



CITIES AT THE CROSSROADS IN THE REGULATION OF SHARING ECONOMY

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Abstract: This article sheds light on the advent of online platforms and the way it is reshaping urban environment, breaking down traditional axes of both social interaction and commercial power, shifting the structure of traditional services. The platform revolution is radically transforming an array of many functional cities' areas, like transportation, accommodations and personal services. Thus current concerns as strong urbanization, industrialization and world population growth, enable sharing economy firms to flourish as a reaction against the frictions of urban life exploiting such exacerbation, in order to fulfill demand for appropriate services. After a critical analysis of these issues, the article deepens innovative transportation services, moving on to illustrate the Italian rulemaking process as a chance to provide a solution to the ongoing problem of striking the right balance between competing priorities, such as market access and preservation of sustainable mobility. It suggests to reflect upon the best approach able to face the complexity of urban transport systems, in order to break in a new culture for urban mobility, comply to EU legislation too.

Keywords: sharing economy, cities, pooling economy, commons, transportation

JEL codes: R41, R52, R42, K24, K11

Introduction

The global context of cities in the 21st century is actually characterized by strong urbanization, industrialization and world population growth. Cities are changing their role, morphology, and structure since large-scale urbanization has become a global phenomenon (Iacone & De Nictolis 2017). The growth of cities brings both opportunities and challenges both encompassed by technological innovation, which conveyed platform initiatives to flourish.

Actually, this digital revolution breath has pervaded every dimension of urban space on a social and economic grounds, even the way of socialization, navigation

and experimentation, laying the basis for the creation of a digitally integrated urban space (Ratti & Claudel 2016).

Platform revolution might significantly contribute to increase urban efficiency: it could address the socio-economic system towards a new concept of *welfare*, as a response to the growing phenomenon of urbanization, combining the realization of greater sustainability, inclusion and safety. In this regard, the European Commission has noted that urbanization facilitates sharing: indeed, between 2007 and 2013, urban populations in the European Union have increased and this trend *may provide a greater potential for the development of collaborative services* (European Commission Staff 2014).

The resulting reduction in transaction costs is a significant effect coming from technological innovation: it leads up an emerging entire economic system of *crowd-based* firms (Sundararajan 2016), whose *peer-to-peer* activities are gradually reshaping, but in some cases supplanting, long established business models (Smorto 2017). Furthermore, the sharing economy is removing the central role played by public institutions, replacing them for the provision of goods and services.

In this regard, the sharing economy could represent at first a reaction against the failure of previous economic models, in order to remove the assets polarization caused during the time: the phenomenon is used to be conceptualized as an alternative to capitalism and its related overconsumption, aimed at facilitating access over ownership, borrowing rather than buying.

In addition, it can be considered a reactive consequence to the vacuum caused by both state and market failure (Pais & Provasi 2015). The financial crisis which affected the 2007–2008 biennium cracked the thaumaturgical power of capitalism in reducing inequality within industrialized countries. These factors allowed sharing firms to flourish, exploiting such economic exacerbation, as well as the positive consequences of technology growth.

The sharing economy development suggests to privilege the city as a focal point for scientific observation of economic, institutional but also social innovation; this choice is suggested by the observation of the widespread of collaborative practices into the urban environment, that encountered an impressive evolution in recent years achieving a considerable economic and social value, producing considerable impact on the legal landscape, particularly at the local level (Finck & Ranchordas 2016a).

In recent years the sharing economy is thus deploying all its hidden potential. It is becoming a relevant economic phenomenon, intimately related to the urban context and its dense urban geography, which often creates inefficiencies, challenges, but also opportunities. Sharing economy firms have found success by providing innovative solutions to the challenges of life in crowded urban areas (this is quite clear in the field of transportation and accommodation, with the rise of companies like Uber and Airbnb to fill demand for services like ride sharing and alternative accommodations). In this regard, sharing economy initiatives can be included in the group of resilient and adaptive responses, giving the solution to a number of urban problems (Finck & Ranchordas 2016b).

Urban mobility reflects the complexity of the city; it could therefore be an exemplary test bed where the competition between the priorities of the market and the rights of individual or local communities as collectives are constantly in struggle. The empirical observation of urban mobility represents an exemplary field to observe the development of transportation platforms, as well as policies that might help carve the distinction explained thereafter between *sharing* and *pooling*.

This Article argues that sharing economy represents a rapidly emerging urban phenomenon (Davidson & Infranca 2016a), as a reaction against the frictions of urban life: it leads up an emerging entire economic system of *crowd-based* (Sundararajan 2016b) firms, whose *peer-to-peer* activities are gradually reshaping, but in some cases supplanting, long established business models (Smorto 2017). Sharing firms are exploiting such exacerbation, improving the quality of urban life and inhabitants, in order to fulfill demand for appropriate services. It can be considered a technological response to the classic urban challenges, above all the management of common resources. The piercing digital revolution breath has pervaded every dimension of urban space, moving into an era of cultural understanding based on artificial intelligence and massive data sets (Allen 2017). Furthermore, it reflects a new way of socialization and experimentation, laying the basis for the creation of a digitally integrated urban space (Ratti & Claudel 2017). Platform revolution can thus significantly contribute to increase urban efficiency: it could address the socio-economic system towards a new concept of *welfare*, as a response to the growing phenomenon of urbanization, combining the realization of greater sustainability, inclusion and safety.

The disruption caused by such initiatives as carsharing, ridesharing, short-term rentals, shared housing and workspaces, not only put into question the way urban spaces are planned, but they directly redefine the urban design, thus making existing local rules towards traditional local services obsolete and inadequate to embrace these new services. The redesign of cities implies to think about many other issues of urban life, as cohabitation, encounters, and the unplanned and uninstitutionalized confrontation of diverse lifestyles, habits, cultures, and stories.

The *label* sharing economy, however, embodies an array of many heterogeneous initiatives, based on different and often antithetic logics. The legal literature has thus far conveyed an incomplete image by focusing just on controversial platforms such as Uber and their ongoing lawsuits.

The vast diversity of goods and services offered and the consequent rapidly evolving business models, indeed, have proven inconducive to traditional-regulatory approaches (Cannon & Chung 2015), raising the question of the most acceptable policy.

In this respect, extreme positions as a complete *laissez-faire* approach or complete ban are not advisable. Anyway, any rulemaking process should take into account these issues concerning sharing economy initiatives implemented by platforms, as a whole:

- the exploitation of unused assets and, in many circumstances, the creation of new goods and services;

- the relationship between the design of sharing economies and the production of externalities;
- the disruption of many mainstream services.

From an economic perspective, technology allows the creation of a new digital market, where companies might be often highly proficient in creating business structures aimed at avoiding taxation through the use of intellectual property law and global regulatory arbitrage. Those phenomena commonly identified under the umbrella of the *sharing economy* may give birth to new technological giants that use power asymmetries to capture most of the value created by contractual workers, raising concerns characterized by negative dominant tendencies (Slee 2015).

The sharing economy thus provides a fascinating case for investigating the emergence of a new and heterogeneous organizational field, implying a profound tension between market-driven logics and non-market alternatives to market capitalism (Schor 2014). This means an appropriate setting for questioning the effects of technologies on markets and societies, and analyzing the disciplinary effects of technologies on the individual.

This Article aims to provide a preliminary distinction between (Bardhi & Eckhardt 2015):

- genuinely collaborative initiatives that promote the sharing of underutilized assets, as well as involve some form of sustainable exchange based on resource inequality, excess capacity, power parity, and the possibility to engage in repeated interactions (e.g., spare guestrooms). Some examples of genuine sharing practices are home-swaps (e.g., HomeExchange), ride-sharing and carpooling platforms (e.g., BlaBlaCar);
- non-collaborative platforms that are not driven by sustainable consumption, but profits (e.g. Uber).

The analysis of such dichotomy would be proficient to deepen the testing of transportation, since sharing economy initiatives dealing with this issue can alternately lay down genuinely collaborative initiatives (e.g. carpooling), or replacing traditional services by new business models focused on the data and consequent networks effects (e.g. UberPop).

The analysis of several public policies, like the Opinion of the Committee of the Regions of the European Union on The Regional and Local Dimension of the Sharing Economy, will constitute the outset to build and verify this theoretical hypothesis; it will represent the emerging role of a society-based version of the sharing economy, the so-called *pooling economy*, as opposed to market-based sharing economy initiatives. The term *pooling* is thus used to distinguish those initiatives that simply replicate traditional economic patterns: it is a concept very dear to the scholars of the commons, summoning the Ostrom's *common – pool – resources* concept. To verify this hypothesis, this paper moves previously on a brief overview of the economic and geographic sharing potential of cities, moving on the field of urban transportation, which embodies and reflects their complexity. Thus, it will discuss about outdated Italian transportation legal framework of 1992, and the way it might restrict the development of new platforms providing innovative transportation services. Drawing on the experience of Italian transportation services, it suggests a

new legal framework, based on a holistic approach, for the regulation of sharing practices and the improvement of *pooling*.

A preliminary introduction to the sharing economy

During the last decades a proliferation of consumption models is observable, in which Access (Rifkin 2000) is enabled through sharing or pooling – respectively depending on whether profits would be achieved or not – of resources (Orsi 2013), products or services redefined through technology and peer communities, even if a general attitude to pool resources together and efficiently manage them occurred through history much earlier than the advent of apps like Uber or Airbnb (Cohen & Sundararajan 2015).

To summarize, the sharing economy has been considered a new economic model beyond the paradigm of mass production and consumption, which has particularly been fueled by ICTs, with the rise of social network systems, which facilitate connections between peers eager to share their possessions (Roh 2016). Thus, trust and reputation management are an important precondition (Wagner et al. 2015).

The sharing economy, however, is a broad concept that lacks a common definition: that's why it has experienced a major change in meaning with the evolution of online services and many different initiatives embraced by. At the beginning, it was used to refer to the scientific purposes of the *file sharing*, in particular the *open source* movement (Airgrain 2012). Afterwards, it used to point out any kind of *peer to peer* relationship, often used interchangeably with such terms as *collaborative consumption* (Botsman & Rogers 2010), *access-based consumption* (Bardhi & Eckhardt 2012), *the mesh* (Gansky 2010), *crowd-based capitalism* (Sundararajan 2016a) and more over.

A simple first definition was provided by the Oxford Dictionary in 2015, defining the phenomenon as “An economic system in which assets or services are shared between private individuals, either free or for a fee, typically by means of the Internet”.

The key element involved deals with sharing a service or resource, with or without monetary compensation (Fink & Ranchordas 2016b), screening an incomplete vision of the concept itself which depicts the new alternative patterns of production, wealth creation and redistribution (Mayer 2014).

Sharing economy has been described along five fundamental features (Sundararajan 2016b):

- a. it is defined as a free-market phenomenon;
- b. it is based on putting underutilized (potential) capital to use;
- c. it develops on crowd-based networks, both physical or not physical, such as on-line platforms;
- d. it overcomes traditional boundaries between the personal and the professional;
- e. it blurs the lines between workaday employment and casual work.

This covers, indeed, just an economic perspective, which draws attention on profit activities anchored on the Silicon Valley's paradigm, undermining social implications deeply involved. The expression can be attributed not only to the pervasiveness and enabling power of new technologies, but also referred to the need to

fill a social vacuum due to the failures of the market and the state (Pais & Provasi 2015). In this regard, the sharing economy enacts the failures of the two forms of allocation that have distinguished the modern economy, the Keynesian and neoliberal economic theory; it is able to occupy the deprived economic fiber by experimenting new collaborative social forms, which can both potentially and ideally embed economic relations once again in social ones. From this point of view, the reaction to market failures translate into self-organization carried out by individuals, which constitute a community tied by the same aim. The sharing economy adopts a platform approach whereby relations, reputation, social trust and other non-economic motives within a community become one of the main drivers. As such, activities through which people make a contribution but without placing the profit-incentive at the core of their initiative have social or ethical relevance remarkable as well.

European institutions strengthened this dichotomy: as it will be displayed, European policies are progressively concentrating their attention to the exploitation of social patterns, going beyond the general promotion of sharing economy initiatives just as new economic ones. In particular, the policies of the European Union are seizing a significant change in the behavioral paradigm of the individual in the sharing economy: the sharing economy can thus give rise to a new economic identity where individuals would, instead of pursuing the quest to maximise his/her own material interests, associate their own economic behaviour with a commitment to the community, act in the public – social, economic, political – arena and place themselves in relation to others in order to take care of the general, common interest (i.e. the so-called “*mulier active*”) (Iaione 2011).

The main cornerstone, that will be analyzed in the next paragraph, deals with the Opinion of The Committee of Regions (CoR) about the Local and Regional Dimension of the Sharing Economy (Committee of Regions 2016). Its value can be due to the effort to systematize all collaborative initiatives, but also to have captured their local dimension: this assumption highlight the role of cities as the recipients of such phenomena. The local dimension is considered fundamental for the exploitation of social aspects, because sharing economy can be considered an important tool to avoid or reduce inequalities since these new models are intimately tied to urban landscape and inhabitants daily customs. In this regard, beyond to any possible economic perspectives, the real hidden potential of sharing economy could be identified in its social implications to align large numbers of people, reducing anonymity and inequalities which are increasingly affecting urban realities of the current century.

The European policy perspective

The debate *against* or *pro* the sharing economy has been developing constant throughout time in European Union, by focusing predominantly on transportation arrangements as Uber. However, it provides just a partial vision of the phenomenon itself, as appointed by the Opinion of the Committee of Regions. European institutions aren't apart from the sharing economy development and the effort to decline it.

Since 2015 the European Commission has preferred the term *collaborative economy* rather than *sharing* in its Communication on “*Upgrading the Single Market*” (European Commission 2015). In this regard, unique concerns referred to impacts of new business models into existing markets, creating tensions with existing goods and services providers, inequality and market fragmentation. Therefore, these challenges implied regulatory uncertainty over the application of rules on consumer protection, taxation, licensing, health and safety norms, social security and employment protection.

The proposed terminology, pursuant to the following opinion of the CoR, was just focused on the commercial and consumer aspects of the sharing/collaborative economy, leaving aside the non-commercial and commons-based approaches (Iaione 2009a; Foster 2011; Bollier 2014).

The *Opinion* (2015b) has the merit of grasping the innovative and dynamic nature of the concept; besides, it points out a first distinction built on new or revived social patterns having important business, legal and institutional implications: the social practices of sharing, collaboration and cooperation. It distinguishes between:

- the sharing economy in the strict sense, creating and ossifying a differentiation based on different typologies of users (consumers-users vs. providers-users);
- collaborative forms by framing collaboration and cooperation as added layers of sharing, that foster a peer-to-peer approach in which every user can be a provider and consumer at the same time, or even be involved in the platform governance.

Moreover, account could also be taken of the model of *governance* and control of the financial transaction: in this regard, it is possible to verify whether the platform merely serves as a tool for connecting individuals and those, on the opposite, in which the intermediary retains control of the transaction (Smorto 2015).

The systematic approach provided by the Opinion leads, in turn, the emergence of such dichotomy articulated in other two forms:

1. On demand economy:

- “access economy”, for sharing economy initiatives whose business model implies that goods and services are traded on the basis of access rather than ownership. It refers to renting things temporarily rather than selling them permanently. Typical;
- “gig economy”, for SE initiatives based on contingent work that is transacted on a digital marketplace;

2. Pooling economy:

- “collaborative economy”, SE initiatives that foster a peer-to-peer approach and/or involve users in the design of the productive process or transform clients into a community;
- “commoning economy” for SE initiatives that are collectively owned or managed.

The Grid shows the heterogeneity of sharing economy initiatives and highlights the dichotomy of market-based initiatives and Pooling initiatives. The first group subsumes every platform initiative having a profit (Uber, Airbnb, carsharing); the second one, instead, deals with practices based on pooling as a form of cooperation

encompassing sharing of congestible resources to avoid scarcity but also collaboration around non congestible, constructed resources, in order to generate an added value (Iaione 2017).

As a result, the positions of the European Commission has been focusing on both facilitating the collaborative platform revolution, but restricting platforms having a market based approach (European Commission 2016). Actually, the whole attention of the European Commission is more concentrated upon the social dimension, in order to avoid social fragmentation and social dumping (European Commission 2017). The change will take the form of *the European Pillar of Social Rights*, the necessary instrument to ensure fairness and social justice in Europe.

The urban dimension of the sharing economy

The study of the sharing economy induces to reflect upon the current role of cities. They can be thus the main ecosystem for the development of human personality, representing the physical space within which the conditions of individual and collective welfare, the exercise of citizenship rights, the possibility to bring diversity together, especially because of the ethnic and cultural diversity in the area of inquiry, the *urban* landscape, however, is something more, which goes beyond the simple idea of a fixed space, and can be conceived as a *process* (Lefebvre 1968).

The social complexity of the city and the vacuity of public institutions create insecurity, degradation of the urban environment and conflict in the use of public spaces, the location of marginal and excluded areas, resulting in a significant reduction of urban well-being (Iaione 2016). Findings could rise, if we considered many other conditions referred to the urban landscape, which facilitate the emerging of sharing economy, as:

- Urban Geography (density and scale of cities; costs and frustration of city life; traffic congestion);
- Urban Anonymity & Lack of Social Trust (heterogeneity of life);
- Urban Frictions (lack of efficiency).

The sharing economy represents a strain of innovation firmly rooted in urban geography, with a flow of information through technology highly dependent upon the spatial dimensions of the market or relationships it facilitates (Davidson & Infranca 2016b). Dense urban geography is thus an ambivalent condition of inefficiencies and challenges, but also opportunities for sharing economy firms to flourish.

In this regard, transformation incurred could be declined as:

- a. *economic*, because sharing economy causes the disruption of the most entrenched sectors (accommodation, transportation), making costs of entries lower for new businesses, with potential benefits for local economy, especially in terms of local externalities;
- b. *physical*, since these initiatives are able to transform the way individuals move across space within a city and opens new neighborhoods to development;
- c. *social*, because interaction among citizens fosters added social capital, reinforcing community empowerment.

In light of the above, the local context of sharing initiatives represents a significant new resource that can inform not only about the way cities respond to such enterprises, but also how they govern across the spectrum of urban challenges. The urban dimension allows regulatory regimes to evolve, just like cities gradually learn from their experiences, even through experimentalism. But it also requires policies able to face some issues, dealing with:

- barriers to entry (especially when there's a market-based-approach initiative);
- underserved areas;
- participation of citizens;
- data disclosure and transparency;
- more efficient and effective governance.

Some accounts of the sharing economy link its growth to increased urbanization (McLaren & Agyeman 2016), whose explosion produced several impacts even on the physical aspects of cities, with possible consequences in terms of urban congestion costs (Brinkman 2013), and, generally speaking, urban wars (OECD 2015). In this realm, many of the sharing economy initiatives provides value to consumers by alleviating costs and frustrations of city life and profit from inefficiencies in local public systems. This statement will be quite clear and deepen in the field of transportation.

As well as for the urbanization, cities can be considered also the recipients of sharing economy effects. With the development of Web 2.0 and the use of Internet, as well as the increasing affordability of smartphones and technical feasibility provided by GPS, digital platforms have been able not only to offer themselves as intermediaries for commercial services; they also mobilize citizens to interact both with one another through social networks or the government.

At first, unlike for earlier generations of disruptive technology as Microsoft, Google, Amazon and more over, the sharing economy impacts are chiefly local (Davidson & Infranca 2016b). This means that the regulatory response to these new entrants has primarily been at the municipal level, where businesses like hotels and taxis services are mainly governed. The underlying logic of local politics relies in the pragmatic orientation of the governance approach adopted by Mayors, in order to solve problems of everyday urban life, soon lacking at the national level (Barber 2013). In this regard, sharing enterprises can be subjected to zoning codes, hotel licensing regimes, taxi medallion requirements, and other similar local legal issues.

The urban dimension is, at the same time, the *locus* where new forms of cooperation are taking place, to make claims on urban resources and city space as a *commons* (Iaione & Foster 2016). In this case, we can say that even sharing economy is shaped by urban conditions (Krauss 2014; Rauch & Schleicher 2015). In particular, we argue that only initiatives based on *pooling* can be considered the only ones able to bring positive effects within cities, while, on the contrary, sharing firms which just replicates mainstream markets of goods and services risk to worsen urban conditions and quality of life in a long period. It is intended to propose a vision of a city not merely perceived by a technological perspective, but based on the paradigm of city as a commons, through which it is capable to safeguard the protection of its rights and ensure social justice.

The new local development therefore calls for a broader concept of *governance*, involving a different relationship between institutions and society, seeking a widespread territorial intelligence, understood broadly also as a combination of resources, both material and immaterial. The urban dimension, in this realm, can bring advantages for local authorities too, because it allows to negotiate with sharing economy firms: the Memorandum of Understandings of the City of Genoa with Airbnb is a clear example of useful negotiation.

The conceptualization of the *city as a commons* completely framed these new demands, whose constitutional coordinates are primarily found in the principle of horizontal subsidiarity, as mobilizing additional resources – rather than substitutes – than public resources.

Public transportation in the era of the sharing economy

Transportation embodies many of city challenges. It reflects the complexity of the urban context, as a place of enduring struggle between market priorities and the rights of individual or local communities. Citizens' demand for mobility is rising in parallel with their habits of use, since increasing expectations about the improvement of quality, convenience and affordability of prices.

They want to easily change the mean of transportation, and have access to travel information. Especially for younger generations, hiring and sharing mobility services are increasingly popular habits, while owning a private vehicle can be considered an increasingly scarce goal.

Transportation – both urban and extra-urban – has been subjected of many debates at both national (Munari 2002; Rangone 2003) and community level, mainly focusing on reducing the negative impacts these activities have on the environment and quality of life.

It is indeed considered to be a complex system, that depends on a number of different factors, including the model of human settlements and consumption, organization of production and the availability of infrastructures (European Commission 2009).

Mobility represents a fundamental right, intimately tied to the quality of life in cities, hamlets and suburbs. The guarantee of rights represents an important goal for cities, in consideration of the important increase expected by 2050 of over 66% (compared to 54% in 2014) of the world population that will reside in cities.

Indeed, people living in urban areas spend a considerable amount of time on public transportation, as stated by a current, extensive study, carried out by Ipsos and the Boston Consulting Group in ten of the major European Union countries, looking at transport infrastructure (2017).

The research shows that:

- a European citizen employee, on average, 9 hours and 35 minutes to move every week;
- there is a strong car dependence, which is the mean of transport mainly used.

For people travelling using public transport, overcrowding is one of the major causes of discomfort. This aim is truly important for Italy, where people invest much more time of the Europeans in the moves, with an average of 10 hours and 40 minutes to week, 1 hour and 5 minutes plus than the European average. Italian citizens' preferences are still own property vehicles, because of distrust of public transportation. However, they are also sympathizer with new technologies, and seem reactive to the use of more sustainable mobility means.

For this reason it is important understand how the quality of the service can be improved.

The European citizens seem to be, overall, quite satisfied of the single infrastructures of mobility as the railroads, the road net, the system of public transportation, but they are very dissatisfied instead of the level of interconnection existing among these infrastructures. Furthermore, currently transportation systems lack efficiency, facing up new – bottom up – needs required.

Nevertheless, transportation is often used to be centered on private vehicles. This choice, however, does not result very efficient: from a user's perspective, it usually provides limited transportation options, but it also leads to severe congestion and considerable gas expenses, especially in densely populated urban areas, due to traffic jams, lack of parking space and high costs due to increasing fuel prices (Sahami et al. 2010).

These concerns, as can be seen, are too crucial to be ignored (Iaione 2009b). Improving roads could ease temporarily congestion levels; however, a study of the European Commission's Joint Research Centre found no significant impacts on reducing congestion.

In this regard, a truly sustainable mobility system should be necessary; it needs a virtuous circle, produced by investments in infrastructures more interconnected, in a way which provides local, regional and inter-regional accessibility at an affordable cost to families and businesses, while serving community needs for social and economic exchange.

This goal, however, couldn't be achieved without a change of approach (even methodological) by both public spheres and community, supported by the development of the new technologies as an important contribution to road safety too. Transportation, in conclusion, should not just be considered as a goal in and of itself, but as a wider powerful tool, instrumental to the development of livable, productive, equitable and healthy communities, in accordance with the new and more active role played by community.

Sharing economy could significantly contribute to improve quality of services. In this regard, two different approaches can be distinguished:

- a market based approach, aimed at creating alternative systems of transportation, more efficient and faster than public ones (as Uber or carsharing);
- pooling initiatives, implemented by local community, in order to share costs of travels.

Ultimately, initiatives going under the first approach are self-interested, based on the individual consumption. As a consequence, even if there are benefits for users *uti singuli*, there aren't gains in terms of congestion and pollution decrease.

Actually, the proliferation of such initiatives as Uber, which reply, without replacing, non scheduled transportation, induces to consider them as substitutes (Wyman 2017): Uber, indeed, upends the traditional segmentation of taxi services. This means that the widespread of the service – together with the increase of drivers – risks to lead further disadvantages without an adequate policy, which has to be national since the competition law concerns and the need to ensure regulatory consistency across the national territory. These concerns are totally absent in pooling initiatives, in which a concrete decrease of pollution, congestion and costs occurs.

The analysis of the Italian legal framework aims to give confirmation to these statements. By analyzing the characteristics of sharing economy practices, this Article discusses potential approaches to the regulation of these phenomena that meet the interests of innovators, but offering a minimum of guarantees to users.

The Italian legal framework

The Italian non scheduled transportation sector is the most invested in technological innovation, highlighting the distinction between *sharing* and *pooling* initiatives. The spread of *smartphones* and *apps* has allowed a further expansion, both qualitatively and quantitatively, of the modalities of interaction between supply and demand. The exponential growth of these technology platforms responds to the need to find innovative solutions to the challenges posed by everyday life in congested urban contexts, providing solutions to the disadvantages caused by homogeneity and overcrowding in urban areas (Buratti 1976).

Compared with the legislation in force, dating back to 1992, the technological evolution, and the resulting economic and social changes, raise issues that have been discussed, both nationally and supra-nationally, not only in judicial offices, but also by authorities and political institutions, for the plurality of interests involved (Passaglia 2016).

Italian transportation legal framework is aligned with the European integration process, which considers transportation as an important tool for the development of the Single Market; it is an exemplary field to explain the important role of public local authorities and cities.

The technical feasibility provides innovative solutions to the challenges of life, especially in crowded urban areas. Thanks to GPS-based navigation combined with real-time traffic information and mobile platforms, individuals are able to optimize their routing and schedule choices;

Sharing economy transportation firms, therefore, represent a reaction against the frictions of urban life exploiting such exacerbation, in order to fulfill demand for appropriate services.

Furthermore, technological progress has led the development of apps for taxi service (such as MyTaxi), but it has also allowed to flourish a non professional alternative kind of transportation as Uber, the current market leader. As a result, these businesses interact with the traditional models, sometimes competing directly against, raising unfair competition concerns (as UberPop case).

Italian market evolution leverages regulatory challenges due to the anachronistic legislation of non-scheduled transportation, dating from 1992. It strictly regulates only taxi and private hire vehicles, which are subject to various regulations by states and municipalities. The market has strong barriers to entry, because of the requirement of licenses as necessary condition to access and operate; moreover, local regulations too impose other limitations, as the number of taxicabs that can be registered or the place vehicles can have a ride.

Since 2015 both the Transportation Regulation Authority and the Competition Authority has been sending signals that change is welcome, calling for a review of existing regulation, in order to remove or adapt those rules unable to correct market failures, but avoiding any qualification of new transportation services provided. In 2015, indeed, the Transportation Regulation Authority suggested some proposal reform of the legal framework in order to include technological mobility services, even adding a new kind of transportation service, a so-called tertium genus, due to the conceptual difficulty in applying underlying rules.

Recently, last March the Competition Authority sent to the Parliament and the Government a report, aimed at creating a level playing field. Finally, last August 4th, 2017 the Italian Parliament approved the Annual Law upon market and competition. Pursuant to clauses from 179 through 182, the Government is delegate to adopt a legislative decree for the reformation of non-line public service, in order to guarantee the development of sustainable mobility and smart cities by the next year.

Even if there is not a clear stance on the way regulatory bodies should proceed, due to physiological vagueness of delegation criteria, it could represent the first concrete reaction upon the question of how to handle new market entrants. In this regard, the differentiation implemented by the CoR, could be a useful method of study, in order to understand which kind of initiatives should be really encouraged.

The mechanisms that underpin car sharing are based on sharing a resource and on forms of revenue for carriers, car suppliers, or drivers. This initiative does not have significant profiles of relationality and value-added production, except from the economic point of view.

Moreover, from an environmental sustainability standpoint this phenomenon does not allow an effective reduction in the number of cars in circulation and there is no incentive to share the car with other people or use alternative means of transport.

Platform as UberPOP has been banned many times because it operates in violation of legal requirements, as the possession of licenses. However, consequences

Table 1. The implementation of the CoR Grid in the mobility field

	<i>On Demand economy</i>	<i>Pooling economy</i>	
<i>Access economy</i>	Gig economy	Collaborative economy	<i>Commoning economy</i>
<i>Car sharing</i>	Uber Pop	Car pooling	
<i>Car2Go, EniEnjoy, ZipCar</i>		Moovit, BlaBlaCar, Viaggia insieme, Strappo, LetzGo	

Source: Le politiche pubbliche al tempo della sharing economy of Christian Iaione.

are similar but worse than car sharing, because the majority of car sharing services makes use of electric vehicles, with less environmental impact.

Car pooling is based on a more solid sustainability approach. In fact, this phenomenon is more responsive to collaborative economy dynamics, where one of the outputs is the creation of networks of mutual support and networking. It represents one of the areas of intervention for so-called sustainable mobility, as it allows to reduce the number of cars with beneficial effects in terms of pollution, road congestion and infrastructure needs.

Benefits can be summarized as follows:

- Optimization of resources: cars with more people on board imply less investment in new infrastructure;
- Economic savings in terms of cost per capita of fuel, oil, tires, tolls, parking costs etc.;
- Reduction of pollution, always due to the small number of vehicles in circulation;
- Improving social relations between people;
- No problems with normal Cars insurance.

Car pooling can be a valid initiative for sharing common routes, such as work places, school, and many other places of interest in the neighborhood. It is a new way to conceptualize mobility across the city, often used by commuters as well. According to a report prepared by Jojob, a specialist in this latter segment, only considering “professional” trips of the last year, more than 646,900 kilometers have been spared. These are significant figures, especially because of the urban context of reference: in these realm, results prove how pooling can give a concrete contribution to the improvement of urban life, from a qualitative standpoint.

The strength of this model does not, as in sharing-oriented cases, compete with traditional transportation services; on the contrary, it intends to put a brake on the use of the private vehicle.

Conclusions

The sharing economy induces local governments to plan about regulatory responses in a new holistical point of view, taking into account many legal aspect as privacy, consumer and insurance protection, data disclosure, competition law and public services.

The regulation of transportation initiatives should be different, depending on interactions with neighborhoods and the objective of making a profit. In particular, pooling oriented activities should be encouraged by local and national authorities, because, as noted, they are the only answer to the challenges of the urban context. In this sense, pooling initiatives could be considered useful tools for redistribution, sustainability and social implications.

This ultimately results in a rethinking of the city and its articulation, as an institution that promotes – and does not repress – collaboration, to stimulate a series of innovative policies aimed at overcoming social and economic inequality, which is becoming a characteristic of urbanization of the 21st century.

Pooling, in conclusion, provide a new vision of the city, which implies the right of citizens to join the creation of the city, and involves the possibility of taking an active part in the decision-making process and of having equal access to resources and urban services; in a complementary way, cities can act as promoters in the protection of fundamental rights, recognizing and securing each inhabitant the right to access essential resources and services.

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