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Paraskevi (Vivian) M. Stergiou

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Europa-Kolleg Hamburg
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Please don't hurt me, I will rate you
Reputation systems as self-regulatory mechanisms for the sharing economy

Paraskevi (Vivian) M. Stergiou

Abstract

The rise of the sharing economy has generated great regulatory challenges. The European Union (EU) has to perform a fine balancing act. On the one hand, it has to safeguard weaker parties, consumers and workers, ensuring they enjoy fair treatment by adopting proper regulatory responses. On the other hand, since the sharing economy offers innovative solutions to common societal and consumer problems, the EU wishes to tap into its full potential. It is hard to strike the right balance between innovation and regulation. This paper contributes to the hot debate on how to regulate the sharing economy without stifling innovation, by examining reputation systems and their function as self-regulatory mechanisms. Can the EU have the best of both worlds, reputation and innovation, by letting innovative technology, and reputation systems specifically, do the regulatory work? My answer is no. I first take reputation systems seriously by examining how they work and what they may achieve. Reputation systems are based on innovative algorithmic technology and generate trust among strangers. Self-regulation advocates argue that reputation systems are well suited, and in any case better than top down regulatory responses, to help users and society deal with the risks generated by the sharing economy . I then turn to the many and well-established flaws in the design and function of reputation systems. These systems come with clear limitations, and are unable to adequately address the complex regulatory challenges that have followed the sharing economy boom. The EU has to work towards developing innovative regulatory solutions, which allow space for self-regulatory mechanisms but combine them with other regulatory tools. The EU needs to set a “traditional” regulatory framework within which self-regulation can function properly. At the same time rules and regulations should be used to deal with the problems that, by default, cannot be addressed by reputation systems (such as externalities). Such clear cut EU rules must be the outcome of democratic debate.

Keywords:

Regulation, self-regulation, platform regulation, EU policy challenges, EU responses to technological innovation, sharing economy, European Single Market strategy, technology enabled regulation, consumer protection, European consumer protection law, reputation systems, ratings, consumer harm, Airbnb, Uber, behavioral economics, digital discrimination, reporting bias, European Union law

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1. *Introduction*

Would you ride in a car with a stranger? Would you have dinner with someone you met online? Would you mind doing so in their place, in a foreign country, far away from home? Many people do it, and they do it because others did it and left comments, reviews and ratings behind-landmarks to guide users through the sharing economy maze. How did we come to trust strangers for transactions that involve a high level of intimacy, such as sharing food or a tiny apartment? It is the result of an innovation, reputation systems. Based on the feedback provided by former users of various services, these systems provide consumers with the trust[1] and the confidence[2] needed to interact with complete strangers. The so-called sharing economy thus boomed. The expansion of the sharing economy raises some serious consumer protection and user exploitation issues, however, that have only recently become the object of academic legal research[3].

Now, the EU is faced with a challenge- how to regulate the sharing economy without stifling innovation. Not only the EU, but every legal system has to address the challenges prompted by the rise of the sharing economy, however, this paper focuses on the EU due to its longstanding regulatory efforts to combat the exploitation of weaker parties in contracts. This well-established effort to protect the less informed, weaker and needier party in a transaction is relevant to the discussion of how to regulate the sharing economy, as the greatest risks from its expansion are likely to affect the weaker parties: consumers and workers[4].

So far, the EU has maintained a "wait and see" stance, in order to avoid forcing innovation out of the market with overregulation. The European regulator embraced new collaborative technologies which European citizens consider good, convenient[5] and "value for money"[6]. In an effort to increase growth and jobs, and provide innovative solutions to consumer problems, the EU declared its willingness to tap the potential of the sharing economy[7]. Letting this potential go to waste would be just as bad as letting it be realised at the expense of weaker participants[8]. The EU set the sharing economy high on the

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[1] M. Mohlmann and A. Geissinger, "Trust in the Sharing Economy: Platform Mediated Peer Trust*"* in N. Davidson et al. (eds.), *The Cambridge Handbook on Law and Regulation of the Sharing Economy* (Cambridge University Press 2018), p. 4.

[2] A. Stemler, "Feedback Loop Failure: Implications for the Self-Regulation of the Sharing Economy" (2017) 18 *Minnesota Journal of Law, Science and Technology,* p. 673.

[3] R. Calo and A. Rosenblat, "The Taking Economy: Uber, Information, and Power*"* (2017) 117 *Columbia Law Review*, p.p. 1623-1624 https://digitalcommons.law.uw.edu/faculty-articles/47.

[4] Calo and Rosenblat, s*upra* note 3, p. 1690.

[5] European Commission, "The use of the collaborative economy", DGCOMM (2018) Flash Eurobarometer Survey 467 report, p.p. 1-2 https://data.europa.eu/euodp/en/data/dataset/S2184_467_ENG.

[6] European Commission, *supra* note 5, p. 3.

[7] The European willingness to tap the potential of the sharing economy has been declared in various documents which can be reached at https://ec.europa.eu/growth/single-market/services/collaborative-economy_en (last accessed 11.12.2019), but, the very creation of a "collaborative economy" tab under the "Single market" page at the official European Commission website is quite telling.

[8] European Commission*, supra* note 5, p.p. 1-2.

single market strategy agenda as early as 2016[9] and it has been trying eversince to strike the right balance between innovation and fair, regulation that supports the weaker parties[10]. A tension can be observed between the aim of EU regulators to support platforms, since they are a potential for growth, and to regulate them, in order to protect users[11].

Could reputation systems, a key self-regulatory mechanism, be the solution to these multiple problems? If sharing economy guru, Rachel Botsman, is right to claim that trust is the most important driver of the sharing economy[12], and since, according to the very statements of sharing economy participants, the opportunity to use ratings and comments is a key ingredient in sharing economy participation[13], what better approach for the EU than to just step back and let reputation systems, a key trust-building mechanism, do all the regulatory work?

This paper explores whether self-regulation through stars, comments and ratings provides the best of both worlds; fairness and protection for weaker parties, plus a framework for innovative solutions based on sharing. It does not. I argue that self-regulation has limits, and that reputation systems are not flawless. The EU has to work towards innovative regulatory responses that combine self-regulation with other tools. Reputation systems alone cannot do what a fair regulator is supposed to do, especially if protecting weaker parties and other societal concerns are taken into account. A European framework must be put in place with clear-cut rules for the protection of weaker parties. Such a framework will be the reference point by which states, local authorities and local societies can decide, through democratic deliberation, how much sharing they want, and of what kind. Self-regulation is ill suited to achieving more ambitious regulatory goals, which, I argue, can arise through democratic debate on the sharing economy.

Simply put, the paper calls for regulatory action and tries to channel the democratic discussion towards a more just regulation of the sharing economy. To be sure, rating systems are useful mechanisms, and they address typical consumer problems (e.g. easy complaint procedures for Uber passengers) with great efficiency and innovative spirit. After all, users love them and their participation in the sharing is proof of this[14],but they are no panacea. Europe has to open up the democratic debate

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[9] *European Commission, "A European Agenda for the Collaborative Economy", Press Release (02.06.2016). Mr Katainen explicitly stated that "A competitive European economy requires innovation, be it in the area of products or services. Europe's next unicorn could stem from the collaborative economy. Our role is to encourage a regulatory environment that allows new business models to develop while protecting consumers and ensuring fair taxation and employment conditions."*, https://ec.europa.eu/commission/presscorner/detail/en/IP_16_2001,
also *see*, European Commission, "A European agenda for the Collaborative Economy", COM (2016) 356 final https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2016%3A356%3AFIN.

[10] "**These new business models can make an important contribution to jobs and growth in the European Union, if encouraged and developed in a responsible manner", European Commission, "A European Agenda for the Collaborative Economy", Press Release (02.06.2016), s*upra* note 9.**

[11] C. Easton, "European Union Information Law and the Sharing Economy", in Synodinou et. al. (eds.), *EU Internet Law* (Springer International Publishing, 2017), p.p. 163-181, p. 177.

[12]https://www.youtube.com/watch?v=h9kg_H3JfLw accessed 30.12.2019.

[13]European Commission*, supra* note 5, p.p. 1-2.

[14]European Commission, *supra* note 5, p.p. 1-2.

on how to regulate the sharing economy without draining innovation, and take regulatory action, so that a framework can be created, with clear-cut rules, within which self-regulatory mechanisms or local initiatives (city regulation or neighbourhood cooperation with platforms) could flourish. Local authorities and local people should be provided with room to offer their own regulatory solutions and participate more equally in the debate. Self-regulation alone cannot address their concerns. To be sure, the challenge now facing the EU, how to balance regulation and innovation, is no easy challenge, but, leaving all regulatory space open to self-regulation could result in thinner protection for weaker parties and the exploitation of local society.

Part 1 asks the what-is-the-sharing-economy question. Part 2 turns to the charms of self-regulation and presents arguments against top-down regulation which is pictured as a poor fit for this bright new world[15]. Reputation systems are a good example of innovative regulation. They are specifically examined in Part 3. Part 4 shows the limitations of tech-based self-regulation and examines some major market imperfections that cannot adequately be dealt with on a self-regulatory basis. I further examine imperfections, flaws and failures of rating systems in particular in Part 5. Part 6 calls for regulatory action on behalf of the EU and offers some propositions on what a fair regulatory framework might look like. These propositions should not be considered final, but rather as contributions to a further democratic debate which should open up. Part 7 draws conclusions regarding the aforementioned aspects.

1.1 The sharing economy as a disruptive innovation

Fresh, innovative and growth driving the sharing economy has brought benefits to consumers[16] and digital platforms[17],opportunities for workers who value flexibility[18] and an ongoing nightmare for regulators. The sharing economy is a disruptive force. It creates new markets and disrupts incumbent firms[19],but, it is also a "regulatory disruption" in that it disrupts existing regulatory schemes[20]. Regulatory authorities and scholars are struggling to make sense of it all.

Answering the question of how to regulate the sharing economy is anything but clear. The debate is ongoing and heated. Before addressing it, some disclaimers must be made. I should note at this early stage that I focus mainly on big sharing economy companies (Uber, Airbnb and similar), as they have drawn great regulatory attention to themselves through the controversies they generated. They are the only companies with rich bibliographical references (very serious gaps persist, however). Exploitation

[15] Stemler, s*upra* note 2, p.p. 680-684.
[16] M. Lao, "Workers in the "Gig" Economy: The Case for Extending the Antitrust Labor Exemption" (2018) 51 *UC Davis Law Review*, p.p. 1543-1587, p.1546.
[17]Lao, *supra* note 16, p.p. 1545-1546.
[18]Lao, *supra* note 16, p.p. 1543-1546.
[19] Ch. Koopman *et al.*, "The Sharing Economy and Consumer Protection Regulation: The Case for Policy Change" (2015) 8:2 *The Journal of Business, Entrepreneurship & the Law,* p.p. 530-545, p. 544.
Available at SSRN:https://ssrn.com/abstract=2535345orhttp://dx.doi.org/10.2139/ssrn.2535345.
[20] V. Katz, "Regulating the Sharing Economy" (2015) 30:18 *Berkeley Technology Law Journal*, p.p. 1067-1126, p. 1069.

seems more plausible in these companies, because of the great information and power asymmetries between such firms and users[21]. Such firms have a full picture of how a significant number of consumers behave, they retain both user data and absolute control of the mechanics of popular applications[22]. Firms like Uber are well positioned to develop the technologies and techniques needed to manipulate users for the benefit of the platform[23]. Further, this undisputedly powerful position is not lessened simply because they use communitarian branding under a banner of "sharing"[24]. We believe that such firms are more suitable for our analysis, which focuses on issues of exploiting weaker parties.

1.2 Is it possible to define the sharing economy?

It is easier to name transactions that are most likely to be part of the sharing economy, such as two people sharing a journey using their own car and an app to find each other and split the cost, compared to providing a definition for the sharing economy. Alternatively, it is easier to simply refer to popular sharing economy applications, such as Uber, Lyft, Airbnb and BlablaCar or FancyHands. In order to define the sharing economy one would need to exchange complexity and depth for an illusion of accuracy. Nothing can be as challenging for definitions addicts as a rapidly evolving phenomenon, with great societal, environmental and economic implications, which leverages the power of new technologies. There is no agreement on the exact meaning of the term "sharing economy"[25].

The sharing economy involves very heterogeneous practices and sectors. It may be for profit or not for profit. It may be an alternative to capitalistic transactions and still reinforce capitalistic practices. It might be the path to more sustainable production and collaborative living, or it might just be a way to earn a profit while by-passing regulations. It can be good for the environment and still harm the environment. It can be about freeing people from employment and the 9-5 oppression or it might be the pathway to the poorhouse for workers. There is, then, a single point of *consensus* among sharing economy scholars: the sharing economy is hard to define[26].

The "sharing economy" is a contested concept[27], that is, a concept which creates endless disputes about its proper use. I will therefore indulge in providing a working definition only, with the disclaimer that this exercise of mine does not capture this elusive, fast changing phenomenon within fixed boundaries. Its value is limited to helping us move forward with our discussion.

The term "sharing economy" describes the granting of temporary access to products and services offered by peers to peers. Peer-to-peer (P2P) transactions are enabled through applications available for

[21] Calo and Rosenblat, *supra* note 3, p. 1649.
[22] Calo and Rosenblat, *supra* note 3, p. 1652.
[23] Calo and Rosenblat, *supra* note 3, p.p. 1650-1654.
[24] D. Murillo *et al.*, "When the sharing economy becomes neoliberalism on steroids: Unravelling the controversies" (2017) 125 *Technological Forecasting and Social Change*, p.p. 66-76.
[25] A. Acquier *et al.*,"Promises and Paradoxes of the Sharing Economy: An organizing Organizing Framework" (2017) 125 *Technological Forecasting and Social Change,* Elsevier, p.p. 1-10, p.p.1-5.
[26] Acquier *et al. supra* note 25, p. 2.
[27] Acquier *et al. supra* note 25, p. 2.

smartphones or tablets[28]. The boundaries between consumption and production are blurry, but one could, in any case, speak of a relationship between three parties, a consumer, a provider and the sharing economy platform which facilitates the transaction. P2P exchanges of goods and services include short term rentals of space for housing or work purposes (Airbnb[29], Homeaway[30] and PeerSpace[31]), the rental of peer owned assets (KitSplit[32]), lending (Prosper[33]), transportation for short or long trips (Uber[34]), or even finding someone to deal with one's daily chores (HomeJoy[35])[36]. In Europe the vast majority of sharing economy participants use it for accommodation and transport[37].

1.3 "Neoliberalism on steroids" or innovation with social impact? The many faces of the sharing economy

The sharing economy has clearly proven its ability to reflect all sorts of ideological aspirations. It has been described as a movement for greater technology-enabled solidarity among the members of a community, as great innovation that will tap into the potential of underutilised assets[38], as a grassroots movement calling for sustainable consumption, as the path towards more interesting and flexible jobs, as a way to reduce poverty and inequality by providing access,[39] and, of course, as a force that sharpens competition[40] in the markets penetrated by sharing economy pioneers, thus leading incumbents to outperform themselves.

It has also been criticised as "neoliberalism on steroids"[41] and accused of failing to realise its initial pro-social promises. The efforts of major sharing economy platforms to flourish as a result of being unregulated, or to mask the dark side of the sharing economy by employing positive, collaboration-friendly, wording, have not gone unnoticed[42]. Platforms are recognised as able to

[28] Th. Puschmann and R. Alt, "Sharing Economy" (2016) 58:1, *Business & Information Systems Engineering,* p.p. 93-99, p. 93 *in fine*.
[29]https://el.airbnb.com/, accessed 26.09.2019.
[30]https://www.homeaway.com/, accessed 26.09.2019.
[31]https://www.peerspace.com, accessed 26.09.2019.
[32]https://kitsplit.com/?source=cameralends&v=2, accessed 26.09.2019.
[33]https://www.prosper.com, accessed 26.09.20019.
[34]https://www.uber.com/gr/en/, accessed 26.09.2019.
[35] https://www.wired.com/2015/10/why-homejoy-failed/. Homejoy failed and is no longer available, despite being cited in the bibliography as a typical home chores sharing application, *see* Katz, supra note 20. We deliberately decided to use this example to illustrate the rapidly changing nature of the sharing economy. It is one of the main reasons why platform enabled sharing poses such great regulatory challenges, simply put, it is a moving target for the regulators, accessed 11.09.2019.
[36]Katz, *supra* note 20*,* p.1067.
[37]European Commission, *supra* note 5 p. 3.
[38]*See* Calo and Rosenblat, *supra* note 3, p. 1626.
[39]Calo and Rosenblat, *supra* note 3, p.1642, with further references.
[40]Calo and Rosenblat, *supra* note 3, p.1643.
[41]Murillo *et al.*, *supra* note 24, p.p. 66-76.
[42] J. Drahokoupil and A. Piasna, "Work in the Platform Economy: Beyond Lower Transaction Costs" (2017) 52 *Intereconomics: Review of European Economic Policy*, p.p. 335-340, p. 335 ("The usage of these terms ["collaborative", "sharing"] seems to reflect efforts to cast these new phenomena as something inherently positive, which is not helpful to keeping the policy debate evidence-based").

deceptively use all the right words, such as "collaboration" and "sustainability"[43], while demonstrating no interest in whether these values will be realised or not[44]. Scholars have criticised platforms for their ability to manipulate users[45]. It could be argued that big business such as Uber and Airbnb hide their purely for-profit motives and their undisputed full control of the sociotechnical aspects of sharing economy participation under a thin veil of naive wording [46]. These concerns should be compared with important consumer protection gaps and the lack of proper academic legal work on consumer protection in the context of the sharing economy[47]. I will add more on this later.

1.4 Europe at the crossroads between innovation and regulation

The rise of the sharing economy has put the EU in an interesting position. It has to strike the right balance between innovation and regulation. In order to create a strong, sustainable and fair single market it has to develop proper strategic European responses to the rise of the sharing economy[48]. This interplay between innovative potential and regulatory challenge was especially underlined in the 2018/2019 Single Market forum on the sharing economy, where it was noted that the sharing economy can create new opportunities "for the economy and the society in general" and should not be seen simply as a business model, but rather as a new form of "integration between the economy and society", which, however, "poses risks on the current standards of consumer protection"[49]. Let us analyse this interplay.

On the one hand, the sharing economy is an innovative force that comes with great benefits. It employs innovative technology to provide consumers with the trust they need in order to share with strangers[50], it strengthens the local economy[51], gives citizens the opportunity to utilise their underutilised assets[52] and creates extra income for people who have survived the recent financial crisis[53]. Consumers can access goods and services in a convenient and cost efficient way[54], and by being

[43] https://www.jacobinmag.com/2014/01/sharing-and-caring/, accessed 09.09.2019.
[44] On deception and sharing *see* https://www.salon.com/2014/03/14/sharing_economy_shams_deception_at_the_core_of_the_internets_hottest_businesses/, accessed 09.09.2019.
[45] G. Smorto, "Protecting the weaker parties in the platform economy" in N. M. Davidson *et al*. (eds) *Cambridge Handbook on Law and Regulation of the Sharing Economy* (Cambridge University Press, 2018) p.p. 431-446.
[46] Calo and Rosenblat, *supra* note 3, p. 1652.
[47] Calo and Rosenblat, *supra* note 3, p. 1677 ("But so far consumer protection law has yet to catch up to a commercial world fueled by data").
[48]Easton, *supra* note 11, p.164.
[49] European Commission, "Single Market Forum 2018/2019, Collaborative Economy: Opportunities, Challenges, Policies", Conference Report (2018), p. 1.
[50]M. Henderson and S. Churi, *The Trust Revolution* (Cambridge University Press*,* 2019), p.p. 151-155.
[51] H. Verboven and L. Vanherck, "The sustainability paradox of the sharing economy" (2016) 24:4, Nachhaltigkeis Management Forum, Sustainability Management Forum*,* p.p. 303-314, p. 307.
[52] Easton*, supra* note 11, p. 165.
[53] Easton, *supra* note 11, Easton refers to early responses of the European Commission to the rise of the sharing economy. The lack of trust in large companies due to the 2008 financial crisis played a role to consumers' raising willingness to share, Easton argues p. 167.
[54] Easton *supra* note 11, p. 167.

provided with easy access to assets can expand the lifespan of their own goods[55] and/or avoid buying new ones, be it equipment, tools or even food supplies[56]. In this way, fewer resources are being used and this results in environmental gains[57]. It thus comes as no surprise that the European Union wants to tap into the potential of the sharing trend.

All this is somewhat challenging to the European regulator who now needs to develop appropriate responses (which could include doing nothing). This kind of challenge is nothing new. Technological innovation generates uncertainty[58]. The regulators are somehow expected to project to the future, predict it and act accordingly. Usually, due to technology-driven uncertainty and their lack of information, they try to fit new realities into old rules, drafted with another context in mind, or they misinterpret pre-existing rules in a non-coherent, confusing way, or they impose uncalled for regulatory burdens on emerging technologies and obsolete categorisation techniques to new products and services[59]. Simply put, they tend to add regulatory uncertainty on top of the innovation driven uncertainty. It has been argued[60] that this interplay is very natural, since innovation is fast paced and ever-changing, while regulation is about certainty and predictability. I believe that the positive aspects of both innovation and regulation can be co-facilitated if proper responses are developed. This is what the EU should now pursue.

1.5 Pending regulatory issues and the development of the European Single Market

The regulatory work needed for the proper treatment of the regulatory questions posed by the sharing economy lies ahead of us. Let us now take a closer look at the controversial regulatory questions facing the EU, especially in light of its own commitments to developing a technology-friendly single market.

The EU refers to the "collaborative economy" (a terminological differentiation hard to explain) among other aspects of the single market on the official Commission website[61]. However, it is hard to talk about a single market with so much fragmentation and uncertainty regarding the applicable regulation on the sharing economy. Instead, it seems like a "patchwork Europe"[62], where fragmented regulatory realities prevail. The lack of a clear framework that allocates responsibilities among sharing

[55] Verboven and Vanherck*, supra* note 51, p. 307.
[56] https://www.eu-fusions.org/index.php/netherlands-household/176-share-your-meal-nl-netherlands accessed 24.12.2019.
[57] For the opposite view *see* Verboren and Vanherck *supra* note 51*,* Verboven and Vanherck discuss the risk of a "rebound effect" due to prices decline because of extending sharing. They argue that the price decline will result in gains in purchasing power and might increase consumption or resource use. In general, the authors discuss the risk of negative environmental externalities that might go unnoticed, since the sharing economy business models are mostly considered "sustainable" from an environmental and a social perspective, *see* p.p. 305-313, esepecially p. 307 where it is claimed that the use of sharing economy business models can even result in "hyperconsumption".
[58] S. Ranchordas., "Innovation Experimentalism in the Age of the Sharing Economy" (2015) 14:4 *Lewis and Clark Law Review* p.p. 871- 924, p. 886.
[59]Ranchordas, *supra* note 58, p.p. 885-890.
[60]Ranchordas*, supra* note 58, p. 883.
[61]https://ec.europa.eu/growth/single-market/services/collaborative-economy_en accessed 27.11.2019.
[62] M. Munkøe, "Regulating the European Sharing Economy: State of Play and Challenges" (2017) 52:1 *Intereconomics*, pp. 38-44.

economy participants is cited as one of the most problematic aspects of the sharing economy experience[63]. The dark sides of the sharing economy are also not to be underestimated (despite the interest of academic scholars being only recent[64]). Gaps in employment protection and emerging consumer risks pose critical questions for the regulators[65]. The body of EU law on services and e-commerce is big and theoretically relevant, but, probably not a good fit for addressing these questions[66]. At the same time, the EU has expressed its willingness[67] to maintain a high standard of protection for consumers and workers, and seems to consider weaker party protection a key aspect in the successful design of the digital single market[68]. This makes the regulatory problem even more complex, as much of the criticism of platforms is grounded in the claims that weaker parties are mistreated. All this is at the same time as the EU has recognised the need to act strategically and let emerging technologies flourish[69]. Simply put, the challenge for the EU is to create a regulatory environment that boosts consumer/worker confidence and facilitates societal considerations while leaving space for innovative platforms to grow[70]. Technological (emergence of platforms) and social (raising willingness to collaborate, exchange, co-work, co-live and share food[71]) innovation should be met with proper regulatory action that will not squeeze platforms out of Europe or into the grey market.

The key question is, then, how the EU is going to perform this fine balancing act between regulation and innovation. Is self-regulation through reputation systems the appropriate response? My answer is no. Self-regulation *alone*, and reputation systems in paticular, cannot address the full range of challenges posed by the rise of the sharing economy, especially weaker-parties-protection issues. Reputation systems should be combined with other regulatory tools, and more work on developing them and making them a good fit for a tech-loving, innovation-based reality, is called for.

I will first present the case for self-regulation (Part 2). I then examine how reputation systems work and their potential as self-regulatory mechanisms (Part 3). Then (Part 4) I describe their limitations and debunk the idea that self-regulation alone suffices. In Part 5 I argue that users are neither perfect information providers nor good at comprehending trust signals, and explore how reputation systems might maximise confusion, create feedback loopholes and let biases escalate and infect our transactions.

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[63] European Commission, *supra* note 5, p.p. 1-2.
[64] Calo and Rosenblat*, supra* note 3, p. 1690, ("consumer protection law has been oddly silent in the debates about the sharing economy").
[65] Easton, *supra* note 11, p. 164.
[66] For the need to develop a cohesive European approach to the sharing economy *see* Easton *supra* note 11, p.p.164-181.
[67] European Commission, s*upra* note 49, p.p. 1-6.
[68] European Commission, "A Digital Single Market Strategy for Europe" COM (2015) 192 final, items 2.1. and 3 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52015DC0192.
[69] *See* European Commission*, supra* note 68 *(*The European Commission has expressed its willingness to see the EU becoming a leader of the digital era. Despite the very positive wording of various official documents, the EU is not leading the digital revolution).
[70] Easton, *supra* note 11, p. 168.
[71] https://www.eu-fusions.org/index.php/netherlands-household/176-share-your-meal-nl-netherlands, accessed 30.12.2019.

In Part 6 I recapitulate, noting that self-regulation alone is no panacea, and proceed with propositions regarding a European regulatory framework for the sharing economy.

2. Self-regulatory responses to market failures

Markets often fail to generate efficient or fair outcomes (a situation referred to as a market failure[72]). Regulation is employed to correct this and may take various forms. It may be top down legislation of the command and control type, or a bottom up solution where market agents are not the targets of regulation, but rather the "authors" of it. Top-down governmental legislation is usually the first solution that comes to mind when market forces do not generate desirable outcomes. The sharing economy, because of its disruptive, technology-driven nature, has caused many to argue in favour of leaving room for self-regulation[73].

2.1 Asymmetrical information and moral hazard

Information asymmetry is a typical market failure often cited when top-down intervention needs to be legitimised. Where there are information asymmetries, suboptimal transactions take place. Market agents, who lack an important piece of information may be exploited by other market agents of superior knowledge. Moral hazards[74]also come into play. Individuals have an incentive to offer suboptimal services or charge higher prices, because information is not well distributed among market agents, so "nobody will know".

All the traditional risks and concerns linked to consumer transactions come into play when sharing economy transactions occur. Information between peers is asymmetrical in most peer to peer transactions [75]. The rider knows less than the driver. Your host tells you that his place is "close to the city centre" in a city that you have never visited. Traditional legislation seems an obvious first thought[76], but, technological innovation is a game changer, and makes self-regulation a more tempting choice for the sharing economy.

2.2 A matter of incentives and technology

Platforms have incentives to make transactions pleasant and efficient for everyone, as their profits depend on this, and at the same time they have the power to monitor users and discipline them, if they

[72] M. Cohen and A. Sundararajan, "Self-Regulation and Innovation in the Peer-to-Peer Sharing Economy" (2015) 82:1 *University of Chicago Law Review Online,* p.p. 116-133, available at: https://chicagounbound.uchicago.edu/uclrev_online/vol82/iss1/8.
[73] *See* A. Sundararajan, *The Collaborative Economy, Socioeconomic, Regulatory And Policy Issues, Report for the European Parliament, Internal Market and Consumer Protection Committee* (2016) available at: http://www.europarl.europa.eu/supporting-analyses.
[74] Cohen and Sundararajan, *supra* note 72 p.p. 128-133.
[75] Cohen and Sundararajan, *supra* note 72 p.p. 128-133.
[76] M. Finck, "Digital Co-Regulation: Designing a Supranational Legal Framework for the Platform Economy" (2018) 1 *European Law Review*, p.p. 47-69, p. 52.

misbehave[77]. As long as people place trust in each other, in the platform, and in the very notion of the sharing economy, platforms can make high profits. It comes as no surprise then that most successful platforms have tried to effectively deal with trust issues[78] and information asymmetries.

Platforms create mechanisms which reallocate knowledge[79]. They do so especially through aggregating feedback and data regarding their users. All this information is then simplified and made accessible to users in the form of simple signals of digital trustworthiness, that is, stars, comments, ratings, scores and reviews. Users can make informed decisions using these trust signals. The idea is that if individuals are provided with enough information they will, rationally, decide which transaction is to their benefit and avoid what may harm them, namely transactions with individuals who have low digital capital. The most successful platforms have put some serious effort into creating an environment of ongoing, spontaneous monitoring (or the impression of such an environment). After all, they try to establish themselves as an objective third party to the transaction between a consumer and a provider with all the right incentives to make it work and privileged access to computer science talent and data (neither of which is available to state authorities). Some platforms even verify IDs and manage payments to make users feel secure[80]. They employ people to deal with consumer complaints and needs. They put terms and conditions in place to define online and offline standards of behaviour[81]. They can easily ban users if low scores are given to them by their peers[82]. Simply put, platforms try to make users feel safe. One way to do it is by coordinating knowledge in an efficient way[83] and by using technology to beat information asymmetry.

2.3 Traditional regulation as a poor fit for platforms

Based on the above, it has been argued[84] that top down regulation is inappropriate for the sharing economy[85] and that self-regulation should be prioritised. The mechanics of the sharing economy are generally poorly understood by legislators. The platform technology is a "black box"[86] for them and its socioeconomic impact remains unmapped. The gaps in understanding the technological systems that make the sharing economy possible provide an unstable basis for regulatory intervention. Here, again, it all comes down to information asymmetry. Consumers know more about the services provided through

[77] Cohen and Sundararajan, *supra* note 72 p.p. 128-133.
[78] Henderson and Churi, s*upra* note 50, p.p. 151-155.
[79] D. Allen and C. Berg, "The sharing economy, How overregulation could destroy and economic revolution" (Institute of Public Affairs, 2014), available at https://collaborativeeconomy.com/wp/wp-content/uploads/2015/04/Allen-D.-and-Berg-C.2014.The-Sharing-Economy.-Institute-of-Public-Affairs.-.pdf.
[80] Easton, *supra* note 11, p.p. 176-177.
[81] Finck, *supra* note 76, p. 53.
[82] Cohen and Sundararajan, *supra* note 72, p.129.
[83] Allen and Berg, *supra* note 79.
[84] Koopman *et al*., *supra* note 19, p.p 541-544.
[85] Koopman *et al., supra* note 19, p.p. 541-544.
[86] Finck, *supra* note 76, p. 51.

the platform and their comments and ratings can make this information available[87] to other users in a way that top-town regulation cannot. At the same time, most information about how platform technology works is at the exclusive disposal of platforms. Platforms have access to user data combined with superior knowledge of consumer needs and superior algorithmic technology. Why not delegate regulatory powers to them[88]? They could optimise reviews, ratings and data driven rankings, and establish a transparent, clear set of internal rules that will increase both trustworthiness and profits.

Conversely, the adoption of ill-suited legislation could result in three major risks being realised. Innovation could be stifled[89]. The rules adopted might not be enforceable or come at a high enforcement cost (regulatory authorities cannot monitor transactions as platforms can). Finally, they might result only in complex regulatory frameworks that constrain business too much, thus harming everyone[90], including the economy as a whole[91]. Most importantly, they might harm low income consumers who have access to goods and services via the sharing economy. The sharing economy is often seen as a movement that democratises access to a high standard of living, because it provides individuals with access to goods that they could never afford to own[92]. At the same time, these innovative applications help individuals become entrepreneurs by monetising their skills and spare assets without having to deal with the back-end aspects of doing business (such as communicating with customers or getting paid)[93]. This potential, which is especially beneficial to the poor, could be lost, via regulatory overkill that forced platforms out of the market.

2.4 The European market in a technology driven era and the potential of self-regulation

It has been argued that Europe cannot underestimate the willingness of platforms to move to jurisdictions where regulation is not complex or expensive to comply with[94]. The risk of regulatory failure or regulatory overkill[95] cannot be underestimated[96]. Platforms leaving the European market or deciding not to establish themselves in Europe or create jobs in Europe would not be good news for the EU, which is in an urgent need of technological innovation, in order to remain competitive in this technology driven era[97]. Europe is no paradise for platforms and this has costs[98] in every possible way. The pro-

[87] Easton C., *supra* note 11, p.p. 174-175.
[88] Allen and Berg, *supra* note 79.
[89] Allen and Berg, *supra* note 79.
[90] Koopman *et al.*, *supra* note 19, p.p. 534-538.
[91] Finck, *supra* note 76, p. 52.
[92] Cohen and Sundararajan, *supra* note 72, p.129.
[93] Henderson and Churi, *supra* note 50 p. 153.
[94] Finck, *supra* note 76, p.p. 49-53.
[95] Allen and Berg, *supra* note 79.
[96] https://www.hoover.org/research/war-against-airbnb, last accessed 01.09.2019.
[97] European Commission, *supra* note 68.
[98] European Commission, supra note 68, "The rise of the sharing economy also offers opportunities for increased efficiency, growth and jobs, through improved consumer choice".

self-regulation argument claims that the benefits linked to the rise of the sharing economy are so great[99] that nobody can afford to jeopardise them. Before making the European legal system something that innovators and start-ups are afraid of, we should first consider whether they should be provided with space to flourish. It has been argued that self-regulation can do that[100].

Self-regulation comes in various forms and employs various tools[101]. It is not deregulation or zero regulation[102]. Self-regulation is, still, regulation. Regulatory responsibility is being removed from the governmental/institutional regulator and delegated to another party. In the case of the sharing economy, this means platforms. Bearing in mind that prominent self-regulation advocates do not argue against combining self-regulatory mechanisms with co-regulation or harder stronger intervention, where needed, we now turn to an innovative answer to many regulatory problems- reputation systems. These mechanisms for self-regulation through reputation have attracted great attention and are considered innovative regulatory mechanisms of great potential[103]. I analyse how they work and their greatest contributions to the success of the sharing economy. Further, I explain why they are no panacea, with their limited regulatory power and their well-established flaws (Parts 4 and 5). And, finally, I voice the need for a clear, "traditional" regulatory framework at a European level that will not allow self-regulation to occupy too much space (Part 6).

3. *Reputation systems as self-regulatory mechanisms-Introductory remarks*

The importance of personal reputation for sharing economy participants cannot be overstated. Internet users, faced with overwhelming information and great uncertainty about products, people, news and services online, follow the popular flow and adopt decisions already adopted by others in the past. In doing so they simplify their decision making[104] and are confident that they are doing the right thing[105]. Rating systems are based on this. If a person has good reviews and many stars on Airbnb, she can be trusted, because others trusted her and enjoyed the experience enough to happily leave a comment and a good rating behind. Take BlablaCar, a car-sharing service, for example. Trust levels among BlablaCar users are high[106]. This means that users of this platform trust each other and are confident when riding a car together. Where does this confidence and trust come from? Let us take a closer look.

3.1 Reputation systems as trust-building mechanisms and confidence-generators

[99] A review of the most prominent positive narratives regarding the sharing economy boom, rich in further bibliographical references, is to be found in Cherry and Pidgeon, "Is Sharing the Solution? Exploring Public Acceptability of the Sharing Economy" (2018) 195 *Journal of Cleaner Production*, p.p. 939-948.
[100] Allen and Berg, *supra* note 79.
[101] Cohen and Sundararajan, *supra* note 72 p.p. 123-128.
[102] Cohen and Sundararajan, *supra* note 72.
103 Allen and Berg, *supra* note 79.
[104] A. Mauri *et. al*, "Humanize your businessthe role of personal reputation in the sharingeconomy", (2018) 73 *International Journal of Hospitality Management,* Elsevier, p.p. 36-43.
[105] Mauri et al. *supra* note 104, p.p. 36-39.
[106] Mohlmann and Geissinger, *supra* note 1, p. 32.

It has been argued that the sharing economy would have never existed had it not been for reputation systems[107]. Why? People who have never met in real life meet total strangers and jump into their cars or even drive abroad with them. Trust is the answer. These transactions are made possible because of "digital trust cues"[108] which facilitate trustworthiness. Various trust building mechanisms can be considered trust cues. The terms and conditions set by the platforms and their ability to monitor and ban users, for example, function as trust cues. Peer ratings, comments and feedback are such trust cues and their function is key for the sharing economy.

The function of reputation systems is linked to the very old idea that market agents care about their reputation in the market. They have incentives to meet consumer needs and, thus, establish their business. Simply put, reputation systems create reputational incentives for sharing economy participants. The latter must behave well, because their scores and comments are attached to their user profile. This means they are accessible to everyone who might want to use their tools, services, car, financial advice or share a room. It should be noted that most reputation systems are two-sided ("two way ratings", "simultaneous reviews"[109]) with both consumers and providers rating each other and receiving feedback[110].

Reputation systems give users the incentive to self-police[111]. When we know that we will be rated for our behaviour we adjust it to the expectations of our counterparty. At the same time, based on reviews, we know what to expect[112]. Airbnb reviews, for example, offer a brief, first-hand summarised history of a listed property based on the stories told by the travellers who actually went there[113]. Before deciding who will host us, we first access their record of digital reputation. A comment that the property is too far away from the city centre or that the host is rude can make a property's prospects in Airbnb vanish.

3.2 Reputation systems deal with information asymmetries

Access to peer produced information is very important when it comes to transactions between a provider and a consumer, because there may be information asymmetries. We have seen that information asymmetries occur when one party to the transaction (usually the provider) has superior knowledge compared to the counterparty (usually the consumer). There is a risk of exploitation hidden in this asymmetry. By establishing free flows of information among peers, reputation systems are thought to

[107] *See* W. Lun Chang and Jia Yin Wang "Mine isYours? Using sentiment analysis to explore the degree Degree of risk Risk in the sharing Sharing economy" (2018) 28 *Electronic Commerce Research and Applications*, p.p.141-158.
[108] Mohlmann and Geisinger, *supra* note 1, p.p. 32-37.
[109] Mohlmann and Geisinger, *supra* note 1, p.p. 32-37.
[110] This is yet another area of the sharing economy where borders are blurred. Both consumers and providers are users of the sharing economy platforms and it is not always easy to define who is who.
[111] Stemler, *supra* note 2, p.p. 683-684.
[112] https://www.nytimes.com/2014/12/02/business/for-uber-airbnb-and-other-companies-customer-ratings-go-both-ways.html, accessed 09.09.2019.
[113] Mohlmann and Geissinger, *supra* note 1 p.p. 32-37.

effectively tackle information asymmetries and minimise the risks related to asymmetrical information and uncertainty[114].

To illustrate the importance of ratings and reviews, let us now point to two special characteristics of the sharing economy transactions, intimacy and the lack of physical communication when booking. First, intimacy. Intimacy increases the need for trust and confidence. One must have the confidence to share a room with a stranger or let a stranger into their the house. Platforms like Airbnb and Uber have reached impressive levels of growth[115] by connecting total strangers. Research has shown that negative reviews are an important factor considered by consumers in their online decision making[116]. Users see reviews as helpful and even more trustable than information provided by the platform itself[117], and thus they help them place trust in the sharing economy transactions and feel confident enough to engage in them. It, then, comes as no surprise that there was a sharing economy boom when online review systems became popular.

The second key characteristic is that there is no physical communication with the person providing the service when booking the service. This is also the case with e-commerce, however, there is a big difference. While the e-commerce consumer has no physical communication with the provider for the entire transaction, this is not true for the sharing economy transaction. Financial services excluded, most sharing economy contracts include zero physical involvement when concluded (app downloading and a few clicks) and a high level of physical intimacy when executed (sleeping/driving/eating with a stranger). If online trade is considered riskier than shopping in physical shops[118] because one cannot touch the product and ask the seller questions in person, what is the risk of a transaction that starts with a total stranger online and, literally, becomes physical when executed? One could argue that the sharing economy consumer is faced with the negative aspects of both distance and physical shopping. This paradoxical position becomes more comfortable because of reputation systems. In summary, eating with strangers, travelling with them and sleeping under the same roof requires trust, and reviews are all about trust[119].

3.3 Reputation systems alleviate the need for top-down regulation

Many have argued that[120] reputation systems do a better job than top down regulation when it comes to protecting consumers. They aggregate information which can be used[121] by everyone willing to participate in a sharing economy transaction. Users can thus protect themselves from interactions with

[114] Stemler, *supra* note 2, p. 683.
[115] Allen and Berg, *supra* note 79.
[116] Chang and Wang, *supra* note 107, p. 141.
[117] Mauri *et al*., *supra* note 104, p. 37.
[118] *See* Chang and Wang, *supra* note 107, p.p. 141-144, discussing a users' sentiment analysis and how risks are being perceived in the context of the sharing economy.
[119] Chang and Wang, *supra* note 107, with further references, p.p.142-143.
[120] Koopman *et al.*, *supra* note 19.
[121] Stemler, *supra* note 2, p.p. 683-686.

people who fail to meet their expectations[122]. To let people know what their peers think of a driver, a room or the person that might show up to clean a bathroom is enough[123], the argument goes, to protect them from harm. They should therefore be let alone to make their own transactional choices and, if something bad happens, *ex post* legal mechanisms, as in place, can be employed- the injured party can easily follow the "traditional" civil law path towards compensation.

In any case, top down regulation, especially European legislation, the argument goes, is the outcome of the labouring efforts of groups of experts, who might be influenced by lobbyists. Publicly appointed regulators might be captured and tempted to legislate in accordance with private interests instead of the public good[124]. Self-regulation, on the other hand, and reputation systems in particular, are based on horizontal, non-hierarchical, channels of information exchange. Users have no incentive to protect the professional interests of other users by providing the wrong feedback or overrating and they cannot be captured by strong interest groups who want to manipulate regulation.

Some have even gone as far as to argue that the real risk for the sharing economy consumers is the regulatory efforts of the regulators[125], which might drain innovation and slow down ground-breaking solutions advanced by platforms to address consumer needs. They might create barriers to entry and weaken competition, which will result in higher prices and bad services. At the same time, all this effort is unnecessary because sharing economy platforms are incentivizised enough to safeguard consumer interests[126].

These are strong arguments against heavy, top-down regulatory intervention in the mechanics of the sharing economy[127]. The idea behind these arguments is that traditional regulation is a poor fit[128] for our technology driven era, however, a closer examination of reputation systems reveals that their regulatory power is of limited scope. This is what I explore in Parts 4 and 5. Part 6 calls for further regulation and further democratic debate on the issues discussed in this paper.

4. Are reputation systems perfect?

Reputation systems were made to generate trust in the sharing economy. They were not designed to address social issues or concerns of harm to third parties. There is, then, a clear limit to what they can do. Data-driven systems are primarily designed to focus on economic considerations[129] and, thus, fail to consider the big picture of human interaction and its societal consequences. The negative aspects of a user's decision making process (racism or sexism, for example) can affect the way that reputation

[122] Stemler, *supra* note 2.
[123] Allen and Berg, *supra* note 79 and Koopman *et.al.*, *supra* note 19 p.p. 539-544.
[124] Koopman *et. al*. *supra* note 19, p.p. 539-544 and Finck, *supra* note 76, p. 52.
[125] Allen and Berg, *supra* note 79.
[126] https://www.cato-unbound.org/print-issue/1887, accessed10.09.2019.
[127] Stemler, *supra* note 2, p. 683.
[128] https://www.hoover.org/research/war-against-airbnb, accessed10.09.2019.
[129] Easton, *supra* note 11, p. 178.

systems work[130] and still go unchecked by the system, since the latter has been designed to facilitate consumer choice, not to judge it. The space that should be given to technology-driven self-regulation is therefore under no circumstances unlimited and should be specified (with a clear-cut set of compulsory rules for what can be self-regulated and what should be decided upon at a state or local level, for example). Let us now take a closer look at the ways in which innovative technology produces suboptimal regulatory outcomes.

4.1 Unequal access to the access economy and externalities going unchecked

Reputation systems are by design silent abount the costs transferred to third parties due to the sharing economy transactions (externalities). Environmental concerns are relevant here. The sharing economy is access-based and so from its very beginning it was linked to sustainability and limited consumption. This is not necessarily the case, however. Due to the decrease in relative cost and the rise of market demand for the goods and services provided, consumption might increase as more products are being made accessible and as new users come into play. This might result in additional resources being used[131]. Uber, for example, offers access to cars whenever one needs them. This might generate additional miles and encourage an attitude towards private cars which is detrimental to the environment[132].Public demand for better public transport might decrease. These are possible costs transferred to society as a whole, or to those who do not own a smartphone and thus have no access to the access economy (the poor, the elderly, the illiterate and other groups in need of solidarity). "Peers" will never voice such concerns through feedback mechanisms. They might go online and voice them through other channels, but this is irrelevant for the mapping of the regulatory limits of reputation mechanisms.

Prominent sharing economy platforms have also attracted criticism for of their attitudes towards disabled people[133], especially Uber[134]. Critical voices argue that disabled people are given low ratings or even deactivated[135] when using sharing economy applications. What I am trying to say is: reputation systems are by their very nature designed to build trust among users and ignore other perspectives. The latter, if explored, might result in reasonable policy goals which cannot be pursued through reputation and ratings. It is the task of democratic dialogue to identify further regulatory goals and it is the task of "traditional" regulation at a local or European level to deal with them-probably by cooperating with the platforms.

4.2 Sharing economy participation dependent on colour, gender and capital?

[130] Easton, *supra* note 11, p. 175.
[131] Verboven and Vanherck, *supra* note 51 p.p. 305-313, discussing the risk of a "rebound effect".
[132] Acquier *et al., supra* note 25, p. 5.
[133] Katz, *supra* note 20, p.p. 1096-1097.
[134] https://www.techrepublic.com/article/the-sharing-economy-will-self-regulation-by-startups-suffice-to-protect-consumers/, accessed on 17.09.2019.
[135] https://www.theguardian.com/sustainable-business/2014/nov/12/algorithms-race-discrimination-uber-lyft-airbnb-peer, accessed 23.09.2019.

The sharing economy established itself with communitarian roots, however, despite popular narratives and assumptions to the opposite, its effects on wealth inequality remain to be seen. More research is called for,[136] as it is still unclear whether, especially in the long term, it benefits the worse off. This is not to say that we doubt the benefits it has brought to consumers by sharpening competition[137], however, "evidence of significant wealth decentralization is difficult to find"[138] and the accusations of possible worker exploitation are rising. In any case, it is clear that in order to participate in the most profitable areas of the sharing economy, a person has to have some sort of capital in the first place (spare rooms for Airbnb, a car for Uber, high-level financial knowledge for P2P lending etc.). This is the case with almost everything in life of course, but the point raised here is that no anti-capitalistic dream is likely to come to life soon due to the sharing economy boom-not from Airbnb and not from Uber-despite the narratives employed. Sharing economy enthusiasts, should, then, in any case, be mindful of the tension between narrative and reality. Simply put, there is a gap between what platforms claim to be doing and what experience shows that they are doing. Regulators should consider this gap before delegating extreme regulatory powers to the platforms-especially European regulators with their much declared willingness to protect consumers and other weak participants.

The presence of discrimination on the popular platform Airbnb has been empirically established[139]. There is ethnic and gender discrimination[140] as users are rating each other or accepting and rejecting offers for hosting or visiting. People with African American-sounding names have more trouble finding a ride with ridesharing apps[141]. Airbnb users with African American-sounding names see their requests rejected more often. Black hosts charge less than non non-black hosts for similar listings on Airbnb[142].

Low ratings can result in a user being locked out of a platform. Being a low-rated provider for gender, colour or sexuality purposes, is thus a concern that deserves serious consideration from a fairness perspective. Most platforms do not provide the opportunity to challenge unfair reviews[143]. If discriminated against, one might post a comment, of course, but there is no guarantee that it will not be erased or simply hidden under the information noise. Self-regulation fails to address this issue, because, again, it comes with some clear limitations.

4.3 Incentives misaligned, trust misplaced and toxic behaviour encouraged

The sharing economy platforms seem to lack adequate incentives to address third party harm

[136] *See* J.P.Allen, *Technology and Inequality* (Springer, 2017), p.p. 121-135.
[137] Calo and Rosenblat, *supra* note 3, p.p.1642-1643.
[138] Allen, *supra* note 136, p.p.121-135.
[139] B. Edelman and M. Luca, "Digital Discrimination: The case Case of Airbnb.com" (2014) *Harvard Business School Working Paper*, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2377353.
[140] Allen, *supra* note 136, p. 123.
[141] Allen, *supra* note 136, p. 123.
[142] Edelman and Luca *supra* note 139.
[143] Katz, *supra* note 20, p. 1119.

and societal issues. The big sharing economy companies[144], at least, seem to lack incentives to work towards fair transactions[145]. They seem to have a commercial interest in letting their users act as they wish as long as they leave reviews that generate the impression of monitoring. Reputation systems must make a constant impression of trustworthiness to users and ensure them that their counter-parties are "superhosts", "perfect to ride with", "polite, fast and easy to deal with" or something similar, in order to generate profits.

Who judges Uber users for rejecting[146] other users on the basis of their appearance[147]? Who can tell racist Airbnb hosts to open their houses to ethnicities about whom they have intolerant views? Who can tell hosts that their houses should have fair rules in place rather than complying with a code of white supremacy? In order to do this, it would have to be accepted that these are not just private cars and private houses, but something like taxis and hotels. Platforms are highly unlikely to accept such claims[148].

We have so far examined the limitations of self-regulation, with a special focus on reputation systems. Let us now turn, first, to the flaws in the design and function of reputation systems and then to the behavioural biases that make efficient interaction with reputation mechanisms hard for users.

5. Problems in self-regulatory paradise

The idea that reputation systems can work miracles is naive. For reputation systems to work the input provided must be accurate and sincere, the users must be able to read and comprehend the trust signals received and the platform must refrain from "cooking" the outcome of ratings, reviews and feedback through nudging, framing and algorithmic technology. We will now see why this is not always the case.

5.1 Reputation systems are not flawless

To begin with, ratings in the sharing economy, seem overwhelmingly positive. More than 90% of Airbnb properties boast an average rating of either 4.5 or 5 stars[149]. The stars system of Airbnb, for example, frames its questions in a pre-set environment that is highly likely to produce positive feedback. Users are asked whether the a place was clean and whether it was easy to find the host. No questions about the host's manners or attitude, no easy way to timely voice concerns about rules imposed *ex post* by the host, despite not having been included in the online description of the property. Nobody asks the user if they felt unwelcome or even under threat for reasons of gender or sexuality, for example.

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[144] https://www.theguardian.com/sustainable-business/2014/nov/12/algorithms-race-discrimination-uber-lyft-airbnb-peer, last accessed 23.09.2019.
[145] For Airbnb *see* Edelman and Luca, *supra* note 139.
[146] Easton, *supra* note 11, p. 175, ("Uber drivers can be rejected simply on the way they look") and Allen, *supra* note 137, p. 124, ("When photos are included in profiles 75% of customers prefer a female host").
[147] https://www.theguardian.com/sustainable-business/2014/nov/12/algorithms-race-discrimination-uber-lyft-airbnb-peer, last accessed 23.09.2019.
[148] Allen, *supra* note 136, p. 125, Allen claims that big platforms like Uber "could not function, if they complied with the same liability regulations as competitors such as taxis and hotels".
[149] Mauri, *et.al.*, *supra* note 104, p. 37.

Users can voice safety and discrimination concerns by leaving a comment which is not as easy to track by future users as the stars for the clean room which appear in the forefront. Simply put, an intrusive sexist with a clean room and responsiveness to text messages is likely to be a superhost on Airbnb. If ratings are overwhelmingly positive, can reviews save the day? Research shows that consumers are highly likely to read only a relatively small amount of review content[150]. Big sharing economy platforms have also the right to modify or erase reviews[151]. The flaws are clear.

5.2 No transparency

Platforms keep the mechanics of reputation systems to themselves and these systems are not being monitored by regulators. If someone feels their rating and ranking is unfair they cannot appeal it. In other words, there is no "technological due process"[152]. Platforms do not share information on the algorithmic structure of rankings and how a score is being attributed to a given account[153]. They, usually, present a long list of factors used to determine "popularity" without providing further explanation. They have great discretion in determining search criteria and ranking design information. Abuses cannot be discovered and addressed[154] either. The predominance of algorithms and the lack of transparency it imposes, make it hard, if not impossible, to determine whether fairness criteria are employed to make decisions[155]. In addition to all these powers, platforms can suspend or terminate accounts (for low scores or other reasons[156]) without providing explanations to the person affected by the decision, nor sharing with them the process they followed to reach it. Terms and conditions, imposed by platforms themselves, protect them from having the legal obligation to explain why they banned a user or deactivated an

[150] Chang and Wang, *supra* note 107, p. 141.
[151] Stemler, *supra* note 2, p. 700.
[152] D. Citron Keats, "Technological Due Process", (2008) 85 *Washington U. Law Review*, p. 1249. Available at: https://openscholarship.wustl.edu/law_lawreview/vol85/iss6/2
[153] Keats, *supra* note 152.
[154] Smorto, *supra* note 45, p. 17.
[155] Easton, *supra* note 11, p. 178.
[156] 15.5 In addition, Airbnb may take any of the following measures (i) to comply with applicable law, or the order or request of a court, law enforcement or other administrative agency or governmental body, or if (ii) you have breached these Terms, the Payments Terms, our Policies or Standards, applicable laws, regulations, or third party rights, (iii) you have provided inaccurate, fraudulent, outdated or incomplete information during the Airbnb Account registration, Listing process or thereafter, (iv) you and/or your Listings or Host Services at any time fail to meet any applicable quality or eligibility criteria, (v) you have repeatedly received poor Ratings or Reviews or Airbnb otherwise becomes aware of or has received complaints about your performance or conduct, (vi) you have repeatedly cancelled confirmed bookings or failed to respond to booking requests without a valid reason, or (vii) Airbnb believes in good faith that such action is reasonably necessary to protect the personal safety or property of Airbnb, its Members, or third parties, or to prevent fraud or other illegal activity: refuse to surface, delete or delay any Listings, Ratings, Reviews, or other Member Content; cancel any pending or confirmed bookings;limit your access to or use of the Airbnb Platform; temporarily or permanently revoke any special status associated with your Airbnb Account; temporarily or in case of severe or repeated offenses permanently suspend your Airbnb Account and stop providing access to the Airbnb Platform.
In case of non-material breaches and where appropriate, you will be given notice of any intendedmeasure by Airbnb and an opportunity to resolve the issue to Airbnb's reasonable satisfaction. Airbnb.com Terms and conditions https://el.airbnb.com, accessed 06.09.2019.

account[157].Again, there is no technological due process.

Providers have no say about termination and decisions on rankings. Usually they are just simply notified about changes. They cannot voice their concerns, all they can do is exit the platform, if they disagree. Given that many providers depend on this income for their living, the least we can say is that they are being treated in an unfair way. Major contractual rights, such as the right to be provided with reasons for the termination of a contractual relationship (which looks too much like employment) are overlooked by the platforms. All in all, fairness and transparency do not seem to be highly valued by platforms[158], to the detriment of weaker parties[159], though, the *illusion* of transparency is very important for the sharing economy and reputation systems help facilitate it.

5.3 Manipulation

Reputation systems, which are at the centre of consumer empowerment arguments, can become the object of gaming and manipulation[160]. Platforms have all the data they need to influence decision making in ways that are hard to track and address. They have the incentive to create an illusion of safety and of free information flows[161], while, at the same time, they seem to lack the incentives to avoid system manipulations. As big business is entering the sharing economy, the problem is likely to become more serious. Deep pocketed players may be able to buy their rankings and ratings. Botsman, an influential author and advocate of the sharing economy notes that reputation is "the most important asset" users have in the sharing economy. If this is the case, markets will emerge around reputation and make room for manipulation, as noted by Slee, an influential author and sharing economy sceptic[162]. Users might be willing to "invest" in improving their reputation and buying themselves some good reviews, a high ranking and some extra stars. This will weaken competition, create barriers to entry, and, of course, result in consumer detriment. "Incentivised reviewing", a phenomenon where users take products and discounts in exchange for a positive review, could also become part of the sharing economy[163]. "Sharing" might, then, hide taking, and all this community oriented branding might be just the other face of "neoliberalism on steroids"[164].

Firms have always sought ways to maximizise profits by nudging consumer behaviour. Sharing economy firms have a "unique capacity to nudge and monitor participants"[165]. Preliminary evidence

[157] Smorto, *supra* note 45, p. 13.
[158] https://www.cnet.com/news/should-uber-and-lyft-keep-passenger-ratings-secret/#targetText=Should%20Uber%20and%20Lyft%20keep,see%20what%20that%20score%20is, accessed on 26.09.2019.
[159] Smorto, *supra* note 45, p.p.12-20.
[160] Smorto, *supra* note 45, p.p.11-20.
[161] Smorto, *supra* note 45.
[162] More on this interesting debate in T. Slee, "Some obvious things about internet reputation systems" (2013) http://tomslee.net/wordpress/wp-content/uploads/2013/09/2013-09-23_reputation_systems.pdf., accessed 30.8.2020.
[163] Easton, *supra* note 11, p. 175.
[164] Murillo *et al.*, *supra* note 24.
[165] Calo and Rosenblat, *supra* note 3, p.p. 1650-1653.

suggests that firms like Uber are more than willing to use their advanced technology and access to data to coerce, mislead and nudge users[166]. Legal scholars have been slow to understanding the power that platforms can exercise over users. Platforms design from scratch the decision making environment for users, know their behavioural patterns and may track all their movements when the app is turned on. Platforms can estimate consumer mood and sentiments and nudge them towards consumer decisions when they are most vulnerable, or manipulate providers to work when the platform needs them most by playing with the prices[167]. We can no longer overlook the fact that this much discussed about reputation-based safety, might mask manipulation coming from various sources. Democratic debate on such issues and further participation by informed legal scholars and citizen movements to it are urgently needed.

5.4 Reputation systems combined with unbalanced terms and conditions

Despite all the narrative suggesting otherwise, the sharing economy is not as flat and non-hierarchical as it would like to be. The leading technology companies which are the focus of this paper are in a hierarchically superior position over users. They also employ another self-regulatory mechanism, terms and conditions, which is obviously unbalanced[168]. Terms and conditions create the framework for the entire sharing economy transaction to take place. Reputation systems function within the framework created by terms and conditions. In my view, this is a dangerous combination when terms and conditions are obviously unbalanced.

Terms and conditions are non-negotiable ("take it or leave it"), pre-set by the platform and may be amended whenever the platform feels like changing them[169]. The bargaining power of users, whether they are providers (or should we say workers?) or consumers, is questionable. Most transactions are governed by rules fully determined by the platform. They seem to serve various goals, such as creating an illusion of legality, consensus and transparency, while, at the same time ensuring that the platform will not be held liable for anything, that it will keep its responsibilities to the lowest level allowed by law, and that it will shift all burdens to the other two parties. Clauses traditionally identified by contract law scholars as reflecting an imbalance in bargaining power are all typically to be found in the standard terms and conditions of the major sharing economy platforms[170]. Users agree to all this by clicking "I

[166] Calo and Rosenblat, *supra* note 3.
[167] Calo and Rosenblat, *supra* note 3, p. 1628, ("When a company can design an environment from scratch, track consumer behavior in that environment, and change the conditions throughout that environment based on what the firm observes, the possibilities to manipulate are legion. Companies can reach consumers at their most vulnerable, nudge them into overconsumption, and charge each consumer the most she may be willing to pay.").
[168] https://el.airbnb.com. Airbnb terms and conditions: Airbnb reserves the right to modify these Terms at any time in accordance with this provision. If we make changes to these Terms, we will post the revised Terms on the Airbnb Platform and update the "Last Updated" date at the top of these Terms. We will also provide you with notice of the modifications byemail at least thirty (30) days before the date they become effective. If you disagree with the revised Terms, you may terminate this Agreement with immediate effect. We will inform you about your right to terminate the Agreement in the notification email. If you do not terminate your Agreement before the date the revised Terms become effective, your continued access to or use of the Airbnb Platform will constitute acceptance of the revised Terms, accessed 06.09.2019.
[169] Smorto, *supra* note 45, p. 12.
[170] Smorto, *supra* note 45.

agree". It is hard to imagine them reading the entire text, full of incomprehensible legal wording, before pushing the digital button.

5.5 Reputation systems should not be approached out of context

In my opinion, we should never take reputation systems out of context in a discussion. Sharing economy users trust reputation systems, but they also trust that platforms are monitoring what is going on and that, somehow, if something bad happens they can ask for help, complain[171] or seek immediate legal protection. They might even (want to) believe that the platform itself is the service provider[172]. Who can blame them? When using these platforms corporate logos are all around. The platform usually deals with payments, invites the parties to communicate only through its own channels and advertises itself everywhere as a trustworthy transactions facilitator. Would they trust it as much if they knew that they have had pressed "I aggree" to terms and conditions that absolve the platform of all responsibility? Would they trust so much if they knew that if something bad happened they could of course leave a negative comment and a poor rating, but that nobody is highly likely to run to support them or protect them from immediate harm? One can doubt they would. It is highly likely that if users could take the time to read and comprehend the strikingly pro-platform terms and conditions of the major and most successful leading sharing economy platforms[173] (Uber and Airbnb mostly), they would develop a different perception of risk.

Simply put, everyone wants to say "I am staying at an Airbnb" and feel safe, but truth is they are staying with a random person who listed their house online. They think that a big corporation somehow guarantees for the safe and proper execution of the transaction, which is not the case. Big tech companies have invested serious money into drafting terms and conditions and lobbying against regulations, in order to ensure that they do not have to safeguard the proper execution of any transaction. A careful reading of Airbnb or Uber terms and conditions can have a miraculous effect on the trust placed in the sharing economy- they are a pure demonstration of corporate power. It is clear that rating systems do not arise in a vacuum. They come together with other self-regulatory initiatives and are located in an environment that *looks* safe and transparent, while mainly working towards alleviating all responsibility from the platform[174]. Platforms could work to address the negative aspects of their users' decisions and behaviours, but, to the extent that such action would involve "potentially commercially

[171] https://www.bizjournals.com/sanfrancisco/blog/2014/10/uber-lyft-f-better-business-bureau.html, accessed 26.09.2019.
[172] Smorto G., *supra* note 45, p. 20.
[173] The design of terms and conditions per se make not reading them a very attractive choice. Absent any specific regulation these terms are drafted in the most boring, legalistic wording possible, and they are, mostly, confusingly detailed explanations of obligations presented in a chaotic outlay.
[174] https://el.airbnb.com Airbnb Terms and Conditions 10.1 Within a certain timeframe after completing a booking, Guests and Hosts can leave a public review ("**Review**") and submit a star rating ("**Rating**") about each other. Ratings or Reviews reflect the opinions of individual Members and do not reflect the opinion of Airbnb. Ratings and Reviews are not verified by Airbnb for accuracy and may be incorrect or misleading, accessed 06.09.2019.

damaging" initiatives[175] or extra costs (due to advanced monitoring responsibilities, for example), it might take time to happen. Less time would be needed, if platforms were made to take action because of a clear set of basic rules that would come into force at a European level and that would be compulsory for any sharing platform willing to do business in Europe (more on this in Part 6).

5.6 Behavioural aspects

Let us now turn to the rationality of the sharing actors and let us show how reputation systems are more likely to be perfect re-enforcers of bias and confusion, instead of perfect channels where perfectly accurate pieces of information flow. I focus here on the problematic aspects of reputation systems and the all-too human behaviour of feedback providers who might want to collude, take revenge, feel empathy or just avoid confrontation. I argue that reputation systems can re-enforce biases, discrimination on the grounds of race, gender and sexuality and generally fail to provide accurate signals of trustworthiness. Furthermore, and regardless of their accuracy, trust signals might be misunderstood by the user.

5.6.1 Collusion and fear of retaliation

In 2013, 98% of ratings on BlaBlaCar, a car sharing platform, were 5 stars out of...5[176]. Since sharing economy participants are only human, they do what humans do: they trade. The internet is full[177] of stories of bargaining between users: "give me 5 stars and I will give you 5" or something else. These are transactions with a high level of intimacy (you share a car for hours) and it is highly likely that individuals have the opportunity to agree on how to rate each other (collusion). Fear of retaliation[178] might also play a role[179]. Individuals seem willing to avoid confrontation and safeguard easy access to future rides, therefore they will not give negative feedback and they will choose to upgrade their bad experiences.

At this point it should be noted that platforms like Airbnb have responded to such concerns by changing their reviews policy. Now, they make reviews available only after both parties have submitted their feedback, in order to avoid collusion and retaliation. This change is of course a great improvement, but many problems remain. The new system cannot tackle reporting bias due to fear of retaliation[180]. Simply put, users do not want to appear tough and hard to please or difficult to deal with, because this will function as a signal for future transactions and might lead to fewer accepted requests in the future. Users might thus decide not to provide negative feedback for a mediocre experience and skip their

[175] Easton, *supra* note 11, p. 175.
[176] Slee, *supra* note 162, p. 6.
[177] https://www.cnet.com/news/should-uber-and-lyft-keep-passenger-ratings-secret/#targetText=Should%20Uber%20and%20Lyft%20keep,see%20what%20that%20score%20is, accessed 26.09.2019.
[178] Stemler, *supra* note 2, p.p. 691-692.
[179] Slee, *supra* note 162, p. 7.
[180] Stemler, *supra* note 2, p. 691.

reporting duties in general (reporting bias). This means that very good and very poor experiences dominate in the system, since they are more likely to be reported than mediocre service provision[181]. Experiences bad enough to make a user change their mind and, ultimately, not use the service, in Airbnb at least, will go unreported. Users who seek emergency accommodation, in order to avoid spending the night with a terrible host in a not-as-described Airbnb, for example, will not be allowed to leave a comment. This is yet another way to inflate the system with too-good-to-be-true ratings[182].

5.6.2 Intimate interactions of (very) human beings

It is not just strategic behaviour and trade that may result in inflated positive feedback. We are all too human when expected to rate, rank, star and tell stories based on our personal experiences. One interesting finding suggests a relationship between risk attitudes and the willingness to participate in the sharing economy. Individuals with low levels of risk aversion (risk seeking users) were found more likely to frequently use sharing economy websites[183]. Much feedback is then produced by people who do not value safety much. What may be an "okay neighbourhood" for such people, might be a "weird place where I felt insecure" for less frequent users or just risk averse and risk neutral individuals.

When we eat with, share a car or see a stranger in our room, our judgment of the person is deeply personal and deeply biased, and of course it is not easy for most of us to separate between the person providing/consuming a service and the service itself. How ready are we then for this bright new world where people might be given bad scores because they "smell strongly of body odour" or because they did "anything to annoy me in some way" [184] as has been the case with users of Uber so far? Is it not scary to think that introverts who are not willing to chat, people who are dealing with mental or physical conditions, people with disabilities, or simply less conventionally attractive individuals are more likely to be awarded less stars?

5.6.3 Human all too human

Human beings involved in highly personal interactions with other human beings may be discouraged from providing honest feedback[185] for reasons that have nothing to do with trade or collusion. Someone might want to talk a lot about how far away their Airbnb was from the city centre, but they also note that the host is an older gentleman who is renting out his spare room and trying to turn it into a viable business (and, yes, he made sure to tell the story)-plus, he was kind and nice[186]. Users are reluctant to

[181] Stemler, *supra* note 2, p. 691.
[182] Stemler, *supra* note 2, p.p. 696-697.
[183] Chang and Wang, supra note 107, p.144.
[184] https://www.cnet.com/news/should-uber-and-lyft-keep-passenger-ratings-secret/#targetText=Should%20Uber%20and%20Lyft%20keep,see%20what%20that%20score%20is, accessed 26.09.2019.
[185] Stemler, *supra* note 2, p. 691, this may be the reason why Airbnb guests who stay in private rooms " as compared to entire houses give higher ratings".
[186] "Not wanting to be a jerk, I posted the briefest review possible" https://www.airbnbhell.com/not-quite-

provide negative feedback, unless something extremely bad happens to them during their stay[187]. The high level of intimacy creates feelings of empathy and empathy may be employed as an internal justification for failing to provide a well-deserved negative feedback[188].

Users seem to feel that, if they provide a bad rating, they are "evil"[189]. Do we really want to give one star to our Uber driver who had poor personal hygiene habits or can we just "forget about it"? Close social interactions might easily become awkward. What is the right way to rate a driver who drives very well, his car is clean, but does not stop sharing racist ideology throughout the very long hours of a ride in a shared Blablacar car?[190] Is it fair for a woman to receive a low score for ruining with her period the sheets offered to her by her Airbnb host? Do we consider it fair contractual practice to let hosts charge women more for ruined sheets, because they are "dirty" (sic), when having their period (which a 21st twenty-first century host using a seventeenth century wording names a "woman thing" online[191])? Probably yes. More work is needed, however, in order to provide proper answers to such complex questions. Further discussion is necessary particularly about where private property (and unlimited contractual freedom) ends and where a property-use contract becomes a service-provision contract subject to broader considerations, other than those important to the contracting parties.

Intimacy makes sentiments and preferences salient. It is this kind of situations that results in individuals rating each other on a thumbs up or thumbs down basis— people are either perfect or awful. Many Airbnb comments have strong emotionally heavy titles, and look far too much like gossip or efforts to attract attention[192]-this has nothing to do with their accuracy, but it may affect how other users see them and include them in their decision-making process. Confused and baffled users might just fail to provide feedback altogether, so their experience will not count[193]. Extremely positive or extremely negative experiences with striking titles (such as "nightmare in New York" or "Perfect Host") will attract all the attention, while reports in the middle of the spectrum are more likely to remain unnoticed. Rating on an extreme scale and being too emotional when making comments results in inflated trust cues that serve as a poor basis for an informed decision-making process by future users[194]. In addition, if all providers are rated on a "love it or leave it" basis, then some people might want to leave what others

expected-from-airbnb/, accessed 26.09.2019.

[187] Easton, *supra* note 11, p. 175.

[188] Stemler, *supra* note 2, p. 690.

[189] https://www.wired.com/2013/11/qq_kia/#targetText=Bad%20reviews%20are%20"frankly%20foundational,to%20do%20a%20better%20job.&targetText="If%20you%20just%20focus%20on,your%20review%20would%20be%20unfair.", accessed 26.09.2019.

[190] Highly influenced by true experiences described by Slee, *supra* note 162.

[191] https://community.withairbnb.com/t5/Hosting/I-will-no-longer-post-a-bad-review-about-a-guest/td-p/526567(An interesting story of a woman host trying to panish punish a woman guest for ruining her sheets with her period-her period is called "a woman thing"), accessed 26.09.2019.

[192] https://community.withairbnb.com/t5/Hosting/I-will-no-longer-post-a-bad-review-about-a-guest/td-p/526567, accessed 26.09.2019.

[193] On the "potential for inbuilt positive biases to occur if a user leaves a platform after a substandard experience and does not leave a review" *see* Easton, *supra* note 11, p. 175.

[194] *See* Slee, *supra* note 162, p.p. 4-8.

loved, but lack the information that would help them note this huge gap in preferences and expectations in advance[195].

5.6.4 Reciprocity

When an Airbnb host offers a bottle of wine every night during one's stay, this might appear to be free, but they might also be putting their best foot forward to ensure a 5 star rating. Some kind of reciprocal attitude urges guests to overlook the distance from the city centre or the extra 100 euros taken as a guarantee, despite the fact that this was not stated in the description of the listed property.

People reciprocate. They demonstrate the so-called "reciprocity bias" and "treat like behaviour with like"[196]. Combined with the high level of intimacy and interaction involved in many sharing economy transactions, this may affect how users rate their experiences. Many Airbnb guests who failed to provide a review reported that they did not want to have bad feelings towards the person who did their best to please them[197]. Hosts offer a glass of wine to make people forget that the property has no wifi. Drivers smile to get a good rating. People empathise with people they meet and behave in reciprocal ways[198]. The first thing that comes in mind when considering what to give back is an extra good comment. Inflated reviews can be given due to reciprocity "regardless of merit" [199]. Where a negative or mediocre review would be more accurate, a smile, a bottle of wine and a "free" lunch might make all the difference and distort the reputation system outcome.

People might also try to take revenge and even go out of their way to make sure that their counterparties pay what they consider their fair share of costs[200]. At this juncture, fear of retaliation is, again, relevant[201]. After all, if one is an Airbnb host, the guest, literally, knows where they sleep at night. In the case of workers who provide services at other users' houses , one can ask for their services and attack them. People are very likely to think "I'd better let it go and not get into this", a demonstration of fear of retaliation[202]. Knowledge that people behave reciprocally boosts such fear of retaliation[203]. All this might result in users not leaving ratings.

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[195] https://www.airbnbhell.com/not-quite-expected-from-airbnb/, accessed 15.09.2019.
[196] Stemler, *supra* note 2, p.692.
[197] Stemler, *supra* note 2, p.p.688-703.
[198] Stemler, *supra* note 2.
[199] Stemler, *supra* note 2.
[200] https://community.withairbnb.com/t5/Hosting/I-will-no-longer-post-a-bad-review-about-a-guest/td-p/526567, accessed 26.09.2019.
[201] Having received an one star review a host tried to find the listed property of his guest (who was also a host himself) and then went online inviting other members of the Airbnb "community" to use his property and rate him with one star for revenge, he also made sure to write online "Karma lives" and before getting to these solutions he first "requested that Thomas correct his review"
[posted 12.09.2019 on Host Stories on https://www.airbnbhell.com/], accessed 26.09.2019.
[202] Stemler, *supra* note 2, p. 691.
[203] "I don't want to name names or share links because I don't want Airbnb retaliation"https://www.airbnbhell.com/discrimination-host-cancels-before-start-of-trip/ [posted 14.09.2019], accessed 26.09.2019.

5.6.5 Considering irrelevant factors and demonstrating general biases

Someone who does not like black people or women might give them a low score on a rating platform. Race and gender become extremely salient during sharing economy transactions[204], because of the intimacy involved, and therefore people influenced by stereotypical ideas on genders or race might fail to accurately report past experiences when asked to provide feedback. Conversely, when people have many things in common with their host they might overlook that they are incompetent service providers and fail to report this when rating them. In other words, they exhibit homophily[205], they tend to sympathise with people who are like them. As a result people might be forced out of the market or driven up to higher rankings for reasons that have nothing to do with the quality of their services or the prices charged[206]. Since the algorithm's input is human judgment, reputation systems fed with biased judgments are highly likely to give distorted trust signals as output.

People are not perfectly rational when considering information provided to them. They use mental shortcuts to make sense of the information overload they are faced with, have limited information processing capacity, are not good at considering probabilities (which might result in misperceptions of risk) and are socially influenced (which might result in unfair judgments)[207]. Even if trust signals were not distorted, individuals' abilities to consider them when making decisions should not be overestimated. To these general biases, we should, again, add reporting bias. The users with the strongest feelings for their past transactions provide feedback more than those with "ok" experiences. This, again, creates a system based on extremes. Sharing economy users are perfect or awful, because mediocre or "fine" past experience is highly likely to go under-reported due to reporting bias[208].

The "herding effect" is critical at this point, as it leads to unconscious bias based on other ratings. When it comes to providing a review or a comment, users are likely to be influenced by previous reviews and, without knowing it, they might change their feedback in accordance with previous reviews[209]. Typical responses to biased behaviour include de-biasing efforts through "nudging"-that is gently pushing people to overcome distortions in their decision making process- however, platforms seem to lack incentives to "nudge" people towards unbiased decision-making[210].

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[204] Here is an interesting story of a dystopian 21st century transactional behavior.Edelman B. and Luca M., 2014 "Digital Discrimination: The case of Airbnb.com", *Harvard Business School Working Paper*, no 14-54 *See* an interesting "experiment" which lead to discrimination accusation of discrimination at https://www.airbnbhell.com/discrimination-host-cancels-before-start-of-trip/, A person of colour tried to book a property and got was rejected. Few minutes later his, white, wife tried to book the same property and got was accepted. The racist host is a superhost on Airbnb and the person of colour who tried to inform Airbnb about the racist behavior...was not able to find someone and voice concerns.did not even get to find someone to talk to https://www.airbnbhell.com/discrimination-host-cancels-before-start-of-trip/ [posted 14.09.2019], accessed 26.09.2019.

205 Stemler, *supra* note 2, p. 690.

206 Stemler, *supra* note 2, p. 690.

207 Stemler, *supra* note 2.

[208] Stemler, *supra* note 2, p.p. 689-691.

[209] Stemler, *supra* note 2, p.p. 689-691.

[210] Stemler, *supra* note 2, p.p. 689-691.

6. *Suggestions-A European regulatory framework is needed*

It has been established so far that self-regulation, and reputation systems in particular, are no panacea. A regulatory framework must be set. By this I mean some rules and standards which should be in place and guide self-regulation or co-regulation at a local level. States should have some flexibility within this framework to shape the rules they want, but, especially cities and municipalities should be encouraged to participate in a broad democratic discussion about how much and what kind of sharing they want. In this way, further rules will arise at a local level through democratic deliberation and opportunities for cooperation between platforms, citizens, municipalities and local political movements will be facilitated. In order to give a clearer picture of this, I will hereby just offer some general ideas on how a proper general regulatory framework would look like. These issues should be further discussed and the EU should open up the debate and encourage European citizens to participate more. What I want to make clear, however, is that self-regulation alone is not enough, as we have seen by taking a close look at a very successful and innovative self-regulatory mechanism, reputation systems, and its context, the terms and conditions set by the platforms. More is needed and this paper is a call for regulators to take action and shape the rules that will allow self-regulation to work.

More specifically, the European regulators should set a framework for platforms and then let them provide their users with whatever reputation systems they consider appropriate. This would depend on the specific service provided through the platform. It could also be the outcome of co-regulatory initiatives decided upon by the platforms and the locals through democratic debate. The framework provided by the EU will have a great impact on the debate that will take place at a state or local level, because it will function as a frame of reference for all sorts of solutions and place a benchmark of minimum standards of protection for consumers, workers and societies, against which all new regulatory solutions should be checked. This is particularly important for local authorities and local citizens movements, because when they try to enter into discussions with companies as heavily funded as Airbnb, for example, the dialogue on how to co-regulate and how to cooperate is, from the very beginning, unbalanced.

Platforms should also be encouraged by the European framework to adopt debiasing techniques for their users, such as "nudging" and information provision. The European framework could provide platforms with some clear procedures to be employed towards debiasing the sharing experience and offer incentives, support and benefits to platforms willing to undertake the costs and efforts of debiasing. Platforms should also have some basic monitoring responsibilities and work harder towards combating scams, dangerous users or fraudulent behaviour. The monitoring of transactions on behalf of the platform should be checked, and therefore information sharing between platforms and authorities should be made compulsory. In my view, local participation (of municipalities and local people) should be encouraged in order for a specific spectrum of monitoring measures to be properly identified through democratic discussion and experimentation. In this way, specific monitoring goals can be set and the local authorities can assist the platforms in achieving them. Platforms should be held responsible, if they fail

to undertake inspections (of Uber cars or property listed on Airbnb for example), intervene and generally monitor the service provision when users or the local inhabitants have red-flagged other users.

Let us now take a closer look at some possible content for this European framework. Again, this content should arise from democratic debates on the matter and I do not intend to offer closed solutions here, but rather some, hopefully useful, suggestions. In my view, consumer law should play a crucial role. It should be updated to meet the needs of our era.The terms and conditions employed by the platforms should be in line with our basic perceptions of what is fair and what is unfair. This means that they cannot be changed by the platform whenever it wishes to do so. Unfair terms should be banned (e.g.terms which transfer all liabilities from the execution of the contract to the platform's counterparties). Platforms should be held liable for damages every time they fail to prevent damage despite being properly notified. They should be banned from stating otherwise in the "Terms and Conditions" in a misleading and manipulative way which may easily affect users and their willingness to pursue compensation when suffering damages. Terms and conditions should be clear-cut and written in a simple, easy to grasp wording.

Whatever the content of this new consumer law, compliance should be made compulsory and users should be informed of that on entering the platform. For example, a "window" could pop up telling them with no legalistic, no confusing wording what their rights are and who is to be held liable for what. Examples of cases of joint liability, where both the platform and the provider are to be held liable, together with cases where the provider alone is to be held liable (e.g. when the provider by their own initiative causes damage to the consumer), should be exhibited in a special section, so that the users have a general idea about what they can do, if something bad happens. This would combat misperceptions of responsibilities on behalf of consumers who seem to believe that they can always turn to the deep pocketed platforms for compensation. Solutions like this will be a huge departure from the current situation where users are informed only in small print and with blurry legalistic wording that the platform is not to be held responsible for various reasons, as described above. What I am trying to say is that no matter the content of this new consumer law, it should be communicated in a clear way so that consumers can make informed decisions and probably, yes, undertake risks or understand the importance of proper ratings and honest feedback.

Transparency should be established. Platforms should be made to share part of the information and the mechanics behind their function with the authorities and the users. It is hard to make them do so, but the EU should seriously consider the information asymmetries between itself and the platform, on the one hand, and the platform and its users, on the other hand, and set some standard rules for technological companies that want to do business in Europe. I argued that space should be provided for local initiatives, local authorities and local people to voice their concerns, shape regulatory responses and work together with the platforms on rules that work better for both neighbourhoods and the platforms. Many efficient solutions could arise from such cooperation. Instead of establishing a call centre in India, for example, rules should be in place so that users can immediately notify a specific local

authority (e.g. local municipality police department) if something bad happens. This should be done in cooperation with the platform which has all the information and the technological ability to help deal with such situations. The platforms could, for example, provide immediate channels of communication with local authorities for risky situations and illegal actions or scams, although, again, for such cooperative solutions to arise, room for broader and balanced discussions among various stakeholders is needed. Otherwise, the only participants in the debate are platforms, with their superior information on users, cities and technology. Information and more transparency on behalf of the platforms are necessary elements for any such process to be truly participatory and democratic. In any case, if all regulatory discussion is closed because self-regulation is considered a gift from god, then there can be no deliberation through democratic debate and participatory initiatives at a local level, because local people are seen only as "users" and their voice as something that should be heard only through the predetermined channels of stars and comments. Hopefully, this paper has made it clear that stars and comments are very useful and truly innovative, but come with important limitations.

Transparency has another aspect as well, however, which has already been described above. Users should be informed about how their experience is being shaped by the platform, meaning how they obtain more or less stars, and why. This is especially important for providers who might lose their income due to bad scores. Mechanisms should be put in place to help providers improve after receiving bad scores (training, advice, help to improve the car or house or skill offered etc.). Decisions on behalf of the platform to ban providers due to low scores should come with explanations and the ability to improve on specific aspects of the service provision and, then, be allowed back into the platform. Providers, especially when their tasks come too close to what we would naturally consider "employment", should have the right to appeal decisions that ban them from platforms and, if improved, they should be allowed to offer services again and thus avoid losing their income.

In any case, what I am trying to do here is argue that self-regulation, despite its popularity among users and the enthusiasm among some scholars, as presented above, does not have all the necessary solutions to the complex issues arising when people share with strangers. Combination with traditional regulation is needed. Technology should not disorient us and make us forget that some classic pieces of regulation (e.g. EU consumer law) are there for a reason, or that civil law principles (e.g. ban on unfair terms and conditions) are there simply because we need fair contracts. Self-regulation can be of help, but "traditional" regulators should put the framework in place in order for it to flourish. Self-regulation should, then, be allowed to happen within specific boundaries that help protect local societies (which can easily be affected by externalities) and weaker parties from exploitation. I have put forward some propositions in this section, but it is democratic debate and democratic deliberation among various, well informed stakeholders that can offer more solutions. Constant experimentation and, of course, more attention from legal scholars on the issues discussed here, are also necessary. This paper serves as a call for two things: one, a regulatory framework that will set some basic rules at a European level; and two, further democratic debate (with the lively participation of informed scholars), especially at a local level,

to enable cooperative and imaginative solutions.

7. *Conclusion*

Self-regulation has limitations. We have explored and explained them in this paper by taking a close look at a success story of self-regulation: rating systems. Now, it is time for regulators to take action by creating a set of basic rules for sharing platforms in the EU. At the same time, the democratic debate on how best to coordinate efforts between platforms and local authorities should be opened and participation from states, locals and municipalities should be increased.

The purpose of this paper is not to provide a closed solution. The sharing economy is dynamic and so is the democratic debate about how to regulate it-or at least this is how it should be. It is especially important at a local level for municipalities and citizens to have a say about what kind of sharing economy they want in their neighbourhoods. The purpose of this paper is to show that self-regulation does not suffice, and to call for regulatory action and further democratic discussion. I have offered some propositions above, especially suggesting that clear-cut rules on transparency, information sharing, liabilities and the protection of weaker parties must be put in place, although, other propositions and other regulatory avenues are, of course, possible. My suggestions, hoperfully, indicate where the debate should be heading.

To recapitulate: self-regulation is not enough and even innovative self-regulatory mechanisms such as reputation systems should be used within a pre-set framework that will somehow restrict platforms' self-regulatory liberties. This should be set at an EU level. It should include traditional regulation, such as compulsory compliance with an updated EU consumer law. The aim should be twofold: to protect weaker parties and make sure that room is left for local initiatives to decide how much sharing and of what kind they want. This is not to undermine the importance of reputation systems, which, as analysed above, are extremely useful and beloved by users, it is to help them function within a better context.

Finally, two general remarks are needed. First, it is fair to say that the sharing economy is a highly under-researched area, especially when it comes to consumer protection issues[211]. More work is needed, especially from law and economics scholars. The potential of innovative, technology-based self-regulation is still poorly understood. I thus underline the limitations, flaws and drawbacks of reputation mechanisms which are good for maximising platform profits, but ill-suited to addressing societal concerns and the possible harm of weaker parties[212]. Current platform initiatives for the improvement

[211] Calo and Rosenblat, *supra* note 3, p. 1690.

[212] Even the extremely pro-self-regulation authors Henderson and Churi 2019, admit that when social welfare and distributional issues enter the picture, considerations about who should provide the trust, and, thus, regulate transactions, the ridesharing companies or the government regulation, becomes complex. Ridesharing companies or the government regulatory agencies? The authors are usually inclined to favour Uber most of the times as they consider it a great innovator that changed what authors call "the market for trust". Though, they do admit that consumer choice does not necessarily reflect broader social values and the fact that people opt for Uber instead of Taxis says nothing about what authors call "society-wide valuations of welfare". By this, I assume, they mean

of reputation systems are not adequate.

Secondly, legal scholars need to work more on analysing and understanding the regulatory challenges posed by the sharing economy. Fairness, legality, transparency and other key European values are shockingly missing from the sharing economy debate. The field of law that traditionally addresses issues of power and information asymmetries, European consumer law, could indicate the right direction for smart regulation, if combined with a proper understanding of the regulatory potential of technological solutions.

To be sure, the EU must facilitate and welcome innovation, but, if the EU is serious in its efforts to tap the full potential of the sharing economy and remain competitive and powerful in a tech-centred era, it cannot outsource to platforms the task of developing proper regulatory solutions for the problems created by the platforms themselves. A fair European framework is needed in order for the undisputed fruits of the sharing economy to be distributed among many in an inclusive way. This paper is a call for regulatory action and further and deeper democratic debate on the matter. It is the task of legal scholars, regulators and the EU to take action and construct a framework around self-regulation.Within this framework local society, municipalities, users and the platforms should be able to shape solutions for a more just sharing of flats, cars, bicycles and neighbourhoods.

fairness, distributional issues or the negative externalities of selfish consumer choice, *see supra* note 50.

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