

THE STUDENT SCHOLARSHIP BLOG

‘Co-Regulating Uber- why, and how, should we regulate?’

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I. INTRODUCTION

In the beginning of 2015, Uber was considered the world's biggest start-up.¹ Thus, its name is fitting: Uber is derived from the German word “über”, the word literally means “above”.² It is a multinational online transportation platform that allows consumers to purchase a car ride from other drivers who use their own cars, as opposed to the traditional model where only registered taxis are permitted to provide this service. It is an example of “sharing economy”, and it is an economic novelty that is considered revolutionary. The sharing economy is “a trend where people can monetize their personal belongings by renting (sharing) them out to complete strangers.”³ This phenomenon is large and important because it has an impact on many, if not all of us. This explains why economists, students, journalists and neighbours, engage in discussions about the sharing economy with emotional concerns. Some celebrate the sharing economy as the solution to climate change as it is better for the environment.⁴ It

¹ See Tom Schimmeck, Teile & Herrsche. Ubers globaler Feldzug für die “Sharing economy” (Deutschlandfunk, 03.07.2015), manuscript available from: http://www.deutschlandfunk.de/ubers-globaler-feldzug-teile-herrsche-inc.1170.de.html?dram:article_id=321500, last accessed: 08.12.2015. According to the latest valuation in November 2015 the company was estimated to be worth \$51 billion, see the statistics by Scott Austin, Chris Canipe, Sarah Slobin, *The Billion Dollar Startup Club* (The Wallstreet Journal, 18.02.2015), available from: <http://graphics.wsj.com/billion-dollar-club>, last accessed: 10.12.2015. Data about its net revenue is difficult to obtain, see *id.* at. However, it is suggested that Uber is not yet profitable, see Maja Kosoff, *New revenue figures show \$50 billion Uber is losing a lot of money* (Business Insider, 05.08.2015), available from: <http://www.businessinsider.com/ubers-revenue-profit-and-loss-2015-8>, last accessed: 10.12.2015.

² See UrbanDictionary, available from: <http://www.urbandictionary.com/define.php?term=uber>, last accessed: 01.12.2015. Used as a prefix, the term “uber” has the basic meaning “over, beyond.” It is added to adjectives and nouns to form compounds, like “uberstylish” or “uberchefs”, see Dictionary.com, available from: <http://dictionary.reference.com/browse/uber>, last accessed: 01.12.2015.

³ See Charles Arthur, *Why the sharing economy could be the internet's most divisive revolution yet* (The Observer, 21.12.2014), available from: <http://www.theguardian.com/technology/2014/dec/21/sharing-economy-divisive-uber-airbnb>, last accessed: 21.12.2014. See also Jennie Davis, *Drive at your own risk: Uber violates unfair competition law by misleading UberX drivers about their insurance coverage*, 56 BOSTON COLLEGE LAW REVIEW, 1097 (2015).

⁴ See Efehan Danisman, *Europe Future Lab, Investing in the Future: Economic Inequality, Climate Change and the Sharing Economy, Youth perspectives on the challenges of tomorrow*, available from: http://www.futurelabeurope.eu/read/items/futurelab-europe-launched-the-publication-investing-in-the-future-economic-inequality-climate-change-and-the-sharing-economy.html?file=files/futurelabeurope/fle_core/images/News/FutureLab%20Europe_Investing%20In%20the%20Future_OECD.pdf, last accessed: 10.12.2015 (suggesting that “the sharing economy model is offering a new, sustainable way of doing business and creates value for the environment, people and society.”).

is also viewed as the source of a new community spirit, as it is an “eclipse of capitalism”.⁵ To others, it is a threat to the ordinary and vulnerable people.⁶ It is viewed as a dangerous game, which will ultimately only pay off for a few big players.⁷

I relate to the excitement about Uber because it is unorthodox. Yet this ambiguous phenomenon requires new strategies for proper legal regulations. In this essay, my aim is to design a strategy to legally react to Uber. To do so, I will discuss the background of the Uber business model, followed by an economic perspective to analyse the reasons for the recent emergence of Uber. I will then provide a synopsis of the current scholarly debate on how to regulate Uber. This is followed by my analysis on how Uber is affecting our conventional property rights, public safety, insurance and labour security. I attempt to show that the effects on property rights and labour protection do not necessitate legislative intervention. That being said, a responsible legislator cannot ignore the impact Uber has towards public security and insurance coverage issues. Finally, I propose to apply a regulatory model developed by Saurwein.⁸ Saurwein argues for a model of co-regulation, in which Uber itself acquires responsibility to layout and implement rules.

Comprehensive academic studies on environmental benefits caused by Uber do not yet exist. However, the Natural Resources Defense Council and the University of California Berkeley are currently carrying out a yearlong study of the environmental impacts of ride-hailing companies like Uber and Lyft. The results will be published in autumn 2016, see Andrew J. Harkins, *Uber and Lyft will be the subjects of an environmental impact study* (The Verge, 13.11.2015), available from: <http://www.theverge.com/2015/11/13/9730458/uber-lyft-environment-impact-cost-NRDC-Berkeley-study>, last accessed: 09.12.2015.

⁵ See RACHEL BOTSMAN & ROO ROGERS, *WHAT'S MINE IS YOURS* Chapter 9 (2010) (suggesting that “community is the brand” of the sharing economy). See also Vicky Ford, *The sharing economy could change the way in which we interact for the better* (The Parliament Magazine, 22.09.2015) available from: <https://www.theparliamentmagazine.eu/articles/feature/sharing-economy-could-change-way-which-we-interact-better>, last accessed: 10.12.2015. See also JEREMY RIFKIN, *THE ZERO MARGINAL COST SOCIETY* 2 (2014) on the eclipse of Capitalism.

⁶ See Avi Asher-Schapiro, *Against Sharing* (Jacobin, 14.09.2014), available from: <https://www.jacobinmag.com/2014/09/against-sharing>, last accessed: 10.12.2015.

⁷ See Sofia Ranchordás, *Does Sharing Mean Caring? Regulating Innovation in the Sharing Economy*, 16 MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY, 8 (2015) (establishing that several companies in the sharing economy „are far from being run from basements“).

⁸ See Florian Saurwein, *Regulatory Choice for Alternative Modes of Regulation: How Context Matters*, 33 LAW & POLICY, 334-366 (2011)

The terms legislator and lawmaker are in the following used interchangeably.

I choose not to take a descriptive, historical approach, which observes politicians as parties of social interactions and is dedicated to analysing their behaviour.⁹ Instead I pursue the normative question how the legislator should react to the current developments. The analysis is not based on a certain jurisdiction but instead consists of general considerations, which can be applied to any jurisdiction.¹⁰

II. UBER: AN EXAMPLE OF THE SHARING ECONOMY

A. UBER'S BUSINESS MODEL

Founded in 2009 in San Francisco by Travis Kalanick, Uber is now the world's largest transportation network company, globally operating in over 260 cities in fifty-five countries.¹¹ Uber offers different services, but for this essay, I confine to discussing UberX and UberPOP.¹² These platforms enable private car owners without a commercial license to offer transportation services to strangers.¹³

UberX and UberPOP can be easily accessed through a smartphone application. A customer downloads the Uber app, supplies his or her credit card information and can

⁹ Such a historical-analytic approach is for instance adopted by GARY D. LIBECAP, *CONTRACTING FOR PROPERTY RIGHTS* 11 (2004).

¹⁰ However, references to specific jurisdiction will be made, where considered instructive.

¹¹ For an overview on Uber's leadership team, see UBER. THE COMPANY, available from: <https://www.uber.com/about>, last accessed: 13.12.2015. The full corporate name is Uber Technologies, Inc., see UBER. LEGAL, available from: <https://www.uber.com/legal/copyright>, last accessed: 09.12.2015. For number of cities that Uber is currently operating in, see Davis, *BOSTON COLLEGE LAW REVIEW*, 1104 (2015).

¹² Exclusions include UberTAXI (for drivers, who own a licence) and UberBLACK (drivers need an insurance and business licence), see Christian Solmecke & Bonny Lengersdorf, *Rechtliche Probleme bei Sharing Economy. Herausforderungen an die Gesetzgebung auf dem Weg in eine geteilte Welt*, 485-556 *MULTIMEDIA UND RECHT*, 496 (2015). See also Schimmeck, Teile & Herrsche. *Ubers globaler Feldzug für die "Sharing economy"* (2015). In China, Uber recently launched uberCOMMUTE, where people can share cars when travelling to and from their job, see UBER. NEWSROOM, *Uber and the American Worker: Remarks from David Plouffe* (posted 03.11.2015), available from: <https://newsroom.uber.com/2015/11/1776>, last accessed: 12.12.2015.

¹³ Drivers are independent operators, who partner with the Uber platform, see Darcy Allen & Chris Berg, *The sharing economy. How over-regulation could destroy an economic revolution*, *INSTITUTE OF PUBLIC AFFAIRS, THE VOICE FOR FREEDOM*, 6 (2014). For Uber's legal policy on permission to allow private car owners to offer transport services, see UBER. LEGAL, *Terms and Conditions* ("2. THE SERVICES"), last updated 08.04.2015, available from: <https://www.uber.com/legal/usa/terms>, last accessed: 12.12.2015.

then request rides.¹⁴ All registered drivers in the area are able to accept these requests.¹⁵ After completing the ride, the customer automatically pays by credit card.¹⁶ Uber charges a commission of around 20 per cent for every successful matching via the app.¹⁷ After the ride, the consumer gives the driver a rating from one to five stars.¹⁸ The requirements for Uber drivers are to be 21 years old, have driver's experience and have a car that is, depending on the city, not older than ten or fifteen years.¹⁹

B. THE MECHANISMS OF SHARING

More and more people are using Uber, and the main reason is simply that it is cheaper than relying on traditional taxicab services or to own a private car.²⁰ The logical question is then, why did this business model emerge just now? And how can Uber afford low rates and thereby achieve such a rapid growth?²¹

¹⁴ See UBER. LEGAL, *Terms and Conditions* ("4. PAYMENT"), last updated 08.04.2015, available from: <https://www.uber.com/legal/usa/terms>, last accessed: 12.12.2015.

¹⁵ See Davis, *BOSTON COLLEGE LAW REVIEW*, 1103 (2015).

¹⁶ See Brishen Rogers, *The Social Costs of Uber*, 82 *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 86-87 (2015); Davis, *BOSTON COLLEGE LAW REVIEW*, 1103 (2015).

¹⁷ See Schimmeck, Teile & Herrsche. *Ubers globaler Feldzug für die "Sharing economy"* (2015).

¹⁸ See UBER. MELBOURNE, *How to Get 5-star Rating?* Available from: <https://drive.uber.com/melbourne/how-can-we-help/how-to-uber/vicquality>, last accessed: 06.12.2015. See also James Cook, *Uber's internal charts show how its driver-rating system actually works* (Business Insider UK, 11.02.2015), available from: <http://uk.businessinsider.com/leaked-charts-show-how-ubers-driver-rating-system-works-2015-2>, last accessed: 10.12.2015 (submitting that an average rating above 4,6 is considered good).

¹⁹ See UBER. BECOME A DRIVER, *What are the requirements to start?* Available from: <https://www.uber.com/driver-jobs>, last accessed: 08.12.2015. See also Solmecke & Lengersdorf, *MULTIMEDIA UND RECHT*, 496 (2015).

²⁰ Other reasons mentioned are of a more idealistic nature, for instance to support sustainable usage of resources or appreciating the community spirit, which is created by sharing economy businesses such as Uber, as will be discussed below, see Part II.B.3.a) and Part IV.C.1. Uber applies a flexible price setting mechanism ("Surge Pricing"), see UBER. HELP, *What is surge pricing?* Available from: <https://help.uber.com/h/6c8065cf-5535-4a8b-9940-d292ffdce119>, last accessed: 07.12.2015. Uber's growing popularity has led to controversies due to the lack of price caps, see Erin Mitchell, *Uber's Loophole in the Regulatory System*, 6 *HOUSTON LAW REVIEW: OFF THE RECORD*, 80 (2015). These practices have been criticized as price gauging, see Davis, *BOSTON COLLEGE LAW REVIEW*, 1105 (2015). Uber has reacted by setting price caps in emergencies, e.g. in the event of natural disasters, see Susanna Kim, *How Uber chooses its surge price cap in emergencies* (abc News, 26.01.2015), available from: <http://abcnews.go.com/Business/uber-chooses-surge-price-cap-emergencies/story?id=28494303>, last accessed: 10.12.2015. The UberX service is approximately 20-50% cheaper than taxicabs, see Allen & Berg, *INSTITUTE OF PUBLIC AFFAIRS, THE VOICE FOR FREEDOM*, 7 (2014).

²¹ For data on Uber's value see above, Fn. 9. For an overview on the business's growth in the UK see Christopher Williams, *Uber reports rapid UK growth* (The Telegraph, 18.10.2015), available from:

The answer is simple: Internet, GPS and smartphones.²² The widespread usage of technology for social communication has tremendously lowered the transaction costs to connect people thereby improving the economic efficiency of peer-to-peer exchange.²³ This decentralisation leads to cost-reduction and is thus a key-factor for the competitiveness of sharing economy businesses like Uber. It is very expensive to run large taxi companies because of the liabilities and the overheads involved with the ownership of cars.²⁴ In contrast, Uber merely acts as an intermediary.²⁵ The company only facilitates the exchange between people and does not own any cars.²⁶ Therefore, Uber requires no capital for investments in its building-up and maintaining its infrastructure.²⁷ Uber also reduces the search costs for finding a ride.²⁸ The Uber platform facilitates personal connection by providing a standard format for exchange and thereby aggregating supply and demand.²⁹ As a result, matching costs for drivers

<http://www.telegraph.co.uk/technology/uber/11937354/Uber-reports-rapid-UK-growth.html>, last accessed: 10.12.2015.

²² See, e.g., Mitchell, *HOUSTON LAW REVIEW: OFF THE RECORD*, 76 (2015). See also Technology Quarterly, *All eyes on the sharing economy* (The Economist, 09.05.2013), available from: <http://www.economist.com/news/technology-quarterly/21572914-collaborative-consumption-technology-makes-it-easier-people-rent-items>, last accessed: 10.12.2015.

²³ Mainly consisting of information, bargaining and enforcement costs, see Allen & Berg, *INSTITUTE OF PUBLIC AFFAIRS, THE VOICE FOR FREEDOM*, 13 (2014). For an in depth-analysis of transaction costs in the sharing economy see Yochai Benkler, *Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production*, 114 *THE YALE LAW JOURNAL*, 306-320 (2004). See further in Bryant Cannon & Hanna Chung, *A framework for designing co-regulation models well-adapted to technology-facilitated sharing economies*, 31 *SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL*, 26 (2015); Ranchordás, *MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY*, 5 (2015); Jordan M. Barry & Paul L. Caron, *Tax Regulation, Transportation Innovation and the Sharing Economy*, 82 *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 4 (2015); Krauss, *SOUTH WESTERN LAW REVIEW*, 367 (2014).

²⁴ See Patrick Spencer, *How the sharing economy creates more efficient markets* (Georgetown Public Policy Reviews, 09.10.2015), available from: <http://gppreview.com/2015/10/09/how-the-sharing-economy-creates-more-efficient-markets>, last accessed: 06.12.2015.

²⁵ See Molly Cohen & Arun Sundararajan, *Self-Regulation and Innovation in the Peer-to-Peer Sharing Economy*, 81 *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 121 (2015); Frontier Economics Bulletin, *Uber regulated? How we should regulate "smartphone" taxi apps*, July 2014, available from: <http://www.frontier-economics.com.au/publications/uber-regulated>, last accessed: 10.12.2015.

²⁶ The fact that sharing economy platforms coordinate rather than produce is regarded as one characteristic feature of sharing economies, see, e.g., Allen & Berg, *INSTITUTE OF PUBLIC AFFAIRS, THE VOICE FOR FREEDOM*, 4 (2014).

²⁷ See Rogers, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 86 (2015) (emphasizing the efficiency of the transportation market created by Uber).

²⁸ See *id.* at 88.

²⁹ See Krauss, *SOUTH WESTERN LAW REVIEW*, 366 (2014).

and riders using Uber are almost non-existent.³⁰ The Uber driver will usually only need a few minutes to arrive at the desired location, while the consumer can observe the car's progress since his smartphone enables him to locate the driver's position.³¹

C. THE CURRENT DEBATE

Since Uber appeared six years ago, there have been vigorous calls for regulation.³² Currently, many jurisdictions are discussing possible legislative response to Uber.³³ Some jurisdictions, such as Washington DC and California have taken action by requiring all transport service drivers to carry a commercial liability insurance.³⁴

Regulating Uber and companies alike is a hot topic amongst scholars as well. There is a wide spectrum of opinions from the academia. Per Cohen & Sundarajan, Allen & Berg, they hold the view that mechanisms of self-regulation render governmental intervention unnecessary because it is already incorporated into some parts of the Uber's business model.³⁵ Per Allen and Berg "the danger of excessive legislation and regulation will absorb the gains yielded by technology improvements, preventing mutually beneficial trade and stifling economy growth"³⁶. Others, such as Mitchell, advocate for simply extending the scope of application of already existing legislation governing traditional taxi industries by absorbing "the same liabilities and legal duties that cab companies are

³⁰ See Allen & Berg, INSTITUTE OF PUBLIC AFFAIRS, THE VOICE FOR FREEDOM, 25 (2014); Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 86 (2015).

³¹ See Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 88 (2015).

³² See, e.g., Andrew Vila and Kevin Gardner, *Bringing Out the Regulatory Wheel Clamps for Uber* (The Wall Street Journal, 27.09.2015), available from: <http://www.wsj.com/articles/bringing-out-the-regulatory-wheel-clamps-for-uber-1443385825>, last accessed: 10.12.2015.

³³ Legislative response includes possible regulations against Uber's competitor Lyft. See *above* Harkins, (Fn. 4)

³⁴ Legislations allowing the ride-sharing platforms to operate while setting certain safety standards have been passed in Washington DC (see Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 93 (2015)) and California. These rules for instance require ride-sharing companies to carry commercial liability insurance, see Mitchell, HOUSTON LAW REVIEW: OFF THE RECORD, 79, 94 (2015). For an overview on the California legislation see Cannon & Chung, SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL, 48-49 (2015); Krauss, SOUTH WESTERN LAW REVIEW, 375-377 (2014); Davis, BOSTON COLLEGE LAW REVIEW, 1112 (2015).

³⁵ Self-regulation is a term that can be defined as the reallocation of regulatory responsibility to parties other than the government, see Cohen & Sundararajan, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 116 (2015). See also Allen & Berg, INSTITUTE OF PUBLIC AFFAIRS, THE VOICE FOR FREEDOM (2014). See also Barry & Caron, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE (2015) (taking a more moderate but still sceptical view on regulation).

³⁶ Allen & Berg, INSTITUTE OF PUBLIC AFFAIRS, THE VOICE FOR FREEDOM, 14 (2014).

subject to under state and federal law³⁷. The most popular viewpoint shared by many academics is that the answer lies somewhere between these extremes and that the challenge thus lies in “finding the right balance of regulatory intervention”³⁸.

III. IDENTIFYING AREAS THAT REQUIRE REGULATION

My objective is to systematically design outlines for what a regulation should look like for a service provider like Uber. This design involves formulating general criteria for taking regulative decisions. From a governance perspective, the concept of regulation refers to the use of legal instruments to implement social and economic policy objectives.³⁹ In particular, regulative tools are aimed at correcting market failures of various kinds.⁴⁰ Hence, in order to decide on the necessity of governmental intervention with regard to a new phenomenon (in our case with regard to Uber) a rational lawmaker has to (1) determine relevant policy objectives; (2) identify interests that could interfere with these objectives and thereby trigger the necessity to intervene; and (3) decide whether traditional regulation is required or whether the industry will be able to solve interest conflicts through alternative regulation.⁴¹ This can be achieved through the

³⁷ Mitchell, HOUSTON LAW REVIEW: OFF THE RECORD, 76 (2015).

³⁸ Cannon & Chung, SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL, 57 (2015). *See further, e.g.*, the concepts of Cohen & Sundararajan, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 119-133 (2015); Daniel E. Rauch & David Schleicher, *Like Uber, But for Local Governmental Policy: The Future of Local Regulation of the 'Sharing Economy'*, GEORGE MASON LAW & ECONOMICS RESEARCH PAPER, 3-7 (2015); Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 85-86 (2015); Ranchordás, MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY, 43-60 (2015); Frontier Economics Bulletin, *Uber regulated? How we should regulate "smartphone" taxi apps*, July 2014, available from: <http://www.frontier-economics.com.au/publications/uber-regulated>, last accessed: 10.12.2015.

³⁹ *See generally* on the concept of governance Mark Bevir, *Governance as Theory, Practice, and Dilemma*, in THE SAGE HANDBOOK OF GOVERNANCE, 1 (Mark Bevir ed. 2011) (broadly defining governance as “new theories and practices of governing and the dilemmas to which they give rise”). *See also* Cohen & Sundararajan, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 119 (2015) (quoting Judge Richard Posner’s more comprehensive definition: “Properly defined, the term refers to taxes and subsidies of all sorts as well as to explicit legislative and administrative controls over rates, entry, and other facets of economic activity.”).

⁴⁰ *See* Marian Döhler, *Regulation*, in THE SAGE HANDBOOK OF GOVERNANCE, 518 (Mark Bevir ed. 2011) (observing that on a more general level, regulation could be regarded as an alternative to public ownership).

⁴¹ I do not claim that the following steps are mandatory for every regulative decision. However, I consider them a useful pattern to address regulative questions and therefore chose to structure this essay accordingly. For a comprehensive overview on different theories and practices of governance *see* THE SAGE HANDBOOK OF GOVERNANCE, 17-367 (Mark Bevir ed. 2011).

mechanisms of self-regulation or co-regulation⁴². With regard to (2), I look at the impact that Uber has on property rights of the parties involved in and of those influenced by the business.⁴³ In this part, I shall provide a detailed analysis with regards to (2) as it has so far found less attention in the academic debate. Issues of public safety and security, insurance coverage and labour protection are explored in less detail because they have been explored in a lot of academic debate surrounding Uber.⁴⁴

The choice of policy objectives largely depends on our social vision of society, which cannot be exhaustively justified by rational means.⁴⁵ However, in modern societies there is a broad agreement that it is the government's responsibility to secure not only economic stability and safety for its citizens but also to work towards certain broadly defined social goals.⁴⁶ Hence, the following analysis is based on the assumption that the government's role is not confined to providing a mere framework for the market to operate.⁴⁷ Instead, it shall protect and secure a person's rights to property, to guarantee fairness, to improve social equality, whilst encouraging economic progress and innovation.⁴⁸

⁴² For a definition of self-regulation see above Fn. 35. Co-regulation generally refers to any involvement of nongovernmental actors in the regulatory process, *see* Saurwein, *LAW & POLICY*, 336 (2011).

⁴³ It is of paramount importance to clearly identify and specify the interests concerned. For this reason, I differentiate between several aspects of Uber's impact on society.

⁴⁴ *See, e.g.*, Rogers, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 90-102 (2015); Davis, *BOSTON COLLEGE LAW REVIEW*, 1097-1142 (2015); Mitchell, *HOUSTON LAW REVIEW: OFF THE RECORD*, 77-95 (2015).

⁴⁵ *See* Joseph William Singer, *The Reliance Interest in Property*, 40 *STANFORD LAW REVIEW*, 627-628 (1988) (identifying three different aspects of a social vision, i.e. (1) our images about the relations among individuals and between individuals and the community, (2) our assessment of a relevant contribution to moral discourse and (3) a normative commitment to a particular form of social life), 628.

⁴⁶ *See, e.g.*, Article 20 of the German Constitution ("Grundgesetz"), which provides for a not only for the rule of law and sovereignty of the people but also for a welfare state. *See also* Christoph Link, *Berichterstattung, in STAATSWECHE IM VERFASSUNGSSTAAT - NACH 40 JAHREN GRUNDGESETZ*, 34-42 (Jörg Ipsen, et al. eds., 1989); JACQUES LENOBLE & MARC MAESSCHALCK, *DEMOCRACY, LAW AND GOVERNANCE*, 2-5 (2010); Frank Michelman, *Democracy and Positive Liberty*, *BOSTON REVIEW*, 3-8 (1996); Stuart A. Scheingold, *Introduction, in LEGALITY AND DEMOCRACY xv-xxiii* (Stuart A. Scheingold ed. 2006).

⁴⁷ The necessity for the state to play a constructive role is also emphasized by YOCHAI BENKLER, *THE WEALTH OF NETWORKS* 16, 20-22 (2006).

⁴⁸ *See generally* Christian Starck, *Der demokratische Verfassungsstaat: Gestalt, Grundlagen, Gefährdungen* (1995).

A. PROPERTY RIGHTS

For the purpose of this essay, property rights are understood broadly. The term shall not only refer to the right to *exclude* others from certain physical objects we own.⁴⁹ I define property rights as a bundle of rights, which are influenced by social relations.⁵⁰ Notably, one of “the sticks in the bundle” is the right to *use* property in certain ways, for instance to invite others to the usage of our property.⁵¹

The following section examines Uber’s impact on existing property rights of different parties: On (1) taxi drivers, on (2) Uber drivers and (3) Uber consumers. I will then proceed to determine whether the said impacts call for intervention.

1. Taxi Drivers

The impact on taxi drivers is a devaluation of their licences through creative destruction. The taxi drivers’ utmost concern is the drop of the value of their licenses. Even though there is a trend towards deregulation, governmental authorities still control and limit the number of taxi licences in many jurisdictions.⁵² As Wyman demonstrates, traditional Taxi driver licences (hereafter as “medallions”) constitute property rights, because medallions can be transferred, leased, or pledged.⁵³ Taxi drivers with medallions have the right to exclude others without medallions from exercising their

⁴⁹ This traditional approach is taken by Harold Demsetz, *Toward a Theory of Property Rights*, 57 THE AMERICAN ECONOMIC REVIEW, 354 (1967). See also Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUMBIA LAW REVIEW, 789 (2001).

⁵⁰ See Shitong Qiao & Frank Upham, *The Evolution of Relational Property Rights: A Case of Chinese Rural Land Reform*, 100 IOWA LAW REVIEW, 2480 (2015) (referring to Singer’s “social relations model”, see Joseph William Singer, *Property and Social Relations: From Title to Entitlement*, in PROPERTY AND VALUES: ALTERNATIVES TO PUBLIC AND PRIVATE OWNERSHIP, 3 (Charles Geisler & Gail Daneker eds., 2000)).

⁵¹ See Qiao & Upham, IOWA LAW REVIEW, 2481 (2015). See also RIFKIN, *The Zero Marginal Cost Society*, 231-233 (2014).

⁵² See Jon-Terje Bekken & Frode Longva, *Trends in taxi regulation*, INSTITUTE OF TRANSPORT ECONOMICS (ASSOCIATION FOR EUROPEAN TRANSPORT) (2004). See also Miriam Katrina Wyman, *Problematic Private Property. The Case of New York Taxicab Medallions*, 30 YALE JOURNAL ON REGULATION, 166 (2013) (comparing the governance level on which such regulation is exercised, mainly relying on Bekken and Longva’s research). For a short overview on the development of taxi regulation in US-cities see Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 87-88 (2015).

⁵³ Wyman’s confines her analysis to the New York concept but her argument is generally applicable. See Wyman, YALE JOURNAL ON REGULATION, 136-137 (2013) (contending that the medallion’s protection by the Taking Clause is not a necessary condition for its qualification as private property).

exclusive right to pick up passengers on the streets.⁵⁴ The appearance of Uber has caused fierce competition in the taxi-market.⁵⁵ In New York, Uber now carries out 13 percent of all hired rides.⁵⁶ This initiated a considerable drop in the taxi licence's value. In August 2015 it was at \$650,000, down nearly 50% compared to the year before.⁵⁷ The substantial loss suffered by drivers of the traditional taxi industry constitutes an interference with the taxi driver's property rights, incorporated in the licence. As a result, Taxi drivers consider it unfair that Uber drivers, while offering similar services as taxi drivers, are not under an obligation to acquire commercial licences.⁵⁸ They have already initiated court cases in several American and European cities.⁵⁹ Claims were mainly based on purported violations of locally applicable competition laws.⁶⁰ Thus, the issue that lies at the heart of these conflicts is in its nature one of property right protection.

Logically, taxi drivers consider it the legislators' responsibilities to protect their licences. However, establishing a government's duty to safeguard interests of a minority group requires justification. I contend that there is no sufficient justification for upholding the protection of cab driver's licences. In this respect, I shall refer mainly to Wyman's study of New York cab driver's medallions, in which she convincingly discards possible attempts to justify a monopoly. Per Wyman, the traditional taxi system

⁵⁴ See *ibid.*

⁵⁵ See Davis, *BOSTON COLLEGE LAW REVIEW*, 1102 (2015).

⁵⁶ See Nina Zipkin, *Uber is Eating Up Taxi rides in New York City* (Entrepreneur, 21.10.2015) available from: <http://www.entrepreneur.com/article/251932>, last accessed: 04.12.2015.

⁵⁷ The price was \$1,3 million in April 2014, dropped to \$900,000 in March 2015, see James Hickmann, *How Uber Is Actually Killing the Value of a New York City Taxi Medallion* (The Street, 26.05.2015), available from: <http://www.thestreet.com/story/13153924/1/how-uber-is-actually-killing-the-value-of-a-new-york-city-taxi-medallion.html>, last accessed: 09.12.2015. It further dropped to \$650,000 in August 2015, see Simon Van Zuylen-Wood, *The Struggles of New York City's Taxi King* (Bloomberg Business, 27.08.2015), available from: <http://www.bloomberg.com/features/2015-taxi-medallion-king>, last accessed: 12.12.2015.

⁵⁸ To acquire a licence, the drivers must prove their driving abilities and satisfy criminal history criteria, see Mitchell, *HOUSTON LAW REVIEW: OFF THE RECORD*, 91 (2015).

⁵⁹ See Ranchordás, *MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY*, 5-7 (2015). For an overview on the suits filed by Uber's competitors see Mitchell, *HOUSTON LAW REVIEW: OFF THE RECORD*, 85-93 (2015).

⁶⁰ See Mitchell, *HOUSTON LAW REVIEW: OFF THE RECORD*, 91 (2015). See also Davis, *BOSTON COLLEGE LAW REVIEW*, 1099 (2015).

does not resolve traffic problems such as congestion and car pollution.⁶¹ To resolve these problems one could introduce congestion charges for all cars, regardless of whether it operates as a taxi-cab, an Uber car or a private car. Studies have even shown that the existence of ride-sharing platform companies leads to a reduction of the number of cars on the streets.⁶² Research on Uber's impact on car purchases is yet to be completed.⁶³ However, many believe that Uber considerably lowers the demand for private cars.⁶⁴

A similar line of argument can be applied with regard to problematic issues of public security and labour protection. Addressing these through upholding a licence monopoly, which completely excludes Uber drivers from the market, is not appropriate. Such an intensive measure goes beyond what is needed to effectively address security concerns. Instead, as will be discussed later in this essay, I propose, where necessary, clear security and insurance standard can be defined for Uber.

Another possible justification could be by lowering enforcement costs for handling traffic offences committed by drivers. One could also argue, that taxi drivers are less likely to commit illegal acts for fear of losing their licence. However, the data evaluated by Wyman shows (at least for the context of New York) that authorities have repeatedly ignored law infringements and revocations of licences are very rare.⁶⁵ This indicates that medallion owner's compliance effect is comparatively low.⁶⁶

⁶¹ See Wyman, *YALE JOURNAL ON REGULATION*, 149 (2013). See also Cohen & Sundararajan, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 117 (2015) (referring to the congestion caused by additional taxicabs to illustrate the concept of negative externalities).

⁶² According to a study by Alix Partners, between 2014 and 2021, about 1.2 million purchases of new vehicles in the US will be replaced by car sharing, see Mark Rogowsky, *Zipcar, Uber And The Beginning Of Trouble For The Auto Industry* (Forbes, 08.02.2015), available from: <http://www.forbes.com/sites/markrogowsky/2014/02/08/viral-marketing-car-sharing-apps-are-beginning-to-infect-auto-sales>, last accessed: 11.12.2015. See also RIFKIN, *The Zero Marginal Cost Society*, 228-231 (2014) (analysing the environmental effects of car-sharing).

⁶³ However, such research projects are on the way, see Fn. 3.

⁶⁴ See, e.g. Rogers, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 90 (2015) (pointing out that "Uber reduces consumers' incentives to purchase automobiles, almost certainly saving them money and reducing environmental harms.").

⁶⁵ See Wyman, *YALE JOURNAL ON REGULATION*, 154-155 (2013).

⁶⁶ See *id.* at 155.

As a result, I believe that there is no practical justification for protecting taxi driver's licences from depreciation caused by Uber drivers.⁶⁷ Instead, the taking of large market shares by Uber constitutes an innovative development that just so happens to affect, or destroys the existing modes of transport service structures.⁶⁸ Uber is a "Creative Destruction" to the traditional car-hiring business.⁶⁹ Per Schumpeter, creative destructions are inherently necessary in a capitalist economy to achieve progress.⁷⁰

2. Uber Drivers

The impact to Uber drivers is that there is an increasingly blurred line between personal and commercial property. It has been recognized in the academia that private property rights are generally defined as personal used and commercial property.⁷¹ From a legal perspective, the division is relevant when legislation provides special protection to private personal property used for the purpose of enjoyment, while putting stricter

⁶⁷ See Frontier Economics Bulletin, *Uber regulated? How we should regulate "smartphone" taxi apps*, July 2014, available from: <http://www.frontier-economics.com.au/publications/uber-regulated>, last accessed: 10.12.2015 („Existing taxi regulation appears to protect the interests of those in the industry, not those reliant on taxi services. Apps only seem to be vilified because they threaten to break this entrenched order down.”).

⁶⁸ For a comprehensive study on the relationship between innovation and sharing economy practices see Ranchordás, MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY, 13-27 (2015). Ranchordás defines innovation as “the ability to take new ideas and translate them into commercial or effective social outcomes by using new processes, products, or services.” (quoting Richard Bendis & Ethan Byler, *Creating a National Innovation Framework*, SCIENCE PROGRESS, 1,7 (2009).

⁶⁹ See Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 86 (2015) (describing the way that Uber transforms the car-hire sector as “creative destruction”).

⁷⁰ See JOSEPH SCHUMPETER, CAPITALISM, SOCIALISM AND DEMOCRACY 82-85 (Harper, 1975, originally published 1942). For an analysis on how the process of creative construction promotes sustainability see KLAUS FICHTER, *NACHHALTIGKEIT: MOTOR FÜR SCHÖPFERISCHE ZERSTÖRUNG? IN SOZIALE INNOVATION. AUF DEM WEG ZU EINEM POSTINDUSTRIELLEN INNOVATIONSPARADIGMA* (JÜRGEN HOWALDT & HEIKE JACOBSEN EDS., 2010).

⁷¹ Private properties are also referred to as consumption property, see Shelly Kreiczer-Levy, *Consumption Property in the Sharing Economy*, ACADEMIC CENTER OF LAW AND BUSINESS, 1 (2014). For Commercial property, see *id.* at 2-3. The following thoughts take up on Levy's analysis. She focuses on „physical goods that are privately owned and purchased for individual use, and then shared in exchange for monetary compensation in peer-to-peer markets“ see *id.* at 15. Considering this definition, one might point out that her argument is not applicable to Uber, which focuses on *services* rather *physical goods*. However, even though the Uber driver acts as a service provider, the passenger enjoys the benefits of the car as an asset. Therefore, Levy's concept of consumption property can be applied to Uber. See also Cohen & Sundararajan, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 116 (2015) (not focussing on property law but rather emphasizing the sharing economy „blurs the line between personal and professional in the provision of commercial services“).

obligations on commercial properties used for profit.⁷² An illustrative example is the privately owned house or flat, which for example, under the German constitution enjoys a high degree of protection.⁷³ Legally, an intrusion to a private personal property without the owner's consent is generally difficult to justify. Further, commercial property is frequently subject to higher taxes.⁷⁴ The rationale behind such preferential legislative treatment is that private property for personal use makes a stronger contribution to a person's intimacy, privacy and autonomy.⁷⁵

Uber drivers use their cars both for personal purposes and for commercially providing transportation services to complete strangers, thereby calling the traditional distinction between personal and commercial property into question. That being said, Uber is not a completely new phenomenon to the sharing economy,⁷⁶ it has been common practice for employees to use their company car for private purposes, rendering a clear distinction between privately used and commercial property difficult. However, we must still recognize that businesses like Uber accelerate the dynamic of this development: Almost any person at age can choose virtually overnight to temporarily turn his car, i.e. private property, into a commercial asset.⁷⁷

Regarding Uber drivers, the property rights effects are largely positive, both for the individual driver and for the whole of society. The individual Uber driver does not have to make risky investments in machinery or other expensive equipment but can operate

⁷² Areas in which privately used property and consumption property are treated differently include zoning, criminal procedure, discrimination, foreclosure and bankruptcy, taxes and eminent domain, *see* Kreiczer-Levy, ACADEMIC CENTER OF LAW AND BUSINESS, 1 (2014).

⁷³ This example is used by *id.* at 9. *See, e.g.*, Art. 13 of the German Constitution, which stipulates that the personal apartment shall be generally inviolable. Intrusions require a judicial order and strong suspicion of a crime committed.

⁷⁴ German tax law for instance imposes a much higher tax on transactions of commercial real estate than on private real estate, *see* Deutsche Presseagentur (dpa), *Immobilienverkauf: Wann müssen Steuern gezahlt werden?* (Das offizielle Hauptstadtportal, 26.07.2013), available from: <https://www.berlin.de/special/finanzen-und-recht/steuern/3117035-1657471-immobilienverkauf-wann-muessen-steuern-g.html>, last accessed: 12.12.2015.

⁷⁵ *See* Kreiczer-Levy, ACADEMIC CENTER OF LAW AND BUSINESS, 4 (2014).

⁷⁶ *See* Barry & Caron, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 70 (2015) (observing that the sharing economy is not a new phenomenon).

⁷⁷ *See* Jenny Kassan & Janelle Orsi, *The Legal Landscape of the Sharing Economy*, 27 JOURNAL OF ENVIRONMENTAL LAW AND LITIGATION, 7 (2012).

his or her “Nano-enterprise” and earn additional income.⁷⁸ Uber allows drivers to effectively use the excess capacity of their cars by providing rides to other people.⁷⁹ The use of property beyond the narrow traditional categories thus encourages a more sustainable resource utilisation.⁸⁰ In my opinion, these positive effects indicate that legislative intervention is not desirable.

That being said, since the distinction between personal and commercial property is blurred, the question arises whether the regulator needs to provide a legal definition for such multifunctional property to be used as a starting point for assigning a certain level of protection. The introduction of new property categories is advocated by Levy, who holds that “distinguishing among different assets based on their contribution to autonomy, dignity and freedom is what typifies a rich and nuanced legal system.”⁸¹ Yet, I contend that introducing additional categories cannot solve possible uncertainties caused by the blurring of traditional property categories. The sharing economy calls for flexible solutions. A strict distinction based on categories of property rights, is subject to a *numerus clausus*, i.e. a limited number of types of rights).⁸² Numerus Clausus is by definition inflexible, and hence unable to adapt to the shifting ground presented by the sharing economy.⁸³ A mere re-design of property therefore lack the capacity to satisfy the needs of the constantly changing sharing economy.

⁷⁸ For risky investments, *see id.* at 7 (labelling the sharing economy a “Post-Wall Street Economy”). For “nano-enterprise” *see id.* at 8. For additional income, *see* Ranchordás, MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY, 5 (2015). Some point out that the emerge of sharing economy company is attached to the financial crisis, which has caused numerous job losses and therefore encouraged the search for alternative sources of income, *see* Technology Quarterly, *All eyes on the sharing economy* (The Economist, 09.05.2013), available from: <http://www.economist.com/news/technology-quarterly/21572914-collaborative-consumption-technology-makes-it-easier-people-rent-items>, last accessed: 10.12.2015.

⁷⁹ *See* Benkler, THE YALE LAW JOURNAL, 296-304 (2004) (explaining that people usually “overinvest” in cars in the sense that they cannot exploit the car’s whole capacity. This excess capacity makes the car a “shareable good”).

⁸⁰ *See, e.g.*, Krecizer-Levy, ACADEMIC CENTER OF LAW AND BUSINESS, 12 (2014); Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 90 (2015); Allen & Berg, INSTITUTE OF PUBLIC AFFAIRS, THE VOICE FOR FREEDOM, 13 (2014); Cannon & Chung, SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL, 31 (2015); Ranchordás, MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY, 46 (2015).

⁸¹ Krecizer-Levy, ACADEMIC CENTER OF LAW AND BUSINESS, 5 (2014).

⁸² *See generally* on the Numerus Clausus Principle Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 THE YALE LAW JOURNAL (2000).

⁸³ The difficulties in predicting the sharing economy’s development is emphasized by Barry & Caron, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 75 (2015). *See also* Krauss, SOUTH WESTERN

Thus, I propose a context-specific approach that promises to provide better adapted legal solutions. Instead of imposing law-made categories, which are bound to fall short in capturing all real-life phenomena, the regulator should concentrate on the *specific usage* of assets in different circumstances. After all, the main characteristic of the technological developments of the network society is the widened scope of possibilities for *usage* of property.⁸⁴

3. Consumers

The sharing economy's major impact on consumer's property rights is that it renders ownership less important through the notion of "access trumps ownership".⁸⁵ As regards to Uber, one could object that the business model does not incorporate a shift from ownership to access. For from the consumer's perspective, the usage of Uber substitutes taxi-rides, which is not a form of ownership but regularly co-exists with privately owned cars. However, it seems likely that the availability of Uber's affordable and flexible services influences people in their decision not to purchase a car.⁸⁶ Hence, Uber indeed embodies the "access revolution"⁸⁷ associated with the sharing economy.

From a social science perspective, this development is particularly noteworthy against the background that the private car was traditionally regarded as a property item of high importance, often constituting the most valuable piece of private property and symbolizing both status and freedom.⁸⁸ The reason why people choose to give up on

LAW REVIEW, 373 (2014) (arguing that flexible tools are needed to protect "emerging markets (...) in the nascent stages of development") and Ranchordás, MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY, 9 (2015) (establishing that Uber is an innovative business and as such a "moving and evolving target").

⁸⁴ This can be regarded as an example of the phenomenon described by Libecap, who in his research focuses on describing how changes in production technology can change the nature of property rights, see LIBECAP, Contracting for Property Rights, 16 (2004).

⁸⁵ Lisa Gansky, *The Sharing Economy: Access Trumps Ownership* (Policy Dialogue on Entrepreneurship, 29.06.2015), available from: <http://www.kauffman.org/blogs/policy-dialogue/2015/june/the-sharing-economy-access-trumps-ownership>, last accessed: 09.12.2015.

⁸⁶ See above Fn. 3.

⁸⁷ Kreitzer-Levy, ACADEMIC CENTER OF LAW AND BUSINESS, 7 (2014).

⁸⁸ See RIFKIN, *The Zero Marginal Cost Society*, 225 (2014) (stating that: „If private property is the defining characteristic of a capitalist system, then the privately owned automobile is the signature item.“).

The emphasis on access rather than ownership is regularly pointed out when analysing property structure in the sharing economy, see, e.g., Kassan & Orsi, JOURNAL OF ENVIRONMENTAL LAW AND LITIGATION, 4-5 (2012) (observing "the explosion of an access economy"). See also Ranchordás, MINNESOTA

ownership, despite the prestige attached to it, is often simply that other means of transport are less expensive. However, research also indicates that people are “letting go of ownership” because it fits their values.⁸⁹ As mentioned above, the mechanisms of sharing provide environmental benefits.⁹⁰ Thus those who are environmentally conscious naturally prefer Uber over taxis, and to own a car. In addition, there are social aspects to the Uber model. People get to meet members from their community and engage in conversations throughout their ride.⁹¹ This can be an enriching experience and may lead to a greater cohesion and empowerment within communities.⁹² Other benefits associated with Uber are the opening up of parking spaces for other uses and a reduction of drunk driving.⁹³

The positive impacts for drivers are mirrored on the consumer’s side and render restrictive regulative intervention unnecessary. On the contrary, considering the environmental and social effects, the question arises whether such positive outcomes justify incentive regulation aimed at enhancing developments of the sharing economy.⁹⁴ This could for instance be achieved by subsidising the operation of sharing platforms or by granting tax concessions to transactions within the sharing economy. I consider specifically tailored incentive regulation to be currently unnecessary. The sharing economy is growing rapidly.⁹⁵ It is a complex momentum that legislators should not interfere with. However, the fact that Uber is enhancing the protection of common resources may serve as a reason for not imposing certain taxes to Uber drivers.⁹⁶

JOURNAL OF LAW, SCIENCE & TECHNOLOGY, 5 (2015); Kurt Matzler, et al., *Adapting to the Sharing Economy*, MITSLOAN MANAGEMENT REVIEW (2015).

⁸⁹ For “letting go of ownership”, see RIFKIN, *The Zero Marginal Cost Society*, 231 (2014). On fitting their values, see KASSAN & ORSI, *JOURNAL OF ENVIRONMENTAL LAW AND LITIGATION*, 12 (2012) (terming the collaboration within the sharing economy as “the New American Dream”). See also RANCHORDÁS, *MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY*, 5 (2015).

⁹⁰ As regards academic studies on Uber’s environmental impact see above Fn. 3.

⁹¹ See RANCHORDÁS, *MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY*, 5 (2015). 16.

⁹² See *id.* at 50.

⁹³ See ROGERS, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 90-91 (2015).

⁹⁴ An overview on the concept of incentive regulation (“Anreizregulierung“ in German) is provided by ROLAND BROEMEL, *STRATEGISCHES VERHALTEN IN DER REGULIERUNG*, 234-248 (2010).

⁹⁵ According to estimates by Pricewaterhouse Coopers, the value of the five main sharing economy sectors will rise up to \$335 billion by 2025, see pwc, *The sharing economy – sizing the revenue opportunity*, available from: <http://www.pwc.co.uk/issues/megatrends/collisions/sharingeconomy/the-sharing-economy-sizing-the-revenue-opportunity.html>, last accessed: 08.12.2015.

⁹⁶ For an in-depth analysis of tax regulation on the sharing economy see BARRY & CARON, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 69-84 (2015).

Legislators can rely on such benefits in order to justify that seemingly unequal tax standards do not constitute unfair preferential treatment of Uber in comparison to the traditional taxi industry.⁹⁷

B. SAFETY AND SECURITY

1. Uber's Impact on the Considerable Risks for Personal Safety

Apart from the general risk attached to participating in traffic, there are additional specific dangers inherent to the ride service business. Uber drivers need to communicate with their passengers during the transport in order to determine the desired location. Uber also provides drivers with an incentive to operate their smartphone while driving. On New Year's Eve 2014, an Uber driver, who was presumably momentarily distracted by operating the Uber app, killed a 9 year-old girl.⁹⁸ This incident gave rise to a heated discussion on Uber's safety measures. Safety risks are indisputably an issue with regard to transportation companies. Car accidents may involve irreversible physical injuries or even lead to death of passengers. Also, passengers stay in a vehicle with the driver, who is a stranger to them. Hence, they are easy victims to assaults.⁹⁹ This risk coincides with empirical studies, of which Uber drivers have repeatedly been reported to assault passengers.¹⁰⁰

⁹⁷ Uber consist of a network of subsidiaries outside the U.S., which constitutes a corporate structure that allows minimizing taxes. Such structure is possible as Uber's value largely lies in its intellectual property, *see* Brian O'Keefe and Marty Jones, *How Uber plays the tax shell game* (Fortune, 22.10.2015), available from: <http://fortune.com/2015/10/22/uber-tax-shell>, last accessed: 08.12.2015.

⁹⁸ *See* Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 92 (2015); Davis, BOSTON COLLEGE LAW REVIEW, 1097 (2015).

⁹⁹ Estimates for taxi drivers suggest that the occupational violence is at up to 15 times of that of other occupations, *see* Frontier Economics Bulletin, *Uber regulated? How we should regulate "smartphone" taxi apps*, July 2014, available from: <http://www.frontier-economics.com.au/publications/uber-regulated>, last accessed: 10.12.2015 (citing Duncan Chappell & Vittorio Di Martino, *Violence at Work*, INTERNATIONAL LABOUR OFFICE, GENEVA (1998)).

¹⁰⁰ *See* Mitchell, HOUSTON LAW REVIEW: OFF THE RECORD, 77 (2015); Nick Judd, *A Recent History of Uber: Lobbying, Lawsuits and a Scuffle* (VICE, 18 July 2014) available from: <http://www.vice.com/read/a-recent-history-of-uber-lobbying-lawsuits-and-a-scuffle-718>, last accessed: 01.12. 2015.

2. Required Intervention: Preventive Screening and Continuous Monitoring

Working towards public safety and security is a government's key responsibility.¹⁰¹ This is especially true where legal interests of great importance are at stake.¹⁰² This includes the right to physical integrity, which enjoys a high level of protection under most jurisdictions. Even though legislators lack the capacity to completely rule out the possibility of accidents, they have an obligation to make efforts to effectively reduce the risks.

A decrease in risks for passengers can be achieved if mandatory background checks as well as certain skill requirements are made a prerequisite for the approval of Uber drivers. The background checks should include an investigation in the criminal record, especially on road traffic offences. Regarding skills, a minimum level of experience should be required and regularly checks on driving skills ensured. Moreover, Uber drivers' performances should be subjected to constant monitoring and review. The monitoring results should be transparently made available to consumers in order to facilitate an evaluation of the risk they are entering into, thereby enabling them to make an informed decision. Such measures are to some extent already in place.¹⁰³

C. INSURANCE COVERAGE

1. Impact: Underinsurance

When the New Year's incident happened, Uber's commercial insurance did not cover the incident's consequences, the reason being that the driver was not carrying out a ride-

¹⁰¹ See generally Christoph Link, *Berichterstattung*, in STAATSWECHE IM VERFASSUNGSSTAAT - NACH 40 JAHREN GRUNDGESETZ, 27-33 (Jörg Ipsen, et al. eds., 1989).

¹⁰² With regard to constitutional rights the following general rule can be formulated: The greater the importance attached to a certain right, the higher are the efforts required by the legislator to protect this right, see ROBERT ALEXY, *THEORIE DER GRUNDRECHTE*, 146 (3 ed. 1996).

¹⁰³ Uber for instance requires checks on criminal and driving history, see Frontier Economics Bulletin, *Uber regulated? How we should regulate "smartphone" taxi apps*, July 2014, available from: <http://www.frontier-economics.com.au/publications/uber-regulated>, last accessed: 10.12.2015. For an overview on Uber's safety measures see UBER. NEWSROOM. *Details on Safety*, available from: <http://newsroom.uber.com/2015/07/details-on-safety>, last accessed: 11.12.2015. See also UBER. BECOME A DRIVER, *What are the requirements to start?* Available from: <https://www.uber.com/driver-jobs>, last accessed: 08.12.2015.

service at that time.¹⁰⁴ The issues of insurance are closely related to that of public safety, since insurance issues arise after an accident has occurred. The Uber driver, the passenger or a third party might experience a loss and the question arises, whose insurance will cover for such a loss. Since most insurances distinguish between private and commercial use, a driver's private car insurance will usually not cover commercial activities.¹⁰⁵ Hence, underinsurance can constitute a serious problem for third parties, but also for drivers and passengers.

2. Required Intervention: Minimum Insurance and Transparency

Considering the particular risks inherent in the transportation business, *third parties* affected by Uber drivers deserve a solvent creditor. Hence, Uber should be required to put in place a commercial insurance, to primarily covering the negative consequences of driver's tortious actions. A commercial insurance is a primary insurance that covers losses regardless of whether a driver's personal insurance also covers the risk in question.¹⁰⁶

With regard to losses experienced by Uber drivers and Uber consumers, the assessment is more difficult. One could argue that the parties themselves do not deserve any commercial insurance protection by Uber, as they entered into the ride-sharing contract voluntarily, thereby accepting the risk of not being sufficiently insured. However, this view of a fully informed and rational individual has been discarded by behavioural economics, incorporating psychological insights into studying decision-making.¹⁰⁷ In the case of Uber market failures are likely to occur. Consumers, who are new to the

¹⁰⁴ See Ben Popper, *When an Uber driver kills someone, who is responsible?* (The Verge, 28.01.2015), available from: <http://www.theverge.com/2014/1/28/5350660/lawsuit-uber-accident-death-girl-liability-insurance>, last accessed: 11.12.2015; Rogers, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 92 (2015); Davis, *BOSTON COLLEGE LAW REVIEW*, 1097 (2015).

¹⁰⁵ See Davis, *BOSTON COLLEGE LAW REVIEW*, 1109 (2015). See also Ron Lieber, *The Question of Coverage for Ride Service Drivers* (The New York Times, 05.09.2014), available from: http://www.nytimes.com/2014/09/06/your-money/auto-insurance/offloading-the-risk-in-renting-a-car-ride.html?_r=0, last accessed: 11.12.2015.

¹⁰⁶ See Ellen Huet, *New Laws Push Uber And Lyft To Bump Up Insurance Coverage, But A Collision Gap Remains* (Forbes, 01.07.2015), available from: <http://www.forbes.com/sites/ellenhuet/2015/07/01/new-laws-push-uber-and-lyft-to-bump-up-insurance-coverage-but-a-collision-gap-remains>, last accessed: 12.12.2015.

¹⁰⁷ See generally PETE LUNN, *REGULATORY POLICY AND BEHAVIOURAL ECONOMICS*, 19 (OECD 2014) (providing insights on how findings of behavioural studies could and should influence regulatory policy).

network transportation market, will regularly underestimate their risk-exposure and consequently demand insurance measures, which are below the optimal level.¹⁰⁸ Uber drivers on the other hand do not have sufficient incentive to address such externalities.¹⁰⁹

I hold the view that the legislator has the responsibility to balance these externalities. Taking into account that a car accident can lead to massive damage in property but also physical injury, there should be at least a minimum requirement for Uber to cover for such losses.¹¹⁰ Also, the insurance policies in place must be made transparent for both drivers and consumers.¹¹¹

D. LABOUR PROTECTION

Uber drivers are considered self-employed entrepreneurs and labour protection laws therefore do not apply.¹¹² In particular, drivers do not enjoy minimum wages, minimum hours¹¹³ or representation by trade unions.¹¹⁴ Hence, an effective labour protection is not available.

Generally, I concur with Mitchel in regarding minimum wage and work hours restrictions as beneficial to the health and success of society.¹¹⁵ With regard to issues of labour protection, it is important to keep in mind that many drivers do not work full-time but rather use Uber as a possibility to receive additional income. Since Uber in this

¹⁰⁸ See Cannon & Chung, SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL, 34 (2015). Hence, the underinsurance can be conceptualized as a negative externality.

¹⁰⁹ This „incentive gap“ describes the insufficient natural incentive that prevents drivers, i.e. inexperienced market participants, to create a framework of safety management and to correct externalities, *see id.* at 35.

¹¹⁰ A practical solution might be the provision of the new California Law (*see above* Fn. 43) according to which Uber's liability insurance coverage must be primary, *see* Ellen Huet, *New Laws Push Uber And Lyft To Bump Up Insurance Coverage, But A Collision Gap Remains* (Forbes, 01.07.2015), available from: <http://www.forbes.com/sites/ellenhuet/2015/07/01/new-laws-push-uber-and-lyft-to-bump-up-insurance-coverage-but-a-collision-gap-remains>, last accessed: 12.12.2015.

¹¹¹ See Mitchell, HOUSTON LAW REVIEW: OFF THE RECORD, 79-80 (2015).

¹¹² See Avi Asher-Schapiro, *Against Sharing* (Jacobin, 14.09.2014), available from: <https://www.jacobinmag.com/2014/09/against-sharing>, last accessed: 10.12.2015. See also Davis, BOSTON COLLEGE LAW REVIEW, 1105 (2015).

¹¹³ See Mitchell, HOUSTON LAW REVIEW: OFF THE RECORD, 77 (2015).

¹¹⁴ Schimmeck, Teile & Herrsche. *Ubers globaler Feldzug für die “Sharing economy”* (2015).

¹¹⁵ See Mitchell, HOUSTON LAW REVIEW: OFF THE RECORD, 83 (2015).

respect has to some extent created a new market, it is questionable whether traditional labour protection standards should apply or whether instead specific standards have to be developed.¹¹⁶

Research suggests that sharing economy platforms disproportionately benefit those, whose income is below median.¹¹⁷ Hence, I hold the view that introducing a minimum wage or minimum hours would ultimately have counterproductive effects for the parties involved. Also, the representation by trade unions is hardly compatible with the high fluctuation and different level of driver's engagement in Uber's business. Instead, loose and flexible forms of organisation better serve Uber driver's purposes. Such situation-based associations have already appeared in some cities in response to the planned introduction of specific policies by Uber.¹¹⁸

IV. ASSESSING THE SUITABILITY OF CO-REGULATION

There are different ways in which government and industry can share the capacity to design rules: The state can lend authority via formal approval, direct control, accreditation of organisations and norms.¹¹⁹ Regardless of the approach taken, it is crucial to provide a clear and detailed distribution of the parties responsibilities.¹²⁰ Why can such a co-regulation approach be preferable over top-down regulation? Industries are their own business's insiders and know the processes and requirements of their working environment best.¹²¹ Hence, management failure and misallocation of resources are less likely if the industries themselves are involved in designing rules. Collaborative arrangements often lead to well functioning mechanisms of enforcement and compliance.¹²²

¹¹⁶ On Uber creating a new market, *see* Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 98 (2015). *See also* Ranchordás, MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY, 53 (2015).

¹¹⁷ *See* Cohen & Sundararajan, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 129 (2015).

¹¹⁸ E.g. when the Uber announced plans to require UberBlack drivers to accept a certain amount of lower-cost UberX services, *see* Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 99 (2015).

¹¹⁹ *See generally* Lisa Blomgren Bingham, *Collaborative Governance*, in THE SAGE HANDBOOK OF GOVERNANCE, 386-394 (Mark Bevir ed. 2011). *See also* Cohen & Sundararajan, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 123-125 (2015); Saurwein, LAW & POLICY, 351 (2011)

¹²⁰ *See* Saurwein, LAW & POLICY, 352 (2011).

¹²¹ *See* Cannon & Chung, SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL, 59 (2015) (submitting that co-regulation furthermore fosters accountability and responsibility).

¹²² *See* Cohen & Sundararajan, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 125-127 (2015).

But is it not common sense that for rules to be followed, there needs to be an external authority that convincingly imposes a threat of negative consequences if norms are not adhered to? What would otherwise prevent the industry from just working towards its own profits and ignoring e.g. the needs of consumer protection? Ostrom's studies have demonstrated that a top-down approach of governance is not the sole way to managing regulative challenges.¹²³ Following her, scholars such as Saurwein examined the question under which circumstances elements of self-regulation can be successful and how non-compliance in such settings can be avoided.¹²⁴ I contend that governments should formally lend the authority to Uber to establish a framework of rules, covering the areas mentioned above. Uber shall also be responsible for the enforcement of such rules.

Building on Saurwein's approach to alternative modes of regulation, I endeavour to explain why the approach of co-regulation is suitable for Uber. Drawing on theoretical as well as empirical regulation and governance research, Saurwein identifies "contextual factors".¹²⁵ Contextual factors can be used to assess how well a certain industry would perform under alternative regulation.¹²⁶ Cannon and Chung have examined the model's *general* capacity to help developing regulative solutions to challenges of the sharing economy.¹²⁷ Considering Saurwein's as well as Cannon and

¹²³ See ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* (1990). Examples of early self-regulatory organizations are also provided by Cohen & Sundararajan, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 124-125 (2015).

¹²⁴ See *generally* Saurwein, *LAW & POLICY*, 339-342 (2011) (distinguishing economic, institutional/organisational and macro systemic approaches to assess alternative regulatory agreements).

¹²⁵ See *id.* at 341 (drawing a distinction between "influences by the specific organizational design of a regulatory entity" (institutional/organizational success factors) on the one hand and the characteristics of the regulatory environment ("enabling contextual factors") on the other hand. This distinction is however not substantial for this essay's purposes and will therefore not be further explored).

¹²⁶ See *id.* at 356.

¹²⁷ See Cannon & Chung, *SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL*, 61-91 (2015) (defining as their objective to "identify a framework for analysing how a co-regulatory scheme that can effectively complement the inhering attributes of the sharing economies being regulated to improve effectiveness, the optimal level of protection of public interests over interest groups, and cost-effective feasibility").

A similar approach is also taken by Cohen & Sundararajan, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 129-133 (2015). The authors advocate *self*-regulatory (instead of *co*-regulatory) approaches, defining self-regulation as "the reallocation of regulatory responsibility to parties other than the government" (see *id.* at 116). Despite this difference in terminology, similarities can be observed with regard to the content of concepts. Hence, this essay will also frequently refer to Cohen & Sundararajan's approach.

Chung's work, this essay's contribution is to apply the factors to Uber as one *specific example* of the sharing economy.

Before I begin the assessment, some remarks on methodology shall provide clarification. Saurwein's factors are part of an abstract framework designed to be applicable for various industries.¹²⁸ So it differs in relevance when assessing Uber. In the following, only those factors of particular interest to Uber shall be addressed. This choice concurs with Saurwein's approach, for he too emphasizes the importance of considering an industry's specific institutional design when making an assessment.¹²⁹

A. THE ECONOMIC BENEFITS AND REPUTATIONAL SENSITIVITY

According to Saurwein, co-regulation is an adequate model if the industry receives economic benefits from the regulation, i.e. gains from the regulation outweigh the costs of developing and implementing the rules.¹³⁰ Economic gains will arise, if the industry strongly relies on its reputation and if malpractices are likely to be detected.¹³¹ In such a setting, the industry has a strong incentive to voluntarily adopt preventive measures in order to avoid media scandals, potentially resulting in tremendous losses.¹³² This impact is further reinforced, where the industry supports certain public policy objectives to enhance a positive corporate image.¹³³

¹²⁸ See Saurwein, *LAW & POLICY*, 334 (2011) (clarifying that „this article identifies contextual factors that should be included in any effort to predict when alternative regulatory arrangements are likely to emerge and to be effective.“).

¹²⁹ *Id.* at 341.

¹³⁰ See *id.* at 342. See also Cannon & Chung, *SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL*, 61-66 (2015); Cohen & Sundararajan, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 129-130 (2015).

¹³¹ See Saurwein, *LAW & POLICY*, 343 (2011).

¹³² See *id.* at 342. See also Cannon & Chung, *SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL*, 66-69 (2015). The importance of reputation is also emphasized by Cohen & Sundararajan, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 128 (2015).

¹³³ See Saurwein, *LAW & POLICY*, 349 (2011) (classifying the “industry culture” as a separate assessment factor). See also Cannon & Chung, *SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL*, 87-89 (2015).

Let us now apply these considerations to our case example. For Uber, reputation clearly matters¹³⁴: Uber purports a business image of being close and connected to its customers, while embracing creative ideas and team-spirit. As mentioned above, many people choose Uber's services not only because it is the cheaper option, but because they *like* the platform. They like that it is innovative, that it is part of a big, promising movement, allowing them to contribute to environmental protection and at the same time getting acquainted to courteous drivers.¹³⁵ To say it with the words of Uber's spokesman Lane Kasselmann, "Uber means: better, best, above average. That's what our product is: It's better than the alternative."¹³⁶

But the business might all too easily lose its *ubercool* image once bad publicity dominates the news. And chances are high that any misstep will make it into headlines: due to its economic and innovative power, Uber is a hot topic for journalists all over the world. Apart from the media's genuine interest in Uber, one has to consider Uber's natural enemies.¹³⁷ The taxi drivers will make sure that news agencies acquire immediate knowledge of Uber's lapses.¹³⁸

These considerations strongly support the assumption that Uber as a reputational sensitive business will voluntarily impose guidelines in order to protect or even enhance its reputation.¹³⁹ In fact, there have already been several examples for such deliberate initiative in Uber's comparatively short business history. First of all, there is the tool of consumer-evaluation.¹⁴⁰ Uber offers the five star rating system, through which

¹³⁴ See, e.g., Frontier Economics Bulletin, *Uber regulated? How we should regulate "smartphone" taxi apps*, July 2014, available from: <http://www.frontier-economics.com.au/publications/uber-regulated>, last accessed: 10.12.2015.

¹³⁵ See Ranchordás, MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY, 9 (2015); Krauss, SOUTH WESTERN LAW REVIEW, 365 (2014) (arguing that "although a few people may prefer typewriters to computers or pagers to cell phones, mostly everyone loves new technology").

¹³⁶ Schimmeck, Teile & Herrsche. *Ubers globaler Feldzug für die "Sharing economy"* (2015).

¹³⁷ The connection between a risk of public campaigns and reputational sensitivity is also drawn by Saurwein, LAW & POLICY, 343 (2011). Saurwein focuses on NGO campaigns. However, there is reason to believe that the effects of campaigns opened by taxi drivers would be similar.

¹³⁸ See Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 93 (2015) (observing that „any rash of accidents (...) will create an opening for Uber's competitors“).

¹³⁹ See *id.* at 93 (drawing the conclusion that voluntary measures are likely to be adopted). See also Davis, BOSTON COLLEGE LAW REVIEW, 1100 (2015) (pointing out that it is in the Transportation Network Companies's best interest to address insurance gaps).

¹⁴⁰ Such rating systems are an important feature of most sharing economy business, see Cannon & Chung, SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL, 30 (2015).

consumers can evaluate drivers with one to five stars after a ride.¹⁴¹ By being able to see a driver's rating record, a consumer is enabled to make an informed decision on whether to use Uber's service at all and which driver to choose.¹⁴² Another concern is possible insurance gaps, as mentioned above. After the death of the girl, Uber, responding to the public outcries, introduced insurance coverage for ride-sharing drivers.¹⁴³ Whether or not this insurance policy is indeed sufficient however remains controversial.¹⁴⁴ An analysis of highly complex insurance questions goes beyond the scope of this essay. Instead, the developments described shall merely shed light on the fact that Uber, as a result from its reputational sensitivity, voluntarily and flexibly tries to work out solutions for upcoming problems.

Due to the use of digital tools inherent in the business's operation, Uber is able to design and enforce rules at a low cost. Through the platform, Uber controls the demand for the drivers and can in cases of incompliance disconnect them without suffering high transaction costs.¹⁴⁵ Hence, the benefits of rules on safety and insurance are likely to outweigh the implementation costs.

¹⁴¹ See above Fn. 25.

¹⁴² This constitutes a decisive distinction to the traditional taxi market, where customers will rarely use the same taxi twice and therefore cannot punish an operator for bad performance, see Frontier Economics Bulletin, *Uber regulated? How we should regulate "smartphone" taxi apps*, July 2014, available from: <http://www.frontier-economics.com.au/publications/uber-regulated>, last accessed: 10.12.2015.

This tool however also raises concerns: Some fear that consumers might give bad reviews to minority drivers, others that the rating system leads to "emotional labour", i.e. drivers forced to establish "micro-relationships" with the customer to make them feel good, see Rogers, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 97 (2015).

¹⁴³ Due to different local legal frameworks (for the California Law, see above Fn. 43), Uber maintains different insurance policies for different states, see Zara Rahim, UBER. NEWSROOM, *Certificates of Insurance – U.S. Ridesharing* (11.01.2015), available from: <http://newsroom.uber.com/2015/01/certificates-of-insurance-u-s-ridesharing>, last accessed: 12.12.2015 (providing an overview on the insurance policies in different states).

¹⁴⁴ See Davis, BOSTON COLLEGE LAW REVIEW, 1107-1110 (2015) (arguing that it remains uncertain if there is sufficient coverage for the drivers themselves and discussing several more possible insurance gaps).

¹⁴⁵ See Cohen & Sundararajan, THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE, 130 (2015). Other costs, such as for safety checks on vehicles and drivers are admittedly difficult to quantify, see Frontier Economics Bulletin, *Uber regulated? How we should regulate "smartphone" taxi apps*, July 2014, available from: <http://www.frontier-economics.com.au/publications/uber-regulated>, last accessed: 10.12.2015.

B. INTERVENTION CAPACITY OF GOVERNMENTAL ACTORS

Saurwein suggests that an industry is more likely to adopt self-regulating measures if the government disposes of intervention capacity, i.e. if regulators have the potential to effectively govern the phenomenon in question by employing traditional instruments such as statutes or ordinances.¹⁴⁶ Applying a “tactic of government by raised eyebrow”, legislators have in such situation the capacity to communicate to the industry that adhering to an unregulated status quo will not be tolerated.¹⁴⁷ If the industry does not take voluntary action, compulsory measures will be taken.

The governmental intervention capacity is largely determined by technological complexity of a sector.¹⁴⁸ Thus it is comparably high with regards to transportation network companies. The production of medicine or the means of sustainable energy production is complex.¹⁴⁹ On the other hand, the working mechanisms of Uber are relatively simple in comparison. Just take people who have a car and some spare-time and people in need of a ride, connect them on an Internet platform, accessible through an app and charge a commission. Against this background, it will not be too challenging for the lawmaker to design rules, which adequately fit the specific business circumstances. With regard to public security, the legislator could for instance simply introduce those background test standards, which are (at least in many jurisdictions) already in place for traditional taxi drivers.

It could be argued that a national government’s regulation capacity is lowered by the fact that Uber is a multinational company. Saurwein points out that the requirement of transnational organisation decreases a national legislator’s potential to impose effective regulation.¹⁵⁰ However, the transportation industry is largely determined by national

¹⁴⁶ See Saurwein, *LAW & POLICY*, 343-344 (2011); Cannon & Chung, *SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL*, 69-73 (2015). See also Saurwein, *LAW & POLICY*, 344 (2011).

¹⁴⁷ *Id.* at 344 (quoting ERWIN G. KRASNOW & LAWRENCE D. LONGLEY, *THE POLITICS OF BROADCAST REGULATION* (3 ed. 1982)).

¹⁴⁸ See Saurwein, *LAW & POLICY*, 344 (2011).

¹⁴⁹ The assessment of environmental issues is a frequently cited example for the lawmaker’s overstrain by the scientific complexity of the subject area, see, e.g. REINHARD SPARWASSER, et al., *UMWELTRECHT: GRUNDZÜGE DES ÖFFENTLICHEN UMWELTSCHUTZRECHTS*, 64-65 (5 ed. 2003); Marian Döhler, *Regulation*, in *THE SAGE HANDBOOK OF GOVERNANCE*, 522 (Mark Bevir ed. 2011).

¹⁵⁰ See Saurwein, *LAW & POLICY*, 344 (2011).

rather than international law.¹⁵¹ Despite Uber's international outreach, the national legislator is therefore not limited in his authority to set rules which can be enforced within jurisdiction's territory. Hence, the government's intervention capacity is high, suggesting that co-regulating Uber promises to be successful.

C. INTENSITY OF REGULATORY INTERVENTION REQUIRED

Saurwein establishes that co-regulation has a higher prospect to succeed, if the intensity of required regulation is comparatively low.¹⁵² The degree of intensity is determined by the impact on fundamental rights of parties involved, the implications for the business's revenue and finally by the question whether intended regulation effects market entry/exit or merely changes performances in certain aspects.¹⁵³ Applying this test reveals that the regulative measures suggested above are of low intensity. Safety guidelines as well as sufficient insurance coverage will not question Uber's dominant market position. Also, there is no negative impact on fundamental rights. Instead, as shown above, Uber diversifies property rights of drivers and consumers and enhances and the protection of physical integrity of the parties involved. Consequently, the low intensity of required regulation further supports the assumption that a co-regulation approach is suitable for Uber.

D. NUMBER OF PARTICIPANTS AND MARKET FRAGMENTATION

Saurwein further submits that alternative regulation models work less well in fragmented markets with a diverse range of actors.¹⁵⁴ In the market of transportation network companies, Uber currently holds an overwhelmingly strong market position. Its

¹⁵¹ In particular, there are no international treaties, which Uber could invoke. However, Uber has filed a claim to authorities of the European Union that national legislation is violating EU treaties. In July 2015, a Spanish Court brought a case before the European Court of Justice. Since transportation regulations are exempt from EU-wide service directives, the issue to be decided by the court is whether Uber is a transportation company or an "information society service", see Sam Schechner, *Uber to Fight EU Rules in Europe's Top Court* (The Wall Street Journal, 20.07.2015), available from: <http://www.wsj.com/articles/case-against-uber-referred-to-europes-top-court-1437402253>, last accessed: 08.12.2015.

¹⁵² See Saurwein, *LAW & POLICY*, 345 (2011); Cannon & Chung, *SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL*, 76-79 (2015).

¹⁵³ The entry/exit requirement is classified as an example for a high intensity of regulation, see Saurwein, *LAW & POLICY*, 345 (2011).

¹⁵⁴ *Id.* at 346. See also Cannon & Chung, *SANTA CLARA COMPUTER & HIGH TECH LAW JOURNAL*, 81-83 (2015).

sole serious competitor is Lyft.¹⁵⁵ Apart from that, there are businesses operating in local markets¹⁵⁶, without however calling Uber's dominant position into question.¹⁵⁷ Thus, the market cannot be considered fragmented.

With regard to the competition by Lyft, it can even be argued that such low level competition is beneficial for the success of co-regulation.¹⁵⁸ If competition were completely non-existent, this would decrease the level of reputational sensitivity, as described above. In contrast, where there is at least one serious competitor, this creates a higher incentive for Uber to be the frontrunner in adopting reputation-enhancing guidelines.

V. CONCLUSION

This essay has made an attempt to better understand the phenomenon Uber as an example of the emerging sharing economy. I analysed Uber's impact on different law areas and provided suggestions on how the legislator should react. Ultimately, rules are needed with regard to public safety, security and insurance coverage. I content that with regard to personal safety, security and insurance, rules are necessary. They should include the following requirements: (1) Mandatory screening tests as a prerequisite for the approval as Uber driver, (2) continuous monitoring of driver's performance through a rating system, (3) an insurance that primarily covers for losses of third parties, drivers and passengers and (4) transparent information about the insurance's scope. However, the necessity or *rules* does not equal the requirement of *traditional regulation*. Instead, I suggest that, in order to establish effective and practical guidelines to ensure a high degree of compliance, the lawmaker should choose an approach of co-regulation,

¹⁵⁵ For a comparison between Lyft and Uber, see Rivalfox, *Uber: Main Competitors*, available from: <https://rivalfox.com/uber-competitors>, last accessed: 07.12.2015.

¹⁵⁶ Australian competitors include for instance ingogo and goCatch, see Frontier Economics Bulletin, *Uber regulated? How we should regulate "smartphone" taxi apps*, July 2014, available from: <http://www.frontier-economics.com.au/publications/uber-regulated>, last accessed: 10.12.2015. For an overview on the market in Asia see Josh Horwitz, *Uber's biggest Asian competitors have already raised \$7 – and could soon merge* (Quartz, 28.09.2015), available from: <http://qz.com/509913/ubers-%E2%80%8Bbiggest%E2%80%8B-asian-competitors-have-already-raised-about-7-billion-and-could-soon-merge>, last accessed: 10.12.2015.

¹⁵⁷ This assessment remains not unchallenged, see Rogers, *THE UNIVERSITY OF CHICAGO LAW REVIEW DIALOGUE*, 92 (2015) (pointing to the low switching costs for drivers and riders and hence arguing that "Uber may become the Myspace or Netscape of ride sharing - that is, a pioneer that could not maintain its market position").

¹⁵⁸ See Saurwein, *LAW & POLICY*, 349 (2011).

lending the authority to Uber to set up and enforce the required rules. This arrangement would be successful due to Uber's high degree of reputational sensitivity, the government's strong intervention capacity, the low intensity of regulatory intervention and the moderate competition in the transportation network market. Finally, my study leaves some questions unanswered. For instance, how does the concept of co-regulation relate to the requirement of legitimate decision-making in a democracy?¹⁵⁹ Or which measures should be employed to monitor rules introduced by Uber and to resolve possible conflicts?¹⁶⁰ These questions invite for further studies and discussions.

¹⁵⁹ See Marian Döhler, *Regulation*, in THE SAGE HANDBOOK OF GOVERNANCE, 527 (Mark Bevir ed. 2011) (suggesting a “switch from input-to output-legitimacy”). For a general discussion of the challenges faced by public sector legitimacy in light of new forms of governance see Mark Considine & Ali Kamran Afzal, *Legitimacy*, in THE SAGE HANDBOOK OF GOVERNANCE, 369-385 (Mark Bevir ed. 2011).

¹⁶⁰ Different forms of alternative dispute resolution aimed at resolving conflicts are discussed by Lisa Blomgren Bingham, *Collaborative Governance*, in THE SAGE HANDBOOK OF GOVERNANCE, 394-396 (Mark Bevir ed. 2011).