewee 4; Milan)

“We have an organisation for the hotels and restaurants and they of course have been really aggressive towards Airbnb and demanding certain conditions.” (Interviewee 7; Copenhagen)

“They [established businesses] could also work against you because then it is very much a business as usual orientated scene. Say conventional developers, world companies. This could attract these energies to commercialize sharing projects.” (Interviewee 12; Barcelona)

The insights from the interviewees indicate a paradoxical influence of the city’s local economy. The organisations from key sectors reveal vested interest in conventional practices and object the disruptive effects of the sharing economy. Especially, established parties in the hotel, restaurant, taxi and automotive sectors revealed strong opposition against developments in the sharing economy. Overall, players in the traditional key sectors tend to frame the negative disruptive aspects and obstruct the growth of the sharing economy. While niche or growing sectors such as ICT, fintech and other (alternative) sectors proved valuable for the sharing economy to grow. The players in these sectors, especially ICT, tend to frame the positive potentials and provided valuable expertise to stimulate the growth of the sharing economy.

Furthermore, the cities with a large touristic sector (Amsterdam, Berlin and Barcelona) where most affected by the exponential growth of Airbnb. In these cities, the rapid growth of Airbnb rentals, not merely led to increased tourism but also to rising housing prices, complaints from residents as well as critical discussions and protests by the hotel industry and other local stakeholders. As a consequence, the city authorities of the touristic cities strongly frame the disruptive aspects of the sharing economy and had to respond to the critical reflections. This is another example of established businesses trying to prevent to get disrupted by the sharing economy niche. The other cities were less affected by the effects of Airbnb. As a consequence, these cities are not forced to respond (yet). As explained by several interviewees:

“We have different problems that need to be addressed. This is very important to understand. Because in the beginning we thought let’s do it like Berlin or let’s do it like Amsterdam. But there are different problems.” (Interviewee 2; Vienna)

“We do see a rapid growth in terms of Airbnb apartments but at this point this is not a problem that is pressuring the city or lowering the quality of the stay here.” (Interviewee 7; Copenhagen)

To answer *sub-question 3* this section explained why city authorities frame the sharing economy differently. The observations revealed that city authorities do not operate in a vacuum but in city-specific context, shaped by their distinctive historical pathways. Discursive framings are contingent on national traditions, prior policies and strategic plans, historical events and (social) developments and the current urban political context and the local economy. Differences in framings emerge because of these path and place dependent influences.

6.2. Factors causing diversity in urban governance

This section compares the empirical findings and links them to the propositions to answer *sub-question 4: Why do city authorities govern the sharing economy differently?*

6.2.1. Discursive frames

As described in *section 5.3*, the specific characteristics, potentials and challenges city governments emphasize and aim to address, or how they frame the sharing economy, varies per city. *Figure 12*, visualizes how the discursive frames of city authorities guides the urban governance of the sharing economy.

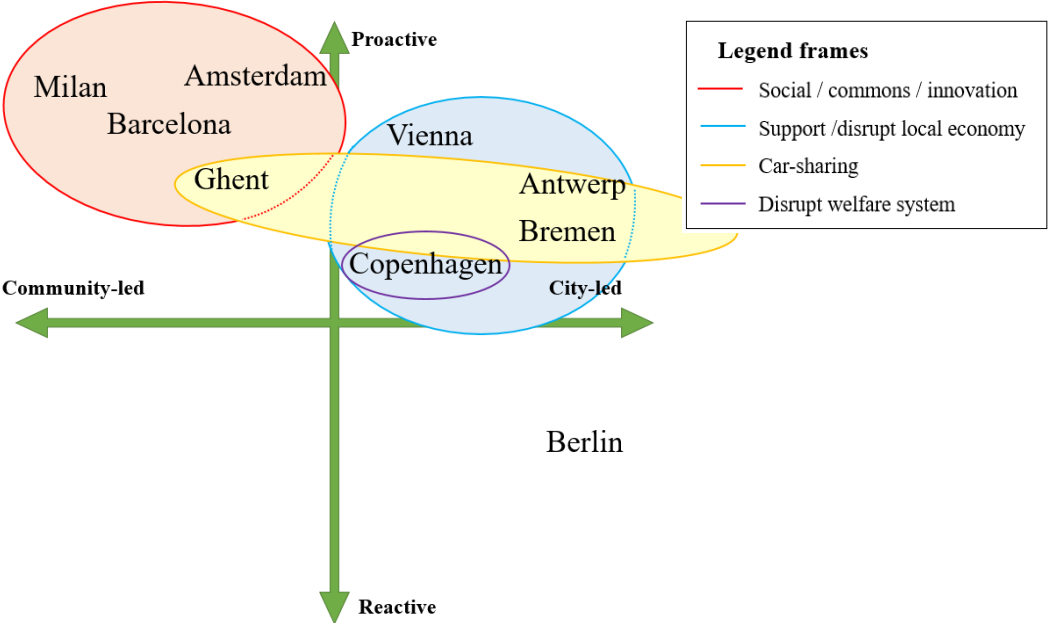


Figure 12: Overview framing- and urban governance of the sharing economy

Figure 12 shows three clusters. First, the city of Amsterdam, Ghent, Barcelona and Milan strongly frame the innovative, social and commons potentials of the sharing economy and concurrently take proactive actions to stimulate the growth of (bottom-up) social, commons-based, innovative sharing initiatives. Vienna, Copenhagen and to a lesser extend Antwerp and Bremen, form the second cluster. These cities frame both the economic growth as well as the disruptive potentials of the sharing economy. Accordingly, these cities proactively stimulate the economic growth potentials while controlling the disruptive effects with primarily explorative and regulating actions. The third and last cluster consists of Antwerp, Ghent and Bremen. These cities frame the specific potentials for car-sharing and reveal the similar proactive approach in stimulating this. The figure shows that frames influence governance approaches.

Discursive frames also revealed to guide governance actions and roles. Framing specific potentials (social, innovative, economic growth) led to enabling actions (funding, advice, awareness campaigns) to stimulate these practices and initiatives to grow. In a similar vein, framing specific challenges (disrupt the local economy and welfare system) led to regulating and explorative actions to (uncover how to) impede these risks to become reality. For example, the city government of Copenhagen and Vienna frame the risk of unregulated marketspaces. At the same time the city governments take regulatory (adjust regulations and implement new legislations) and explorative actions (assess the impact) to prevent this. Overall, the results reveal that framing the potentials leads to enabling governance roles and actions while framing the challenges leads to regulatory roles and actions.¹⁰

These results are in line with **proposition 5**, stating that the way city governments frame the sharing economy influences how they govern the topic. The results indeed indicate that framing the potentials and challenges creates space for governance actions. As demonstrated in **figure 12**, all cities with discursive frames show a proactive governing approach. The city government of Berlin is the only one without specific framing tactics and reveals a reactive governing approach. However, discursive framings do not necessarily lead to proactive governance actions. This can be seen in the case of Copenhagen. The city government of Copenhagen also shows discursive frames but acts more conservative. Additionally, the frames guide the actions and roles city governments take. For example, the city of Milan frames the social inclusion and innovation potential and consequently takes proactive enabling and providing actions to stimulate the growth of social and innovative sharing practices.

6.2.2. Strategic plans and policy objectives

Several interviewees mentioned the lack of a strategic plan or policy as a hurdle to govern the sharing economy (3, 5, 6 and 12). As the interviewees explained:

“There is lack of vision and perspective. There should be a more general understanding across departments to enable proactive governance.” (Interviewee 3; Berlin)

“If you have a strategic plan you can move from awareness to actions” (Interviewee 5; Ghent)

“There is no clear political statement from the municipality about what they want to do with the sharing economy.” (Interviewee 6; Antwerp)

Other interviewees (1, 2 and 7) emphasized that a clear vision, strategic plan or policy supported (the coordination of) governing actions. The interviewees mentioned:

“Our policy is clear, it has to fit the aims of Vienna.” (Interviewee 2; Vienna)

“The Mayor has formulated a vision and some principals about the sharing economy and this is a sort of the overall definition of what Copenhagen does within the sharing economy.” (Interviewee 7; Copenhagen)

¹⁰ Note that most cities take several roles. The different governing roles do not exclude- but rather complement each other.

Strategic plans and policies revealed to be closely in line with discursive framings. In fact, discursive framings were primarily communicated through strategic plans or policies. In the city of Amsterdam, Vienna, Copenhagen and Milan the framings of- and strategic plans regarding the sharing economy reached arenas where significant authoritative power is exercised and became part of the political agenda. These cities also reveal the most proactive governance actions. Copenhagen is an exception, the city government first wants to do more research. In Barcelona city authorities of the Other Economics department are currently drafting a policy approach to steer their governance approach.

“We are trying to build some public policy on this issue. To examine what is the best way to face it.” (Interviewee 12; Barcelona)

Additionally, the city of Antwerp, Ghent and Bremen have sector specific strategic plans to stimulate car-sharing and also reveal the most proactive actions to govern and foster car-sharing practices.

Thus, discursive framings with political commitment, that is strategic plans and policies, influence how city authorities govern the sharing economy. These results are in accordance with **proposition 6**, declaring that strategies and policy objectives influence the governance of the sharing economy. The results indicate that policy objectives and strategic plans to address (certain parts of) the sharing economy indeed guide and create space for governing actions. Overall the cities with strategic plans and policies to address the sharing economy (including car-sharing) reveal the most proactive governing actions. That is, Amsterdam, Vienna and Milan as well as Antwerp, Ghent and Bremen specifically for car-sharing.

6.2.3. Governing capacity

The results reveal that the capacity of the city authorities to govern the sharing economy varies significantly. The results of the background study reveal that city authorities in Antwerp, Ghent, Milan and Barcelona are more dependent on rules and regulations from higher levels of government than the cities of Amsterdam, Berlin, Bremen, Copenhagen and Vienna. The Amsterdam, Berlin, Bremen, Copenhagen and Vienna have more local powers. This creates opportunity structures for governance actions. City-states such as Bremen, Berlin and Vienna can for example implement their own legislation. As one of the interviewees explained:

“We cannot regulate the sharing economy as Berlin probably can.” (Interviewee 4; Milan)

In addition to variance in local powers, the results indicate that city governments also differ in their internal organisation. Some cities assigned a specific international working group or assigned people to address the sharing economy. That is the case in the city of Amsterdam, Copenhagen, Vienna and Milan. Moreover, several interviewees (3, 6, 12) explained that the absence of a specifically assigned people or a group within the city government formed a hurdle for proactive governance actions:

“We were suggesting in our potential analyses to create, an institution within the city government, which goes also across all the different departments to create an entity which is dealing with the sharing economy and all their facets.” (Interviewee 3; Berlin)

“So it is not like we have a central area or central role to manage everything that has to do with the sharing economy. Each challenge has to be faced in specific areas, depending on where these challenges are happening. But we, from my [Other Economics] area are trying to set-up some kind of coordination within the different areas that are facing challenges related to sharing economy. So we do not deal with the challenges in a very narrow way.” (Interviewee 12; Barcelona)

Thus, the ability of city authorities to govern the sharing economy is influenced by their internal organisation and autonomy. Given the novelty and complexity of the sharing economy governing capacity is also dependent on the vertical tiers and local resources and knowledge city authorities can draw on. In fact, almost all city authorities emphasized that learning from other cities through global networks and at conferences was very important for them to develop effective policies and address the sharing economy (1, 2, 4-8, 10, 12). All cities are part of the EUROCITIES network and their last conference was dedicated to addressing the emergence of the sharing economy. The majority of the interviewees also indicated the city-to-city event organized by the city of Amsterdam; and OuiShare Fest in Paris as helpful events to collaborate with and learn from other city leaders involved in addressing the topic. International networks and events proved to be valuable to increase governing capacity to address the sharing economy.

The majority of the interviewees (1, 4, 5, 7, 8, 10 and 12) further explained that they included and/or strongly relied on advice, expertise and resources from local experts, stakeholders and citizens to address the sharing economy.

“It is like a big puzzle, you need a lot of people and a lot of time and effort to get a good picture of it and then deal with it.” (Interviewee 3; Berlin)

The specific sources city governments draw their knowledge and resources from varied considerably. The city authorities of Barcelona and Milan included a lot of city actors including citizens, local experts and consultants to collaboratively develop their policy and guiding principles regarding the sharing economy.

“This participatory process was quite important for the city of Milan because we involved many actors interested in the concept of the sharing economy.” (Interviewee 4; Milan)

Also, the city government of Amsterdam and Ghent involved various stakeholders in the policy making process by organizing events and initiatives to stimulate discussions and involvement of citizens and other local stakeholders.

“We call this the ecosystem of Amsterdam, in which start-ups, knowledge institutes, the government and the private sphere easily collaborate and find each other.” (Interviewee 1; Amsterdam)

City authorities from Berlin, Bremen, Antwerp, Vienna and Copenhagen have also drawn resources from local stakeholders but revealed to focus more at established parties such as consultancies, incumbent firms or knowledge institutes.

“There should be more talking with the third sector, with the citizens and not with particular big companies. Because now their point of view and their interests gets through. But it has to be levelled out at a commons level so that all stakeholders could be included.” (Interviewee 3; Berlin)

The difference in who city authorities involve and draw their knowledge and resources from led to notable variation in how the city governments frame the sharing economy. The cities that draw their insights from a multi-stakeholder dialogue, that is Amsterdam, Ghent, Barcelona and Milan, strongly frame the social-, innovation and bottom-up potentials of the sharing economy. While cities drawing knowledge and resources primarily from established firms and organisations, including Vienna and Copenhagen, seem more inclined to frame the economic potentials as well as the disruptive effects such as the risk of unfair competition. The dichotomy between city authorities framing the stimulation of social initiatives and niche innovations and city authorities framing the growth and disruption of the current local economy reveals to be contingent to the extent to and from which local stakeholders the city authorities draw their resources and expertise. In particular, the different local stakeholders city authorities include in the policy making process causes variance in discursive framing.

These results prove that city governments operate within a multi-actor and multi-level governance system, which influences their governing capacity. A remarkable note is the fact that city authorities revealed to be ahead of higher government levels in addressing the sharing economy. The results indicate that authorities at higher levels are starting to develop guidelines and boundary conditions (e.g. adjusted legislation and tax regulations) but city governments take the lead with their strategic plans, policies and governance actions.

“We couldn’t wait until the report [from the European Union] appeared. We had to respond to the emergence of these sharing platforms. So we actually feed them with a lot of knowledge.”
(Interviewee 1; Amsterdam)

“The stimulus is not coming from the national level.” (Interviewee 10; Ghent)

Additionally, some interviewees mentioned the need for more clarity, guidance and a quicker response from higher levels.

“We hoped for a bit more clarity about what platforms have to do with regard to data sharing because this is a big issue for cities.” (Interviewee 1; Amsterdam)

“The consequences of the sharing economy in terms of monopoly, data and personal information, these are huge dilemmas from a global point of few. It is not city government’s responsibility to tackle those [issues] but it should be on a more global or at least international level. I think the European Union should be more specific and provide more guidance.”
(Interviewee 7; Copenhagen)

Instead of city governments relying on rules and resources from higher level authorities, it mainly seems to be the other way around. Higher level governments are keeping an eye on cities, to monitor and learn from their experiences. An exception is Milan. The city government of Milan has to comply with the sharing economy policy the Italian government recently implemented. As the interviewee stated:

“This national law we have to follow it and reorganize our services according to national law.”
(Interviewee 4; Milan)

Milan is also part of a European program called “*Sharing Cities*”. This European program provides the city with additional resources (mainly funding) to address the sharing economy.

Thus, these observations show that the capacity to govern the sharing economy is contingent to the multi-level governance system city authorities operate in. This is largely in line with *proposition 7*, stating that the way city governments govern the sharing economy is dependent on their governing capacity. Especially the internal organisation, local autonomy (*7A*), global networks (*7C*) the extent to- and from which local stakeholders city authorities draw their resources and expertise (*7D*) were indicated as important factors to create governing capacity. In contrast to the vertical tiers, city authorities revealed to be less dependent on horizontal tiers. Most city governments proved to be ahead of higher level governments' response. This is partly in line with *proposition 7B*, stating that how cities govern the sharing economy is influenced by- and influences European, national and regional law and policies. Given the novelty and local character of the sharing economy urban policies and governance predominantly influence higher level laws and policies.

7. CONCLUSION

In this thesis, I have studied the variation in how city authorities frame and govern the sharing economy. Through an explorative comparative case study of nine European cities with strategic plans to govern the sharing economy this thesis aimed to uncover what caused the differences in framings and urban governance. The analysis followed a number of theoretically-derived propositions. The main results are summarized in *Table 11*. The table shows that the empirical results validate the propositions.

Table 11. Overview propositions and results

No.	Proposition	Empiricism
1.	How city governments frame and govern the sharing economy is influenced by national politics and traditions.	National politics and traditions revealed to have a considerable impact in the case of Copenhagen and Vienna. Their national political culture (i.e. welfare and highly regulated state) revealed to steer their framing and governance approach.
2.	Prior political decisions and policies guide how the sharing economy is framed and governed.	In all cities prior policies and strategic plans (especially smart city strategies) proved to guide the framing of the sharing economy. In Antwerp, Berlin and Vienna the political commitment to become a smart city was perceived as a hurdle to address the sharing economy.
3.	How the sharing economy is framed and governed is contingent on the city-specific path dependent political, socio-cultural and economic context.	<ul style="list-style-type: none"> • The path dependent socio-cultural context revealed to influence how Ghent and Barcelona frame and govern the sharing economy while the city authorities of Vienna and Milan revealed to dissociate from prior socio-cultural paths. • Historical events in Bremen and Milan guided their framing of the sharing economy and catalysed a proactive governance approach. • The political orientation of the current city government revealed to guide how the authorities frame the sharing economy: left-wing governments tend to focus on social and welfare aspects (Amsterdam, Ghent, Copenhagen, Barcelona and Milan) while right-wing governments focus on digital advancements and the local economy (Antwerp and Berlin).
4.	How city authorities frame and govern the sharing economy is influenced by the local economy: A. Cities with a diverse local economy will reveal governance actions in various sectors. B. Cities with a specialized economy will reveal governing actions confined to these specific sectors	The local economy influences how city authorities frame and govern the sharing economy. Bremen and Ghent show that the framing of the sharing economy is path dependent on the pre-existing economic specialization of the city. These cities have a strong automotive sector and reveal framings and governance actions to stimulate car-sharing. The influence of key sectors proved paradoxical in most cities: more traditional sectors mainly frame the negative potentials, try to obstruct the growth of the sharing economy and keep cities lock-in their economic trajectories. While emerging sectors (especially ICT) proved valuable for the growth of the sharing economy niche.

5.	Discursive framings influence the urban governance of the sharing economy: If city authorities frame the sharing economy as a solution to- or a causation of commonly accepted problems, space for governance action is created.	All city governments except for Berlin discursively frame specific potentials and challenges of the sharing economy. These frames created space for and guided their governance actions: city authorities framing the innovative, social and commons potentials mainly revealed governing actions to support these initiatives (Amsterdam, Ghent, Barcelona and Milan). City governments framing the car-sharing potentials, primarily focussed on fostering the growth of car-sharing usage (Antwerp, Ghent and Bremen). City authorities framing the disrupting and growth potentials for the local economy showed regulating or explorative activities to prevent and support this (Copenhagen and Vienna).
6.	Strategic plans and policy objectives influence governance actions: If city governments formulate strategies and policy objectives related to the sharing economy this supports and legitimates governance actions.	Strategic plans or policies regarding the sharing economy (including car-sharing) revealed to support proactive governance actions in the case of Amsterdam, Vienna and Milan as well as Antwerp, Ghent and Bremen specifically for car-sharing.
7.	How city governments frame and govern the sharing economy is influenced by their governing capacity which is: A. ...dependent on their internal organisation, rules and resources. B. ...guided by- and influencing European, national and regional law and policies. C. ...dependent on the extent to which city authorities draw on resources from vertical and horizontal tiers. D. ...influenced by the extent to which city authorities draw on resources from citizens and local stakeholders.	The ability of city governments to govern the sharing economy proved to be influenced by the city's internal organisation (Amsterdam, Vienna, Copenhagen and Milan), autonomy of the city government (Amsterdam, Berlin, Bremen, Copenhagen and Vienna), the extent to which the cities draw resources and knowledge from local stakeholders (Amsterdam, Ghent, Barcelona and Milan) and global networks (all cities). In contrast to the horizontal tiers, city authorities revealed to be less dependent on vertical tiers. Most city governments proved to be ahead of higher level governments' response, except for Milan.

From the analysis, I can now return to the overall research question:

How and why do city authorities govern the sharing economy differently?

The city authorities revealed different frames to establish a rationale for governing the ambiguous and heterogenous sharing economy topic. Framings varied from highlighting the potentials to become a more socially inclusive, innovative, commons-based, car-free or economically viable city to the risk of disrupting the marketplace, consumer and employee protection. In addition to the use of diverse framings, city governments revealed to govern the sharing economy differently. The city of Amsterdam, Vienna, Barcelona and Milan approach the sharing economy proactively by taking various enabling, providing and regulating actions. The city of Antwerp, Ghent and Bremen show a sector-specific, proactive approach with enabling, consumer and regulating actions to support the growth of car-sharing. Both Antwerp and Ghent as well as Copenhagen are still figuring out how they could effectively govern the broader potentials and challenges of the sharing economy. These cities are proactively addressing the sharing economy with explorative actions. Finally, Berlin shows a reactive approach by only interfering with regulating actions.

The results revealed that distinctive historical pathways together with the current city-specific context induce city authorities to frame the sharing economy differently. The discursive framings were shaped by prior strategic plans and policies, past socio-cultural movements, unplanned historical events and the current state of a city's economy and political context. Additionally, in some cases the national political culture also steered framings. Although city authorities operate in a path-dependent, city-specific context, these structures are not deterministic. For instance, Milan had a long tradition of consumerism and wealth, but by framing the commons, access-based and post-capitalistic potentials of the sharing economy the city government breaks with this tradition. Another example is Bremen, by framing the car-sharing potential the city government diverged from strong national traditions of car ownership. In both cases, historical events created opportunities to deviate from prior paths and shape new policy directions with discursive frames.

Besides discursive frames, the governing capacity, strategic plans and policy objectives influenced how city authorities to govern the sharing economy. These results confirm that city governments do not operate in a vacuum, but within an interdependent multilevel governance context causing variations in the ability of city governments to address the sharing economy. Given the novelty and complexity of the sharing economy, city authorities especially relied on knowledge and resources from local stakeholders and global networks. As opposed to the horizontal tiers, the vertical tiers (higher level authorities) proved less important as city government revealed to be pioneering and vital players in governing the sharing economy.

To conclude, the comparative results show that differences in governing actions, roles and approaches occur since urban governance is a path and place dependent process interdependent of the multi-level governance context. The city's historical economic, socio-cultural and political pathways proved to shape discursive framings and set the stage for possible governance paths in the future.

8. DISCUSSION

8.1. The limitations and further research

This explorative research provides practical insights into the current policy discourse and the strategic attempts to govern the sharing economy of pioneering European cities. The comparative case study design combines sensitivity in the analysis of the individual cases with a comparative analysis of the nine cities from which generalizations to other comparable cities can be made (external validity). However, the conclusions are strongly ingrained with historical, economic, political and socio-cultural variables that are typical to European cities. Therefore transferring its conclusions to cities of other continents should be done with care. Further studies could validate and test the generality of the conclusions. A comparison between the intercontinental cities seems suitable to this end.

Important to note is the fact that the interviewees, especially the city authorities tended to focus on- and emphasized their successful efforts. They prefer to showcase their best practices and want to put their city on the map as a leading city in addressing the sharing economy. This sometimes led to inconsistencies with other interviewees or desktop results. These biased insights were largely filtered out through triangulation. Another limitation to the internal validity of this study, is the fact that some of the selected cities (i.e. Ghent and Antwerp) recently started to explore the topic and have not formulated an integral vision or strategic plan yet. Therefore, perceptions of the sharing economy varied among internal departments and the interpretations of specific interviewees are not necessarily representative for the entire city government. Given the novelty and the interpretative flexibility of the topic it would be effective to conduct additional interviews with all involved city authorities to complement the desktop research more comprehensively. Still, a good representation of the policy discourse and urban governance was obtained, through using strategic- and policy documents, interviews as well as grey literature and by focusing on city governments in different contexts for the exploratory nature of this research.

Due to limited time and resources this study predominantly focussed on the role of city authorities in framing and governing the sharing economy. However, the phenomenon first and foremost emerged by itself. Sharing start-ups and practices started to pop-up without stimulation or intervention from public authorities. Therefore, city authorities depend largely on the efforts of non-governmental actors. The emergence of the sharing economy even opens doors for new ways of collaborative policy making and governance. To provide a more detailed answer to the question how and why urban governance of the sharing economy differs per city, the framings and efforts of all involved city stakeholders should be taken into account. Another interesting empirical avenue for future research would be to include cities that do not address the sharing economy (yet). This way the (constraining) role of path dependency can further be examined. This study solely focussed on cities with strategic plans. Herewith, the question why certain city government do not address the sharing economy remains largely unanswered.

8.2. Theoretical implications

This study aimed to address the lack of urban governance perspective in transition theory. To meet this aim, insights from multi-level governance theories and evolutionary economics have been combined with the discourse-focused strand of transition theory. Drawing on these three literature strands, eight propositions and a conceptual model were suggested. The model conceptualized the influence of governing capacity, discursive framings, strategic plans and policies on the governing actions and roles city authorities take to govern the sharing economy. Since the empirical results were strongly in line with the proposed conceptual model, the combinations of these literature strands proved to be very useful. By performing a contextual-sensitive research in various urban contexts this study developed an understanding of similarities and differences between urban contexts. This enabled the researcher to identify decisive factors, including prior strategic plans and policies, historical socio-cultural movements, the economic and political city-specific context and historical events causing diversity in the way city authorities frame and govern the sharing economy.

The city-level analyses also proved appropriate since city authorities revealed to be ahead of higher level authorities in addressing the sharing economy. In accordance with Marvin & Hodson (2010), this study verifies the need for an understanding of the role of cities in transition theory and insights from urban- and multi-level governance literature proved valuable to this end. The results revealed that cities are at the centre of policy discourse and debate about sharing economy. Moreover, the study proved that city governments can play a crucial role in steering policy discourse with discursive framings and strategic plans. More of this contextually-sensitive research in various urban contexts is required to further uncover how city governments can steer the sharing economy into a favourable direction. Additional research opens up the possibility to integrate insights from institutional work (e.g. Lawrence et al., 2009) into the proposed theoretical framework. It would for example be interesting to analyze how discursive framings turned into collective strategic plans and policies. That is, how do they institutionalize? Further analyses into the different institutional tactics city governments use would be relevant.

Particularly in light of today's digital advancements that enable the exponential growth of powerful sharing platforms such as Airbnb and Uber, city governments reveal a strong search for external expertise from- and co-operation with other cities and higher authorities. Herewith, the results reveal the need for further research developing an understanding of the role of digital technologies in the dynamics of transitions and urban governance.

8.3. Practical implications

Drawing on the empirical insights of this study practical advice can be given to city authorities. This study examined how pioneering cities strategically attempt to govern and steer the sharing economy in a favourable direction. Although these insights do not reveal whether their efforts have been effective or successful, the results do give practical insights into their tactics and experienced hurdles to address the sharing economy. The results indicate that the communication of discursive frames, the development of strategic plans and policies with a clear vision, the internal assignment of people to address the topic prevent political conflict. In addition, taking part in global networks to learn about best and worst practices of other cities, and including local stakeholders and citizens in the policy making process revealed to be valuable to develop well-considered strategic plans and overcome political conflicts. City authorities who aim to address the sharing economy are advised to take these aspects into account. For future research it would be helpful to develop success criteria to become a *Sharing City*.

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Appendix 1: Case selection

Case selection: cities from the European Union with more than 500.000 residents (Eurostat, 2014).

COUNTRY	CITY	POPULATION
Austria	Vienna	1 741 246
Belgium	Brussel	1 183 841
	Antwerp	513 915
Bulgaria	Sofia	1 221 292
Croatia	Zagreb	793 049
Czech Republic	Prague	1 259 079
Denmark	Copenhagen	559 440
France	Paris	2 240 681
	Lyon	1 321 495
	Lille	1 119 832
	Bordeaux	730 116
	Toulouse	725 052
	Nantes	602 853
	Nice	520 990
Finland	Helsinki	612 664
Germany	Berlin	3 421 829
	Hamburg	1 746 342
	Munich	1 407 836
	Köln	1 034 175
	Frankfurt am Main	701 350
	Stuttgart	604 297
	Düsseldorf	598 686
	Dortmund	575 944
	Essen	569 884
	Bremen	548 547
	Leipzig	531 562
	Dresden	530 754
	Hannover	518 386
Greece	Athens	799 979
Hungary	Budapest	1 735 711
Ireland	Dublin	516 255
Italy	Rome	2 863 322
	Milan	1 324 169
	Naples	989 111
	Turin	902 137
	Palermo	678 492
	Genoa	596 958
Latvia	Riga	643 615
Lithuania	Vilnius	537 152
Netherlands	Amsterdam	799 278
	Rotterdam	616 294
	Den Hague	505 856
Norway	Oslo	623 966
Poland	Warsaw	1 724 404
	Krakow	758 992
	Lodz	711 332
	Wroclaw	632 067
	Poznan	548 028

Portugal	Lisbon	524 282
Romania	Bucharest	2 134 030
Spain	Madrid	3 165 235
	Barcelona	1 602 386
	Valencia	786 424
	Seville	696 676
	Zaragoza	666 058
	Malaga	566 913
Sweden	Stockholm	864 324
	Gothenburg	520 374
United Kingdom	London	8 477 600
	Birmingham	1 096 800
	Leeds	763 900
	Glasgow	598 100
	Sheffield	561 900
	Bradford	527 300
	Manchester	517 300

Appendix 2: Interview schedule

Thank you again for your participation. Is the internet connection sufficient/can you hear me properly?

I will first shortly introduce myself, I am Lies van den Eijnden. As a research assistant at shareNL and a student at the University of Utrecht, I do research about the sharing/collaborative economy.

More specific, in my research I inquire how European cities govern the sharing economy. Currently, cities are approaching the sharing economy with a patchwork of different policies. The goal of my research is to uncover why cities are governing the sharing economy in a different manner. I have already done a desktop study about the sharing economy in general and on [CITY] in specific.

The interview will take about 45-60 minutes and the goal of this interview is to examine how [CITY] is governing the sharing economy and which city or country specific factors influence this policy.

I will start with a few general questions about the role of the sharing economy in [CITY].

Consequently I'll focus on the how different actors in your city perceive the sharing economy, which policy objectives and strategies the local government has and how the sharing economy is currently governed. In the end I will focus on how contextual factors such as the local economy influence how the sharing economy has developed in [CITY].

- Do you have any additional questions or remarks?
- Would you mind if I record this interview?

1. THE ROLE OF THE SHARING ECONOMY IN [CITY]

- | | |
|-----|---|
| 1.1 | What role does the sharing economy play in [CITY]? <ul style="list-style-type: none">• What is the impact of the sharing economy on the city? |
| 1.2 | Which actors in [CITY] play an important role in the sharing economy? (<i>for example knowledge institutes, citizens, the government, organisations etc.</i>) <ul style="list-style-type: none">• How are they responding to the sharing economy?• How is the sharing economy perceived by these different actors? |
| 1.3 | To what extend is there a consensus of what the sharing economy is in [CITY]? <ul style="list-style-type: none">• Can you describe this definition?/ the different point of views?• How did this definition emerge?<ul style="list-style-type: none">○ Who formulated this definition? |
| 1.4 | To what extend is the sharing economy causing a debate? <ul style="list-style-type: none">• Who are involved in the debate?• What are the main points of debate?• Why do you think these points are under debate? |
| 1.5 | How is the sharing economy discussed in the local media? <ul style="list-style-type: none">• How does this influence how actors in [CITY] perceive the sharing economy? |

2. STRATEGY, POLICY AND ACTIONS OF [CITY]

- 2.1** What is the vision from the city of [CITY] concerning the sharing economy?
- What is considered part of the sharing economy?
 - Which sectors are regarded as part of the sharing economy?
 - What kind of organisations are regarded as part of the sharing economy? (non-profit/ profit/ both)
 - How is the sharing economy perceived by the city government?
 - Is the sharing economy perceived as technology driven or more society driven?
- 2.2** Does your city have a policy regarding the sharing economy? If yes:
- Can you describe the policy?
 - What are the goals of the policy?
 - Who is responsible for this policy?
 - How do these goals relate to other policy goals? (*for example to become a sustainable, liveable, smart, circular or green city goals*)
 - If yes, why are they related?
- 2.3** To what extent does [CITY] learn about the sharing economy from other cities?
- 2.4** What actions is [CITY] taking to govern the sharing economy?
- What kind of policy instruments are used? (*campaigns, funding, regulations etc.*)

3. CITY SPECIFIC CONTEXT

- 3.1** In what ways do city specific factors influence how the sharing economy has developed in [CITY]? (*for example social, cultural factors or historical events*)
- Why?
 - How does this influence how the sharing economy is governed in [CITY]?
- 3.2** In what ways does the local economy/ key sectors in [CITY] influence how the sharing economy has developed? If yes:
- Why?
 - How does this influence how [CITY] governs the sharing economy?
- 3.3** Which political responsibilities does [CITY] have?
- How does this influence how the sharing economy is governed in [CITY]?
- 3.4** In what ways you think existing regulations or policies in [CITY] influence how the sharing economy has developed?
- Why?
 - How does this influence how [CITY] governs the sharing economy?
- 3.5** Are there any city specific factors or events that influenced how the sharing economy is governed in [CITY]? (*for example social, cultural factors or historical events*)

4. NATIONAL CONTEXT

- | | |
|-----|---|
| 4.1 | How does the [COUNTRY] government influence how the sharing economy is governed in [CITY]? <ul style="list-style-type: none">• Why? |
| 4.2 | Are there any other national factors that influence how the sharing economy is governed in [CITY]? (<i>social, cultural, economic etc.</i>) |

5. EUROPEAN CONTEXT

- | | |
|-----|--|
| 5.1 | How does the European Union influence how the sharing economy is governed in [CITY]? |
|-----|--|

6. ADDITIONAL QUESTIONS

- | | |
|-----|--|
| 6.1 | Are there any other important things that I missed? (<i>about how the sharing economy is addressed and governed by the city and why</i>) |
| 6.2 | Do you have additional questions or remarks? |
| 6.3 | Do you have any additional materials (<i>policy documents etc.</i>) that you think I can use for my research? |
| 6.4 | Do you know any other relevant persons I can contact for further information about the sharing economy in your city? |

Thank you very much, your answers are very valuable for my research. I will send you the transcript within a few weeks and my final thesis in June if you are interested.

If necessary, can I contact you via e-mail or phone to ask additional questions?

Appendix 3: Events

Name of the event	Explanation	Date
Start-ups in the sharing economy	Meet-up organized by shareNL to advice and convene starters in the sharing economy	13-09-2016
Slapend Rijk	Tegenlicht meet-up organized at Pakhuis de Zwijger to discuss the impact of Airbnb on Amsterdam and its residents. With guest speaker Alderman Laurens Ivens from municipality Amsterdam.	21-09-2016
Driving Change	Car-sharing symposium organized by mobility expert Ananda Groag (shareNL). With guest speaker Michael Glotz-Richter (senior project manager for 'sustainable mobility' at the City of Bremen). He explained how the city government stimulates the growth of car-sharing and sustainable transport.	27-09-2016
De opkomst van de deeleconomie	Event organized by NRC live about the emergence of the sharing economy. With guest speaker Ger Baron (Chief Tecnology Officer, municipality of Amsterdam). He briefly discussed how Amsterdam is addressing the sharing economy.	27-10-2016
What´s next for the sharing economy?	Meet-up organized by shareNL at Pakhuis de Zwijger in which different speakers revealed their perspective on the prospects of the sharing economy With presentation from Nanette Schippers (expert on sharing economy, municipality of Amsterdam). She elaborated on the proactive approach of Amsterdam to reap the benefits of the collaborative economy.	21-12-2016
Advancing research into the sharing economy	A multidisciplinary mini-symposium at Utrecht University where a range of speakers from inside and outside the academy shed light on the latest developments in the sharing economy. A keynote was given by Paolo Parigi (Stanford University/Uber).	15-03-2017
50 jaar witkar	Meet-up at Pakhuis de Zwijger about how Luud Schimmelpennink already founded shared mobility in Amsterdam 50 years ago. With reflections on shared mobility in Amsterdam from Pieter Litjens (Alderman traffic and transport at the municipality of Amsterdam), Ger Baron (CTO municipality Amsterdam) and other mobility experts and scholars.	03-04-2017