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**Does Sharing Mean Caring? Regulating
Innovation in the Sharing Economy**

Sofia Ranchordás

Tilburg University
S.H.Ranchordas@tilburguniversity.edu

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Does Sharing Mean Caring? Regulating Innovation in the Sharing Economy

Sofia Ranchordás*

ABSTRACT

Sharing economy practices have become increasingly popular in recent years. From swapping systems to network transportation to private kitchens, sharing with strangers appears to be the new urban trend. Although Uber, Airbnb, and other online platforms have democratized access to a number of services and facilities, concerns have been raised as to public safety, health, and limited liability of these sharing economy practices. In addition, these innovative activities have been contested by professionals offering similar services who claim that the sharing economy is opening the door to unfair competition. Regulators are at a crossroads: on the one hand, innovation in the sharing economy should not be stifled by excessive and outdated regulation; on the other hand, there is a real need to protect the users of these services from fraud, liability, and unskilled service providers. This dilemma is far more complex than it seems, since regulators are confronted here with an array of challenging questions. First, can these sharing economy practices be qualified as “innovations” worth protecting and encouraging? Second, should the regulation of these practices serve the same goals as the existing rules for equivalent commercial services? Third, how can regulation keep up with the evolving nature of these innovative practices? All of

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* Sofia Ranchordás, Ph.D., LL.M., Assistant Professor, Tilburg Law School, The Netherlands; Visiting Scholar, Summer 2014, George Washington University Law School. I would like to thank Paul Schiff Berman and the George Washington University Law School. I am very grateful to Michael Abramovicz and Pierre Larouche for their comments on earlier versions of this article. I would also like to thank Claudia Koerbler and, particularly, Jemi Laclé for our discussions on the sharing economy, and for the multiple “sharing and caring” moments. I also thank Alison Key and her staff for the wonderful editing work.

these questions come down to one simple problem: too little is known about the socially effective ways of consistently regulating and promoting innovation. The solution to these problems requires analyzing two fields of study, both of which seem to be at an embryonic stage in legal literature: the study of sharing economy practices and the relationship between innovation and law in this area. This Article analyzes the challenges of regulating the sharing economy from an “innovation law perspective,” by arguing that these innovations should not be stifled by regulation, but should also not be left unregulated. This Article closes by suggesting that innovation in the sharing economy requires fewer, but broader rules that do not stifle innovation, but also impose a minimum of legal requirements that take into account the specificities of innovative sharing economy practices, and that are open for future developments.

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I. INTRODUCTION

A. “UBERING” IN D.C.

Pick-up address selected, four minutes waiting time, car selected, driver on her way. During a hot summer in Washington D.C., I decided to introduce the concept of the “sharing economy” in my life.¹ Not that hailing a cab is difficult around here, but being able to go out without cash, save some money, and track who is picking you up might make any ride in this city more pleasant. Uber, and other forms of the sharing economy, are some of the innovations that are making markets more competitive while improving access to a number of facilities and services.² Most of us welcome these innovations. Going on vacation, hiring a handy amateur to assemble our new furniture, renting a car for a short ride, or swapping goods has never been so convenient and inexpensive. You are now

1. See generally Steve Henn, *What’s Mine Is Yours (For a Price) in the Sharing Economy*, NPR (Nov. 13, 2013, 3:16 AM), <http://www.npr.org/blogs/alltechconsidered/2013/11/13/244860511/whats-mine-is-yours-for-a-price-in-the-sharing-economy>; Raj Kapoor, *Lessons From the Sharing Economy*, TECHCRUNCH (Aug. 30, 2014), <http://techcrunch.com/2014/08/30/critical-lessons-from-the-sharing-economy/> (“Companies everywhere are jumping on the sharing economy trend.”); *The Rise of the Sharing Economy*, ECONOMIST (Mar. 9, 2013), <http://www.economist.com/news/leaders/21573104-internet-everything-hire-rise-sharing-economy>.

2. See Russell Belk, *You Are What You Can Access: Sharing and Collaborative Consumption Online*, 67 J. BUS. RES. 1595 (2014) (discussing the rise of the sharing economy as a result of increased access to resources, facilitated by the Internet).

what you can access, and not what you have.³ In this new model, access is “the new form of ownership.”⁴

One decade ago, sharing economy practices would have been unthinkable, not only because we were living in more prosperous times, but also because we would not have conceived of engaging in such transactions with strangers, not to mention unlicensed strangers that play taxi drivers in their spare time.⁵ Now we do, but there appear to be no rules or limits in this game. Can and should we set them? Should everyone play by the same rules? And is this a new game like no other we have seen before?

B. THE ADVENTURES AND MISADVENTURES OF THE SHARING ECONOMY

In the last couple of years, the popularity and business of the sharing economy has increased tremendously.⁶ Uber, Airbnb, Lyft, and other forms of the sharing economy are innovative forms of sharing underused facilities.⁷ The sharing economy presupposes two elements: the existence of physical “shareable goods that systematically have excess capacity,” and a sharing attitude or motivation.⁸ The idea behind the sharing economy is simple: consumers will share goods when transaction costs related to the coordination of economic

3. *Id.* at 1595 (“The old wisdom that we are what we own, may need modifying to consider forms of possession and uses that do not involve ownership.”).

4. *Id.*; see also *The Rise of the Sharing Economy*, *supra* note 1 (“As proponents of the sharing economy like to put it, access trumps ownership.”).

5. See Henn, *supra* note 1 (noting that the sharing economy was a result of the financial crisis).

6. See *id.* (“The sharing, or peer-to-peer, economy is exploding.”); *The Rise of the Sharing Economy*, *supra* note 1.

7. See sources cited *supra* note 6; see also *All Eyes on the Sharing Economy*, *ECONOMIST* (Mar. 9, 2013) <http://www.economist.com/news/technology-quarterly/21572914-collaborative-consumption-technology-makes-it-easier-people-rent-items> (“Technology makes it easier for people to rent items to each other. But as it grows, the ‘sharing economy’ is hitting roadblocks.”). For other examples of the sharing economy, see *infra* notes 207, 299 and accompanying text.

8. See Yochai Benkler, *Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production*, 114 *YALE L.J.* 273, 276, 288 (2004).

activities within specific communities are low.⁹ Sharing practices have become a widespread phenomenon with the development of information and communication social technology that easily connects strangers, supports peer-to-peer collaboration, increases incentives to cooperate, acquires information about the past and present, and predicts future behavior of participants involved in sharing practices.¹⁰ In addition, the price of sharing is significantly lower than the price of owning.¹¹

Shareable goods and sharing systems have been welcomed by a significant number of users that now have access to a greater number of services for a lower price, have met other members of their communities, and have found an extra source of income.¹² These are exactly the types of innovation needed in a time of economic crisis and enhanced individualism.¹³ The increase in sharing practices and collaborative consumption is a reaction against the traditional Western consumer culture and fits within a culture of sustainability and a recent “wave of social innovation.”¹⁴ However, in a number of European and American cities, ride-sharing practices have not always been well accepted, evidenced by organized protests and strikes by licensed taxi companies.¹⁵ These companies have filed

9. See *id.* at 277–78.

10. See Belk, *supra* note 2; *The Rise of the Sharing Economy*, *supra* note 1 (“[T]echnology has reduced transaction costs, making sharing assets cheaper and easier than ever”); see also Benkler, *supra* note 8, at 333, 336; Juho Hamari et al., *The Sharing Economy: Why People Participate in Collaborative Consumption 1* (May 30, 2013) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2271971.

11. See Cait Poyner Lamberton & Randall L. Rose, *When Is Ours Better than Mine? A Framework for Understanding and Altering Participation in Commercial Sharing Systems*, 76 J. MARKETING 109, 111 (2012).

12. See *The Rise of the Sharing Economy*, *supra* note 1.

13. *All Eyes on the Sharing Economy*, *supra* note 7 (“It is surely no coincidence that many peer-to-peer rental firms were founded between 2008 and 2010, in the aftermath of the global financial crisis.”). See, e.g., Henn, *supra* note 1 (“In 2009, as the economy collapsed and [Airbnb] was getting off the ground, this became a godsend for some.”).

14. Pia A. Albinsson & B. Yasanthi Perera, *Alternative Marketplaces in the 21st Century: Building Community Through Sharing Events*, 11 J. CONSUMER BEHAVIOUR 303, 305 (2012).

15. See, e.g., Mark Tran, *Taxi Drivers in European Capitals Strike over Uber—As It Happened*, THE GUARDIAN (June 11, 2014, 11:35 AM), <http://www.theguardian.com/politics/2014/jun/11/taxi-drivers-strike-uber->

complaints against Uber Technologies, which has led to the prohibition of Uber in several cities, including Berlin and Brussels, since April 2014.¹⁶ This culminated in a nationwide prohibition by the Frankfurt District Court.¹⁷ Berlin's District Court, for example, qualified Uber as a rental car service that was violating German passenger transport laws.¹⁸ According to these laws, rental cars are required to return to their place of business after completing an assignment.¹⁹ This is not the case for Uber drivers that remain circulating in the city center after dropping off their customers.²⁰ The Frankfurt District Court went further than previous cases on the topic and highlighted that Uber failed to have the necessary licenses and insurance and posed unfair competition to the local taxi industry.²¹

In London, the regulation of this transportation service has also been highly contested and it seems to be pushing the boundaries of legal concepts and interpretation.²² For example, we have witnessed recent debates on whether the Uber smartphone application could be qualified as a "taximeter" within the meaning of the legislation.²³ Taxi drivers claimed that only licensed black car drivers could use "taximeter"

london-live-updates (discussing organized strikes by taxi drivers in London, Paris, Madrid, and Berlin to protest against privately-hired cars offered by Uber in June 2014).

16. See, e.g., Jeevan Vasagar, *Uber Taxi Service Suffers Setback in Berlin*, FIN. TIMES (Apr. 17, 2014, 4:19 PM), <http://www.ft.com/intl/cms/s/0/1591faf2-c638-11e3-ba0e-00144feabdc0.html#axzz387TxWRMa>.

17. See Mark Scott & Melissa Eddy, *Uber Service Banned Across Germany by Frankfurt Court*, N.Y. TIMES (Sept. 2, 2014, 5:45 AM), http://bits.blogs.nytimes.com/2014/09/02/uber-banned-across-germany-by-frankfurt-court/?_php=true&_type=blogs&emc=eta1&_r=0, for a recent press release on the decision of the Frankfurt District Court stating, "[a] German court has slapped an injunction on the popular car pick-up service Uber, saying it lacks the needed legal permits."

18. *Id.*

19. *Id.*

20. See Vasagar, *supra* note 16.

21. See Scott & Eddy, *supra* note 17.

22. See Neil Brown, *Uber: TfL and the Taxonomy of Taximeters*, SCL—THE IT LAW COMMUNITY (Sept. 16, 2014), <http://www.scl.org/site.aspx?i=ed38518>.

23. See *id.* (examining the "recent controversy over the taxi app 'Uber,' and question[ing] whether TfL's decision in favour of Uber is a beneficial step for innovation.").

technology.²⁴ London's transit regulator, Transport for London (TfL), recently decided that this was not the case, removing an obstacle to Uber's activity in London.²⁵ However, the clash between the interests of licensed taxi drivers and the need to encourage innovations such as this one is far from being solved.²⁶

In addition, taxi drivers are not the only licensed service providers frowning their brows at the sharing economy. In New York City, Airbnb²⁷ has also faced legal problems, and numerous fines have been applied to Airbnb hosts for not complying with local regulations.²⁸ According to New York regulations, Airbnb rooms and apartments can be qualified as illegal hotels.²⁹ However, there appear to be alternatives to this

24. *See id.*

25. *See TfL to Invite High Court to Rule on Taximeters*, TRANSPORT FOR LONDON (May 29, 2014), <http://www.tfl.gov.uk/info-for/media/press-releases/2014/may/tfl-to-invite-high-court-to-rule-on-taximeters> ("TfL set out its provisional view that smart phones used by private hire drivers . . . do not constitute the equipping of a vehicle with a 'taximeter.'").

26. *See* Katie Collins, *Uber Welcomes TfL's Taximeter High Court Referral*, WIRED.CO.UK (May 30, 2014), <http://www.wired.co.uk/news/archive/2014-05/30/uber-tfl-high-court> ("The Licensed Taxi Driver's Association (LTDA) is adamant that Uber is breaching the private hire act and drivers of London's black cabs are due to protest against Uber . . .").

27. Airbnb is an online platform that connects private hosts renting their houses for a short period with travelers. All payments are made through this online platform and Airbnb users can provide feedback on their hosts and "clients." *See How Do I Travel on Airbnb?*, AIRBNB (last visited Oct. 16, 2014), <https://www.airbnb.com/help/article/271> (explaining rules and guidelines for hosting apartments and booking reservations on Airbnb.com).

28. *See, e.g.*, Ron Lieber, *A \$2,400 Fine for an Airbnb Host*, N.Y. TIMES (May 21, 2013, 2:22 PM), <http://bucks.blogs.nytimes.com/2013/05/21/a-2400-fine-for-an-airbnb-host/> ("Nigel Warren faced steep fines for violations from renting his apartment on Airbnb."); *Room for All, for Now*, ECONOMIST (Apr. 26, 2014), <http://www.economist.com/news/business/21601259-there-are-signs-sharing-site-starting-threaten-budget-hotels-room-all>.

29. *See, e.g.*, ERIC T. SCHNEIDERMAN, N.Y. ATTORNEY GEN., AIRBNB IN THE CITY 14 (Oct. 2014), available at <http://www.ag.ny.gov/pdfs/Airbnb%20report.pdf> ("Numerous Units Booked as Private Short-Term Rentals May Have Operated as Illegal Hostels."); *see also* Elizabeth A. Harris, *Short-Term Rentals via the Web: Lucrative but Often Illegal*, N.Y. TIMES, Nov. 5, 2013, at A22 ("In most residential apartment buildings, renting out your space for less than 30 days is illegal, unless you are present . . ."); Catherine Yang, *Illegal Hotel Operator Made Nearly \$7 Million Using Airbnb*, THE EPOCH TIMES (Oct. 16, 2014), <http://www.theepochtimes.com/n3/1024373-illegal-hotel-operator-made-nearly-7-million-using-airbnb/> (discussing a report released by Attorney

all-or-nothing approach. In February 2014, the municipality of Amsterdam decided to authorize the private rental of houses to tourists in an attempt to reduce the regulatory uncertainty, and to address the growing problem of professionals who rent multiple houses through Airbnb.³⁰

Sharing economy practices challenge regulations on a daily basis, evidencing the tension between the need to encourage innovation and the need to protect customers from fraud, liability, and practices that might endanger public health or safety.³¹ In the world of the sharing economy, traditional legal boundaries are easily blurred, resulting in legal gray areas and regulatory uncertainty.³² In addition, these tensions cannot always be reduced to a combat between David—innovative but small start-ups that connect individuals—and Goliath—municipalities and agencies concerned about compliance with safety regulation, or large hotel chains and taxi corporations that do not wish to lose their clients.³³ Some electronic platforms, such as Uber and Airbnb, are far from being run from basements.³⁴ Still, this does not mean that their innovative potential should not be cherished. The real clash here is between the interest to stimulate innovation and the need to protect the public from its potential harms.³⁵

General Eric Schneiderman and stating that, “the vast majority of Airbnb listings are illegal, and ‘multi-million dollar businesses’ of illegal hotels are being run out of the most ‘gentrified neighborhoods’ of New York City”).

30. See Jarl van der Ploeg, *Amsterdam Akkoord Met Huis Verhuren aan Toeristen*, VOLKSKRANT (Feb. 15, 2014, 8:28 AM), <http://www.volkskrant.nl/vk/nl/2686/Binnenland/article/detail/3597693/2014/02/15/Amsterdam-akkoord-met-huis-verhuren-aan-toeristen.dhtml> (Ger.) (discussing Amsterdam’s decision to allow temporary leasing of private space to tourists; the municipality of Amsterdam allows property owners to rent their houses to a maximum number of four tourists for the maximum of three months).

31. See Molly Cohen & Corey Zehngbot, *What’s Old Becomes New: Regulating the Sharing Economy*, 58 BOSTON BAR J. 34 (2014) (discussing the delicate balance of safety with economic development in the sharing economy).

32. *Id.* at 34–37 (explaining how “the start-ups’ rapid emergence defy long regulatory timelines” and discussing where the regulatory line should be drawn moving forward).

33. *Id.* at 34.

34. *See id.*

35. *See id.*

While we all praise innovation and the existence of sharing economy practices,³⁶ we should first ask whether these sharing economy practices can be qualified as innovations. Second, we should analyze how regulation should approach innovation given its multiple complexities. Third, it is important to question whether the regulations of their equivalent commercial services are applicable to them or whether regulators should “lower their standards”—and for how long—taking into account the goals and nature of these practices, its innovative character, and evolving nature. Fourth, we should examine whether these unlicensed services open the door to risks that could be controlled by enacting specific regulations or applying existing ones. In this context, regulators are at a crossroads with multiple controversies. They do not have sufficient information about these innovations or their risks, and might wonder whether the application of existing rules to these new forms of taxis or hotels might stifle innovation, be unreasonable, and even constitute an unwarranted interpretation of statutes.³⁷ Furthermore, the enactment of new regulations may leave out new sharing economy practices that might emerge in the meantime.³⁸

Innovation is a moving and evolving target.³⁹ Regulators can try to shape and guide the means to hit this target, ensuring that it follows certain routes.⁴⁰ However, these routes should be in line with the movement of innovation and should not involve shooting down new technologies and services before they finally hit this moving target.⁴¹

36. Gaia Bernstein, *In the Shadow of Innovation*, 31 CARDOZO L. REV. 2257, 2260 (2010) (“Everybody appears to worship innovation and all parties raise innovation arguments to justify their positions.”).

37. See Roger Brownsword & Karen Yeung, *Regulating Technologies: Tools, Targets and Thematics*, in REGULATING TECHNOLOGIES: LEGAL FUTURES, REGULATORY FRAMES AND TECHNOLOGICAL FIXES 3–22 (Roger Brownsword & Karen Yeung eds., 2008), for an overview of the general problems encountered by regulators when faced with the need to regulate new technologies and innovation.

38. *See id.*

39. *Cf. id.*

40. *See id.*

41. *See id.*

C. THE ADVENTURE OF REGULATING INNOVATION

Innovation is a hot topic these days.⁴² It is a particularly hot topic during a time of economic crisis, when we are reminded that governments must prioritize investments in research and development (R&D) and redefine their innovation policies so as to enhance productivity and foster economic growth.⁴³ Contrary to our common perception of innovation, this phenomenon also occurs outside large research centers, laboratories, and the garages and basements of courageous inventors. Innovation is more than the latest technology; it is a phenomenon that can result in the improvement of living conditions of people and strengthening of communities. Innovation can be technological and social, and the former might assist the latter to empower groups in ways we once thought unimaginable.

In a period where innovation has been given the leading role, regulators face the additional responsibility of regulating innovative products and services without stifling innovation.⁴⁴ While “[m]uch has been written about invention and innovation, . . . [there are not many] precise clues as to what needs to be supported, promoted or measured . . . [leading] to policy formulations that are seriously flawed or, at best, ineffective.”⁴⁵ Innovation is a difficult phenomenon to understand, promote, and regulate within and beyond the sharing economy.⁴⁶ The regulation of innovation in the sharing economy is particularly complex because it is unclear whether

42. See generally ORLY LOBEL, *TALENT WANTS TO BE FREE: WHY WE SHOULD LOVE LEAKS, RAIDS, AND FREE RIDING* 27–46 (Yale Univ. Press 2013) (analyzing and challenging conventional business wisdom that stems innovation).

43. See WENDY H. SCHACHT, CONG. RESEARCH SERV., RL33526, *COOPERATIVE R&D: FEDERAL EFFORTS TO PROMOTE INDUSTRIAL COMPETITIVENESS* 1–4 (2008) (“The government has supported various efforts to promote cooperative research and development activities among industry, universities, and the federal R&D establishment designed to increase the competitiveness of American industry and to encourage the generation of new products, processes, and services.”).

44. See *id.*

45. Luis Suarez-Villa, *Innovative Capacity, Infrastructure and Regional Policy*, in *INFRASTRUCTURE AND THE COMPLEXITY OF ECONOMIC DEVELOPMENT* 258 (David F. Batten & Charlie Karlsson eds., 1996).

46. See *id.*

these practices fit within existing legal frameworks that apply to equivalent commercial practices and should play by the same rules, whether these practices should remain to a great extent unregulated, or whether these practices should benefit from less demanding regulations. This hesitation has opened the door to uncertainty and lack of transparency.

A great number of sharing practices do not require regulation, since they belong to the personal sphere, similar to what occurs during swaps or rides between friends or charity.⁴⁷ Numerous sharing practices are closer to forms of social innovation motivated mainly by the spirit of giving,⁴⁸ as opposed to others, such as Uber, which are mainly profit-driven.⁴⁹ Sharing, however, does not always mean caring, as these platforms open the backdoor to fraudulent behavior, and risk becoming parallel, unsafe, and underinsured practices.⁵⁰ A laissez-faire approach does not suffice in this scenario and, as mentioned above, has resulted in the strict prohibition of these sharing economy practices, since different courts have not been convinced by Uber's arguments that it should not be subject to the same rules as taxi drivers.⁵¹

D. THE APPROACH

This Article approaches the regulation of sharing economy practices from an “innovation law perspective.” The spotlight here is on the challenges that characterize innovation and the balance between the need to encourage innovation on the one hand and, on the other, limit the uncertainty and risks attached to the sharing economy. By analyzing the characteristics of sharing economy practices, this Article discusses potential approaches to the regulation of these

47. JANELLE ORSI, PRACTICING LAW IN THE SHARING ECONOMY: HELPING PEOPLE BUILD COOPERATIVES, SOCIAL ENTERPRISE, AND LOCAL SUSTAINABLE ECONOMIES 563 (2012).

48. For example, collaborative practices among neighbors.

49. See Andrew Ross Sorkin, *Why Uber Might Well Be Worth \$18 Billion*, N.Y. TIMES, June 10, 2014, at B1 (“[T]he limousine and taxi-fetching app company[] was valued on Friday at \$18.2 billion . . .”).

50. See, e.g., Ron Lieber, *The Question of Coverage for Ride Service Drivers*, N.Y. TIMES, Sept. 6, 2014, at B1 (discussing Uber's insurance policies and legislation introduced after an Uber driver's fatal car accident).

51. See Vasagar, *supra* note 16; *supra* Part I.B.

phenomena that meet the interests of innovators in this field, while offering a minimum of guarantees to users.

This Article aims to answer the following central question: how can we find the balance between encouraging innovation in sharing economy practices while regulating it to protect customers from a number of risks that might arise from unlicensed practices? This Article starts at an abstract level by addressing the first challenge: that encouraging and regulating innovation implies knowing what “innovation” is, what its characteristics are, and in the particular case of the sharing economy, being able to define what exactly is innovative about these sharing economy practices. Part II focuses on the phenomenon of innovation, distinguishes between different types of innovation, and addresses the uncertainties and complexities that characterize innovation.⁵² These difficulties are equally present in the case of the sharing economy. Based on this preliminary analysis of the innovation process, Part III addresses the regulation of innovation, arguing that regulators should focus on the need to tackle its newness, uncertainty, and inherent risks. Part IV is specifically devoted to sharing economy practices. Part IV describes the most common forms of collaboration and introduces its regulatory challenges. Part V applies the theoretical aspects discussed in previous Parts, and discusses both existing and proposed regulatory solutions for the regulation of the sharing economy. This last Part proposes overarching solutions to ensure that rules can keep up with innovation, or at least show openness to future improvements and innovative practices. More than offering a set of solutions for the regulation of innovation in the sharing economy, this Article aims to ask the right questions regarding what regulators and judges should be considering when confronted with innovative products and services, including the need to decide on the application of existing regulations to sharing economy practices, and the consequent authorization or prohibition of novel sharing economy practices.

52. Richard R. Nelson & Sidney G. Winter, *In Search of Useful Theory of Innovation*, 6 RES. POL'Y 37, 47–48 (1977) (“Explicit recognition of uncertainty is important in thinking about policy.”).

II. INNOVATION

The economic and social benefits of innovation for the growth and development of any developed nation are now almost indisputable.⁵³ In the past few decades, different social and technological innovations have contributed substantially to the improvement of living standards, and have enhanced the diversity, quality, and safety of products on the market.⁵⁴ Not surprisingly, the stimulation of innovation has been included in the priorities of the Europe 2020 Strategy⁵⁵ and is conceived as a step towards a “more competitive, sustainable and inclusive economy.”⁵⁶ Innovation has been placed at the center of U.S. policies⁵⁷ and Europe 2020 priorities,⁵⁸ and the Organisation for Economic Co-operation and Development (OECD) has pleaded on numerous occasions for the development of renewed visions and “strategic road map[s] to encourage innovation.”⁵⁹ This leading role for innovation results from the idea that

53. See SCHACHT, *supra* note 43, at 1–2.

54. See Robert Cooter et al., *The Importance of Law in Promoting Innovation and Growth*, in RULES FOR GROWTH: PROMOTING INNOVATION AND GROWTH THROUGH LEGAL REFORM 1–2 (2011) (discussing the growth in developing economies, advancing living standards, and other types of progress worldwide).

55. See EUR. COMM’N, EUROPE 2020: A EUROPEAN STRATEGY FOR SMART, SUSTAINABLE AND INCLUSIVE GROWTH 3 (2010), *available at* <http://ec.europa.eu/eu2020/pdf/COMPLETE%20EN%20BARROSO%20%20%2007%20-%20Europe%202020%20-%20EN%20version.pdf> (“Europe 2020 puts forward three mutually reinforcing priorities . . . [including] developing an economy based on knowledge and innovation.”).

56. EUR. COMM’N, INNOVATION UNION COMPETITIVENESS REPORT 1 (2011), *available at* <http://ec.europa.eu/research/innovation-union/pdf/competitiveness-report/2011/iuc2011-full-report.pdf#view=fit&pagemode=none>.

57. See President Barack Obama, Remarks by the President on the Economy (Aug. 5, 2009), *available at* http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-the-Economy-in-Wakarusa-Indiana/ (“[I]nnovation is more important than ever.”).

58. See EUR. COMM’N, *supra* note 55, at 3 (highlighting Europe 2020’s “three mutually reinforcing priorities,” which include “[s]mart growth: developing an economy based on knowledge and innovation[;] [s]ustainable growth: promoting a more resource efficient, greener and more competitive economy[; and] [i]nclusive growth: fostering a high-employment economy delivering social and territorial cohesion.”).

59. ORG. ECON. CO-OPERATION & DEV., REGIONS AND INNOVATION POLICY 20 (2011), *available at* http://www.oecd-ilibrary.org/urban-rural-and-regional-development/regions-and-innovation-policy_9789264097803-en.

creativity, entrepreneurship, and innovation should put us on the path of economic growth.⁶⁰ While it is clear that legal institutions should play a role in shaping an environment conducive to innovation, we are still very far from mastering the paths of innovation. As Geoffrey Manne and Joshua Wright have pointed out, “the ratio of what is known to what is unknown with respect to the relationship between innovation, competition, and regulatory policy is staggeringly low.”⁶¹ We often do not know how innovation emerges, what its complexities are, how to deal with its inherent uncertainty, and how to design a set of legal institutions and instruments that encourage it. The first step should be the defining innovation.

A. INNOVATION: MORE THAN A WORD

Innovation is inherent to the human being.⁶² Throughout the centuries, the pursuit of innovation has awakened our curiosity and eagerness to learn, driving the need to constantly challenge us and improve the state-of-the-art.⁶³ Innovation is a broad concept that can be defined differently depending on the context and field in question.⁶⁴ Innovation rarely emerges due to fortuitous discoveries.⁶⁵ Instead, it is often the result of persistent actors that dare to “think outside the box,” try to develop new solutions for existing problems, resist opposition to new ideas, and break new ground with their inventions.⁶⁶ Innovation emerges, evolves, and is rapidly dissolved in banal

60. See SCHACHT, *supra* note 43, at 1 (“[T]echnological advancement is critical in that it contributes to economic growth.”).

61. COMPETITION POLICY AND PATENT LAW UNDER UNCERTAINTY: REGULATING INNOVATION 1 (Geoffrey A. Manne & Joshua D. Wright eds., 2011).

62. See Jan Fagerberg, *Innovation: A Guide to the Literature*, in THE OXFORD HANDBOOK OF INNOVATION 1, 1 (Jan Fagerberg et al., eds., 2007).

63. See *id.* at 4–5.

64. See *id.* at 4 (“It is a serious mistake to treat an innovation as if it were a well-defined, homogenous thing . . .”).

65. BARBARA THOMAß, *Stimulierung Innovativer Angebote im Rundfunk*, in INNOVATION, RECHT UND ÖFFENTLICHE KOMMUNIKATION 150, 153 (Martin Eifert & Wolfgang Hoffmann-Riem eds., 2011) (Ger.) (analyzing the regulation of the offer of innovative media products and the challenges to traditional regulation).

66. *Id.*

daily objects.⁶⁷ This evolving nature of innovation means that policymakers and regulators are forced to chase a chameleon.⁶⁸

In the legal context, innovation is a concept frequently associated with “something significantly new.”⁶⁹ Nonetheless, the former cannot be qualified as a legal concept.⁷⁰ Rather, it is particularly in business and public policy literature that the concept of innovation has been explored and defined. Richard R. Nelson and Sidney G. Winter, for example, define innovation as a “wide range of variegated processes by which man’s technologies evolve over time.”⁷¹ More simplistic definitions refer to innovation as “the application of new knowledge to industry . . . [including] new products, new processes, and social and organisational change.”⁷² In sum, the innovation process is the “process of putting ideas into useful form and bringing them to market”⁷³

For the purposes of this Article, innovation is defined as “the ability to take new ideas and translate them into commercial [or effective social] outcomes by using new processes, products, or services”⁷⁴ Innovation is more than an idea or a novelty; it must be the first successful concretization of an idea in the marketplace or in society.⁷⁵ Contrary to an invention, innovation is not the “first *occurrence*

67. *See id.*

68. *See id.*

69. Stefan Müller, *Innovationsrecht-Konturen Einer Rechtsmaterie*, 2 INNOVATIONS UND TECHNIKRECHT 58, 60 (2013) (Ger.) (developing the idea of “innovation law” as an interdisciplinary field of study that combines law and multilevel governance, and arguing that it should be placed at the forefront of other policies).

70. *Id.*

71. Nelson & Winter, *supra* note 52, at 37.

72. Lucy Firth & David Mellor, *The Impact of Regulation on Innovation*, 8 EUR. J.L. & ECON. 199, 199 (1999).

73. EUGENE FITZGERALD ET AL., INSIDE REAL INNOVATION: HOW THE RIGHT APPROACH CAN MOVE IDEAS FROM R&D TO MARKET AND GET THE ECONOMY MOVING 2 (2011).

74. Richard Bendis & Ethan Byler, *Creating a National Innovation Framework*, SCI. PROGRESS, Apr. 2009, at 1, 7, available at http://www.scienceprogress.org/wp-content/uploads/2009/04/bendis_innovation.pdf; see also Nelson & Winter, *supra* note 52, at 48 (“[A] theory of innovation must incorporate explicitly the stochastic evolutionary nature of innovation, and must have considerable room for organizational complexity and diversity.”).

75. *See Fagerberg, supra* note 62, at 4.

of an idea for a new product or process,” but rather, the first attempt to “carry[] them out in *practice*.”⁷⁶

This definition of innovation includes not only the technological aspects of innovation, but also social innovation, with the latter referring to “the design and implementation of creative ways of meeting social needs.”⁷⁷ Innovation does not need to be profit-oriented, as long as it translates the first successful realization of an idea that improves, from a technological, social, or economic perspective, the status quo.⁷⁸ Innovation refers not only to emerging technologies but also to socially innovative programs and services that aim to reduce poverty and discrimination, and that also aim to integrate minorities—the so-called “social innovation.”⁷⁹ This broad concept of innovation is relevant in the context of collaborative practices that are designed to empower communities and incentivize interactions between strangers.⁸⁰ For example, one could question the social contact promoted by sharing transportation practices such as Uber or Lyft, where strangers are expected to do more than just sit next to each other and share a ride.⁸¹ Engaging in casual conversation in the context of car sharing systems might not fit our traditional perception of social innovation that is more often connected with charity.⁸² However, breaking the circle of individualism by sharing and caring does not necessarily stretch the concept of social innovation too far.

Innovation—particularly in the case of the sharing economy—is a complex concept composed of multiple dimensions that requires a thorough analysis. First, innovation

76. *See id.* at 3 (emphasis added).

77. Press Release, Renewed Social Agenda, President Barroso Discusses How to Boost “Social Innovation” 1 (Jan. 20, 2009), *available at* http://europa.eu/rapid/press-release_IP-09-81_en.htm?locale=en.

78. *See id.*

79. *See id.* (“Examples of social innovation . . . [include] an initiative which creates local partnerships to reintegrate socially excluded, homeless or those released from prisons, or leaving orphanage . . .”).

80. *See* Megan Rose Dickey, *Lyft Rides are So Social that a Driver Invited a Passenger Over for Thanksgiving Dinner*, BUS. INSIDER (Mar. 15, 2014, 10:33 AM), <http://www.businessinsider.com/qa-with-lyft-ceo-john-zimmer-2014-3>.

81. *See id.* (“Lyft drivers and passengers are already forming deep connections.”).

82. *See id.*

should have a welfare dimension, consisting of positive change for society in general, or for groups of individuals. Second, innovation should be regarded as a relative concept, which means that “new” does not always amount to absolutely inventive, but “new” in a determined setting, time, and place. Last, innovation can be translated either in social or technological improvements. The following subsection elaborates on the different elements of the concept of innovation and apply them to the context of the sharing economy.

B. THE ELEMENTS OF “INNOVATION” IN THE CONTEXT OF THE SHARING ECONOMY

1. A Change for the Better

Innovation is often understood as a change for the better. However, such welfare considerations should take place at the time of the occurrence of the innovation—decades later, everything could have been done better. In addition, innovation is a relative concept, depending on the social and economic circumstances of a country, state, or community.⁸³ Moreover, innovation is context- and sector-specific; it depends on the socioeconomic conditions it is embedded in. Therefore, context must be considered or else innovation is “unlikely to meet the needs of most people, especially in countries [or regions] where innovation and poverty reside side by side.”⁸⁴ A socially innovative idea that provides more access to knowledge and information to an impoverished community might not be absolutely new in other places and contexts, but its application in that community may be highly innovative and worth rewarding.⁸⁵ The innovative ideas included in the concept of innovation refer to new products, services, and public policies that either have a commercial goal or simply an altruistic aim to solve social problems.⁸⁶

83. See Smita Srinivas & Judith Schutz, *Developing Countries and Innovation: Searching for a New Analytical Approach*, 30 *TECH. SOC’Y* 129, 129 (2008).

84. *Id.*

85. See *infra* notes 88–90 and accompanying text.

86. See Srinivas & Schutz, *supra* note 83.

2. Innovation as a Relative Concept

An innovation is something new to a certain region, state, or country; it is thus a relative concept that should be evaluated in a particular region, time, and sector.⁸⁷ For example, a program or policy will qualify as an innovation when it “is new to the states adopting it, no matter how old the program may be or how many other states have adopted it.”⁸⁸ The regulation of this innovation might still pose important challenges to a jurisdiction even if it has been implemented and regulated elsewhere.⁸⁹ In this Article, the newness of the innovation in question is not assessed in global terms, but is related to the experience and knowledge of the jurisdiction in question: have sharing economy practices been used in city X or Y, or are they entirely new? The fact that Uber has been used for some years in San Francisco does not mean it cannot be qualified as an innovation in a European city.⁹⁰

Innovation is often distinguished from invention, defined as the conception of a new idea, a discovery, or a unique finding.⁹¹ In the case of the sharing economy, this degree of newness (understood as invention) is not required for the adopted concept of innovation, since common examples of collaborative consumption have existed for centuries.⁹² However, many of these examples have gained a new dimension with the emergence of online platforms and smartphone applications.⁹³ To illustrate, before the time of

87. See Jack L. Walker, *The Diffusion of Innovations Among the American States*, 63 AM. POL. SCI. REV. 880, 881 (1969).

88. *Id.*

89. See *id.* at 881–82 (discussing the diffusion of innovations and offering a methodology for assessing why “some states adopt innovations more readily than others”).

90. See generally Vasagar, *supra* note 16 (providing background information on the Uber taxi service and its venture into Germany).

91. See, e.g., LUKE A. STEWART, THE INFORMATION TECHNOLOGY & INNOVATION FOUNDATION, THE IMPACT OF REGULATION ON INNOVATION IN THE UNITED STATES: A CROSS-INDUSTRY LITERATURE REVIEW 1 (2010) (citing JOSEPH A. SCHUMPETER, CAPITALISM, SOCIALISM AND DEMOCRACY (Harper & Brothers 1942)), available at <http://www.itif.org/files/2011-impact-regulation-innovation.pdf> (distinguishing innovation as the “commercially successful application of an idea, from invention, the initial development of an idea”).

92. See generally ORSI, *supra* note 47, at 526–27 (describing hotels, hostels, boarding houses, and temporary stays).

93. See *id.*

hotels or hostels, pilgrims and other travelers would request to stay with strangers that they would encounter.⁹⁴ These strangers would provide food and shelter and often receive compensation from their guests.⁹⁵ We should nonetheless see Airbnb and other platforms of hosting guests as innovations, since they are new in their current forms.

The aspect of newness of an innovation is thus a relative concept.⁹⁶ Something is new from a current perspective, even if it had existed previously—but had been abandoned—or had existed elsewhere with similar characteristics.⁹⁷ Newness is determined here as a subjective value conditioned by time and space. From a temporal perspective, the faster and more widespread the effects of an innovation might be, the sooner it will lose its “new” character.⁹⁸ From a spatial perspective, although diffusion of an innovation might determine its successful commercialization, it will also erode its “new” character.⁹⁹ Temporary or local oblivion might allow an old practice to reemerge and contribute in an innovative fashion to the improvement of current living conditions.¹⁰⁰

There are two basic interpretations of newness: (1) the Schumpeterian idea of innovation (“creative destruction”), implying the development of a product which creates a discontinuity in relation to the existing ones;¹⁰¹ and (2) the

94. *See id.*

95. *Id.*

96. For example, an innovation may be new in one region and not in another. *See Walker, supra* note 87 and accompanying text.

97. *See NEVA GOODWIN ET AL., MICROECONOMICS IN CONTEXT* ch. 10 (2008), available at http://www.ase.tufts.edu/gdae/education_materials/modules/Consumption_and_the_Consumer_Society.pdf.

98. *See Walker, supra* note 87, at 897–98 (arguing that states are more likely to adopt innovation already adopted by other states because of the perception that the non-adopting state is “relatively deprived”).

99. Marian Adolf, *Die Kultur der Innovation: Eine Herausforderung des Innovationsbegriffes als Form gesellschaftlichen Wissens*, in *HERAUSFORDERUNG INNOVATION: EINE INTERDISZIPLINÄRE DEBATTE* 25, 30 (Reto M. Hilty et al. eds., Springer 2012) (Ger.) (explaining the concept of innovation as a form of social knowledge or lack of it).

100. For example, the “Airbnb” uses modern technology to revitalize the practice of peer-to-peer room renting. *Cf. Yang, supra* note 29 (describing how the Airbnb “home-sharing app” has facilitated a market of short-term room renting).

101. SCHUMPETER, *supra* note 91 (describing “Creative Destruction” as an essential fact of capitalism).

notion of incremental improvement in a product's design, such as changes in organization or processes that increase efficiency or ensure environmental sustainability.¹⁰² The Schumpeterian concept of innovation refers to changes in paradigms, or breakthrough innovations that transform existing technology and our society by introducing revolutionary new products.¹⁰³ In contrast, incremental innovation builds on existing knowledge and constitutes an extension or improvement of present technologies or practices.¹⁰⁴ Most innovations, even if they break with existing paradigms, are built on existing knowledge and derive from a "step-by-step co-evolutionary process of change."¹⁰⁵

The concept of innovation should not be mistaken with the concept of "mere change."¹⁰⁶ Innovation is a type of change: one that brings about a new approach to technology or a new method (e.g., reducing poverty).¹⁰⁷ Contrary to some breakthrough changes that can be perceived as negative, innovation—particularly in the field of the sharing economy and other fields with social relevance—should stand for "improvement."¹⁰⁸ Mere changes can be a reaction to a social problem (e.g., arresting homeless people to reduce the visibility of poverty), whereas innovative solutions are *proactive* responses to problems (e.g., developing social structures and

102. Milou Beerepoot & Niels Beerepoot, *Government Regulation As an Impetus for Innovation: Evidence from Energy Performance Regulation in the Dutch Residential Building Sector*, 35 ENERGY POLY 4812, 4813 (2007).

103. See Ronald Mascelli, *From Experience: Harnessing Tacit Knowledge to Achieve Breakthrough Innovation*, 17 J. PROD. INNOVATION MGMT. 179, 179–81 (2000) (discussing how creative breakthroughs provide far more commercial value than incremental improvements).

104. See Beerepoot & Beerepoot, *supra* note 102, at 4813 ("[N]ew ideas that actually get to market are usually incremental improvements on existing technology.").

105. Nicholas A. Ashford & Ralph P. Hall, *The Importance of Regulation-Induced Innovation for Sustainable Development*, 3 SUSTAINABILITY 270, 273 (2011).

106. Cf. Carol Slappendel, *Perspectives on Innovation in Organizations*, 17 ORG. STUD. 107, 107 (1996) (discussing how "newness or novelty" is often a key characteristic of innovation and that change alone is not sufficient for something to be perceived as innovative).

107. Cf. *id.* (explaining that "all innovations imply change").

108. See Peter Schramade, *Innovatie en verandering*, 135 HOLLAND MGMT. REV. 3, 3 (2011) (arguing that change is associated with negative emotions and innovation is associated with positive emotions).

guaranteeing shelter, healthcare, and reintegration programs for the homeless).¹⁰⁹

3. Technological and Social Improvements

This Article does not reduce innovation to the mere “development and deployment of technological improvements,”¹¹⁰ but instead follows the trend to pay attention to the encouragement of innovation in social fields.¹¹¹ Innovations in the sharing economy merge concepts of both technological and social innovations.¹¹² Often, the idea of sharing was already there, but the creation of an online platform or a smartphone application that connects users in a simple way constitutes the innovative element of the practice.¹¹³ These technological elements of an innovation are usually palpable technical improvements that can be easily identified.¹¹⁴ Socially innovative aspects are however more

109. *Id.* (discussing how change is reactive and innovation is proactive).

110. *Contra* STUART MINOR BENJAMIN & ARTI K. RAI, STRUCTURING U.S. INNOVATION POLICY: CREATING A WHITE HOUSE OFFICE OF INNOVATION POLICY 2 (2009), available at http://www.itif.org/files/WhiteHouse_Innovation.pdf (using a restrictive definition of innovation that involves only the “development and deployment of technological improvements”).

111. *See, e.g.*, EUR. COMM’N, ENTERPRISE AND INDUSTRY, THIS IS EUROPEAN SOCIAL INNOVATION 9, 14–27 (2010), available at http://ec.europa.eu/enterprise/flipbook/social_innovation/ (describing ten recent social innovation projects in Europe); James A. Phills et al., *Rediscovering Social Innovation*, STAN. SOC. INNOVATION REV., Fall 2008, at 34, 36 (“[S]ocial innovation is the best construct . . . [for] lasting social change.”).

112. Henn, *supra* note 1 (explaining that the idea of “[s]haring is not exactly new,” but technological advances have accelerated the sharing economy through the use of online platforms).

113. *Id.* (citing examples of technology that permit users to “see more than we could see before,” increasing access and making “sharing all sorts of things simple”).

114. *See, e.g., id.* (discussing how smartphone applications specifically that have made old concepts of “sharing” more accessible); *cf.* Nicholas A. Ashford & George R. Heaton, Jr., *Regulation and Technological Innovation in the Chemical Industry*, 46 LAW & CONTEMP. PROBS. 109, 112 (1983) (arguing that one can predict what future technical innovation is likely to occur by “understanding the dynamics of that technology”).

difficult to capture.¹¹⁵ This difficulty results from the fact that social innovation is not tangible.¹¹⁶

Social innovation is in itself not a recent phenomenon.¹¹⁷ Examples of hospices, mutual aid associations, and benefit societies can be traced back centuries.¹¹⁸ Still, the emergence of social innovation detached from religious institutions, as a new field, is a recent idea.¹¹⁹ In the European Union, social innovation has been described as the “design and implementation of creative ways of meeting social needs.”¹²⁰ A true social innovation is generated when the benefits to society of a product or process have substantially more social than private value, when the added value to society is greater than the gains to entrepreneurs.¹²¹

The distinctive character of social innovation relies on the inventor’s main intrinsic motivation: social change.¹²² The social value generated by socially innovative programs or policies is not a mere byproduct, but rather its primary goal.¹²³ This is visible in a number of sharing economy enterprises, particularly in non-profit organizations.¹²⁴ Accordingly, social innovation has been defined as “a novel solution to a social problem that is more effective, efficient, [and] sustainable . . . than existing solutions and for which the value created accrues primarily to society as a whole rather than

115. See generally EUR. COMM’N, *supra* note 111, at 9 (arguing that in Europe there is a lack of clarity regarding social innovation).

116. See, e.g., *id.* at 14 (describing a project to increase interaction between generations, where it was difficult to quantify precisely the social innovation).

117. *Id.* at 9.

118. See STEVEN E. EPSTEIN, *WAGE LABOR AND GUILDS IN MEDIEVAL EUROPE* (1991) (discussing the history of wage guilds in medieval Europe, which served as inspiration for modern benefit societies); see also LORIE CHARLESWORTH, *WELFARE’S FORGOTTEN PAST: A SOCIO-LEGAL HISTORY OF THE POOR LAW* (2010).

119. See EUR. COMM’N, *supra* note 111, at 9 (“A ‘field’ of social innovation, however, is a new idea.”).

120. See Press Release, *supra* note 77.

121. Phills et al., *supra* note 111, at 36.

122. See Clayton Christensen et al., *Disruptive Innovation for Social Change*, HARV. BUS. REV., Dec. 2006 at 94, 96.

123. *Id.* at 96 (“With catalytic innovations, however, social change is the primary objective.”).

124. See, e.g., *id.* at 97–98 (describing social innovations by nonprofits in the health care and education fields).

private individuals.”¹²⁵ Under this broad definition, different types of social innovation are captured, such as fair trade labeling, laws and policies promoting integration of minorities or reducing poverty, and collaborative consumption initiatives.¹²⁶ Common examples of social innovation in the United States and Europe are local partnerships and initiatives that target social exclusion, homelessness, overcrowded or poor conditions in prisons, orphanages, and barriers to labor integration of non-qualified young adults.¹²⁷

In a time of economic crisis, both technological and social innovation should be stimulated.¹²⁸ Diverse forms of the sharing economy and collaborative consumption innovative practices are often not profit-driven.¹²⁹ Instead, they are designed to improve access to shareable goods that would otherwise be inaccessible to the poorest, combat individualism, and empower communities.¹³⁰ Cooperative enterprises between neighbors to share items, babysit children, or provide assistance to the elderly are some examples of innovations that oblige us to think out of the box of business innovation.¹³¹ Instead of analyzing technological innovation in itself (the platform used to connect users of sharing economy practices), attention should be devoted to the service dimension of the sharing economy’s innovations and its advantages and disadvantages.¹³² Technology plays here a secondary role since it is merely a facilitative element for the concretization of an idea.

125. Phills et al., *supra* note 111, at 36.

126. *E.g., id.* at 40 (listing ten recent social innovations, including fair trade labeling).

127. Press Release, *supra* note 77.

128. *Id.* (“[F]inancial and economic crisis makes . . . social innovation in particular even more important to foster sustainable growth, secure jobs and boost competitiveness.”).

129. *Cf.* Phills et al., *supra* note 111, at 37 (explaining that the terms associated with social innovation have historically “implicitly or explicitly exclude[d] public and for-profit organizations”).

130. *Id.*

131. *See, e.g., id.* at 26–27.

132. *See, e.g., id.* at 17–18 (focusing on the act of helping cancer patients in their homes, as opposed to focusing on the software-as-a-service technology that assists in communicating with those patients).

Recognizing the nature of the innovation under analysis is required not only to understand its elements, but also to decide upon its regulatory regime.¹³³ It is important to distinguish between mainly socially innovative activities, which are not primarily profit-oriented,¹³⁴ and innovative activities that might have a beneficial impact on a community, but at the same time have become someone's main source of income.¹³⁵ In the sharing economy, we can distinguish between occasional or spontaneous transactions,¹³⁶ daily profit-oriented transactions,¹³⁷ and solely non-profit oriented swaps or practices to empower minorities or assist neighbors.¹³⁸ In the last case, the main goal of the initiative is to strengthen the sense of community and learn from cultural exchange, it can be qualified as a social innovation and should benefit from a less stringent regulatory regime. The expectations of the parties benefiting from these activities are in theory lower when compared to hiring a professional service for the same purpose. In the first and second cases, however, the social goals of the sharing initiative may be diluted and confused with a profit-driven activity.¹³⁹ While the idea might remain innovative and socially useful, it is important to ask whether the main goal of those behind it is still social change, or profit.

C. THE CHALLENGES OF INNOVATION

In the European Union and the United States, the promotion of innovation has been regarded as both an economic

133. See, e.g., Ashford & Hall, *supra* note 105, at 285 (describing concerns particular to the fuel economy and emissions).

134. Community-centered planning is an example. See Phills et al., *supra* note 111, at 40.

135. For example, fair trade coffee. See *id.* at 40.

136. For example, renting an extra room to guests for a number of limited days or providing dinner to a couple of neighbors in exchange for compensation once or twice a week Airbnb, which assists tenants in renting their extra rooms for short periods, is an example of a spontaneous transaction. See Yang, *supra* note 29.

137. For example, fair trade deals that require the producers of the product to pay a living wage to their employees. See Phills et al., *supra* note 111, at 40.

138. For example, helping the elderly stay physically active. EUR. COMM'N, *supra* note 111, at 26–27.

139. Cf. Phills, *supra* note 111, at 40 (discussing the blending of profit and nonprofit companies, especially nonprofits considering business strategies and for-profits considering their social impact).

and social challenge.¹⁴⁰ Innovation and entrepreneurship are key elements to the enhanced competitiveness of European firms and economic growth.¹⁴¹ Nonetheless, understanding the significance of innovation for the economy, defining the relationship between technological innovation and economic growth, and calculating the commercial potential of an innovation in light of existing uncertainty, have not been simple tasks.¹⁴² From a societal perspective, innovation in social services and structures is expected to solve the problems resulting from an increasingly individualist society, yet an accurate definition of the concept of social innovation appears to be an obstacle to the definition of innovation policy.¹⁴³

A third dimension must be added to the economic and social challenges of innovation: the regulatory facet. Regulating social and technological innovation with little information on the novelties in question and their effects and side effects, poses significant challenges to regulators.¹⁴⁴ This can be explained by the difficulty in finding the balance between the need to encourage innovation, and the respect for legal principles and norms.¹⁴⁵ An increasing number of governmental policies have aimed to promote innovation in the last decade through innovation-oriented policy.¹⁴⁶ Most of these policies have been based on economic incentives.¹⁴⁷ However, this economic approach is only one of the available forms used to influence the behavior of private actors; information transfer

140. EUR. COMM'N, *supra* note 56, at 1–2.

141. *See id.* at 3, 368–74 (“Innovation is a key driver of growth and innovative ideas for the future of Europe.”).

142. *See* Bart Verspagen, *Innovation and Economic Growth*, in THE OXFORD HANDBOOK OF INNOVATION 487 (Jan Fagerberg & David C. Mowery eds., 2007).

143. *Cf.* EUR. COMM'N, *supra* note 111, at 9 (discussing misconceptions and confusion associated with the term social innovation).

144. *See* HASAN BAKHSHI ET AL., STATE OF UNCERTAINTY: INNOVATION POLICY THROUGH EXPERIMENTATION 5 (2011), *available at* http://www.nesta.org.uk/sites/default/files/state_of_uncertainty.pdf (arguing that the main barriers to innovation policy have been “uncertainties surrounding opportunities and constraints”).

145. *Cf. id.* (“Innovation policy remains rooted in a mix of traditional industrial policy and an emerging new understanding [of innovation] . . .”).

146. *See id.*

147. *See id.* (discussing innovation policy and its focus, *inter alia*, on “incentive structures”).

and the enactment of legislation with a stimulating character can also be used to attain the same purpose.¹⁴⁸

The option for any of these instruments depends on the underlying objective, field in question, and level of intervention required or intended (a subsidy might be sufficient when minor or incremental developments are required).¹⁴⁹ Economic benefits do not always serve the mentioned objectives.¹⁵⁰ In fact, there appears to be an underinvestment in innovation in fields that do not yield immediate economic benefits.¹⁵¹ This is the case in environmental innovation and social innovation.¹⁵² In addition, there is insufficient regulation in this field because it has been assumed that the law can do little to change the behavior of private actors or to promote innovation. This is likely the result of the insufficient empirical evidence to demonstrate whether regulation can play a substantial role in this field.¹⁵³ Leaving innovation unregulated would be an easier option, but it would also leave society exposed to a number of undesirable risks.¹⁵⁴ Regulation has been traditionally thought of as an obstacle to innovation and creativity: the law is about routine and regulation, defining boundaries and standardizing procedures, whereas innovation emerges from freedom, room for new ideas, and openness to

148. *Id.* at 8–9 (arguing that innovation policy “will be improved if its main focus is information discovery”); Ashford & Hall, *supra* note 105, at 274 (arguing that regulations can “stimulate significant technological changes”).

149. See Knut Blind, *The Impact of Regulation on Innovation* 3–5 (Nesta, Working Paper No. 12/02, 2012), available at http://www.nesta.org.uk/sites/default/files/the_impact_of_regulation_on_innovation.pdf (discussing the impact of social regulation on innovation).

150. See *id.*

151. See BAKHSHI ET AL. *supra* note 144, at 10 (explaining that traditional innovation policies lead to “sub-optimal investment” because of “weak price incentives for individual businesses”).

152. See generally Ashford & Hall, *supra* note 105 (discussing regulation in the context of environmental regulation).

153. *Contra* Blind, *supra* note 149, at 16–19 (discussing net positive effects from empirical evidence relating to environmental regulations).

154. See Ashford & Hall, *supra* note 105, at 271 (discussing that some have cautioned that globalization in the environmental and labor fields has the potential to create “race to the bottom”).

diversity.¹⁵⁵ However, a balance between these two dimensions must be found.

The advancement of innovation in the current times of economic crisis and in the near future might actually require rethinking and redesigning the role of law and its legislative and regulatory instruments in the process of innovation.¹⁵⁶ This is justified, on the one hand, by the increasing government cuts in R&D, support to social institutions, and other innovation related investments, which have called for the enactment of cheaper strategies to spur innovation,¹⁵⁷ or at least for the acceptance of innovative practices that deviate from traditional standards. Reducing the regulatory burdens imposed on innovators might be a relatively efficient strategy to release more time and private funds for investment in R&D.¹⁵⁸ On the other hand, the 2008 credit crunch revealed the shortcomings of conventional financial theory based on models of strong reliance on economic policy instruments and principles-based regulation deprived of effective regulatory enforcement.¹⁵⁹ This approach failed to keep up with financial innovation, follow the complexity of financial markets, and generate the trust of investors.¹⁶⁰ In addition, innovation appears to be posing novel and more complex challenges to regulation, crossing borders that were once thought to be insurmountable.¹⁶¹

155. Shubha Ghosh, *Introduction: Can We Incentivize Creativity and Entrepreneurship*, in CREATIVITY, LAW AND ENTREPRENEURSHIP 3 (Shubha Ghosh & Robin P. Malloy eds., 2011).

156. See, e.g., Press Release, *supra* note 77 (discussing the relevance of innovation in times of “financial and economic crisis”).

157. See Blind, *supra* note 149, at 18 (arguing that public R&D is not conducive to innovation in energy policy, whereas tax incentives and tradable certificates are).

158. See generally *id.* at 19 (depicting the costs of regulation of environmental protection, workers’ health and safety, and product and consumer safety).

159. Engobo Emeseh et al., *Corporations, CSR and Self-Regulation: What Lessons from the Global Financial Crisis?*, 11 GER. L.J. 230, 230–232 (2010).

160. See Dan Awrey, *Complexity, Innovation, and the Regulation of Modern Financial Markets*, 2 HARV. BUS. L. REV. 235, 235 (2012).

161. See *id.* at 335 (“[C]onventional financial theory failed to adequately account for . . . the nature and pace of financial innovation.”).

One of the most relevant challenges encountered by regulators when asked to regulate innovation is uncertainty.¹⁶² Innovation does not come fully labeled or with a manual of instructions. Even after laboratory tests, regulators might still lack information regarding the effects and side effects of the introduction of a new product or service in the market.¹⁶³

Up until now, regulation has played a modest role in the life of the sharing economy.¹⁶⁴ However, protests and controversies associated with sharing economy practices appear to be calling for a regulatory intervention.¹⁶⁵ Are we on the verge of witnessing the emergence of a new field of law for innovation? Or do we only have to learn how to adapt our current rules to a world where we share instead of own? This is the topic of Part III.

III. WHERE LAW AND INNOVATION MEET

In recent years, legislators and regulators have become increasingly curious as to the regulation of innovation.¹⁶⁶ However, this curiosity has not always put legislators and regulators on the innovation path.¹⁶⁷ Despite large annual investments in R&D, too little has been researched and is known about the most adequate and efficient mix of legal and policy instruments to promote innovation.¹⁶⁸ Even worse, laws often impose costly burdens on innovators that stifle innovation, impede entrepreneurship, or influence innovators

162. See generally Verspagen, *supra* note 142 (discussing uncertainty in the context of innovations).

163. Cf. Slappendel, *supra* note 106, at 123 (arguing that researchers are limited by their “own cognitive abilities” and can “only process so much information within a given time frame”).

164. See generally *The Rise of the Sharing Economy*, *supra* note 1 (arguing that the sharing economy is now developed enough “for regulators and companies to have woken up to it”).

165. See, e.g., Scott & Eddy, *supra* note 17 (discussing the opposition Uber has faced in Germany from the taxi industry and how the taxi industry is calling for Uber to be regulated); see also *supra* notes 15, 16 and accompanying text.

166. See, e.g., EUR. COMM’N, *supra* note 56, at 1–2 (describing the concern of the European Union regarding how to “tackle the ‘innovation emergency’ it is facing”).

167. See generally Bernstein, *supra* note 36 (canvassing debates among regulators, legislators, judges, and the public on how to regulate innovation).

168. *Id.* at 2258–60, 2266–70.

to shop for jurisdictions offering innovation friendly legal conditions.¹⁶⁹ The same goes for the advancement of innovation through legislative instruments. For many years, the law was simply told to stay away from innovation to avoid impeding it.¹⁷⁰ However, beyond laboratories, laborious inventions, and serendipitous discoveries, law can play a greater role than a mere walk-on in the innovation film. In fact, law can act as a driver of innovation,¹⁷¹ but we are still far from knowing what innovation-friendly rules should look like. Reaching this final destination may involve adopting a “comprehensive, complicated ‘mix’ of federal institutions,” context-specific instruments, multiple funding choices,¹⁷² and the use of both economic and legal instruments (if not to stimulate, then at least to guide innovation).¹⁷³

Government intervention in innovation might have costly results, if incorrectly targeted.¹⁷⁴ The absolute lack of rules can also be undesirable, opening the doors to conflicts between innovation and other values. This is particularly true when it comes to the inevitable relationship between legal conditions and innovation, since the lack of an effective legal framework

169. See, e.g., Maria Sutton, *Copyright Provisions in the TPP Would Stifle Innovation and Impede the Economy*, ELECTRONIC FRONTIER FOUND. (May 6, 2013), <https://www.eff.org/deeplinks/2013/05/copyright-provisions-tpp-would-stifle-innovation-and-impede-economy> (arguing that the suggested legal protections will block innovation and fair competition).

170. See, e.g., Bernstein, *supra* note 36, at 2264–65 (citing arguments of scholars who assert that innovation can be achieved without legal protection, and that intellectual property legal regimes in particular “inhibit innovation because they raises the costs of future innovations”).

171. See *id.* (discussing the academic debate surrounding the ability of law to act as a catalyst or an impediment of innovation).

172. Joshua D. Sarnoff, *Government Choices in Innovation Funding (with Reference to Climate Change)*, 62 EMORY L. J. 1087, 1093 (2013).

173. See *id.* at 1092–93 (describing various options the government may take in promoting innovation).

174. See, e.g., Brett Frischmann, *Innovation and Institutions: Rethinking the Economics of U.S. Science and Technology Policy*, 24 VT. L. REV. 347, 347 n.2 (2000) (detailing criticism for the Bayh-Dole Act); cf. Bernstein, *supra* note 36, at 2264 (detailing arguments of legislators who were concerned that certain copyright legislation would curtail innovation).

in the poorest countries is the main obstacle to innovation and consequently to economic growth.¹⁷⁵

The relationship between the law, regulation, and innovation can have three outcomes. First, regulation can *hinder innovation* by placing excessive burdens on entrepreneurs.¹⁷⁶ This is the case of licenses on industries or entry requirements¹⁷⁷ or by forbidding, often on a precautionary basis, the production of new products due to their potential risks.¹⁷⁸ Innovation can also be frustrated by the very same laws that are aimed to promote it.¹⁷⁹ Second, law and regulation may *facilitate* the introduction of innovations in the market, notably by waiving requirements or the observance of standards, granting exemptions, or authorizing companies to develop novel activities and projects on a temporary or permanent basis.¹⁸⁰ Third, regulation can have *no direct effect* on innovation and only accidentally foster it, since innovation might simply emerge serendipitously.¹⁸¹

175. Robert Cooter, *Innovation, Information, and the Poverty of Nations*, 33 FLA. ST. U. L. REV. 373, 375 (2005) (“[S]ystematic defects in the legal institutions of poor countries retard innovation and keep countries poor.”).

176. See, e.g., Gillian Hadfield, *Legal Barriers to Innovation: The Growing Economic Cost of Professional Control over Corporate Legal Markets*, 60 STAN. L. REV. 1689, 1695 (2007) (“The current regulatory model stands as a tremendous barrier to innovation . . .”); see also Bernstein, *supra* note 36, at 2264–65.

177. See Hadfield, *supra* note 176, at 1690–95 (arguing that excessive self-regulation of the legal profession annihilates any margin of creativity in legal services and the development of innovation).

178. See, e.g., *id.* at 1706 (“The market for corporate legal products and services is one of the most heavily regulated in the economy.”).

179. See STEWART, *supra* note 91, at 3 fig. 1 (illustrating how a regulation may either burden or promote innovation); see also Blind, *supra* note 149, at 19 (depicting the positive and negative effects of laws on innovation).

180. See, e.g., Ian M. Ramsay, *Financial Innovation and Regulation: The Case of Securitisation*, J. BANKING & FIN. L. & PRAC. 169, 173 (1993) (claiming that Australian mortgage-back securitization programs that exempt the issue and transfer of securities in a part of the country from stamp duty have “promoted financial innovation”).

181. E.g., STEWART, *supra* note 91, at 17 (more stringent emissions standards “had no effect on innovation in Japan and Germany”); see, e.g., EUR. COMM’N, GUIDELINES ON PROGRAMMING FOR INNOVATION AND THE IMPLEMENTATION OF THE EIP FOR AGRICULTURAL PRODUCTIVITY AND SUSTAINABILITY 3 (2014), available at http://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-guidelines-july-2014_en.pdf (discussing how innovation is often a result of “accidental external factors”).

There is not one formula to produce innovation, and if there is, it is not a one-ingredient-recipe. Innovation is not always the mere and direct result of investment.¹⁸² Creativity, entrepreneurship, and ultimately innovation result from an innovation-friendly climate that is composed of both internal and external elements.¹⁸³ The emergence of innovation can be influenced both by the dynamics of the innovation process (including how much one invests in it), and institutional governance and regulatory elements that may either hinder, delay, or advance innovation.¹⁸⁴ The latter refers also to the way regulators see innovation, understand its complexities, interact with innovators, regulate it, and above all, think forward without regulating backwards.¹⁸⁵

Up until recently, the institutional governance and regulatory elements have received limited attention from the legal literature, which has narrowed the study of innovation to IP, and in certain cases to competition law.¹⁸⁶ Regulators should think outside of this box, by trying to understand the challenges of innovation to traditional regulatory instruments and institutions—including how to marry the fast-changing character of innovation with the need for predictability and legal certainty, bridge innovation with regulatory procedure and requirements, understand how charity and philanthropy are permeating the legal sphere, and convince legislators and regulators to accommodate and incentivize social innovation.

182. Cf. Ashford & Heaton, *supra* note 114, at 131 (“Some have suggested that there was overinvestment in R&D during the 1960’s . . .”).

183. See Blind, *supra* note 149, at 26–27 (offering suggestions on multiple factors that may generate “innovation-friendly” policy); see also EUR. COMM’N, *supra* note 181 and accompanying text.

184. See Blind, *supra* note 149, at 19, 26–27.

185. See *id.*; see also Bernstein, *supra* note 36, at 2265–67.

186. See, e.g., OPEN INNOVATION: RESEARCHING A NEW PARADIGM (Chesbrough, Vanhaverbeke & West eds., Oxford University Press 2006) (discussing “open innovation” in the context of intellectual property law); PERSPECTIVES ON COMMERCIALIZING INNOVATION (F. Scott Kieff & Troy A. Paredas eds., Cambridge University Press 2012) (discussing innovation in the context of intellectual property laws and providing insights to improving innovation); Bernstein, *supra* note 36 (discussing innovation in the context of intellectual property law); Robert D. Cooter, *Legalize Freedom, in* COMPETITION POLICY AND PATENT LAW UNDER UNCERTAINTY: REGULATING INNOVATION 39 (Geoffrey A. Manne & Joshua D. Wright eds., 2011).

A. A CHALLENGING RELATIONSHIP

The regulation of innovation or the advancement of innovation through regulation has often been criticized and qualified as a true dichotomy: innovation is a fast-changing and fluid reality that does not pair well with rigid, top-down rules.¹⁸⁷ Nonetheless, even critics of the regulation of innovation admit that it is necessary, both because the lack of an effective legal framework can be the main obstacle to innovation and economic growth,¹⁸⁸ and because the alternative, case-by-case-litigation, “can easily prove to be worse.”¹⁸⁹

The awareness that the government should intervene in the regulation and promotion of innovation is insufficient. In some cases, governments try to promote innovation without first understanding what it truly implies, which can result in the enactment of laws that place too many burdens on innovators, stifling innovation instead of stimulating it.¹⁹⁰ In other cases, the lack of knowledge as to what the innovation process entails can be visible in the development of innovation policies that are costly but incorrectly targeted.¹⁹¹

The path to “innovation-friendly law” may be tortuous, but it is a road we have to follow, particularly in the case of the sharing economy. The next subsection discusses the questions one might ask to grasp the essence of innovation and provide

187. Martin Eifert, *Innovationsfördernde Regulierung*, in INNOVATIONSFÖRDERNDE REGULIERUNG: INNOVATION UND RECHT II 11, 16 (Martin Eifert & Wolfgang Hoffman-Riem eds., 2009) (Ger.); see BAKHSHI ET AL., *supra* note 144, at 8 (cautioning against “the rigid costs associated with state bodies” when developing innovation policy); Ashford & Heaton, *supra* note 114, at 115 (“There is the danger, however, that regulations themselves . . . may modify the operating constraints of an industry in such a way as to fix them more rigidly.”).

188. Cooter, *supra* note 175, at 374; see e.g., Ashford & Heaton, *supra* note 114, at 115 (describing regulation as a force that may “stimulate rivalry, new entrants, and the search for technological solutions” in innovative industries).

189. Richard A. Epstein, *Can Technological Innovation Survive Government Regulation?*, 36 HARV. J.L. & PUB. POL’Y 87, 87 (2013).

190. Michael A. Carrier, *Increasing Innovation Through Copyright: Common Sense and Better Government Policy*, 62 EMORY L.J. 983, 983–84 (2013) (criticizing vague copyright law and suggesting the elimination of statutory damages and personal liability in cases of secondary infringement).

191. Frischmann, *supra* note 174 (arguing that the Bayh-Dole Act regime and intellectual property is a poor way for government to promote innovation).

innovation-friendly regulations. I argue for a new field of law that understands how the innovation process works and tries to answer accordingly.

B. INNOVATION LAW

Innovation law is a field of research pretty much in its infancy.¹⁹² This field of research tries to understand innovation, its multiple facets, and how different legal instruments can be employed to regulate and facilitate innovation.¹⁹³ An innovation law approach can be beneficial since it tries to think in abstract about the goals that are common to different fields, reflecting about the influence that law can have on elements such as creativity or entrepreneurship.¹⁹⁴

Real-world innovations (and their problems) emerge in different shapes and sizes, transcending artificially delineated fields of law and policy. Solving these problems implies a coordination and commitment across agencies that might be difficult to achieve.¹⁹⁵ This perspective acknowledges the main challenges of regulating innovation—the uncertainty, complexity, and temporary nature—and the need to find a balance between the desire to advance innovation and the observance of legal rules and principles.¹⁹⁶ These are aspects that also characterize the sharing economy.¹⁹⁷ Before analyzing potential and specific regulatory solutions for the sharing economy, I introduce some guidelines of innovation law.

192. LOBEL, *supra* note 42, at 39; Sarnoff, *supra* note 172, at 1149 (discussing how efforts to analyze whether certain legal regimes “provide the best balance of incentives and access to promote both static and dynamic innovation” are still in their infancy).

193. See Sarnoff, *supra* note 172.

194. See *id.* at 1096–97 (discussing analyses of determinants of creativity across “different settings, fields, and geographies,” including, *inter alia*, “legal conditions”).

195. MALCOLM K. SPARROW, THE REGULATORY CRAFT: CONTROLLING RISKS, SOLVING PROBLEMS, AND MANAGING COMPLIANCE 208 (Brookings Institution 2000).

196. See generally JOE TIDD, IMPERIAL LONDON COLL., INNOVATION MODELS 3 (2006), available at http://www.emotools.com/media/upload/files/innovation_models.pdf; *supra* note 187 and accompanying text.

197. See EUROPEAN COMMISSION, BUSINESS INNOVATION OBSERVATION: THE SHARING ECONOMY 14 (2013) (asserting that complexity and uncertainty has been an obstacle for the sharing economy).

1. Uncertainty

The concept of innovation is often associated with indeterminate realities: the unknown, yet to be discovered, or the surprisingly new. Uncertainty is present throughout the entire innovative process and can be translated into multiple questions.¹⁹⁸ Will a certain type of sharing economy practice work? Will it improve access to certain services? What are the risks implied in this practice? Should this activity be regulated? These questions arise because innovation implies both inherent and external uncertainties. The inherent uncertainties are connected with the process of innovation and the unpredictability of its outcomes; whereas external uncertainties refer to the regulatory framework or the necessary conditions to enable the introduction of innovative products or services in the market.¹⁹⁹

Uncertainty impacts the regulation of innovation and the innovation process in multiple ways.²⁰⁰ External regulatory uncertainty can have a strong impact on the incentives to innovate, particularly when the time span to develop profitable technology or, in the case of the sharing economy, valuable social practices, is more significant.²⁰¹ This happens in the case of uncertainty regarding the regulatory delay:²⁰² if firms do not know when and if their products or services will be authorized and how they will be regulated, the incentives to invest may decrease.²⁰³ Regulatory delays are costly and, whenever the product introduction benefits decrease progressively, such

198. See Nelson & Winter, *supra* note 52.

199. Ashford & Heaton, *supra* note 114, at 128–29 (discussing both financial and regulatory uncertainties that contribute to risk in developing new products); Ronald R. Braeutigam, *The Effect of Uncertainty in the Regulatory Delay on the Rate of Innovation*, 43 LAW & CONTEMP. PROBS. 98, 98 (1979).

200. See Braeutigam, *supra* note 199 and accompanying text.

201. *Id.*

202. Regulatory delay refers to the period of time between the moment a firm requests the approval of a new product or the regulation of a new service and its administrative approval or enactment of the respective regulation. See James E. Prieger, *Regulatory Delay and the Timing of Product Innovation*, 25 INT'L J. INDUS. ORG. 219, 220 (2007).

203. *Id.* (stating that regulatory delays distort the incentives to introduce new products at all).

delay can be extremely costly.²⁰⁴ Excessive regulatory uncertainty is detrimental to innovation, since it can result in industry inaction.²⁰⁵

In sum, uncertainty is an inherent and accepted part of the innovation process. However, innovators do not welcome excessive regulatory uncertainty, regulatory delays, or constant and incoherent legislative reviews as the response to the uncertainties of the innovation process.²⁰⁶ Consumers and users of sharing economy practices might also be reluctant to participate in these activities if they are not provided with a minimum of guarantees—for example, that they will arrive safe and sound at their destination, in the case of Uber, or that the risk of food poisoning is limited, in the case of the meal sharing apps.²⁰⁷

2. Complexity

The second concept of innovation law is that innovation is a complex phenomenon: it can be a process or a result, a product or a service, a technology or social novelty.²⁰⁸ Innovation law should be open to all these dimensions of the innovation process and choose regulatory instruments that respond adequately to the complexities of the reality in question.²⁰⁹ John Braithwaite argues that complex phenomena should be regulated by principles instead of rules, which may be more adequate for simple realities.²¹⁰ This complexity of innovation is also visible in the multiplicity of institutions involved.²¹¹ Institutions play a very important role in

204. *See id.*

205. *See id.*

206. *Id.*

207. *See* Ann Farmer, *Making Reservations for Leftovers*, N.Y. TIMES (Nov. 23, 2012, 1:53 PM), http://cityroom.blogs.nytimes.com/2012/11/23/leftovers-made-to-share-with-strangers/?_php=true&_type=blogs&r=0; Henn, *supra* note 1 (explaining an app called “Feastly,” that “allows any chef to market and serve a meal to any hungry eater”).

208. *See* Phills, *supra* note 111, at 37 (“Innovation is both a process and a product.”).

209. *See id.*

210. John Braithwaite, *Rules and Principles: A Theory of Legal Certainty*, 27 AUSTL J. LEGAL PHIL. 47, 47, 52 (2002).

211. *Id.* at 52 (discussing increasing difficulty when disputes involve more than “individual action”).

innovation. The encouragement of innovation is executed by a mix of institutional arrangements, which involve the higher education system and multiple publicly funded instruments, such as R&D grants, tax incentives, government subsidies, procurement policies, and intellectual property rights.²¹² Innovation should be thus encouraged by a mix of public and private instruments that are coherent and aligned to respond to the challenges of innovation.²¹³

In light of this complexity, innovation should be perceived as a multicephalous creature. It is pursued as a private good but it has a public good nature.²¹⁴ If the incentives to innovate are low, it may require, under certain circumstances, ex ante public law incentives²¹⁵ (e.g., tax incentives) but its future subsistence may as well be dependent on patents or other IP rights.

In addition, the regulation of innovation may be hard or soft,²¹⁶ technology- or information-forcing²¹⁷ or adaptable;²¹⁸ public, private, or hybrid.²¹⁹ Innovation law perceives innovation as an isolated and complex phenomenon and accepts

212. Simon Deakin & Andrea Mina, *Institutions and Innovation: Is Corporate Governance the Missing Link?*, in BUSINESS INNOVATION AND THE LAW: PERSPECTIVES FROM INTELLECTUAL PROPERTY, LABOUR, COMPETITION AND CORPORATE LAW 456, 458 (Marilyn Pittard et al. eds., 2013).

213. *See id.*

214. Frischmann, *supra* note 174, at 357–58.

215. Joshua Chao, *Tax Incentives for Innovation in a Modern IP Ecosystem*, 15 VAND. J. ENT. & TECH. L. 753, 771–81 (2013); Daniel J. Hemel & Lisa Larimore Ouellette, *Beyond the Patents-Prizes Debate*, 92 TEX. L. REV. 303, 304–06 (2013).

216. *Cf.* Richard S. Whitt, *Adaptive Policymaking: Evolving and Applying Emergent Solutions for U.S. Communications Policy*, 61 FED. COMM. L.J. 483, 522 (2009) (explaining differences between hard and soft regulation in the area of international relations).

217. *See, e.g.*, Ashford & Heaton, *supra* note 114, at 110; Bradley C. Karkkainen, *Information-Forcing Environmental Regulation*, 33 FLA. ST. U. L. REV. 861 (2006).

218. *E.g.*, Stuart Minor Benjamin & Arti K. Rai, *Fixing Innovation Policy: A Structural Perspective*, 77 GEO. WASH. L. REV. 1 (2008); Cooter et al., *supra* note 54; Floor Fleurke & Han Somsen, *Precautionary Regulation of Chemical Risk: How REACH Confronts the Regulatory Challenges of Scale, Uncertainty, Complexity and Innovation*, 48 COMMON MARKET L. REV. 357 (2011).

219. *See* Sarnoff, *supra* note 172, at 1089–90 (discussing different strategies of fostering innovation, including private, public, and “hybrid” approaches).

its complexity by opening the doors to a myriad of regulatory instruments. Nothing new here, one could argue. However, the “newness” of my argument lies in the fact that we should shift the focus of our analysis from specific technology-related aspects to the main challenge of regulating innovation: uncertainty. It is because a phenomenon is new that we do not know how to regulate it.²²⁰

3. Temporariness and Flexibility

As mentioned earlier, innovation is a complex, fluid, and moving target.²²¹ Law will necessarily lag behind innovation since it cannot be adapted at innovation’s speed.²²² “Product cycles in technology are faster than justice . . . [The innovator is] always already in credit.”²²³ Nevertheless, even if law does not have the pretension to regulate the latest fashion in the world of technologies, it should be open and responsive to innovation. In addition, it has been claimed, in literature focused on the regulation of telecommunications, that regulatory resilience and the development of an adaptive policymaking and regulation paradigm are essential for the advance of sustainable policies.²²⁴ Regulators and policymakers should act as “adaptive agents” who adjust regulations and policies according to the evolution of the markets and technologies.²²⁵ According to Richard Whitt, the “adaptive regulator” must be guided by nine principles, including: an incremental approach, meaning that small steps should be taken and social change should be based on experience; an experimental approach, justified by the “combination of uncertainty and constraints on predictability [which] create[]

220. See, e.g., Whitt *supra* note 216, at 524, 549 (noting that “we can only guess at the extent of our ignorance, realizing that we are almost certain to be confronted with unknown unknowns” and that “creative breakthroughs typically involve leaps into the unknown.”).

221. See Parts I.B, II.A.

222. See generally JOHANNA GIBSON, *THE LOGIC OF INNOVATION: INTELLECTUAL PROPERTY, AND WHAT THE USER FOUND THERE* (Ashgate 2014).

223. *Id.* at 48.

224. See Barbara A. Cherry, *Institutional Governance for Essential Industries Under Complexity: Providing Resilience Within the Rule of Law*, 17 *COMMLAW CONSPECTUS* 1, 2–3 (2008); Whitt, *supra* note 216, at 485–87.

225. Whitt, *supra* note 216, at 496–98.

the necessity for policymakers to experiment,” and a flexible approach, required by the existence of deep uncertainty.²²⁶ In the context of telecommunications and other sectors characterized by rapid evolution and uncertainty, Whitt argues that policymakers should possess the flexibility to revise and adapt the structure of policies and programs to changing circumstances.²²⁷

Regulatory flexibility is equally necessary to face informational problems characterizing the innovation process. If innovation is selected as the primary regulatory purpose, its concretization can be achieved by dividing the regulatory process in multiple stages, and structuring it in a way to incorporate new knowledge as more information becomes available. When regulators are confronted with the need to regulate a novel sharing economy practice, they could allow for an “incubating period” by experimenting with a new temporary rule on a small-scale basis.²²⁸ During this period, regulators should gather further information as to the innovation itself as well as to the effects of the regulation in question.²²⁹ The use of experimental regulations that are not enacted forever, but only for a short period of time, will be evaluated at the end of the experimental period, and can be later adapted so as to accommodate the gathered evidence.²³⁰

Yair Listokin argues that adapting laws and regulations to the changing times and to new information can actually contribute to finding optimal policy solutions.²³¹ Relying on Edmund Burke, Listokin claims that new policies should only be partially implemented, submitted for evaluation, then

226. *Id.* at 500–05.

227. *Id.* at 497–99.

228. See Sofia Ranchordás, *Experimental Legislation: The Whys and the Woes*, 1 THEORY & PRAC. LEGIS. 415 (2013) (analyzing, briefly, some experimental legislation); see also SOFIA RANCHORDÁS, CONSTITUTIONAL SUNSETS AND EXPERIMENTAL LEGISLATION (forthcoming) (offering a more extensive analysis of sunset clauses and experimental legislation and their constitutional limits from a comparative perspective).

229. *Id.*

230. *Id.*

231. Yair Listokin, *Learning Through Policy Variation*, 118 YALE L.J. 480, 484 (2008) (“[O]ptimal search theory favors high-variance policies, because variance increase the probability of finding excellent policies.”).

changed if necessary or terminated.²³² Regulators can increase flexibility of regulations to accompany the pace of innovation both by including a sunset clause—which predetermines their expiry at the end of a certain period—or by experimenting with new rules.²³³ In the first case, regulators predict fast and disruptive changes in technology and society, which may imply a thorough redesign of regulations.²³⁴ In such a scenario, regulators are better off allowing regulations to be terminated. In the second case, where regulators predict incremental innovations and consequently the need to promote a continuous process of regulatory experimentation and learning, experimental regulations might be a better choice.²³⁵ Without going into further detail as to these two legislative instruments, it is important to mention that regulators should convert the process of regulating innovation into a learning process. By experimenting, policymakers and regulators can draw valuable lessons from their own legislative acts and later change these laws accordingly.²³⁶ This reversibility can be namely created by introducing sunset clauses in legislative acts.²³⁷ In some sense, almost all policies have a certain degree of irreversibility since their impact on society and economy cannot be erased. However, the adoption of a sunset clause can ensure that laws and policies automatically lapse when they are unable to keep up with the current state of technology and society.

Terminating regulations by employing sunset clauses or by experimenting on a small-scale can be useful to ensure that rules keep up with the changes in technology and society. In addition, when little information regarding the potential risks of a new sharing economy practice and regulators do not wish to stifle this innovation by enacting stringent regulation, experimenting with new regulations may be a wiser response.

232. *Id.* at 488.

233. *Id.* at 535.

234. *Id.*

235. *Id.* at 488.

236. *Id.* at 485.

237. *Id.* at 485–86.

C. TRAVELING BEYOND INTELLECTUAL PROPERTY

Having accepted the complex nature of innovation, the innovation law perspective adopted in this Article goes forward by expanding its scope. Because there is innovation beyond intellectual property (IP), there should also be rules to tackle innovation beyond this field of law. Innovation outside IP results from the definition of innovation, presented above,²³⁸ that not all forms of innovation are deserving of a patent. This is particularly true in the field of sharing economy.²³⁹ However, this does not mean that law should turn its back on it.²⁴⁰ Innovation law is still in its infancy since the existing studies on innovation and law are usually not studied within a wider regulatory context.²⁴¹ IP appears to be the first—and often the only—acronym that comes to our mind when we are told that the encouragement of innovation implies the enactment of specific rules. Some of us might even whisper “competition laws,” thinking about the well-known Microsoft case.²⁴² Administrative authorities are aware of the importance of innovation for a country’s competitiveness and have tried (though sometimes haphazardly) to actively encourage firms to innovate.²⁴³ This was the case when the U.S. Department of Justice commanded Microsoft to sell its Internet Explorer as a separate product from its Windows operating system.²⁴⁴ This idea that authorities should actively intervene can be also indirectly derived from the “Porter hypothesis,”²⁴⁵ according to which public authorities, and specifically competition

238. See *supra* text accompanying note 74.

239. E.g., WOLFGANG HOESCHELE, THE ROLE OF THE COMMONS AND COMMON PROPERTY IN AN ECONOMY OF ABUNDANCE (n.d.), available at <http://www.icafe.org/b5-Hoeschele.pdf> (arguing that the sharing economy is a good example of an area where a lack of patentability has not diminished innovation).

240. See *id.*

241. See LOBEL, *supra* note 42; Müller, *supra* note 69.

242. See *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001).

243. E.g., THE WHITE HOUSE, A STRATEGY FOR AMERICAN INNOVATION: SECURING OUR ECONOMIC GROWTH AND PROSPERITY 2–6 (2011).

244. Lawrence B. Landman, *Competitiveness, Innovation Policy, and the Innovation Market Myth: A Reply to Tom and Newberg on Innovation Markets as the “Centerpiece” of “New Thinking” on Innovation*, 13 ST. JOHN’S J.L. COMM. 223, 226 (1998).

245. See Ashford & Hall, *supra* note 105, at 276–77; Michael Porter, *The Competitive Advantage of Nations*, 75 HARV. BUS. REV. 73, 86–88 (1990).

authorities, should guarantee that market forces drive firms to innovate, namely through the implementation of stringent competition policy.²⁴⁶

The concretization of legislative or administrative interventions in this field does not always need and cannot always be reduced to an aggressive implementation of competition law. Innovation is essential to increase the competitiveness of firms, but the regulation of innovation goes beyond competition concerns and requires a comprehensive regulatory approach.²⁴⁷ Furthermore, this limited approach to innovation leaves unregulated a new body of innovative practices in social fields, which, as stated above, are not always patentable.²⁴⁸

Gone are the days when patents were regarded as the only legal mechanism to incentivize innovation²⁴⁹ and when innovation was mainly related to solitary garage inventors.²⁵⁰ Not only has the impact of IP law been contested in the last years, but we have also become aware of the fact that other fields of law may equally promote or impede innovation.²⁵¹ This is the case of immigration laws that, if well targeted, can attract high-skilled immigrants and entrepreneurs that can be a source of strength for innovative competitiveness.²⁵² This has been, for example, the rationale behind the StartUp Visa Act of 2013, a bill meant to amend the Immigration and Nationality Act in order to attract entrepreneurs that can create much

246. Porter, *supra* note 245, at 87 (“Government’s proper role is as a catalyst and challenger; it is to encourage—or even push—companies to raise their aspirations and move to higher levels of competitive performance”); see Ashford & Hall, *supra* note 105, at 276–77.

247. See Porter, *supra* note 245.

248. *Id.*; see *supra* text accompanying note 239.

249. Nancy Gallini & Suzanne Scotchmer, *Intellectual Property: When is it the Best Incentive System?*, in INNOVATION POLICY AND THE ECONOMY 51 (Adam B. Jaffe & J. Lerner eds., 2002) (“Intellectual property is not the only mechanism used in the American economy for rewarding R&D.”); Hemel, *supra* note 215, at 304–05.

250. David S. Abrams & R. Polk Wagner, *Poisoning the Next Apple? The America Invents Act and Individual Inventors*, 65 STAN. L. REV. 517, 518–23 (2013) (discussing changes in the view of the “garage inventor” as the “American icon”).

251. See *id.* (discussing the impact of certain legislation on the ability of individuals to be innovators).

252. See, e.g., StartUp Visa Act of 2013, S. 189, 113th Cong. (2013).

needed jobs in America.²⁵³ In Canada, the Startup Business Visa has been recently enacted and promises to be “the first of its kind,” linking immigrant entrepreneurs with Canadian private sector organizations.²⁵⁴ Immigrant entrepreneurs must be able to demonstrate that their business ideas are supported by a local organization, meet language and education requirements, and have sufficient settlement funds.²⁵⁵ An attractive aspect of this visa is the fact that the failure of the startup shall not affect the permanent resident status of the applicant.²⁵⁶ While this and other legislative initiatives to attract entrepreneurs may have in theory undoubted benefits, they may also carry implementation risks and costs. Are the criteria to qualify for a visa not too onerous? Should the effort to try to raise capital not be rewarded? Would looser criteria open a Pandora’s box to immigration services?

Another objection to the excessive focus on the study of IP in the context of law and innovation relates to the limits of the field: a number of innovations that surround us cannot be protected by IP rights.²⁵⁷ This refers both to technological and social innovations.²⁵⁸ However, the more complex examples come from the field of social innovation: local initiatives organized by college students to empower minorities, teach immigrants English, or develop innovative forms of encouraging businesses that have a positive environmental and social impact.²⁵⁹ These initiatives are often not eligible for IP protection and do not attract the attention of lobbyists or even powerful philanthropists, because they do not involve significant profit.²⁶⁰ Nonetheless, these forms of innovation also need rules. Rules that reflect an understanding of the nature of

253. *Id.*

254. CITIZENSHIP & IMMIGRATION CAN., CANADA WANTS ENTREPRENEURS! (2013) available at <http://www.cic.gc.ca/english/pdf/pub/startup-entrepreneurs-eng.pdf>.

255. *Id.*

256. *If I Have a Start-Up Visa, What Happens If My Business Fails?*, GOV’T CANADA, <http://www.cic.gc.ca/english/helpcentre/answer.asp?q=657&t=6> (last visited Oct. 30, 2014).

257. HOESCHELE, *supra* note 239 and accompanying text.

258. *Id.*

259. *See id.* (discussing how patents do not promote innovation as it relates to social or environmental causes).

260. *See id.*

the innovation process, do not lag behind innovation, do not delay the authorization and commercialization of new products and services, and do not send negative signals to the market.²⁶¹ Rules that, at the same time, are stable and predictable enough to transmit confidence to entrepreneurs, guarantee that regulators do not authorize products that may pose a risk to our health or environment, support innovators and entrepreneurs without endangering other fundamental values and principles of our legal order.²⁶² Rules that are “innovation-friendly” without being overambitious or overpessimistic about the role to be played by regulation in the innovation process.²⁶³

IV. INNOVATION AND REGULATION IN THE SHARING ECONOMY

Recent innovations in the field of the sharing economy illustrate well the regulatory challenges faced by lawmakers and regulators when asked to regulate innovation.²⁶⁴ Think about Uber, Lyft, and Airbnb, symbols of contemporary innovation and a new urban trend of sharing and collaborating.²⁶⁵ In the world of the sharing economy, there appear to be infinite possibilities to be an entrepreneur,²⁶⁶ play taxi driver²⁶⁷ or handyman,²⁶⁸ turn your house into a hotel,²⁶⁹

261. JØRGEN ROSTED ET AL., *NEW NATURE OF INNOVATION* 12–13 (2009) available at http://www.tem.fi/files/24835/New_Nature_of_Innovation.pdf (providing suggestions for innovation policy).

262. *Id.*

263. THE WHITE HOUSE, *supra* note 243, at 10; *see also id.*

264. *See supra* Part I (discussing innovation in the sharing economy that generated Uber, Lyft, and Airbnb).

265. *See id.*

266. *See* Gregory Ferenstein, *Airbnb CEO Spells Out the End Game for the Sharing Economy, in 7 Quotes*, VENTUREBEAT (June 2014), <http://venturebeat.com/2014/07/02/airbnb-ceo-spells-out-the-end-game-for-the-sharing-economy-in-7-quotes/> (predicting that the sharing economy will create upwards of 100 million micro-entrepreneurs).

267. Rachele Dragani, *Uber Hustles to Buff Up Its Image*, E-COMMERCETIMES (Aug. 29, 2014, 2:27 PM), <http://www.ecommercetimes.com/story/80968.html>.

268. *E.g.*, HANDY.COM, <http://www.handy.com/services> (last visited Oct. 30, 2014).

269. *E.g.*, *How Do I Travel on Airbnb?*, *supra* note 27.

or connect with people with similar interests and needs.²⁷⁰ The possibilities are infinite, and so are the risks of unregulated practices and the concerns of municipalities, agencies, and tax officers that are now obliged to understand unfamiliar business schemes and adapt their rules to these new realities.²⁷¹

Sharing practices are far from unique to the 21st century.²⁷² Instead, they are primitive practices that were historically used to bind and connect communities, but became diluted in our consumerist society, where we started gathering goods for pleasure and showing off, forgetting the benefits of sharing.²⁷³ Online platforms are taking us back to the time when we used to trust strangers and offer them shelter and food, trade goods with them to seal bonds of friendship, and share items in order to avoid acquiring goods that we do not need more than once or twice in a lifetime.²⁷⁴ Although sharing practices have historical roots, they are reemerging and they are blossoming thanks to new technologies that bring strangers together and facilitate mutual trust.²⁷⁵ Trusting in the kindness and honesty of strangers can be rewarding or

270. *E.g.*, Serkan Toto, *DOMO Lets You Share Your Interests and Connect with New People Around You*, TECHCRUNCH (Mar. 10, 2011), <http://techcrunch.com/2011/03/10/domo-lets-you-share-your-interests-and-connect-with-new-people-around-you/>.

271. *See, e.g.*, Shari Shapiro, *Regulate the Sharing Economy Parent Companies, Not Individual Providers*, REG BLOG (Sept. 22, 2014), <http://www.regblog.org/2014/09/22/22-shapiro-sharing-economy-part-ii/> (“Particularly when it comes to car services, municipalities are struggling with the resources necessary to regulate thousands of independent drivers to ensure that safety measures, insurance, licensing, and similar provisions are in place.”).

272. Henn, *supra* note 1 (“Sharing is not exactly new.”); Gerard Ferrer, *History of Collaborative Consumption*, COLLABORATIVE CONSUMPTION (Jan. 28, 2014), <http://blog.cronnection.com/collaborative-consumption/history-collaborative-consumption/>.

273. *See* Henn, *supra* note 1 (“In a sense it’s retro. It’s really like going back to the way things used to be done, where you got to know each other and you looked after your neighbors . . . Only now it’s beginning to happen on a global scale because of the Internet.”).

274. *See id.*

275. *Id.*; *see, e.g.*, Megan Rose Dickey, *Lyft Rides Are So Social that a Driver Invited a Passenger Over for Thanksgiving Dinner*, BUS. INSIDER (Mar. 15, 2014, 10:33 AM), <http://www.businessinsider.com/qa-with-lyft-ceo-john-zimmer-2014-3>.

deceiving, which is why these practices are never risk-free.²⁷⁶ The following subsections elaborate on the sharing economy and its differences from other socially innovative practices, the novel risks in these practices and how online platforms and regulators are taking action, and finally, whether these sharing economy practices fit in the existing regulations.

A. THE SHARING ECONOMY AND THE OTHERS

While the sharing economy lacks a common definition,²⁷⁷ it is often linked with concepts such as “collaborative consumption,” “peer economy,” or “collaborative economy.”²⁷⁸ The common element to these phenomena is sharing, either for monetary or non-monetary benefits.²⁷⁹ The sharing economy can be placed in the context of a number of social initiatives designed to empower communities and improve access to a number of goods, services, and facilities that would otherwise be restricted to the elite.²⁸⁰

1. Social Enterprises

While the sharing economy and other forms of collaborative consumption remain fairly overlooked in the legal literature, more attention has been paid to social enterprises.²⁸¹ Social enterprise is a broader concept that refers to “any business model that, to a significant degree, has a mission-driven motive. This mission-driven motive may be exclusive of a profit motive or blended with one.”²⁸² This definition does not

276. *E.g.*, Ellen Huet, *Uber Rider Might Lose an Eye from Driver’s Hammer Attack. Could Uber Be Held Liable?*, FORBES (Sept. 9, 2014, 9:37 PM), <http://www.forbes.com/sites/ellenhuet/2014/09/30/uber-driver-hammer-attack-liability/>; Farhad Manjoo, *Renters from Hell: Airbnb and the Limits of Trust Online*, SLATE (Aug. 2, 2011, 5:03 PM), http://www.slate.com/articles/technology/technology/2011/08/renters_from_hell.html.

277. Rachel Botsman, *The Sharing Economy Lacks a Shared Definition*, FASTCOEXIST (Nov. 21, 2013, 7:30 AM), <http://www.fastcoexist.com/3022028/the-sharing-economy-lacks-a-shared-definition>.

278. *All Eyes on the Sharing Economy*, *supra* note 7.

279. *See* Botsman, *supra* note 277.

280. *See* MARC J. LANE, SOCIAL ENTERPRISE: EMPOWERING MISSION DRIVEN ENTREPRENEURS 4–8 (2011) (describing other social initiatives that use business to increase access to resources).

281. *See id.*

282. *Id.* at 7.

depend on how the entity operates and pursues its mission-driven motives.²⁸³ Social enterprises can be organized as nonprofit, tax-exempt organizations, or even as hybrid forms of profit-driven organizations.²⁸⁴ According to Nobel Prize winner Muhammad Yunus, a “social business” should be “dedicated entirely to achieving a social goal,” not profit.²⁸⁵ Social enterprise and other social empowering practices are not only connected with the idea of charity, but also “do[] good through the application of sound business principles.”²⁸⁶ We easily realize that social enterprise goes beyond the concept of the sharing economy.²⁸⁷ In many cases, sharing economy practices will not be formally organized as social enterprises.²⁸⁸ They are often informal collaborative practices between individuals or within communities, facilitated by online platforms.²⁸⁹

2. Collaborative Consumption

Collaborative consumption and sharing economy are often considered to be synonyms.²⁹⁰ “Collaborative consumption” has been defined in the literature as “a form of consumption where people share consumption of goods and services online.”²⁹¹ The motivation to participate in these collaborative schemes may vary from simply “doing good” to obtaining limited economic benefits.²⁹² However, Rachel Botsman argues that “collaborative consumption” should be distinguished from “the sharing economy” since the latter is largely a person-to-person practice based on an economic model of sharing underutilized assets such as spaces and skills for monetary or non-monetary

283. *Id.*

284. *Id.*

285. *Id.* at 4.

286. *Id.* at 7.

287. *See generally id.* (discussing many types of businesses under the umbrella of “social enterprise”).

288. *See id.*

289. *The Rise of the Sharing Economy*, *supra* note 1 (discussing how the Internet has made it easier for individuals to find and rent things from each other).

290. Hamari et al., *supra* note 10; *All Eyes on the Sharing Economy*, *supra* note 7.

291. Hamari, *supra* note 10, at 2.

292. *Id.* at 3.

benefits.²⁹³ In the case of collaborative consumption, the emphasis lies primarily in the idea of “sharing, swapping, trading, or renting products and services.”²⁹⁴ Collaborative consumption (e.g., swap-trading, online platforms) often implies a transfer of ownership, either temporary or permanent; this does not occur in the sharing economy (e.g., Uber, Lyft, Zipcar).²⁹⁵ Despite this distinction, both forms of collaborative practices bring similar risks for users²⁹⁶ and pose comparable challenges to regulators.²⁹⁷

B. SHARING IS NOT ALWAYS CARING

The sharing economy appears to be an innovative idea that we can only welcome. However, while numerous cosmopolitan users might be open to the idea of sharing their rides, food, and living rooms with strangers, others might furrow their eyebrows just at the thought. Sharing economy practices are not risk- or nuisance-free for their users or for third parties.²⁹⁸ An example of this is private kitchen offerings where one can order dinner at a stranger’s place.²⁹⁹ While this might be economical, restaurants have often complained that these private kitchens are not licensed, not subject to health or safety standards, and may put the health of customers at risk.³⁰⁰ Moreover, neighbors of Airbnb hosts around the world have complained that they do not wish to transform their buildings into hotels, sharing access to common facilities with total strangers.³⁰¹

293. Botsman, *supra* note 277.

294. *Id.*

295. *See id.*

296. *See supra* note 276.

297. *E.g.*, Shari Shapiro, *supra* note 271.

298. *See* Ron Lieber, *A Warning for Hosts of Airbnb Travelers*, N.Y. TIMES, Dec. 01, 2012, at B1; *supra* note 276.

299. *See* Farmer, *supra* note 207 (describing the meal sharing app, Mealku, where one is able to purchase leftovers from a stranger’s home).

300. *Id.* (explaining that the meal swap app is not regulated by health codes).

301. *Id.*

These concerns have also drawn the attention of regulators.³⁰² In July 2014, the Pennsylvania Public Utility Commission issued cease and desist orders in Pittsburgh to Uber and Lyft.³⁰³ These orders were motivated by concerns related to public safety since both companies were not complying with a state law requiring a certificate of public convenience granted by the Public Utility Commission.³⁰⁴ Sharing economy practices can raise multiple safety concerns regarding the background checks of drivers and house hosts, safety of vehicles and facilities, location of houses and the position of neighbors, driving or other skills required for the task, and sufficient insurance.³⁰⁵ In the case of Uber, the company guarantees criminal background checks on all drivers, and that all drivers have sufficient insurance and their vehicle inspected.³⁰⁶ However, one may wonder how transparent and rigorous these inspections and background checks are.³⁰⁷

Another question that may arise is whether these drivers are self-employed entrepreneurs or under the control of Uber. Uber has argued that the company is just creating a business model and these drivers are independent.³⁰⁸ However, if something goes wrong with this sharing practice, customers

302. See, e.g., Jessica Nath, *PUC Issues Cease and Desist Orders for Uber, Lyft*, WESA (July 2, 2014, 3:30 PM), available at <http://wesa.fm/post/puc-issues-cease-and-desist-orders-uber-lyft>.

303. *Id.*

304. *Id.*

305. E.g., Farmer, *supra* note 207 (showing health concerns); Nath, *supra* note 302 (showing certification concerns); Scott & Eddy, *supra* note 17 (showing licensing and regulatory concerns).

306. *Rider Safety*, UBER, <https://www.uber.com/en-US/safety> (last visited Nov. 4, 2014).

307. Jason Notte, *Safety Worries Make Uber, Lyft Fair Game for Taxi Watchdogs*, THE STREET (Oct. 14, 2014 7:45 AM), <http://www.thestreet.com/story/12904217/1/safety-worries-make-uber-lyft-fair-game-for-taxi-watchdogs.html> (calling into question the extent of Uber's background checks by describing an incident where "the district attorneys for both San Francisco and Los Angeles issued a statement warning Uber, Lyft and Sidecar that they misled customers by claiming their background checks of drivers screen out anyone who has committed driving violations, including DUIs, as well as sexual assault and other criminal offenses").

308. *Who Are the Drivers on the Uber System?*, UBER, <https://support.uber.com/hc/en-us/articles/201955457-Who-are-the-drivers-on-the-Uber-system> (last visited Nov. 4, 2014).

might be better protected if Uber could be held liable³⁰⁹ The same argument goes for Airbnb: hosts are required to comply with local regulations.³¹⁰ Airbnb only facilitates the contact between hosts and travelers and ensures the payment.³¹¹ Yet, more recently it has been announced that the company will start collecting local taxes for their hosts.³¹² The following section analyzes the reasons for traditional taxi regulation and questions whether these arguments are equally applicable to Uber and similar network transportation systems in the sharing economy.

The mentioned concerns are just some of the aspects that should be brought to attention regarding these online platforms that facilitate contact between individuals. In addition, the quality and reliability of shareable goods and services are highly dependent on the effectiveness of peer-review systems.³¹³ Airbnb started its business by sending employees to New York City to meet hosts in person.³¹⁴ However, with the expansion of its business this is far from being possible.³¹⁵ The system's safety and protection against fraud relies heavily on peer-reviews and the fact that the payment will only be transferred to the host after the traveler has checked in.³¹⁶ Travelers may nonetheless see their reservations suddenly cancelled—something that would rarely happen in the case of a hotel.³¹⁷ Travelers may also find houses that do not comply

309. *See id.* (noting that “drivers on the Uber system are independent contractors”).

310. Derek Thompson, *Airbnb CEO Brian Chesky on Building a Company and Starting a “Sharing” Revolution*, ATLANTIC (Aug. 13, 2013, 2:07 PM), <http://www.theatlantic.com/business/archive/2013/08/airbnb-ceo-brian-chesky-on-building-a-company-and-starting-a-sharing-revolution/278635/>.

311. *How Does the Airbnb Payment System Work?*, AIRBNB, <https://www.airbnb.com/help/article/51> (last visited Nov 3, 2014).

312. *How Do Taxes Work for Guests?*, AIRBNB, <https://www.airbnb.com/help/article/318> (last visited Oct. 18, 2014).

313. *See, e.g.*, YOCHAI BENKLER, *THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM* 59–81 (Yale Univ. Press 2006).

314. *See* Thompson, *supra* note 316 (discussing the 34,000 cities and jurisdictions to which Airbnb hosts are subject).

315. *See id.*

316. *See supra* note 311 and accompanying text.

317. *How Do I Cancel a Reservation As a Host?*. AIRBNB, <https://www.airbnb.com/help/article/166> (last visited Nov. 3, 2014).

with safety and fire regulations, or that do not comply with common standards of hygiene.³¹⁸

C. RULES FOR THE RIDE

Up until now, it has been unclear what the “rules” for sharing are. As mentioned above, users of sharing practices prefer sharing to ownership for a number of reasons, including flexibility in storage (you can return your shared bike or Zipcar in multiple locations); anti-consumerism, social or sustainability benefits; and the offer of similar goods or services for low prices.³¹⁹ However, should this similarity between the commercial version of a product or service and the shared one determine the application of the same rules? Uber, for example, maintains that it is not a taxi company and it should not be required to comply by the rules applicable to that sector.³²⁰ Up until recently, Uber has not complied with traditional rules for commercial services, waiting for the enactment of specific rules for its innovative services.³²¹

In August 2014, the Maryland Public Service Commission ruled that Uber Technologies should be subject to the same regulations imposed on other for-hire vehicle services in the state since it was “a common carrier.”³²² However, the commission acknowledged that new rules were necessary for these new forms of transportation and recognized that “many industry changes and technological advances have occurred since these regulations were adopted, including the everyday use of the Internet.”³²³ The Commission announced that new

318. See, e.g., Lieber, *supra* note 298; Tom Newcombe, *Airbnb Given Safety Standards Warning*, BBT (July 17, 2014), <http://buyingbusinessstravel.com/news/1722814-airbnb-issued-safety-standards-warning> (showing that some residences rented on Airbnb do not meet safety standards).

319. See Lamberton & Rose, *supra* note 11, at 111.

320. Julia Verlaine & Jim Brunsten, *Uber Insists ‘Ceci N’Est Pas un Taxi’ in City of Magritte*, BLOOMBERG (Oct. 13, 2014, 12:09 PM), <http://www.bloomberg.com/news/2014-10-12/uber-insists-ceci-n-est-pas-un-taxi-in-city-of-magritte.html>.

321. See *id.*; see *infra* note 322 and accompanying text.

322. MD. PUBLIC SERV. COMM’N, MARYLAND PSC FINDS THAT UBER IS A COMMON CARRIER 1 (Aug. 6, 2014), *available at* http://webapp.psc.state.md.us/Intranet/sitesearch/Whats_new/Maryland%20PSC%20Finds%20that%20Uber%20is%20a%20Common%20Carrier.pdf.

323. *Id.*

rules reflecting the evolution of transportation should be crafted within ninety days, and should welcome input from Uber and other interested parties.³²⁴ Maryland Public Service Commission appears to have adopted a hybrid position: on the one hand, it considers that Uber should be regulated because it is “a common carrier.”³²⁵ On the other, it acknowledges that modern rules might be necessary.³²⁶

Before adopting a position on this topic, it is important to question why taxis are regulated in the first place, and whether these elements are equally present in the sharing economy and the technology that accompanies it.³²⁷ Taxis are among the most extensively regulated forms of transportation.³²⁸ These regulations affect the quantity, quality, price, and availability of taxicabs.³²⁹ Price regulation is necessary first because consumer demand is usually immediate, meaning that a consumer will not be willing to bargain the price or look for another service provider.³³⁰ This can happen when one uses Uber or Lyft on exceptionally busy days. For example, taking

324. *Id.*

325. *Id.* (“The Commission concluded . . . ‘Uber is a common carrier and a public service company over whom the Commission has jurisdiction.’”).

326. *Id.* (“The order . . . also directs Commission staff to draft new regulations that protect the public interest, but also reflect the evolving nature of transportation services like Uber.”).

327. For example, do certain regulations (such as the knowledge exam imposed on taxi drivers in London) still make sense with advanced technology (in a world where any driver can find her way around with GPS devices)? *See, e.g.,* Roff Smith, *For London’s Cabbies, Job Entails World’s Hardest Geography Test*, NAT’L GEOGRAPHIC (Aug. 8, 2014), <http://news.nationalgeographic.com/news/special-features/2014/08/140808-london-cabbies-knowledge-cabs-hansom-uber-hippocampus-livery/> (discussing the test drivers take in London); *cf.* John Tamny, *Uber Erases ‘The Knowledge’ in London All the While Enhancing Driver and Passenger Knowledge*, FORBES (July 13, 2014, 9:00 AM), <http://www.forbes.com/sites/johntamny/2014/07/13/uber-erases-the-knowledge-in-london-all-the-while-enhancing-driver-and-passenger-knowledge/> (discussing how Uber is supplanting taxi drivers’ expertise in London).

328. Bruce Schaller, *Entry Controls in Taxi Regulation: Implications of US and Canadian Experience for Taxi Regulation and Deregulation*, 14 TRANSP. POL’Y 490, 490 (2007).

329. *Id.* However, the heavy regulation of the taxi market has also been mentioned as an example of inefficient governmental regulation. *See* Robert D. Cairns & Catherine Liston-Heyes, *Competition and Regulation in the Taxi Industry*, 59 J. PUB. ECON. 1, 1 (1996).

330. Edward C. Gallick & David E. Sisk, *A Reconsideration of Taxi Regulation*, 3 J.L. ECON. & ORG. 117, 118 (1987).

an Uber or Lyft on a 4th of July evening after the fireworks on the Mall might mean that you have to pay twice as much.³³¹ However, thanks to price regulation, hailing a taxi in the same evening should cost you as much as any other evening.³³² Second, there is a clear case of information asymmetry between the professional taxi driver who knows how to get around the city (and can extend the passenger's journey far beyond what was desired).³³³ In the case of Uber, the rider is dealing with a driver that very often does not know the area very well and will use the Uber app to find her way or simply follow the rider's instructions.³³⁴ Third, in cities like London, taxi drivers have to take a knowledge exam to prove a basic knowledge of the city. Fourth, a license is required for taxis to guarantee that drivers do not have a criminal record, abuse drugs, or have health conditions that can affect their driving skills.³³⁵ After all, you typically get in a car with a stranger you will never see again.

However, how far should these taxi regulations go in the context of the sharing economy? If Uber is not a taxi but an innovative sharing service, should its drivers be subject to the same requirements? It may not make sense to impose on individuals who "play taxi drivers" on Friday evenings the same requirements imposed on professional taxi drivers. Riders have different expectations, and the information asymmetries and the market failures are reduced in the case of network transportation systems like Uber or Lyft.³³⁶ The tracking and

331. Connor Simpson, *Uber Busted for Intentionally Surging Prices*, THE WIRE (Feb. 26, 2014, 12:25 PM), <http://www.thewire.com/technology/2014/02/uber-busted-intentionally-surging-prices/358555/> (showing that Uber's prices fluctuate drastically based on demand).

332. Gallick & Sisk, *supra* note 330, at 118 (discussing the benefits of uniform pricing).

333. Lydia Emmanouili, *Drivers, Passengers Say Uber App Doesn't Always Yield Best Routes*, NPR (Sept. 21, 2014, 5:30 AM), <http://www.npr.org/2014/09/18/349560787/drivers-passengers-say-uber-app-doesnt-always-yield-best-routes> (highlighting the discrepancy in knowledge between taxi drivers and Uber drivers).

334. *Id.*

335. *E.g.*, *How to Become a Taxi Driver*, SFTMA, <http://www.sfmta.com/services/taxi-industry/become-taxi-driver> (last visited Oct. 18, 2014) (showing the many steps and qualifications required to become a taxi driver in San Francisco); Tamny, *supra* note 327.

336. *See generally The Driver, My Uber Passengers Hates Uber Navigation*, RIDESHARE DASHBOARD (Oct. 6, 2014), <http://ridesharedashboard.com/2014>

peer-review systems provided by Uber offer an additional protection—even if it is just a psychological one—to most riders.³³⁷ While taxi regulations were conceived to compensate for specific market failures in the context of the commercial relationship between a professional taxi-driver and a consumer, the fact that Uber brings a *non*-professional taxi-driver and a consumer together for a ride should not exempt the company from regulation.³³⁸ The risks to safety of the rider are not nonexistent.³³⁹ However, old rules designed for the taxi industry do not fit Uber and its peers. Instead, modern regulations are required.³⁴⁰

We come to the point where we start understanding that we need regulations that allow sharing and caring.³⁴¹ Can you share and innovate by the book? You can, but first someone has to write the book. In October 2014, the District of Columbia Council enacted a bill entitled “Vehicle for the Innovation Amendment Act of 2014,” designed to regulate Lyft, Uber, Sidecar, and UberX-type services in the District.³⁴² Under this

/10/06/uber-passengers-hates-uber-navigation/ (discussing that passengers usually have a way they prefer the driver to take). *See, e.g.*, Tamny, *supra* note 327.

337. Jeff Bercovici, *Uber’s Ratings Terrorize Drivers And Trick Riders. Why Not Fix Them?*, FORBES (Aug. 14, 2014, 12:31 PM), <http://www.forbes.com/sites/jeffbercovici/2014/08/14/what-are-we-actually-rating-when-we-rate-other-people/>.

338. *See* Emily Badger, *Why We Can’t Figure Out How To Regulate Airbnb*, WASH. POST (Apr. 23, 2014), <http://www.washingtonpost.com/blogs/wonkblog/wp/2014/04/23/why-we-cant-figure-out-how-to-regulate-airbnb/> (arguing that despite the status of Uber and Lyft drivers as “quasi-professionals” rather than “strictly commercial enterprises in the traditional sense of a hotel or a taxi or a company,” regulation is required at some level to protect public safety); *see also* Shapiro, *supra* note 271.

339. *See supra* Part IV.B (discussing risks of the sharing economy as a whole, and in particular, for Uber and Lyft passengers).

340. *See id.* (discussing that modern regulation needs to evolve with the sharing economy); Henn, *supra* note 1 (suggesting that governments will need to adapt to these new sharing economy practices, which do not fit traditional regulatory frameworks); *see also infra* Part V.A (discussing difficulties and inconsistencies that result from applying traditional regulation to newer sharing economy practices like Uber or Lyft).

341. *Cf.* Part IV.B.

342. Lori Aratani, *D.C. Council Okays Bill to Legalize Lyft, Sidecar, UberX-type Services in the District*, WASH. POST (Oct. 28, 2014), <http://www.washingtonpost.com/blogs/dr-gridlock/wp/2014/10/28/d-c-council-okays-bill-to-legalize-lyft-sidecar-uberx-type-services-in-the-district/>.

bill, Uber drivers should, among other requirements, be at least twenty-one-years-old, have no criminal record, have adequate insurance, and have their vehicles inspected on a yearly basis. This DC Bill might be the first page of this book.

V. SHARING BY THE BOOK

The sharing economy offers a number of advantages: lower prices,³⁴³ stronger communities,³⁴⁴ a greater number of players in the market,³⁴⁵ and greater access to services that were once regarded as a luxury.³⁴⁶ Notwithstanding these advantages, the sharing economy is opening the door to a number of problems as well.³⁴⁷ Protests regarding the unfair competition and lack of licenses of service providers, scams on numerous websites, and risks to public health and safety may lurk around the corner.³⁴⁸ We book a hotel because we trust that it will have all the required licenses and inspections, and will provide a pleasant place to spend the night.³⁴⁹ Our expectations might be lower in the case of the sharing economy, but they are not nonexistent.³⁵⁰ The sharing economy is based on the bona fides

343. See e.g., Michael Cabanatuan, *Ride Services Decimate S.F. Taxi Industry's Business*, SFGATE (Sept. 16, 2014), <http://www.sfgate.com/bayarea/article/Taxi-use-plummets-in-San-Francisco-65-percent-in-5760251.php> (highlighting how successful startups have been in competing with taxi services); see *supra* note 280 and accompanying text.

344. See Belk, *supra* note 2, at 1599 (“Sharing makes a great deal of practical and economic sense for the consumer, the environment, and the community.”).

345. See generally *id.* (discussing how increased access to resources that has accompanied the rise of the sharing economy may require redefining “ownership”).

346. See *id.* at 1598 (“Internet facilitate[s] [the] ability to help people find things we once had to buy or rent or lease.”); see *supra* note 280 and accompanying text.

347. E.g., Brownsword & Yeung, *supra* note 37 (providing an overview of how new technology causes general regulatory challenges); *supra* Part IV.B (discussing safety risks inherent in sharing economy practices).

348. E.g., Tran, *supra* note 15 (discussing traxi drivers striking in London, Paris, Madrid, and Berlin); see also text accompanying notes 298–23.

349. E.g., Newcombe, *supra* note 318 (discussing expectations of travelers and how Airbnb may fail to deliver); ERIC. T. SCHNEIDERMAN, N.Y. ATTORNEY GEN., *supra* note 29 (outlining the multitude of regulations imposed on hotels to protect expectations of travelers).

350. Cf. Bercovici, *supra* note 337 (discussing general expectations of Uber users).

of all participants.³⁵¹ We trust that all participants will abide by the rules of the game and we use peer-review as a control mechanism.³⁵² However, peer-review of other users might come too late in certain cases.³⁵³ Law is being called in as a “weapon” to avoid social conflict and as a shield against the uncertainty implied in innovative forms of sharing economy practices.³⁵⁴

A number of sharing practices do not require any regulation; they belong to our personal sphere. This is the case for transactions that happen on a small-scale, involve greater accountability, are motivated by a spirit of giving and taking, engage people working together as equals, and involve significant transparency.³⁵⁵ The sharing economy practices analyzed in this Article are situated in the gray area between these socially oriented activities and commercial activities.³⁵⁶

Until now, the sharing economy has remained to a great extent unregulated.³⁵⁷ While a *laissez-faire* approach might not be enough to gain the trust of risk-averse consumers, one may also inquire how far stringent regulation of the sharing economy should go. On the one hand, innovators—here, talented housewives, handymen, individuals playing taxi driver or master chefs—must have the freedom to create their own social enterprises or allow entrepreneurs behind smartphone applications to develop electronic platforms to bring them together. However, as Robert Cooter argues, “freedom requires

351. *E.g.*, Belk, *supra* note 2, at 1598 (highlighting the importance of trust in the business model of the sharing economy).

352. *Id.* (“San Francisco ride sharers and many other such services help to build trust in particular people, and distrust of others, through online ratings after the fact.”); Ferenstein, *supra* note 266 (explaining how peer-review arises out of the need for trust in the sharing economy: “[t]his requires a whole lot of trust and thus information about each person”).

353. *See* Belk, *supra* note 2, at 1598 (explaining that online ratings occur after the fact); Huet, *supra* note 276 and accompanying text; *see also* Manjoo, *supra* note 276.

354. Austin T. Turk, *Law As a Weapon in Social Conflict*, in *THE SOCIAL ORGANIZATION OF LAW* 43, 43–47 (Austin Sarat ed., 2004).

355. *See* ORSI, *supra* note 47.

356. Badger, *supra* note 338 (“Airbnb hosts, Lyft drivers and even Etsy entrepreneurs all by definition blend the personal and the commercial.”).

357. *Cf.* MD. PUBLIC SERV. COMM’N, *supra* note 322 (noting generally how innovative sharing economy practices do not fit squarely within existing regulations); Shapiro, *supra* note 271 (citing challenges of regulation as the cause of the lack of regulation).

law, not its absence,”³⁵⁸ so the freedom to concretize innovative ideas implies effective law, complete contracts, and specialized rules to fill gaps in business contracts.³⁵⁹ Although Cooter’s argument is focused on the regulation of innovation in developing countries, his reasoning could also be tested against the background of the sharing economy. Cooter argues that “the [real] enemy of economy liberty is monopoly, which only permits a few to seek wealth . . . with restrictive laws, state officials can . . . choose who is allowed to do business. To sustain monopoly, public officials crowd out private law with public law.”³⁶⁰

Law may sometimes show little understanding of the rules of entrepreneurship and this is far from a new topic. Almost one century ago, Roscoe Pound regretted that:

[L]aw is not determined by the needs of business nor does it draw its ideas of partnership from the universal understanding and practice of business men. It was fixed centuries ago when Roman jurists sought to understand partnership in terms of consortium of co-heirs after the death of the head of a household.³⁶¹

While the idea of co-heirs of businesses and the need to maintain certain monopolies have had better days, it is important to question how we can (or should) legalize the freedom to share without transgressing the borders of current legal frameworks.

First, we should ask why regulations are imposed in certain fields; for example, why do we need a license to be a taxi driver or regulations to start a hotel? While these strict regulations might protect a professional group and keep fares high, these regulations also aim to protect our safety, public health, and urban planning.³⁶² Car rental companies have specific insurance requirements and are subject to

358. Cooter, *supra* note 186, at 39.

359. *Id.*

360. *Id.*

361. ROSCOE POUND, INTERPRETATIONS OF LEGAL HISTORY 112 (1923).

362. Schaller, *supra* note 328, at 491 (discussing the safety rationale for entry regulation, particularly in the taxi industry, even in response to economic arguments against it). *See generally supra* Part IV.B (discussing the need for regulation in the conventional commercial sphere to protect consumers from physical and economic harm).

inspections.³⁶³ Hotels are subject to health and safety laws, zoning restrictions, special taxes, and rules governing public accommodation and advertising rates.³⁶⁴ In the sharing economy, the lack of clear and specific rules for some practices might open the door to multiple legal problems. I can rent my living room to anyone and no one will check whether my house complies with safety standards.³⁶⁵ Perhaps my guests do not expect it either, because my house is not a hotel, at least until a fire breaks out and they have troubles finding the emergency exit.

The description of the potential risks regarding sharing economy practices brings us to an interesting question: if this area has been left unregulated, can we try to extend existing legal concepts to sharing economy practices? Can we use current legal frameworks to regulate the sharing economy, or do we need new rules?

A. EXISTING LEGAL FRAMEWORKS

In times of sharing and innovation through collaboration, we are required to ask whether we should convert interpretation of laws into a “creative activity.” After all, legislators were not likely thinking about the private room rentals of Airbnb when they drafted regulations on hotels and

363. See Ron Lieber, *Share a Car, Risk Your Insurance*, N.Y. TIMES (Mar. 16, 2012), <http://www.nytimes.com/2012/03/17/your-money/auto-insurance/enthusiastic-about-car-sharing-your-insurer-isnt.html?pagewanted=all&module=Search&mabReward=relbias%3Ar%2C%7B%221%22%3A%22R1%3A8%22%7D&r=0> (explaining how the practice of renting out a personal car may not meet regulatory requirements of rental car companies to carry proper insurance).

364. ORSI, *supra* note 47, at 420.

365. *All Eyes on the Sharing Economy*, *supra* note 7 (highlighting the minimal requirements of renting out rooms on Airbnb, as “technology has reduced transaction costs, making sharing assets cheaper and easier than ever”); see ERIC. T. SCHNEIDERMAN, N.Y. ATTORNEY GEN., *supra* note 29, at 4 (noting the ease with which “users of web platforms like Airbnb who run large-scale enterprises” might “violat[e] of fire safety, zoning, tax, and other applicable laws”); Ferenstein, *supra* note 266 (providing the views of the Airbnb CEO that a “micro-entrepreneur shouldn’t need a fire marshal and inspections if they want to rent out their home for a weekend”).

inns.³⁶⁶ However, considering the text of some state or local laws, judges might not need to be very creative in order to consider a sharing economy business hosting guests as an unlicensed hotel.³⁶⁷ For example in Virginia, a hotel is “any place offering to the public for compensation transitory lodging or sleeping accommodations, overnight or otherwise, including but not limited to facilities known by varying nomenclatures or designations as hotels, motels, travel lodges, tourist homes, or hostels.”³⁶⁸ In other states, and despite the objections of the owners of online platforms, not much creativity is required either.³⁶⁹ In May 2013, Judge Clive Morrick, in New York, decided that a host was indeed operating an unlicensed hotel and was sentenced to a fine of \$2400.³⁷⁰ He was hosting strangers for three days for compensation.³⁷¹

The application of current legal frameworks to the sharing economy has also opened the doors to stringent approaches on the other side of the Atlantic.³⁷² In April, a Belgian court declared Uber’s activities illegal and warned that a \$13,800 fine would be applied every time an Uber car tried to pick up a client.³⁷³ Neelie Kroes, vice-president of the European Commission at the time, expressed her outrage toward this decision, arguing that this “decision was not about helping or protecting passengers, [but] it was about protecting the taxi cartel.”³⁷⁴ Forms of the sharing economy are facing legal

366. See generally Badger, *supra* note 338 (arguing that sharing economy practices of Airbnb and Uber tend to occupy a middle ground that does not fit traditional regulatory schemes).

367. E.g., Donna Tam, *NY Official: Airbnb Stay Illegal; Host Fined \$2,400*, CNET (May 20, 2013, 5:00 PM), <http://www.cnet.com/news/ny-official-airbnb-stay-illegal-host-fined-2400/>.

368. VA. CODE ANN. §35.1 (2010).

369. Tam, *supra* note 367.

370. *Id.*

371. *Id.*

372. E.g., Steve Dent, *Belgium Bans Uber, Threatens €10,000 Fine for Each Attempted Pickup*, ENGADGET (April 15, 2014, 5:49 AM), <http://www.engadget.com/2014/04/15/belgian-uber-ban-10k-fines/>; Newcombe, *supra* note 318 (reporting the UK’s concern over Airbnb hosts violating safety regulations, and steps taken to ensure compliance).

373. Dent, *supra* note 372.

374. Neelie Kroes, *Crazy Court Decision to Ban Uber in Brussels*, EUR. COMMISSION (Apr. 15, 2014), http://ec.europa.eu/commission_2010-2014/kroes/en/content/crazy-court-decision-ban-uber-brussels-show-your-anger.

objections in many different parts of the globe,³⁷⁵ challenging entrenched groups and forcing prices down.³⁷⁶ However, the lack of adequate regulation appears to be harming innovation since judges are extending the existing legal frameworks to sharing economy practices.³⁷⁷ As mentioned earlier, regulations of hotels and restaurants were conceived for relationships between professionals and consumer and not for individual-to-individual transactions.³⁷⁸

While we do not want excessive and outdated regulations that stifle innovation, not regulating the sharing economy seems to be opening the door to the application of existing stringent regulations.³⁷⁹ This may lead to a total discouragement of innovation in this sector. In any case, we do not need to call in the regulatory heavy artillery.

The California Public Utilities Commission (CPUC) has recently legalized ride-sharing practices, requiring, among others, that Uber, Lyft, and other transportation network drivers have a license to operate and inspect the vehicles, require drivers to undergo a criminal background check, and carry one million dollar liability insurance.³⁸⁰ This Commission imposed twenty-eight rules on transportation network drivers, but considered that, if regulated, these sharing economy practices did not endanger public safety.³⁸¹ Although the number of rules might sound excessive, CPUC President Michael R. Peevey declared that these rules would allow “Transportation Network Companies to compete with more traditional forms of transportation and for both drivers and consumers to have greater choice within the transportation

375. *E.g.*, Dent, *supra* note 372; Tam, *supra* note 367.

376. *See* Belk, *supra* note 2, at 1599.

377. *See* Dent, *supra* note 372 (applying existing statutory regulations to Airbnb); Newcombe, *supra* note 318.

378. *See supra* text accompanying notes 32, 338, 356.

379. *See supra* notes 369–78 and accompanying text (discussing cases where courts applied existing legal frameworks to Airbnb and Uber, leading to overly heavy penalties).

380. *See* Press Release, California Public Utilities Commission, CPUC Establishes Rules for Transportation Network Companies (Sept. 19, 2013), available at <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M077/K132/77132276.PDF>.

381. *Id.* (outlining steps proposed to ensure that these innovative transportation services do not compromise public safety).

industry.”³⁸² In Colorado, ride-sharing has also been authorized as of June 2014.³⁸³ By enacting a specific law on ride-sharing practices, Colorado aims to combine the desire to encourage innovation with the need to guarantee public safety.³⁸⁴ This law requires Uber and Lyft and other ride-sharing companies to carry primary commercial insurance during the whole activity.³⁸⁵ Specific rules seem to be a preferred solution.³⁸⁶ However, can these rules keep up with the fast changing nature of the sharing economy?

B. NEW RULES

A more innovation-friendly approach to the sharing economy could imply establishing broader, principle-based regulation specific to the sharing economy.³⁸⁷ Such rules would not be bound by the limitations of existing technology but would rather be open to potentially new sharing economy practices in different fields.³⁸⁸ There are different aspects that seem to be common to most of these practices and should be considered in the specific regulation of the sharing economy.³⁸⁹

382. *Id.*

383. See S. 14-12, 69th Gen. Assemb., Reg. Sess. (Co. 2014), available at http://www.leg.state.co.us/Clics/CLICS2014A/csl.nsf/fsbillcont3/70364091166B28FC87257C4300636F6B?Open&file=125_enr.pdf.

384. Andy Vuong, *Colorado First to Authorize Lyft and Uber’s Ridesharing Services*, DENVER POST (June 4, 2014, 6:32 PM), http://www.denverpost.com/business/ci_25907057/colorado-first-authorize-lyft-and-ubers-ridesharing-services (“Colorado is . . . promoting innovation and competition while protecting consumers and public safety.”).

385. *Id.* (“Lyft, Uber and other ride-sharing companies will have to . . . carry at least \$1 million in liability insurance. The companies, or their drivers, will also have to carry primary insurance coverage during the controversial gap period—when a driver is soliciting fares but hasn’t been matched with a rider.”).

386. See *supra* notes 380–84 and accompanying text (discussing sharing economy-specific laws enacted in California and Colorado).

387. *E.g.*, Shapiro, *supra* note 271 (advocating for broad regulation of parent companies over individual providers, particularly in light of similar safety concerns across sharing economy practices).

388. See, *e.g.*, MD. PUBLIC SERV. COMM’N, *supra* note 322 (highlighting the need for special rules to apply to the emerging sharing economy).

389. See Shapiro, *supra* note 271 (describing how it would be “more effective and efficient to regulate parent companies” as an overarching policy rather than individual providers, due in part to common concerns about safety, liability, and insurance that permeate the sharing economy in the

In the particular case of shared rides and accommodation, we can think about criminal background checks, personal inspection of premises or take-in interviews with service-providers, adequate insurance, and the collection of taxes.³⁹⁰ In addition, it is important to make sure that there is no uncertainty as to liability should accidents occur.³⁹¹ Online platforms are often in a better position to protect the customer than the small entrepreneurs providing these sharing economy services.³⁹² Moreover, in order to respond to the uncertain nature of innovation in the sharing economy,³⁹³ regulations could be first enacted on a temporary and/or even experimental basis and later be evaluated and adapted.

As mentioned above, although sharing practices are far from recent phenomena, the shared access to a number of facilities and services has been facilitated by new technologies.³⁹⁴ These examples of the sharing economy allow a greater number of people to have access to certain services for a

network transportation field); *see also* Badger, *supra* note 338 (arguing for rules specific to the sharing economy by suggesting “setting limits on [sharing economy practices] that *explicitly acknowledge* their quasi-professional status”) (emphasis added).

390. *Cf. All Eyes on the Sharing Economy, supra* note 7 (citing common regulatory concerns that arise from sharing economy practices, including insurance, liability, violation of industry-specific regulation, and tax collection).

391. *Id.* (“As they become more numerous and more popular, however, sharing services have started to run up against snags. There are questions around insurance and legal liability.”); *cf. Nairi, Eliminating Ridesharing Insurance Ambiguity*, UBER (Mar. 14, 2014), <http://blog.uber.com/uber-xridesharinginsurance> (detailing Uber’s attempt to address ambiguity in insurance coverage and liability for accidents that occur when Uber drivers get into accidents).

392. *See* Shapiro, *supra* note 271 (arguing that, unlike individual service providers, “the companies have the resources and incentives to ensure compliance with safety and insurance requirements.”).

393. *See supra* Parts I.B, II.A (discussing the complex nature of innovation); *see also All Eyes on the Sharing Economy, supra* note 7 (noting the “growing pains” felt by the sharing economy as a whole in the face of uncertain growth and accompanying regulation).

394. *E.g., Belk, supra* note 2, at 1596 (“The Internet . . . has brought about many new ways of sharing as well as facilitating older forms of sharing on a larger scale.”); *see supra* Parts II.B.2, II.B.3 (discussing how the online and technological platform of the emerging sharing economy is key to its innovative character).

reduced price.³⁹⁵ The sharing economy is “democratizing” the access to innovation and innovation in technologies is creating a wider scope of opportunities of sharing. However, our democratic and administrative systems are not always sufficiently responsive to these new challenges and to the fast tempo that characterizes their emergence.³⁹⁶ Nonetheless, as John McGinnis explains, “democracy serves many functions. It helps create the preferences of citizens, making the government responsive to what the public want.”³⁹⁷ If the public seems to want to share rides, the government should be responsive to these preferences while remaining cautious about potential risks.

VI. CONCLUSION

The basic idea of the sharing economy is to own less and have access to more.³⁹⁸ “[S]how hospitality to strangers, for by doing so some people have shown hospitality to angels without knowing it.”³⁹⁹ A noble idea, but sharing does not always mean caring, particularly if it is done for compensation and with total strangers.⁴⁰⁰ The innovative character of these sharing practices poses a number of challenges to regulators, namely, should they be submitted to the requirements of equivalent commercial practices?⁴⁰¹ When should they be considered economically and legally irrelevant? How can regulators find the balance between the advancement of innovation and the need to safeguard public safety and health, and protect customers from problems with liability and fraud? Until now, regulators have largely refused to acknowledge the

395. See generally Belk, *supra* note 2.

396. E.g., MD. PUBLIC SERV. COMM’N, *supra* note 322 (applying existing regulatory structures to ridesharing, but suggesting new rules that would provide a better fit).

397. JOHN MCGINNIS, ACCELERATING DEMOCRACY: TRANSFORMING GOVERNANCE THROUGH TECHNOLOGY (2013).

398. Belk, *supra* note 2, at 1595 (discussing the shift in the definition of “ownership” that will need to accompany our trend to own less but access more); Botsman, *supra* note 277, at 97.

399. A common phrase, often attributed to *Hebrews* 13:2.

400. See Belk, *supra* note 2 at 1596 (distinguishing between true sharing and self-motivation); see *supra* Part IV.B (discussing risks inherent to the sharing economy).

401. See Shapiro, *supra* note 271; see *supra* Part V.A.

phenomenon of the sharing economy and have applied instead the legal tools for the equivalent commercial practices. This has resulted in the prohibition of certain sharing economy practices, such as Uber and Lyft, in many cities.⁴⁰² Simply put, the formula has been: Different Game + Same Rules = Game Over.

This Article puts the phenomenon of the sharing economy in the legal spotlight. Most practices in the sharing economy are innovative therefore difficult to regulate.⁴⁰³ In addition, they often oscillate between the border of personal and commercial activities. In the context of specific rules designed to respond to these new realities, innovation law, this Article calls for limited, but specific, regulation of the sharing economy. Regulators should start thinking about specific rules that should be imposed on sharing economy practices; practices that are regarded as substitutes to similar commercial goods and services. Regulation at this level should refer to compulsory contracts between parties, compensation, minimum skill requirements, and rules on liability. Relying on the goodness and hospitality of strangers should always be our starting point, but knowing that rules can be enforced when these values are not there can be the key element to avoid disappointment.

The sharing economy needs a new legal framework. Current legal frameworks do not suffice. Innovators in this area want to steer away from traditional perceptions, ownership-related concepts, and business to consumer relationships, and instead move in the direction of innovation. Before you share the ride—and perhaps one day a flight—with these innovators, we must make sure these innovators obtain their “light-weighted licenses” for your own safety. Only then might sharing rhyme once again with caring.

402. See *supra* Part V.A (discussing the heavy fines and consequences that result from applying current laws to ridesharing and home rental).

403. See *supra* Part III.B (discussing challenges related to regulating innovation).