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Capturing Excess in the On-Demand Economy

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Capturing Excess in the On-Demand Economy

Erez Aloni*

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INTRODUCTION

Jeannie Ralston, an author and journalist, owned an apartment southwest of Austin, Texas, which she used to lease as a long-term rental, for \$650 a month.¹ “Jump[ing] on the Airbnb gravy train,” as she describes it in a *New York Times* column, she and her husband decided to take the apartment off the long-term rental market and turn it into a short-term rental.² Their calculation was that it would take only six nights of renting through Airbnb for them to make the equivalent of a month’s rent under their long-term lease.³ Ryan Scott took it one step further: he owns twelve properties and manages ten more in San Diego, California—all used for short-term rentals via Airbnb.⁴ The reporter says that Ryan, in an interview, confessed that

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¹ See Jeannie Ralston, *How to Survive Being an Airbnb Host*, N.Y. TIMES (June 21, 2016), <https://www.nytimes.com/2016/06/26/travel/airbnb-host.html>.

² See *id.*

³ See *id.*

⁴ See Lori Weisberg, *Airbnb: Opportunity or Nuisance?*, SAN DIEGO UNION TRIBUNE (June 10, 2016, 12:00 PM), <http://www.sandiegouniontribune.com/business/tourism/sdut-airbnb-opportunity-or-nuisance-2016jun10-story.html>.

“he has become addicted to the intoxicating short-term rental revenues [that] his properties have been generating over the last few years.”⁵ Michael Naess, who lives in a two-bedroom apartment in Queens, New York, rented one of his bedrooms to seventy-two guests in ten months—using Airbnb.⁶ The guests stay in the extra bedroom in his apartment.⁷ Finally, Jordan Reeves occasionally rents out his Brooklyn apartment while he is away.⁸

What is common to all of these cases? They all involve properties rented for short-term stays (under thirty days) via Airbnb. But that is where the similarities end. Each one of the lessors uses Airbnb for a different type of short-term rental. Jeannie Ralston’s operation is akin to a bed and breakfast.⁹ Ryan Scott uses apartments for investment; he finds some that were rented long term, takes them off the residency market, and converts them to vacation rentals.¹⁰ Michael Naess rents his unoccupied room to make some extra money on a permanent basis.¹¹ And Jordan Reeves subleases on a temporary basis when his apartment is empty because he is away.¹²

One key distinguishing factor between these activities, I argue, is the level (or lack) of utilization of excess capacity. Increased utilization of excess capacity means leveraging the “‘surplus value’ of these unused or under-utilized assets” to create “more capacity than the owner can herself use at once and that can thereby be monetized.”¹³ Some types of use that on-demand platforms facilitate leverage this “idle capacity,” making sure that goods and skills that can be monetized are not wasted.¹⁴ Conversely, other usage is akin to conventional commercial use—not significantly different from the supply that incumbents provide. By “on-demand

⁵ *See id.*

⁶ *See* N. R. Kleinfield, *Airbnb Host Welcomes Travelers from All Over*, N.Y. TIMES (Apr. 25, 2014), <https://www.nytimes.com/2014/04/27/nyregion/airbnb-host-welcomes-travelers-from-all-over.html>.

⁷ *See id.*

⁸ *See* Deepti Hajela, *Some New York City Hosts are Confused About New Airbnb Advertising Law*, SKIFT (Oct. 30, 2016, 7:00 PM), <https://skift.com/2016/10/30/some-new-york-city-hosts-are-still-confused-about-new-airbnb-advertising-law/>.

⁹ *See* Ralston, *supra* note 1.

¹⁰ *See* Weisberg, *supra* note 4.

¹¹ *See* Kleinfield, *supra* note 6.

¹² *See* Hajela, *supra* note 8.

¹³ *See* Donald J. Kochan, *I Share, Therefore It's Mine*, 51 U. RICH. L. REV. (forthcoming May 2017) (manuscript at 25) (on file with SSRN), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2820456.

¹⁴ *See* Orly Lobel, *The Law of Platform*, 101 MINN. L. REV. 87, 108 (2016) (“A key principle of the platform is putting idle capacity to work.”).

economy” (often referred to by the misnomer “the sharing economy”),¹⁵ I mean an economic model where people—for profit—exchange goods, services, spaces, and money with each other via peer-to-peer platforms.¹⁶

I hence consider activities that the on-demand platforms facilitate on a spectrum: one end consists of activities in increased utilization of excess capacity, and the other end is composed of traditional commercial work without utilization of idle capacity. I will call activities on the former end “casual work,” “work in increased excess capacity,” or work “in increased utilization.” I will call activities on the latter end—i.e., those not grounded primarily in utilization of excess capacity—“conventional work,” “commercial work,” or “excess in disguise.”

Accordingly, we can rank all of the above examples on a spectrum based on their level of use—or lack thereof—of increased excess capacity. Scott, who rents twenty-two units, creates new capacity (infrastructure) when he buys properties intended exclusively for short-term rentals.¹⁷ Ralston, who converted one unit from long-term to short-term rental, uses existing capacity by changing the purpose of the infrastructure she already has.¹⁸ Conversely, Reeves and Naess capitalize on their otherwise underutilized goods to produce more income.¹⁹ But these two are different, too; the former rents occasionally, while the latter has turned an empty room into a permanent vacation unit.

Yet, despite the differences in use of these properties, and the different economic and societal consequences of each of these uses, the law in many jurisdictions still treats three of these cases as the same activity: with the exception of Naess,²⁰ all these uses are illegal in most jurisdictions in the United States and in other Western democracies abroad.²¹

¹⁵ “[S]haring’ and [other] kindred designations are misnomers. Even if there are some altruistic or communal motives among those in the P2P economy, the heart of the industry is financial gain and not altruistic exchanges.” Erez Aloni, *Pluralizing the Sharing Economy*, 91 WASH. L. REV. 1397, 1407 (2016). Thus, in this Article, to avoid this misnomer I use the term “on-demand economy.”

¹⁶ *Id.* at 1410 (defining the peer-to-peer economy as “an economic model where people exchange goods, services, space, and money with each other via peer-to-peer platforms”).

¹⁷ See Weisberg, *supra* note 4.

¹⁸ See Ralston, *supra* note 1.

¹⁹ See Hajela, *supra* note 8; Kleinfeld, *supra* note 6.

²⁰ Naess’s rental is lawful in presumably all jurisdictions because he is in the property during the lessee’s (“guest’s”) entire stay.

²¹ See, e.g., CHI., ILL., MUN. CODE §§ 4-6-300(h)(8), 4-14-060(d) (prohibiting short-term rental unless unit is homeowner’s “primary residence”); HONOLULU, HAW., LAND USE ORDINANCE § 21-10.1 (2016) (prohibiting short-term rentals for periods of less than thirty days); N.Y. MULT. DWELL. LAW § 4(8)(a) (prohibiting short-term rental unless permanent resident occupies unit concurrently with visitor); N.Y.C. ADMIN. CODE tit. 27, § 287.1 (banning advertising of short-term rentals that violate the NEW YORK MULTIPLE DWELLING

In this Article, I submit that activities facilitated by the on-demand platforms produce a different level of negative and positive externalities, based on their location along the spectrum of increased utilization. Transactions in increased excess capacity produce the fewest negative externalities and produce more positive externalities; the more we move along the spectrum toward *no* use of excess capacity, the more negative externalities the activity produces. As such, a unique set of rules—tailored to address the particular benefits and harms that stem from each activity—should govern each category.

This distinction between work in increased excess capacity and other conventional uses in disguise is also prevalent in other sectors of the “on-demand economy.” For example, in the transportation arena some drivers for Uber work part-time, leveraging their increased excess capacity in terms of labor.²² Similarly, some drivers use their private, not-for-business vehicle, thus monetizing the time during which their car otherwise would not be serving an economically useful end.²³ Others, conversely, work full time as drivers, using vehicles with the primary purpose of transporting passengers.²⁴ The point is that the on-demand economy, although it often promotes the exchange of activities based on increased excess capacity, is also used simply as an alternative business method to commercial offerings that do not utilize idle capacity.

The distinction between the level of increased utilization—or the lack of such increase—is crucial to understanding and evaluating the social and economic costs that the on-demand economy produces. First, activities in increased excess capacity expand valuable choice, both for consumers and

LAW); Zweckentfremdungsverbot-Gesetz [ZwVbG] [Act on the Prohibition of Illegal Repurposing of Housing], Nov. 29, 2013; GESETZ-UND VERORDNUNGSBLATT FÜR BERLIN [BLN GVBl.] at 626, § 2(1) (Ger.) (defining “illegal repurposing of housing” to include the use of an entire home as a vacation rental). *See generally* Michele Finck & Sofia Ranchordás, *Sharing and the City*, 49 VAND. J. TRANSNAT'L L. 1299 (2016) (conducting comparative analysis of P2P economy regulation in the U.S. and Europe).

²² *See* Aloni, *supra* note 15, at 1435 (citing STEVEN HILL, RAW DEAL: HOW THE “UBER ECONOMY” AND RUNAWAY CAPITALISM ARE SCREWING AMERICAN WORKERS 122 (2015)); Jacob Davidson, *Uber Reveals How Much Its Drivers Really Earn . . . Sort of*, TIME (Jan. 22, 2015), <http://time.com/money/3678389/uber-drivers-wages/>; *see also* AMY LEVIN, BENENSON STRATEGY GRP., THE DRIVER ROADMAP: WHERE UBER DRIVER-PARTNERS HAVE BEEN, AND WHERE THEY'RE GOING 3 (2014), https://newsroom.uber.com/wp-content/uploads/2015/01/BSG_Uber_Report.pdf (noting, in study commissioned by Uber, that just over half of Uber drivers drove on a part-time basis).

²³ *See* Aloni, *supra* note 15, at 1435.

²⁴ *See id.*; LEVIN, *supra* note 22, at 5 (finding, in study commissioned by Uber, that 55% of UberBLACK drivers, representing 18% of total Uber drivers, drive more than 30 hours per week); *see also infra* notes 68–72 and accompanying text.

for providers.²⁵ For example, the amplified opportunities for travelers to stay in a local resident's apartment allow those visitors to experience the destination from that resident's perspective.²⁶ Likewise, for workers using increased excess capacity, the on-demand economy offers the option to work part time in a flexible setting.²⁷ Conversely, while traditional activities created by on-demand platforms can extend choice, they can also result in *reduction* of valuable choice by eliminating the availability of traditional services and jobs.²⁸ For instance, the accessibility of traditional lower-end hotels may be endangered by unfair competition from those who offer their units for rent full-time but do not have to abide by the regulation of such facilities (and can offer their units for a lower price).²⁹ Correspondingly, people's opportunities to find a full-time job, with all the benefits and protections that accompany it, get scarcer when similar work is offered by providers who do not get similar protections—and thus proffer the same job at a cheaper price.³⁰

Second, transactions in increased utilization produce fewer negative externalities than on-demand activities that do not leverage excess capacity. For instance, temporarily renting one's property via Home Away or Airbnb creates some negative externalities. As examples: unfamiliar people in the common area, nuisances, and pressures on shared utilities such as parking.³¹ But activity that does not utilize excess capacity, such as renting a property the entire year on a short-term basis, is likely to intensify the negative externalities.³² It can result in housing shortages, housing price increases,

²⁵ See Aloni, *supra* note 15, at 1413–16, 1434–35.

²⁶ Roberta A. Kaplan & Michael L. Nadler, *Airbnb: A Case Study in Occupancy Regulation and Taxation*, 82 U. CHI. L. REV. DIALOGUE 103, 105 (2015) (“One of the primary benefits that it provides is that it allows guests to ‘live like a local’ and explore neighborhoods that do not typically cater to tourists, both by providing accommodations in a wide variety of locales and by connecting visitors with local residents.”).

²⁷ Aloni, *supra* note 15, at 1435 (citing HILL, *supra* note 22, at 122; Davidson, *supra* note 22).

²⁸ See *id.* at 1437 (citing Lauren Weber, *One in Three U.S. Workers Is a Freelancer*, WALL ST. J. (Sept. 4, 2014), <http://blogs.wsj.com/atwork/2014/09/04/one-in-three-u-s-workers-is-a-freelancer/>).

²⁹ See *id.* at 1417 (citing Georgios Zervas, Davide Prosperio & John Byers, *The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry*, 30 (Boston U. Sch. Mgmt. Research, Working Paper No. 2013-16), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2366898).

³⁰ See *infra* notes 137–145 and accompanying text.

³¹ See Stephen R. Miller, *First Principles for Regulating the Sharing Economy*, 53 HARV. J. ON LEGIS. 147, 192–93 (2016) (discussing “Good Neighbor Regulations” aimed at alleviating noise, parking, and trash concerns).

³² See *infra* notes 153–172 and accompanying text.

decline in revenue from hotel taxes, and collapse of some hotels, to name a few of the negative externalities.

The challenge for regulation of the on-demand economy, I contend, is in crafting rules that will capture this distinction. Regulation that treats the two categories differently will impose more rigorous (classic) rules of compliance when one does not leverage excess capacity, and an easy-to-administer regime, with light regulation, for activity in underutilized goods or time, that recognizes the particular value and nature of these activities. In this Article, I offer basic principles for how to capture (by regulation) which activities operate in increased utilization of excess capacity and what the basic principles of such regulations should be.

The Article proceeds in the following way: Part I demonstrates that the distinction between work in increased idle capacity and traditional work is significant in terms of presentation in the on-demand economy and cuts across different industries of the on-demand economy. Part II contends that the two activities have different societal and economic impacts: increased utilization produces more choice and fewer negative externalities, while traditional work can result in loss of valuable options and produce more negative externalities. Part III lays out the basic principles of regulation for the on-demand economy, based on this distinction, and evaluates laws that have embraced these principles.

I. THE SPECTRUM OF WORK IN INCREASED UTILIZATION

The growth of the on-demand economy has raised significant regulatory dilemmas for lawmakers around the world.³³ On one side, some consumers, scholars, and lobbyists, rooting for the on-demand firms, have asked lawmakers to limit their intervention and let the innovation flourish.³⁴ On the other side, incumbents, labor rights advocates, and communities affected by on-demand activities request lawmakers to constrain some of the harms inflicted by the rise of this model.³⁵

³³ See Aloni, *supra* note 15, at 1400.

³⁴ See, e.g., Arun Sundararajan, *Why the Government Doesn't Need to Regulate the Sharing Economy*, WIRED (Oct. 22, 2012, 1:45 PM), <https://www.wired.com/2012/10/from-airbnb-to-coursera-why-the-government-shouldnt-regulate-the-sharing-economy/> (“By making both product and trader quality instantly transparent, [the self-regulatory transaction feedback] approach reduces the risks that often lead to market failure [and] provides a first digital safeguard against much of what regulators aim to protect consumers from. After all, *profit* is a much more powerful driver for quality than regulatory compliance.”).

³⁵ See Aloni, *supra* note 15, at 1427–29 (describing the different approaches for regulation of the on-demand economy); Frank Pasquale, *Two Narratives of Platform Capitalism*, 35 YALE L. & POL'Y REV. 309, 316 (2016) (analyzing the competing narratives towards the on-demand economy).

Within this debate, the role that work in increased excess capacity occupies in the on-demand economy takes on a special significance. Scholars, commentators, and the on-demand firms themselves often base many of their arguments against regulatory requirements on the premise that the model is characterized primarily by transactions in increased excess capacity.³⁶ For example, in response to a court ruling³⁷ that found a New York City short-term rental, facilitated by Airbnb, illegal, Airbnb proffered:

It is time to fix this law and protect hosts who occasionally rent out their own homes. Eighty-seven percent of Airbnb hosts in New York list just a home they live in—they are average New Yorkers trying to make ends meet, not illegal hotels that should be subject to the 2010 law.³⁸

And Uber stated, in court filings concerning the classification of its workers, that the firm “merely provides a platform for people who own vehicles to leverage their skills and personal assets and connect with other people looking to pay for those skills and assets.”³⁹

The claim that most suppliers in the on-demand economy use their increased excess capacity is critical to the argument in support of the on-demand economy because it distinguishes the on-demand market from the traditional market. Thus, it should free the on-demand firms from regulations that are tailored for conventional industries. If workers are only maximizing their assets and time, the argument goes, they are different from incumbents who work with designated capital and as full-time

³⁶ See, e.g., Andrew T. Bond, *An App for That: Local Governments and the Rise of the Sharing Economy*, 90 NOTRE DAME L. REV. ONLINE 77, 78 (2015) (“The sharing economy is a microeconomic system built around the utilization of unused human and physical resources.”); Timothy Doescher, *How Congress Can Clear the Road for Uber, Lyft, and the Gig Economy*, THE DAILY SIGNAL (Oct. 27, 2016), <http://dailysignal.com/2016/10/27/how-congress-can-clear-the-road-for-uber-lyft-and-the-gig-economy/> (arguing that the benefit of the gig economy is grounded in flexibility and that “[o]ne fact . . . may explain this: over half of the drivers surveyed are part-time drivers working other jobs.”); Hugo Martin, *Big Chunk of Airbnb’s Revenue Comes from Year-Round Rentals, Study Finds*, L.A. TIMES (Jan. 20, 2016, 11:16 AM), <http://www.latimes.com/business/la-fi-airbnb-hotels-20160120-story.html> (Responding to a report commissioned by the American Hotel and Lodging Association, which found that multi-unit operators are responsible for a third of Airbnb’s revenue, the company stated, “This report uses misleading data to make false claims and attack middle class families who share their homes and use the money they earn to pay the bills.”).

³⁷ See *City of New York v. Carrey*, Nos. 13006002 and 1300736 (N.Y.C. Envtl. Control Bd. May 9, 2013), <https://www.scribd.com/document/142650911/Decision-and-Order-for-NOV-35006622J>.

³⁸ See *Vacation Rental Site Airbnb Ruled Illegal in New York City*, FOX NEWS (May 21, 2013), <http://www.foxnews.com/travel/2013/05/21/airbnb-illegal-in-new-york-city.html>.

³⁹ *Salovitz v. Uber Techs., Inc.*, No. A-14-CV-823-LY, 2014 WL 5318031, at *1 (W.D. Tex. Oct. 16, 2014).

employees. Put differently, the work of the on-demand market is *not* one that replaces or competes with the work of incumbents; rather, it is a new market, occupied by microearners.⁴⁰ The result is a model that increases options for consumers and workers, giving them the opportunity to work in small gigs to make some supplemental income. It is, essentially, a “gig economy”: a small-scale economy of people who monetize their underutilized time, skills, and goods.⁴¹ Conversely, if this market is populated by incumbent-like transactions, then it calls for regulation more akin to the traditional paradigm. Hence, proving that the on-demand economy truly is a small-scale, gig economy that creates new markets and extended options is essential to the argument that the on-demand economy should not be governed by traditional regulation.

Much of the data regarding the on-demand economy are debatable, and some of them are funded or provided directly by interested parties.⁴² Yet, despite this limitation, the data show a clear picture: an immense portion of the on-demand economy is comprised of work done that is—i.e., work that is based on utilization of idle capacity.⁴³ Simultaneously, a large segment of that economy is not based on increased utilization but is comprised of full-time workers sometimes using designated capital: goods that are used primarily for this purpose.⁴⁴ This fragment of the on-demand economy is

⁴⁰ Cf. Lobel, *supra* note 14, at 93 (“[P]art of the value produced by the platform lies in its differentiation from traditional, offline exchanges. In other words, it reveals how the platform economy is not simply competing efficiently over the same markets of regulated industries but also constituting new markets, norms, and behaviors.”).

⁴¹ See Daniel E. Rauch & David Schleicher, *Like Uber, but for Local Government Law: The Future of Local Regulation of the Sharing Economy*, 76 OHIO ST. L. J. 901, 925 (2015) (“[T]he rise of sharing firms as replacements for traditional, full-time jobs leads some to lament the rising ‘gig economy’ as a wealth transfer from workers to capital, shifting risk from employers to workers. Sharing firms resist this claim, arguing their employees . . . are given supplementary income that would otherwise be unavailable.”).

⁴² See, e.g., LEVIN, *supra* note 22 (touting benefits of driving for Uber based on driver surveys in study funded by Uber); JOHN W. O’NEILL & YUXIA OUYANG, AM. HOTEL & LODGING ASS’N, FROM AIR MATTRESSES TO UNREGULATED BUSINESS: AN ANALYSIS OF THE OTHER SIDE OF AIRBNB (2016), https://www.ahla.com/sites/default/files/2016-10/Airbnb_Analysis_September_2016.pdf (criticizing Airbnb in study funded by the American Hotel and Lodging Association).

⁴³ See LEVIN, *supra* note 22, at 5 (finding that Uber was rarely a sole source of income); O’NEILL & OUYANG, *supra* note 42, at 5, 7–8 (finding that only “26% of Airbnb’s revenue is derived from . . . full-time hosts” and comparing full-time hosts to all hosts using Airbnb’s platform).

⁴⁴ See LEVIN, *supra* note 22, at 5 (“62% of people who lease/finance their car use Uber to help with car payments”); O’NEILL & OUYANG, *supra* note 42, at 5, 7–8 (finding that “[a] growing number of hosts are using the Airbnb platform to operate full-time businesses” and noting that full-time operators “represented only 3.5% of operators, but generated 26.0% of revenue”).

not only large in terms of number of participants and transactions but also yields a vast part of the revenue of the on-demand firms.⁴⁵ And despite rhetoric that emphasizes the excess-capacity aspect, work without excess utilization is sometimes even encouraged by the on-demand firms themselves.⁴⁶

I will begin with the data about the short-term on-demand rental market. To distinguish between lessors who use their underutilized assets and those who use designated capital, I delve into data about the number of lessors who have more than one unit posted on on-demand platforms or whose unit is available for an entire year for short-term rental. The principle is that posting a unit as available for a period of more than a few months for short-term rentals indicates that it is for commercial use, rather than for incidental use in capitalizing idle capacity.

A study, run by the Penn State University School of Hospitality Management and funded by the American Hotel and Lodging Association, examined the lessors who posted properties on Airbnb in fourteen big United States metropolitan areas, from October 2014 to September 2015.⁴⁷ The study divided “hosts” (lessors) into three categories: those who offered an entire unit for a short time during the year, those who offered a unit for the entire year, and those who had two or more units on the platform.⁴⁸ The results demonstrate that those who work with designated capital, although the minority, are consistently present across all of the cities and are responsible for massive revenues for Airbnb. The study found that 2,772 full-time operators (those who made their unit or units available more than 360 days a year) constitute 3.5% of the total lessors.⁴⁹ While this may seem like a small number, the revenue that Airbnb derived from these full-time operators was enormous. In the period studied, they yielded \$347,479,616 for Airbnb, which constitutes 26% of Airbnb’s total revenue in those locations during that period.⁵⁰ Further, the study found that lessors who rented two or more units for any amount of time constituted 16.2% of all operators.⁵¹ Finally, mega-operators—defined by the study as hosts who rent more than three units (for any amount of time)—constituted 6.5% of the hosts and yielded 24.6% of Airbnb’s revenue, or \$328,299,944, in those cities during that period.⁵²

⁴⁵ See notes 47–49 and accompanying text.

⁴⁶ See notes 221–223 and accompanying text.

⁴⁷ O’NEILL & OUYANG, *supra* note 42.

⁴⁸ *Id.* at 4.

⁴⁹ *Id.* at 7.

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Id.* at 6.

Further, looking at data from a few specific cities (not included in the above study) provides a more nuanced picture that confirms the same conclusions.⁵³ For example, in Honolulu, Hawai'i, in March 2017, there were 1,519 active hosts.⁵⁴ Of these, 1,000 had one unit, 238 had two, 88 had three, 57 had four, and 117 had five or more.⁵⁵ Again, most lessors had one unit; but around one third were multi-unit operators of different degrees.⁵⁶ Further, of the 3,358 rentals available in 2016, 33% were available for ten to twelve months; 20.8%, for seven to nine months; and only 17.4%, for one to three months.⁵⁷ Thus, this smaller-scale data from Honolulu ratifies the distinction between commercial use and increased usage of excess capacity.

The data about short-term rentals via various on-line on-demand platforms in Vancouver, British Columbia, Canada, are the most nuanced and comprehensive. The data are presented in a report submitted to the Standing Committee on Policy and Strategic Priorities (in the city of Vancouver) for consideration of new regulations of short-term rentals.⁵⁸ The report reviewed the number of whole-unit listings active in 2015.⁵⁹ The data show that 43% of whole-unit listings in 2015 were rented on a nightly basis for fewer than thirty days that year, 19% were available between thirty-one to sixty days, and 12% were available between sixty-one to ninety days.⁶⁰ Conversely, 4% of entire units were available for more than nine months, and 8% were available for six to nine months.⁶¹

⁵³ See generally Dayne Lee, *How Airbnb Short-Term Rentals Exacerbate Los Angeles's Affordable Housing Crisis: Analysis and Policy Recommendations*, 10 HARV. L. & POL'Y REV. 229 (2016). Lee noted:

In practice, 64% of Airbnb listings in Los Angeles are for [short-term rentals] of units that are never occupied by their owners or leaseholders, and operate year-round essentially as independent, unlicensed hotel rooms. Chances are, an apartment booked through the service is managed by a full-time investor or company that also owns or leases dozens of other Airbnb listings.

Id. at 234.

⁵⁴ *Honolulu, Hawaii—Airbnb Data and Analytics*, AIRDNA, <https://www.airdna.co/city/us/hawaii/honolulu> (last visited Mar. 1, 2017). Note that the data presented on this website are aggregated and updated daily. See *Airdna Data Methodology*, AIRDNA, <https://www.airdna.co/services/datafeed>.

⁵⁵ *Honolulu, Hawaii—Airbnb Data and Analytics*, AIRDNA, <https://www.airdna.co/city/us/hawaii/honolulu> (last visited Mar. 1, 2017).

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ KAYE KRISHNA, CITY OF VANCOUVER, REGULATING SHORT-TERM RENTALS IN VANCOUVER (2016), <http://council.vancouver.ca/20161005/documents/pspc1c.pdf>.

⁵⁹ *Id.* at 5, 29.

⁶⁰ *Id.* at 5–6.

⁶¹ *Id.*

The housing data, therefore, show consistently that the use of on-demand rental platforms varies with respect to the extent of underutilization. The majority of properties are offered by lessors who use the increased excess capacity of their principal residency, while a substantial minority of lessors use these platforms to rent their properties not based on increased utilization but as a commercial use.

When it comes to the on-demand transportation arena, there are no available data on the number of drivers who use their private car (designated for leisure) and monetize it for commercial use versus those who use a car designated primarily for commercial use. However, anecdotal evidence shows that a nontrivial number of drivers use a car that they bought or rented for the primary purpose of driving passengers.⁶² Uber, the world's largest on-demand transportation company, has programs helping drivers to rent, lease, or buy a car.⁶³ Uber's Xchange leasing program enables drivers with insufficient (or no) credit to lease a car,⁶⁴ without mileage restrictions, and includes maintenance of the vehicle.⁶⁵ Similarly, Lyft, Uber's main competitor, maintains the Express Drive Rental Car Program, which helps its drivers to rent a car.⁶⁶ The rental's price depends on the number of hours the driver works for Lyft: the greater the hours, the cheaper the rental price.⁶⁷

Beyond the increased utilization of the goods used, sellers in the on-demand economy can also capitalize on their free hours. Thus, the distinction here is between those who use their underutilized labor or skills—by working for on-demand firms part time and selling hours that are not available for their full-time job—and those who work full time for on-demand platforms, just like incumbents do. One way to discern the scale of this distinction (or, more accurately, the spectrum) is through the worker's reliance on the income she makes from her work for the platforms.

⁶² See Nicole Dieker, *Where do Uber and Lyft Drivers Get Their Cars? They Rent Them From Another Startup*, BILLFOLD (Apr. 13, 2015), <https://thebillfold.com/where-do-uber-and-lyft-drivers-get-their-cars-they-rent-them-from-another-startup-8e6eb04dcac5>.

⁶³ *Vehicle Solutions*, UBER, <https://www.uber.com/drive/vehicle-solutions/> (last visited Mar. 7, 2017).

⁶⁴ See Eric Newcomer & Olivia Zaleski, *Inside Uber's Auto-Lease Machine, Where Almost Anyone Can Get a Car*, BLOOMBERG (May 31, 2016), <https://www.bloomberg.com/news/articles/2016-05-31/inside-uber-s-auto-lease-machine-where-almost-anyone-can-get-a-car>.

⁶⁵ See Harry Campbell, *Uber Vehicle Marketplace*, RIDESHARE GUY, <http://therideshareguy.com/uber-vehicle-marketplace/> (last visited Mar. 7, 2017).

⁶⁶ See *Express Drive Rental Car Program*, LYFT, <https://help.lyft.com/hc/en-us/articles/218196557-Express-Drive-Rental-Car-Program-#cost> (last visited Mar. 7, 2017).

⁶⁷ *Id.*

A study by Requests for Startups examined the level of income that workers in the on-demand economy rely on.⁶⁸ The authors surveyed approximately 900 workers in seventy-eight on-demand firms, including Airbnb, DoorDash, Homejoy, Thumbtack, Uber, Lyft, and TaskRabbit.⁶⁹ It found that 39% of such workers rely on this work for a quarter of their income; 19% of workers, for 25–50%; 13% of workers, for 50–75%; and 29% of workers for 75–100% of their income.⁷⁰

Other studies confirm the same result. A survey of approximately 600 Uber drivers, conducted in December 2014, found that almost 40% have no other job, roughly 30% had another full-time job, and another 30% had another part-time job.⁷¹ A McKinsey report found that 40% of Uber drivers in the United States earn their primary living through the platform, but just 7% of those who rent properties on Airbnb rely on it as their primary source of income.⁷² Thus, workers in the on-demand economy fall on a spectrum of utilization of hours: some work part time, as a gig, while for a good portion of workers—between 30% and 40%—the on-demand economy is their main or only source of income.⁷³

In conclusion, the on-demand economy shows a range of use predicated on increased use of excess capacity. On one end of that range, some people work intermittently, leveraging their personal capital to produce otherwise unrealized income. At other end are those who exploit the on-demand platform to commercialize use without leveraging their idle capacity.

⁶⁸ See Jennifer Rossa, *The Workers*, BLOOMBERG BRIEF (June 15, 2015), <https://newsletters.briefs.bloomberg.com/document/4vz1acbgrfxz8uwan9/the-workers-demographics>; Alison Griswold, *Young Twentysomethings May Have a Leg Up in the 1099 Economy*, SLATE (May 22, 2015, 6:49 PM), http://www.slate.com/blogs/moneybox/2015/05/22/_1099_economy_workforce_report_why_twentysomethings_may_have_a_leg_up.html.

⁶⁹ See *id.*

⁷⁰ See *id.*

⁷¹ See Jonathan V. Hall & Alan B. Krueger, *An Analysis of the Labor Market for Uber's Driver-Partners in the United States* 10 (Princeton Univ. Indust. Rel. Sec., Working Paper No. 587, 2015) (describing LEVIN, *supra* note 22, a survey conducted by the Benenson Survey Group per Uber's request).

⁷² See JAMES BUGHIN ET AL., MCKINSEY GLOB. INST., INDEPENDENT WORK: CHOICE, NECESSITY, AND THE GIG ECONOMY 61 (2016), <http://www.mckinsey.com/~/media/McKinsey/Global%20Themes/Employment%20and%20Growth/Independent%20work%20Choice%20necessity%20and%20the%20gig%20economy/Independent-Work-Choice-necessity-and-the-gig-economy-Full-report.ashx>.

⁷³ *Id.*

II. THE SOCIAL AND ECONOMIC BENEFITS OF WORK IN EXCESS CAPACITY

So far I have shown that activities in the on-demand economy fall on a spectrum based on the level of use or non-use of increased utilization of good, time, or skills. This Section investigates the financial and societal consequences that activities on each side of the spectrum create. Part A explores the different influences that each activity has on expansion of choice to consumers and providers. Part B analyzes the other negative and positive externalities that each activity produces.

A. *Increased Utilization as a Choice-Enhancing Mechanism*

Viewed through the prism of choice, the main value of the on-demand economy is expanding the range of work options that revolve around increased use of excess capacity. As I explain below, while the ability to work through using one's excess skills or property has long existed, the on-demand economy makes such work more readily offered, available, and used. At the same time, work that is situated on the other end of the spectrum of increased utilization can result, and in fact has resulted, in decreased choice of other valuable options.

Choice is a central concept in a liberal democracy.⁷⁴ Choice is closely associated with autonomy because it allows people to self-determine the course of their lives.⁷⁵ Human beings know best what their preferences are and are thus best situated to make their own choices.⁷⁶ As stated famously by John Stuart Mill, "The human faculties of perception, judgment, discriminative feeling, mental activity, and even moral preference, are exercised only in making a choice."⁷⁷ Other philosophers have expanded on the importance of choice because "autonomous individuals shape their lives on their own terms and this self-creative activity is exercised primarily through choice."⁷⁸ Thus, generally, facilitating choice is one of the main responsibilities of lawmakers in a liberal state.⁷⁹

The on-demand economy, especially when employed by casual sellers, contributes to the expansion of choice. Undoubtedly, the practice of

⁷⁴ See CASS R. SUNSTEIN, CHOOSING NOT TO CHOOSE: UNDERSTANDING THE VALUE OF CHOICE X (2015).

⁷⁵ See *id.*

⁷⁶ See *id.*

⁷⁷ JOHN STUART MILL, ON LIBERTY 65 (Emery Neff ed., 1926).

⁷⁸ STEVEN LECCE, AGAINST PERFECTIONISM: DEFENDING LIBERAL NEUTRALITY 106 (2008) (analyzing Joseph Raz's approach to autonomy and choice).

⁷⁹ See Aloni, *supra* note 15, at 1431–33.

maximizing otherwise underutilized goods and time existed long before the on-demand economy.⁸⁰ Working as a freelance in a flexible setting, in small gigs, and as an “independent contractor” predated the on-demand economy.⁸¹ Renting properties for short periods while away also preceded the on-demand economy but was done through more conventional and less efficient methods, such as publishing an ad in a newspaper.⁸² Carpooling and other forms of collaborative transportation are also far from new.⁸³

Yet, the on-demand economy intensifies the opportunities to maximize underutilized goods and time. The introduction of simple-to-use technology offers a greater supply of otherwise wasted capital and labor because more people can now easily offer their idle capacity for sale.⁸⁴ These platforms reduce the expense of creating such transactions and enable the sale of one’s merchantability with little or no cost. In so doing, the on-demand economy eases barriers to entry into markets that were previously reserved primarily for professionals.⁸⁵ Simultaneously, the on-demand economy increases choice and supply “by allowing users to slice up time and space into smaller units.”⁸⁶ That is, by facilitating the connection between peers, the on-demand economy enables suppliers to sell smaller portions of their time and goods in an efficient manner. Accordingly, the on-demand economy “reduces barriers to entry into transactions, allows non-expert participants to exchange services and goods and to sell smaller segments of their labor, and therefore enables another layer of market choice.”⁸⁷ The result is more valuable choices for consumers and workers alike.

For consumers, the on-demand economy is beneficial in accommodating different types of values and preferences.⁸⁸ Individuals perceive what is important in diverse ways, and the excess-capacity model supports increased diversity of choices by making options more easily accessible.⁸⁹

⁸⁰ See Lobel, *supra* note 14, at 131.

⁸¹ See *id.* (“The rise of the contingent workforce precedes the rise of the platform. The contingent workforce now constitutes more than one-third of all employees with predictions that it will rise to nearly half of the workforce by 2020.”).

⁸² See HILL, *supra* note 22, at 4–8.

⁸³ See, e.g., Jeff Cozza, *The History of Carpooling, from Jitneys to Ridesharing*, SHAREABLE (Feb. 7, 2012), <http://www.shareable.net/blog/the-history-of-carpooling-from-jitneys-to-ridesharing>.

⁸⁴ See Lobel, *supra* note 14, at 108 (“[S]upply is increased by adding under-utilized assets into the market and, in turn, costs are reduced.”).

⁸⁵ See *id.* at 110–11.

⁸⁶ See *id.* at 108.

⁸⁷ See Aloni, *supra* note 15, at 1410.

⁸⁸ See *id.* at 1413–14.

⁸⁹ See Lobel, *supra* note 14, at 113–14 (“Consumers convey a preference for a different

Hence, if a consumer prefers staying at a unit offered by a resident and viewing the location from the eye of a local, the on-demand platforms enable this. But if one is more risk-averse and would like to avoid any hazard (such as finding that the unit is different from what was described, or located in a less favorable part of the city), a hotel may be a better option. Some consumers care more about hygiene and would prefer to stay at a hotel for that reason.⁹⁰ Some passengers show a preference for knowing the exact time that their Lyft driver will arrive, while others may not have a smartphone, or prefer to pay cash for the transaction (which is not an option with Uber or Lyft), or may be in a rush—so favor catching a taxi on the street.⁹¹ Some consumers view Uber as safer, while other view taxis as safer; some care more about the price than others.⁹² Indeed, in a survey conducted by PricewaterhouseCoopers, 32% of respondents indicated that “more choice in the marketplace” is a strong selling point for on-demand transportation platforms.⁹³ The bottom line is that the on-demand economy offers consumers another layer of market choice that fits their particular preferences.

For providers, the on-demand economy offers the opportunity to work in a flexible framework, in small gigs, to capitalize on their unused time in order to earn some supplementary income.⁹⁴ In reducing barriers to entrance into industries, the on-demand economy also allows nonprofessional players to leverage their unused skills—from driving to cooking—for the purpose of making extra money.⁹⁵

kind of market exchange.”).

⁹⁰ See Aloni, *supra* note 15, at 1414 (citing PRICEWATERHOUSECOOPERS, CONSUMER INTELLIGENCE SERIES: THE SHARING ECONOMY 20 (2015), <http://www.pwc.com/us/en/industry/entertainment-media/publications/consumer-intelligence-series/assets/pwc-cis-sharing-economy.pdf>).

⁹¹ See Larry Magid, *Ride Sharing is Great As Long As We Address Downsides*, THE MERCURY NEWS (Feb. 23, 2017, 9:07 AM), <http://www.mercurynews.com/2017/02/23/ride-sharing-is-great-as-long-as-we-address-downsides> (“The reason I worry about the taxi industry is that there are times when a taxi is a better choice than a ride-hailing service, especially if you’re in a hurry and there’s one nearby.”).

⁹² See Anthony Neal Macri, *#QuickTapLive Survey: Three Quarters of Millennials Prefer Uber, Despite Damaging Media Reports*, QUICKTAP SURVEY BLOG (Jan. 29, 2016), <http://www.quicktapsurvey.com/blog/2016/01/29/uber-vs-taxi/> (surveying consumers’ reasons to pick Uber over a taxi).

⁹³ PRICEWATERHOUSECOOPERS, *supra* note 90, at 20.

⁹⁴ See Lobel, *supra* note 14, at 108 (explaining that many workers in the on-demand economy “seek to fill up their free time and leverage their flexibility to earn extra income. In other words, the platform resurrects dormant capital—be it tangible products or human capital.”); Aloni, *supra* note 15, at 1435.

⁹⁵ See Lobel, *supra* note 14, at 108; Aloni, *supra* note 15, at 1435 (“The model reduces barriers to entering markets previously reserved to those whose full-time work or expertise,

A study conducted by McKinsey Global Institute and published in October 2016 examines several aspects of independent contractors across six countries, including the United States.⁹⁶ The study was not limited to workers in the on-demand economy, as freelancers who work for on-demand platforms constituted 15% of the workers surveyed.⁹⁷ It found that a significant proportion of all casual workers—approximately 70%—were freelancers by choice, rather than because they were unable to find a full-time alternative.⁹⁸ This segment of workers emphasized the degree of flexibility and autonomy that this job framework offers them.⁹⁹ Thus, the report elaborates: “Many earners strongly prefer the autonomy and flexibility of independent work. They value being their own boss, setting their own hours to some extent, and focusing on work that interests them [. . .] The Uber driver can fit his hours around a class schedule or family priorities.”¹⁰⁰ When it came to workers in the on-demand economy, the report found that, in the United States, 87% of workers for this industry chose this working pattern rather than selecting it as a necessity (because they could not find a different type of job).¹⁰¹ Other data, provided by Uber, indicate that Uber drivers appreciate the flexibility in their work. Asked how they decide when to work, 40% of drivers answered that it depends on what else is on their schedule.¹⁰²

At the same time, the impact of the on-demand economy can also translate into reduced choice for consumers and workers. As a result of the competition posed by the on-demand industries, some traditional (conventional) services that are not provided via platforms are at risk of becoming scarcer or disappearing altogether. This is especially true when the on-demand economy promotes suppliers who work commercially (not in utilization of idle capacity). Without regulation that distinguishes these types of activities, the alternatives that incumbents offer cannot withstand the competition, and reduction of such services has resulted.

For instance, one traditional service that may be endangered is traditional taxicabs. The entrance of the Transportation Network Companies (“TNC,” essentially the on-demand transportation companies) into the market has led to a considerable contraction of the number of taxicab rides. The UCLA Labor Center studied the economic implications for the taxi industry in Los

for the most part, is the provision of such services.”).

⁹⁶ BUGHIN ET AL., *supra* note 72, at 1.

⁹⁷ *Id.* at 12.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.* at 45.

¹⁰¹ *Id.* at 59.

¹⁰² LEVIN, *supra* note 22, at 2.

Angeles and documented how the entrance of Lyft and Uber gave rise to significant shrinkage in the number of rides.¹⁰³ It found that, between 2013 and 2014, taxi ridership dropped by 18%, a total of 1.4 million fewer trips than the previous year.¹⁰⁴ This number is likely bigger now as, at the time of the study, Lyft and Uber were not allowed to pick up passengers from LAX airport, a route that constituted a large source of rides exclusively for taxicabs.¹⁰⁵ In Seattle, after Uber and Lyft became authorized to pick up passengers from the airport, every month showed a further decline in the number of taxi rides: from -9.5% in June 2016 to -16.6% in August 2016.¹⁰⁶ In Arlington, Virginia, dispatched cab trips saw a steep reduction in just two years: falling from 2.6 million annually to 1.7 million annually between 2013 and 2015.¹⁰⁷ The resultant financial struggles have forced cab companies to fire workers, file for bankruptcy, and even close entirely, making taxi services less available to the general public in some regions.¹⁰⁸

The decreased availability of traditional services constitutes a problem for consumers who need greater protections. For instance, traditional taxicabs are an important choice for some consumers, especially minorities. This is because people who are part of minority groups may feel safer taking a traditional taxi or find it harder to get rides through on-demand

¹⁰³ SABA WAHEED ET AL., UCLA LABOR CENT., RIDESHARING OR RIDESTEALING? CHANGES IN TAXI RIDERSHIP AND REVENUE IN LOS ANGELES 2009–2014 (2015), <http://www.labor.ucla.edu/downloads/policy-brief-ridesharing-or-ridestealing/>.

¹⁰⁴ *Id.* at 2.

¹⁰⁵ *Id.* (“The Los Angeles airport is still restricted to TNCs from doing business on the premises, but this month the Los Angeles World Airport (LAWA) Commissioners are expected to vote to lift a ban on TNCs at LAX.”); see also Laura J. Nelson & Katie Shepherd, *LAX Becomes Largest U.S. Airport to Allow Uber, Lyft Pickups*, L.A. TIMES (July 16, 2015), <http://www.latimes.com/local/lanow/la-me-ln-uber-legal-lax-20150716-story.html>.

¹⁰⁶ See Sara Bernard, *Uber and the Uncertain Future of Taxis at the Airport*, SEATTLE WEEKLY (Sept. 28, 2016, 1:30 AM), <http://www.seattleweekly.com/news/uber-and-the-uncertain-future-of-taxis-at-the-airport/>.

¹⁰⁷ See *Uber and Lyft are Killing Arlington’s Taxi Business*, ARL NOW (July 13, 2016, 2:30 PM), <https://www.arlnow.com/2016/07/13/uber-and-lyft-are-killing-arlington-taxi-business/>.

¹⁰⁸ In 2016, San Francisco’s biggest taxi company filed for Chapter 11 bankruptcy. See *In re Yellow Cab Cooperative, Inc.*, No. 3:16-bk-30063 (N.D. Cal. Jan. 22, 2016); see also Kate Rogers, *Uber, Lyft Put Pressure on Taxi Companies*, CNBC (Jan. 26, 2016, 1:10 PM), <http://www.cnbc.com/2016/01/26/uber-lyft-put-pressure-on-taxi-companies.html>. Cab company closures have occurred nationwide, including in Santa Ana, California, and Albuquerque, New Mexico. See Lauren Williams, *Fare Fallout: Uber, Lyft, and Rising Costs Force Santa Ana Taxi Firm to Close*, ORANGE CTY. REG. (Apr. 6, 2016, 7:54 AM), <http://www.ocregister.com/articles/taxi-710936-county-uber.html>; Chris Guardaro, *Albuquerque Cab Company Closes, Lays Off 70 Employees at Once*, KOAT (Mar. 6, 2017, 10:31 PM), <http://www.koat.com/article/video-cab-company-out-of-business/9099591>.

transportation companies. Researchers from the Massachusetts Institute of Technology recently tested whether being perceived as an African American passenger makes it harder to get a ride with Lyft and Uber.¹⁰⁹ In Seattle, the study found that African American passengers had to wait longer before booking a ride via Uber—up to a 35% increase in waiting time compared with their white counterparts.¹¹⁰ In Boston, the study used passengers with African American-sounding names and found that Uber drivers cancelled rides more than twice as frequently as they cancelled rides for passengers with white-sounding names.¹¹¹ No doubt, racial discrimination by traditional taxi drivers is a familiar and well-established fact, which occurs on a regular basis.¹¹² However, while a host of federal and state laws forbid traditional taxicabs from discriminating based on race,¹¹³ the applicability of these laws to the on-demand drivers, and firms themselves, is a more contested question.¹¹⁴

Further, people with disabilities have documented cases in which Uber drivers refused to take them, either because the latter had service animals or used a wheelchair.¹¹⁵ In a lawsuit filed by the National Federation of the

¹⁰⁹ See Yanbo Ge et al., *Racial and Gender Discrimination in Transportation Network Companies* (Nat'l Bureau Econ. Research, Working Paper No. 22776, 2016), <http://www.nber.org/papers/w22776>.

¹¹⁰ *Id.* at 2.

¹¹¹ *Id.* at 1–2.

¹¹² See, e.g., THE EQUAL RIGHTS CENTER, SERVICE DENIED: RESPONDING TO TAXICAB DISCRIMINATION IN THE DISTRICT OF COLUMBIA i (2003), https://equalrightscenter.org/wp-content/uploads/taxicab_report.pdf (“Each year, thousands of minority residents and visitors are unable to hail a taxicab in the District of Columbia because of the color of their skin or because they want to go to a predominantly African-American neighborhood.”); Aaron Belzer & Nancy Leong, *The New Public Accommodations*, 105 GEO. L.J. (forthcoming 2017) (manuscript at 26) (on file with SSRN), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2687486 (“Both research and anecdotal evidence suggest that non-white people have more difficulty hailing taxi cabs.”).

¹¹³ See, e.g., *Mitchell v. DCX, Inc.*, 274 F. Supp. 2d 33, 44 (D.D.C. 2003) (alleging racial discrimination by a taxi company under 42 U.S.C. § 1981); Belzer & Leong, *supra* note 112, at 36 (stating that many commentators have assumed that taxi cabs are public accommodations and thus answerable to federal laws, while others have argued that taxi cabs are not bound, although various state laws consider taxi rides “public accommodation”).

¹¹⁴ See, e.g., Brishen Rogers, *The Social Costs of Uber*, 82 U. CHI. L. REV. DIALOGUE 85, 95 (2015) (“Uber’s exact duties under federal and state civil rights laws are not yet clear.”).

¹¹⁵ See Jason Marker, *Wheelchair Using Passenger Films Uber Driver Refusing to Pick Him Up*, AUTO BLOG (Jan. 10, 2017, 11:41 AM), <http://www.autoblog.com/2017/01/10/wheelchair-using-passenger-films-uber-driver-refusing-to-pick-hi/> (describing Uber driver’s refusal to pick up wheelchair-bound passenger after stating that “[d]isabled people need disabled car(s)”); Nina Stochlic, *Uber: Disability Laws Don’t Apply to Us*, DAILY BEAST (May 21, 2015, 2:15 AM), <http://www.thedailybeast.com/articles/2015/05/21/uber->

Blind of California, Uber argued that the Americans with Disabilities Act does not apply to them.¹¹⁶ While Uber and Lyft have recently started to offer services that can accommodate people who rely on wheelchairs, consumers have complained that these services are rarely available.¹¹⁷

Finally, some people who feel more vulnerable may believe that they are safer taking taxis than using an on-demand platform for their rides. While there is no definitive indication that taxis are safer than TNCs, or that many people perceive taxis as safer, anecdotal evidence explains why individuals may feel safer using taxis; thus, publicized reports in which TNC drivers attacked, harassed, or refused to pick up transgender individuals may deter some from choosing this option.¹¹⁸ This hesitation may be bolstered on account of a few widely reported incidents of TNC drivers who raped or sexually assaulted passengers,¹¹⁹ as well as by the TNC firms' refusal to fingerprint their drivers as taxi drivers do.¹²⁰ The bottom line is that, for some people, the availability of traditional taxicabs is still an essential option because the on-demand economy alternative is viewed as more risky.

disability-laws-don-t-apply-to-us.html (describing Uber driver's refusal to pick up wheelchair-bound passenger based on claim that wheelchair would not fit in driver's trunk); Hannah Wise, *Mansfield Woman Says Uber Drivers Won't Pick Her Up Because of Service Dog*, DALLAS NEWS (Oct. 3, 2016), <https://www.dallasnews.com/news/transportation/2016/10/03/mansfield-woman-says-uber-drivers-pick-service-dog> (describing passenger's experience hailing rides through Uber and Lyft with her service dog).

¹¹⁶ See *Nat'l Fed'n of the Blind of California v. Uber Techs., Inc.*, 103 F. Supp. 3d 1073, 1082 (N.D. Cal. 2015) (claiming, *inter alia*, violation of the Americans with Disabilities Act in class action on behalf of blind Uber customers).

¹¹⁷ See Heather Kelly, *Uber's Services for the Disabled Lack Actual Cars*, CNN (May 3, 2016, 1:16 PM), <http://money.cnn.com/2016/05/02/technology/uber-access/>.

¹¹⁸ See Mary Emily O'Hara, *Lyft Driver Accused of Threatening Activist Monica Jones in Transphobic Post*, THE DAILY DOT (Feb. 28, 2016), <http://www.dailydot.com/irl/lyft-driver-monica-jones-location-facebook/> (describing trans activist Monica Jones's experience with transphobic Lyft driver); Raymond Rizzo, *Uber Driver James Henneberg is "Bothered" by the "Transgender Thing"; Refuses to be Paired with Gay Couple in Future; Admits to Lying*, E. NASHVILLE NEWS (Jan. 7, 2017), <http://eastnashville.news/2017/01/uber-driver-james-henneberg-is-bothered-by-the-transgender-thing-refuses-to-be-paired-with-gay-couple-in-future-admits-to-lying/> (exposing Uber driver's transphobic and homophobic social media comments regarding interactions with passengers).

¹¹⁹ See *Reported List of Incidents Involving Uber and Lyft*, WHO'S DRIVING YOU?, <http://www.whosdrivingyou.org/rideshare-incidents> (collecting data on number of reported assaults by Uber and Lyft drivers) (last visited May 2, 2017).

¹²⁰ In 2016, Uber CEO Travis Kalanick stated that Uber's reliance on alternative background-checking methods gives people with past, possibly unjustified, arrests a fair opportunity to drive for the company. See Heather Kelly, *Uber CEO Explains Why He Thinks Fingerprinting Drivers is 'Unjust,'* CNN (June 24, 2016, 12:28 AM), <http://money.cnn.com/2016/06/23/technology/uber-travis-kalanick-ges-fingerprinting/>.

Relatedly, the short-term on-demand platforms may threaten the existence of valuable options of traditional accommodations, such as lower-end hotels. Competition with the on-demand platform has endangered lower-end hotels because the more luxurious hotels are more likely than short-term on-demand rental platforms to attract businesspeople and wealthier tourists.¹²¹ Indeed, a recent study concluded that Airbnb's impact on the hotel industry in Texas is unevenly distributed because Airbnb affects mostly lower-end hotels, making them more vulnerable to economic harm.¹²²

Reduced options to stay in a less expensive hotel can have the most serious impact on those who cannot afford the more luxurious options or who find it harder to book a room through the on-demand economy housing platforms. Some have good reasons to persist in using traditional services: some individuals are more risk averse; others lack the technological access required to book such stay; still others may face discrimination in finding a room via on-demand platforms.¹²³ A recent study found that prospective Airbnb lessees with names perceived to be distinctively African American were 16% less likely to succeed in booking a stay than users with identical profiles but who had names that are considered distinctively white names.¹²⁴ For these consumers, the survival of traditional options can be especially vital.

Finally, and importantly, another aspect in which the on-demand economy decreases choice—particularly when work is not in utilization of excess capacity—is in its effect on the number of long-term rentals available on the housing market. Viewed through this lens, while consumers may enjoy more choice when they travel, they may find it harder to find a long-term rental to live in, in their own city (if they reside in a

¹²¹ See Lobel, *supra* note 14, at 115 (“In general, Airbnb competes more directly with bargain and boutique independent hotels, while luxury hotels and bigger hotel chains, which cater to business clients, are less affected.”).

¹²² See Georgios Zervas, Davide Prosperio & John Byers, *The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry* 30 (Boston U. Sch. Mgmt. Research, Working Paper No. 2013-16, 2013), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2366898.

¹²³ See Aloni, *supra* note 15, at 1424 (“On the other hand, P2P services are not available to everyone because they require a credit or debit card, an internet-connected computer, and sometimes a smartphone. Smartphone ownership, however, correlates with income level and age.”).

¹²⁴ See Benjamin Edelman, Michael Luca & Dan Svirsky, *Racial Discrimination in the Sharing Economy: Evidence from a Field Experiment* 1 (Harv. Bus. Sch., Working Paper No. 16-069, 2016), http://www.hbs.edu/faculty/Publication%20Files/16-069_5c3b2b36-d9f8-4b38-9639-2175aaf9ebc9.pdf.

location with a thriving short-term rental market).¹²⁵ This is because of the trend of converting long-term units to short-term rentals. This development has led to further housing shortages and price increases in the long-term rental market.

To understand this phenomenon and its consequences, it is first important to recognize the financial incentive in taking an apartment off of the long-term rental market and renting it short term. Almost always, renting the unit for short term yields considerable more money than renting it long term.¹²⁶ Take Honolulu, Hawai‘i: according to AirDNA, a company that provides analytics of Airbnb businesses—as a means to advise people where it is best to invest in properties for Airbnb—the average monthly rent of a one-bedroom (long-term rental) is around \$1,300; the average Airbnb monthly revenue from one bedroom is \$2,800; and lessors who are at the ninetieth percentile of Airbnb’s revenue in Honolulu (the most successful lessors in the area) can earn as much as \$4,550 a month.¹²⁷ Thus, in Honolulu, converting a unit from long term to short term, on average, would yield more than double—and possibly triple, almost quadruple—the lessor’s revenue. Honolulu is in no way unique: data from all other main metropolitan cities reveal the incentive in taking apartments off the long-term market. In Vancouver, British Columbia, renting a one-bedroom unit for nine to twelve days (depending on the area) would yield the same revenue as a monthly long-term rental.¹²⁸

Because of this level of monetary incentive, gradually, more rental apartments are taken off the market, and their removal contributes to housing shortages and rent surges.¹²⁹ Particularly in tight markets, reductions of available units are likely to increase rental prices.¹³⁰ This impact is already noticeable in several cities. In October 2014, the New

¹²⁵ See Aloni, *supra* note 15, at 1449 (“[A nonintervention approach] increases choice for some tourists and affords extra income for renters, but those limited benefits come at the price of harm to others—neighbors, hotels, and taxpayers.”).

¹²⁶ See Lee, *supra* note 53, at 234 (“So long as a property owner or leaseholder can earn a substantial premium from Airbnb rather than renting to city residents, there is an overpowering incentive to ‘hotelize’ entire buildings . . .”).

¹²⁷ See Scott Shatford, *The Best Places to Buy Airbnb Investment Property in America*, AIRDNA (Aug. 11, 2015), <http://blog.airdna.co/most-profitable-airbnb-cities-in-america/>.

¹²⁸ KRISHNA, *supra* note 58, at 8.

¹²⁹ See, e.g., Carolyn Said, *The Airbnb Effect*, S.F. CHRONICLE (July 12, 2015), <http://www.sfchronicle.com/airbnb-impact-san-francisco-2015/#1> (finding that in San Francisco at least 350 entire homes listed on Airbnb appear to be full-time vacation rentals—in a city “wracked by a housing crisis, where a typical year sees just 2,000 new units added, a few hundred units off the market makes a significant dent”).

¹³⁰ See Lee, *supra* note 53, at 237 (“In tight housing markets with near-zero vacancy rates, a sudden reduction in supply naturally increases rents, particularly because neither the market nor the public sector can swiftly add to the housing stock.”).

York Office of the Attorney General released a report about the impact of Airbnb on housing availability in New York City.¹³¹ It found that over 4,600 units were available on Airbnb as short-term rentals for more than three months and therefore were unavailable for long-term residents—and that the number of such units is likely even larger.¹³² A more recent study, commissioned by the Housing Conservation Coordinators and MFY Legal Services, used the most rigorous method to measure the impact of Airbnb on long-term rental availability in NYC. The study documented units that they define as “impact listing”—meaning that the listings, in 2015, were (1) an entire unit; (2) a regular short-term rental, meaning the unit was booked for short periods more than once per month and had at least one nonbooked day per month; and (3) commercial, meaning the unit was listed for at least three months in the year by the lessor, who listed more than one unit on Airbnb, or was listed for at least six months a year by the lessor, who listed only one unit on Airbnb.¹³³ These “impact units” are properties that are most likely for commercial use, unavailable for long-term rent, and thus have the strongest negative impact on housing availability.¹³⁴ The study found that, in 2015, nearly 16%—or 8,058 listings—of all Airbnb listings in New York City fell under the definition of impact listings.¹³⁵ Returning these units to the long-term market, the report estimates, would increase housing availability by 10%. Further, because the Airbnb market is most active in Manhattan, releasing these units back to the market would increase the number of vacant units for long-term rental in Manhattan by 21%.¹³⁶

In a similar vein, the employment structure that on-demand companies employ can also prompt a reduction of choices for workers, specifically for traditional employment opportunities in which the worker is defined as an “employee.” Most on-demand firms classify their workers as “independent contractors.”¹³⁷ This classification saves the firms large amounts of money,

¹³¹ See N.Y. STATE OFFICE OF THE ATT'Y GEN., AIRBNB IN THE CITY (2016), <https://ag.ny.gov/pdfs/AIRBNB%20REPORT.pdf>.

¹³² *Id.* at 12.

¹³³ See HÉBER MANUEL DELGADO-MEDRANO & KATIE LYON, BJH ADVISORS, SHORTCHANGING NEW YORK CITY: THE IMPACT OF AIRBNB ON NEW YORK CITY'S HOUSING MARKET 15–16 (2016), http://www.sharebetter.org/wp-content/uploads/2016/06/NYC_HousingReport_Final.pdf.

¹³⁴ *Id.* at 17.

¹³⁵ *Id.* at 26.

¹³⁶ *Id.* at 28.

¹³⁷ See Keith Cunningham-Parmeter, *From Amazon to Uber: Defining Employment in the Modern Economy*, 96 B.U. L. REV. 1673, 1686 (2016); see also *Zenelaj v. Handybook, Inc.*, 82 F. Supp. 3d 968 (N.D. Cal. 2015) (concerning a class-action lawsuit brought against Handybook, a housecleaning on-demand platform, by its workers for misclassification as independent workers).

because they do not need to offer these workers various employment protections such as reimbursement of work-related expenses, overtime payment, employer contributions to unemployment insurance,¹³⁸ and minimum wages.¹³⁹ As an example, according to one estimate, “Uber can save up to thirty percent in payroll taxes simply by classifying its drivers as nonemployees.”¹⁴⁰

The expansion of the on-demand economy, especially when workers do not provide only “gigs” but, rather, derive most of their income from this work, can culminate in a decrease of traditional, protected positions. For example, in the transportation sector, the entrance of Uber and Lyft into the market precipitated a significant drop in the number of taxicab jobs.¹⁴¹ Not all taxi drivers are defined as “employees”—even in the traditional-sector taxi industry, some work as independent contractors.¹⁴² A worker’s classification as “employee” versus “independent contractor” depends on the level of control that the employer retains over the worker.¹⁴³ But many of them are classified as employees, making them recipients of a host of benefits, as noted above—thus, such positions are now more difficult to gain.

¹³⁸ See, e.g., *Cotter v. Lyft, Inc.*, 60 F. Supp. 3d 1067, 1073–74 (N.D. Cal. 2015). In that case, the court stated:

[W]hether a worker is classified as an employee or an independent contractor has great consequences. California law gives many benefits and protections to employees; independent contractors get virtually none. Employees are generally entitled to, among other things, minimum wage and overtime pay, meal and rest breaks, reimbursement for work-related expenses, workers’ compensation, and employer contributions to unemployment insurance.

Id. at 1073–74 (internal citations omitted).

¹³⁹ Robert Sprague, *Worker (Mis)classification in the Sharing Economy: Trying to Fit Square Pegs Into Round Holes*, 31 A.B.A. J. LAB. & EMP. L. 53, 72 (2015) (“It is often economically efficient for a business to use independent contractors.”).

¹⁴⁰ Cunningham-Parmeter, *supra* note 137, at 1686.

¹⁴¹ See WAHEED ET AL., *supra* note 103, at 2 (“Between 2013 and 2014, taxi revenue dropped by 9 percent and total completed trips dropped by 18 percent.”); see also Associated Press, *Taxi Ridership on the Decline as Riders Opt for Uber, Lyft*, WASH. TIMES (Dec. 15, 2016), <http://www.washingtontimes.com/news/2016/dec/15/taxi-ridership-on-the-decline-as-riders-opt-for-ub/> (“Taxi companies have been trying to deal with declining ridership and revenue due to the increased popularity of newcomers Uber and Lyft.”).

¹⁴² See, e.g., *NLRB. v. Friendly Cab Co., Inc.*, 512 F.3d 1090, 1103 (9th Cir. 2008) (holding that taxi drivers are employees); *Yellow Cab Coop. Inc. v. Worker’s Comp. Appeals Bd.*, 277 Cal. Rptr. 434, 436–38 (finding that taxi drivers were “employees” for workers’ compensation purposes).

¹⁴³ Cunningham-Parmeter, *supra* note 137, at 1691 (“Nearly every employment protection depends on the existence of an employer-employee relationship, and every employment test considers the level of control that putative employers retain over workers.”).

As stated, the McKinsey Global Institute assessed that 87% of workers in the on-demand economy work by choice rather than due to an inability to find other gainful employment.¹⁴⁴ However, this means that 13% of workers work in the on-demand economy because they cannot find full-time stable employment. But a different study, which surveyed providers in the on-demand economy, found that “41 percent say they prefer the security and benefits of working for a traditional company even if it might mean less flexibility.”¹⁴⁵ Which is why the accurate number is a debatable question. But there is no doubt that the rise of the on-demand economy—and especially its lack of regulation with regard to employment rights—results in the reduction of stable employment opportunities.

The reduction of choice for consumers and workers is correlated to the spectrum of utilization players use in the on-demand economy. For consumers, it may not matter if the product they buy derived from casual or commercial work. But the consequences that stem from the magnitude of commercial work can eventually mean less choice for consumers. Infrequent casual work in increased excess capacity accordingly has less impact on the reduction of choice. For providers, the distinction is more obvious: as unregulated work in excess-in-disguise grows more common, the fewer options exist for traditional, protected work. Hence, choice and level of utilization of excess capacity are correlated.

B. *Other Negative Externalities*

In addition to the expansion or reduction of choice, activities from opposite ends of the utilization spectrum produce different levels of negative externalities. Activities in increased excess capacity produce fewer negative externalities, whereas commercial use without utilization of excess capacity typically produces more negative externalities.

In the short-term on-demand rental market, the magnitude of negative externalities attached to commercial use of short-term rentals is noticeable.¹⁴⁶ To be sure, casually renting a unit every once in a while can produce some negative externalities, too, such as nuisance and safety

¹⁴⁴ BUGHIN ET AL., *supra* note 72, at 41.

¹⁴⁵ See Press Release, Penn Schoen Berland, Forty-Five Million Americans Say They Have Worked in the On-Demand Economy, While 86.5 Million Have Used It, According to New Survey (Jan. 6, 2016), <http://psbresearch.com/wp-content/uploads/2016/01/On-Demand-Economy-Release.pdf>.

¹⁴⁶ See KRISHNA, *supra* note 58, at 7–11 (reporting on a survey of residents in Vancouver about the impact of short-term rental platforms and surveying the number of complaints filed by residents referencing Airbnb or other short-term rentals).

concerns.¹⁴⁷ Having strangers in a building can make the residents feel less safe; it can create extra noise by people who come to vacation; it can also generate some added pressure on shared resources—from recycling and trash, to parking and elevators, to gym usage (where one exists).¹⁴⁸ However, when one rents an apartment via platforms consistently and commercially, the magnitude of these harms grows;¹⁴⁹ e.g., from occasionally seeing unfamiliar faces in the hallway and parking areas to seeing different unfamiliar faces all the time, from intermittent noise to more constant noise, and so on.

The use of short-term rentals that do not involve utilization of excess space, in residences that are not designed to operate as hotels, intensifies these setbacks. Indeed, in a survey conducted in Vancouver, British Columbia, 42% of those questioned said that short-term rentals reduce safety in buildings and neighborhoods, and 41% said that they increase noise and property damage.¹⁵⁰

Lara Williams, an author and freelance writer who lives in Manchester, UK, describes the major inconvenience and noise she experienced from an apartment adjacent to hers, which was converted to be a short-term rental unit.¹⁵¹ She experienced loud noise, parties, music, and even “men wrestling on the floor outside my flat, someone trying to kick in my door, and fights that have left blood smears across the corridor walls.”¹⁵² Lara recognizes the distinction between commercial use and renting short term by increased utilization. She writes, “I had nothing against someone trying to make a little extra cash over the weekend. It was when it became clear the property was being entirely used for short-term rentals, and after my second phone call to the police, that I started complaining.”¹⁵³ This seems to be a common view: many people agree that their neighbors should be able to leverage their underutilized goods, but they do not want to live next to what functions as a semi-hotel room.¹⁵⁴

¹⁴⁷ See *id.* at 11.

¹⁴⁸ See *id.*

¹⁴⁹ See generally O’NEIL & OUYANG, *supra* note 42.

¹⁵⁰ KRISHNA, *supra* note 58, at 8.

¹⁵¹ See Lara Williams, *When Airbnb Rentals Turn Into Nuisance Neighbours*, THE GUARDIAN (Sept. 18, 2016), <https://www.theguardian.com/technology/2016/sep/17/airbnb-nuisance-neighbours-tribunal-ruling>.

¹⁵² See *id.*

¹⁵³ See *id.*

¹⁵⁴ See, e.g., Scott Gruby, *Why Your Short-Term Airbnb Rental is a Problem*, VOICE OF SAN DIEGO (Feb. 15, 2015), <http://www.voiceofsandiego.org/tourism/why-your-short-term-airbnb-rental-is-a-problem/> (“[M]any people don’t seem to mind a neighbor renting out a room for a few weeks, or even an entire house while the owner is away.”).

What is more, the nuisance resulting from vast conversions to short-term rentals in residential areas threatens to change the nature of entire neighborhoods. In popular tourist destinations, which are very profitable for operators of short-terms, residents report that the short-term market facilitated through the platforms has promoted nuisance, noise, and feelings of insecurity.¹⁵⁵ People who live in residential areas have found themselves neighboring with hotel-like operations. As described by a report written by the Los Angeles Alliance for a New Economy:

In Venice [California], as many as 12.5 percent of all housing units have become AirBnB units, all without public approval. There are 360 AirBnB units per square mile in Venice and longtime residents who never intended to live next to hotels now find themselves dealing with noise and safety concerns that negatively impact their quality of life.¹⁵⁶

The ramifications of on-demand platforms on the availability of long-term rentals can also contribute to changes in the character of a community. If an area is populated with apartments that are rented only short term, when they are not booked these units remain empty.¹⁵⁷ At the same time, local residents cannot find homes—due to the housing shortage and increase in prices—and have to leave the area.¹⁵⁸ As described by a resident of Marfa, Texas: “Instead of having someone live in that house who’s contributing to the community, you’re turning the house into a place that gets rented out a couple of times a month.”¹⁵⁹

Another negative externality of short-term rentals via on-demand platforms is reduction in revenue from transient occupancy tax (aka, hotel tax).¹⁶⁰ Hotel taxes are used in big cities to facilitate collaboration between the city and the hotel industry.¹⁶¹ The hotel collects the taxes for the city or state to use for infrastructure, such as convention centers and transportation, that attracts tourism.¹⁶² Thus, when more visitors stay in short-term

¹⁵⁵ See, e.g., KRISHNA, *supra* note 58, at 8.

¹⁵⁶ ROY SAMAAN, L.A. ALLIANCE FOR A NEW ECONOMY, AIRBNB, RISING RENT, AND THE HOUSING CRISIS IN LOS ANGELES 3 (2015), https://www.ftc.gov/system/files/documents/public_comments/2015/05/01166-96023.pdf.

¹⁵⁷ See *id.* at 16–21.

¹⁵⁸ See *id.* at 2–3. Cf. Lee, *supra* note 53, at 240 (“Airbnb [short-term rentals] impede integration and exacerbate socioeconomic inequality.”).

¹⁵⁹ Rachel Monroe, *More Guests, Empty Houses*, SLATE (Feb. 13, 2014, 8:08 AM), http://www.slate.com/articles/business/moneybox/2014/02/airbnb_gentrification_how_the_s_haring_economy_drives_up_housing_prices.html.

¹⁶⁰ See SAMAAN, *supra* note 156, at 28–29.

¹⁶¹ See Miller, *supra* note 31, at 162–63 (describing the “convention complex” in which “hotels are part of a systematic collaboration between government and industry”).

¹⁶² See *id.* at 162, 173.

residences rather than hotels, the result is less revenue to the city.¹⁶³ In some municipalities this is no longer a problem, as Airbnb has started to collect the tax for the city.¹⁶⁴ In other municipalities, this is still a problem.¹⁶⁵ And regarding hotel tax, too, there is a difference between increased use and commercial use. When a unit is rented full time, it is likely to be in an area that is already highly attractive to tourists.¹⁶⁶ The implication is that a large number of visitors who use the infrastructures funded by hotel taxes do not contribute to this use; conversely, the loss of revenue from casual lessees is less significant because their number is smaller. Further, when one rents an excess-capacity unit only rarely, it can be located in areas that are further from “the tourist path” and thus bring more economic activity to such areas (these are also generally areas that receive less direct benefit from hotel tax revenue).¹⁶⁷

The same holds true with regard to commercial use of TNCs: it is likely to produce more negative externalities than increased-utilization driving does.¹⁶⁸ To be sure, work as a driver in increased utilization also produces some negative externalities; the difference between the externalities that commercial versus casual use creates lies in their magnitude.¹⁶⁹ The expansion of TNC services can increase the number of cars on the road and,

¹⁶³ *Id.* at 173.

¹⁶⁴ In 2015, Airbnb reportedly owed the city of San Francisco as much as \$25 million in hotel back-taxes. See Phillip Matier & Andrew Ross, *Airbnb Pays Tax Bill of ‘Tens of Millions’ to S.F.*, S.F. GATE (Feb. 18, 2015, 8:48 PM), <http://www.sfgate.com/bayarea/matier-ross/article/M-R-Airbnb-pays-tens-of-millions-in-back-6087802.php>.

¹⁶⁵ Miller, *supra* note 31, at 189–90 (surveying laws regarding transient occupancy tax collection by short-term rental providers on behalf of municipalities); see Cathy Bussewitz, *Hawaii Governor Will Veto Bill Allowing Airbnb to Collect Taxes*, SKIFT (Jun. 30, 2016, 2:00 PM), <https://skift.com/2016/06/30/hawaii-governor-will-veto-bill-allowing-airbnb-to-collect-taxes/>.

¹⁶⁶ See Lee, *supra* note 53, at 235 (“Airbnb listings are concentrated in just seven of the city’s densest, most expensive neighborhoods: Venice, Downtown, Miracle Mile, Hollywood, Hollywood Hills, Echo Park, and Silver Lake. These tourist destinations account for nearly half of Airbnb listings, and 69% of all Airbnb-generated revenue in Los Angeles.”); DELGADO-MEDRANO & LYON, *supra* note 133, at 5 (“Airbnb listings are concentrated in a few neighborhoods in Manhattan and Brooklyn.”); KRISHNA, *supra* note 58, at 5 (describing geographical distribution of Airbnb rentals in Vancouver and concluding that “most short-term rental listings are concentrated in and around downtown”).

¹⁶⁷ See Lobel, *supra* note 14, at 124 (“When renters stay at an Airbnb location, they are often staying in local neighborhoods, eating at local restaurants, and shopping at local vendors.”).

¹⁶⁸ See generally WAHEED ET AL., *supra* note 103 (describing negative impact of ridesharing on tax industry); Ge et al., *supra* note 109 (examining instances of racial and gender discrimination in ridesharing).

¹⁶⁹ See generally BUGHIN ET AL., *supra* note 72, at 41–62 (analyzing results of survey of casual versus full-time workers in the P2P economy).

therefore, create more air pollution and traffic congestion.¹⁷⁰ This is because, unlike with taxicabs, there is no cap on the number of automobiles that TNCs use.¹⁷¹ Further, there is a risk that passengers may use public transportation less frequently, because TNC services serve as an alternative option to public transportation.¹⁷² And only infrequently do TNCs serve as replacements for car ownership, so they do not decrease in significant ways the number of cars on the street.¹⁷³ They mainly serve as an alternative to taxis.¹⁷⁴ Indeed, there are some strong indications that the lower prices of TNC rides generate greater numbers of rides than would otherwise exist with traditional taxis.¹⁷⁵ In NYC, there has been debate on the impact of TNCs on traffic, with contradictory evidence produced by both sides. On the one side, in January 2016, the Office of the Mayor published a long-awaited report on the connection between TNCs and intensified traffic in Manhattan.¹⁷⁶ The report concluded that “E-dispatch is a contributor to overall congestion, but did not drive the recent increase in congestion in the CBD [Manhattan’s Central Business District].”¹⁷⁷ This report, however,

¹⁷⁰ See Aloni, *supra* note 15, at 1438–39 (citing Steven Hill, *Is the Sharing Economy Truly Green?*, SIERRA CLUB (Mar. 14, 2016), <http://www.sierraclub.org/sierra/2016-2-march-april/green-life/sharing-economy-truly-green>); Rogers, *supra* note 114, at 91; Tarun Wadhwa, *Could Lyft and Uber Put Public Transit Out of Business?*, FORBES (Nov. 13, 2014, 12:44 PM), <http://www.forbes.com/sites/tarunwadhwa/2014/11/13/will-lyft-and-ubers-shared-ride-service-put-public-transit-out-of-business/#67878d371f58>).

¹⁷¹ See generally Katrina Miriam Wyman, *Problematic Private Property: The Case of New York Tax Medallions*, 30 YALE J. ON REG. 125 (2013) (describing New York’s taxi medallion regulation system).

¹⁷² See BRUCE SCHALLER, SCHALLER CONSULTING, UNSUSTAINABLE? THE GROWTH OF APP-BASED RIDE SERVICES AND TRAFFIC, TRAVEL AND THE FUTURE OF NEW YORK CITY 1 (2017), <http://schallerconsult.com/rideservices/unsustainable.pdf> (“In 2015 and to an even greater extent in 2016, growth in taxi and for-hire ridership outpaced growth in transit (subway and bus) ridership and is now the leading source of growth in non-auto travel in New York City.”).

¹⁷³ See John Kuo, *Can I Avoid Car Insurance by Using Lyft and Uber?*, NERDWALLET (Oct. 14, 2014), <http://www.nerdwallet.com/blog/insurance/2014/10/14/avoid-car-insurance-costs-lyft-uber/>. A recent analysis by NerdWallet studied, across all 50 states, the costs of using Uber and Lyft as compared to owning a car. See *id.* The study found that car ownership is cheaper than taking Uber or Lyft for every trip. See *id.* Especially in cities where a commute is required, TNC services are not a good or cheaper alternative to car ownership. See *id.*

¹⁷⁴ E-dispatch trips are largely replacing yellow taxi trips in New York City’s Central Business District. See N.Y.C. OFFICE OF THE MAYOR, FOR-HIRE VEHICLE TRANSPORTATION STUDY 5 (2016), <http://www1.nyc.gov/assets/operations/downloads/pdf/For-Hire-Vehicle-Transportation-Study.pdf> [hereinafter N.Y.C. FOR-HIRE VEHICLE TRANSPORTATION STUDY].

¹⁷⁵ See Hill, *supra* note 170 (arguing that TNC services increase consumption, negatively affecting the environment and traffic congestion).

¹⁷⁶ See N.Y.C. FOR-HIRE VEHICLE TRANSPORTATION STUDY, *supra* note 174.

¹⁷⁷ *Id.* at 5.

was criticized for its unclear methodology and lack of data about the way conclusions were generated.¹⁷⁸

Other accounts claim the opposite: a recent report concluded, “TNCs accounted for the addition of 600 million miles of vehicular travel to the city’s roadway network [between 2013 and 2016] . . . exceed[ing] the total mileage driven by yellow cabs in Manhattan.”¹⁷⁹ This report, as well as others, argues that the TNCs accrue more rides and numbers of vehicles on the streets while they trim the number of rides in public transportation.¹⁸⁰ Other data from San Francisco and London show similar consequences: a swell in number of rides, a surge in traffic congestion, and concerns about air quality as a result.¹⁸¹

Additional negative externalities may appear as more people work in TNCs as super drivers. The growing number of untrained drivers can increase the number of car accidents. In municipalities that charge a tax for each taxi ride but have not enacted a similar duty on the TNCs, tax revenues are reduced.

To conclude, the magnitude of work that is not based on increased use of excess capacity does most of the job of producing more negative extremities here. It does that by enlarging the number of transactions and by making the type of work offered more comparable to that of traditional offerings. As such, it threatens the rationales that existing regulations are grounded in, like limiting the number of taxis on the road, increasing revenues from tax collection, or controlling nuisances through zoning laws.

III. PRINCIPLES OF REGULATORY APPROACH

Activities of the on-demand economy create different levels of negative and positive externalities, often in correlation with their position on the

¹⁷⁸ See Emma G. Fitzsimmons, *Uber Not to Blame for Rise in Manhattan Traffic Congestion, Report Says*, N.Y. TIMES (Jan. 15, 2016), <https://www.nytimes.com/2016/01/16/nyregion/uber-not-to-blame-for-rise-in-manhattan-traffic-congestion-report-says.html> (“Charles Komanoff, a transportation analyst, called the study ‘unbelievably flimsy’ and questioned the research model the City used.”).

¹⁷⁹ SCHALLER, *supra* note 172, at 5.

¹⁸⁰ See Steven Hill, *Uber is a Nightmare: They’re Selling a Big Lie—And the New York Times Keeps Buying It*, SALON (Apr. 9, 2016, 11:00 AM), http://www.salon.com/2016/04/09/uber_is_a_nightmare_theyre_selling_a_big_lie_and_the_new_york_times_keeps_buying_it/.

¹⁸¹ See *id.* (“Ed Reiskin, director of transportation for San Francisco’s Municipal Transportation Agency, says, ‘[Uber and Lyft] have put . . .’ an estimated 15,000 [more] autos [on the streets] in San Francisco alone . . . In London, a study by the Department for Transport found that the rise of taxi apps such as Uber has played a part in worsening congestion.”).

spectrum of utilization.¹⁸² As such, apposite regulations should aim to differentiate between the two types of activities and treat each with a separate set of rules. This Section provides some basic principles of regulation that embody this concept, while looking at municipalities that have enacted policies incorporating some of these principles—successfully and unsuccessfully.

The first principle involves capturing the distinction between work in increased excess capacity and activity that is not based on increased utilization. Namely, lawmakers should craft regulations that discern when work in increased utilization transforms into an activity that is more akin to traditional commercial work. Regulations, thus, should prevent incumbent-like providers from passing as increased-excess providers in order to evade regulation governing the traditional sectors.

How can policymakers design rules to distinguish between activities that derive from increased utilization and those that do not? When cataloging different undertakings, lawmakers ought to look at two factors together: the frequency of supply and the infrastructure used for the transaction. The frequency denotes the number of transactions the provider is involved with in a defined period. The more frequently that the supplier provides the goods or services, the more likely that she is not working in increased excess capacity. The other distinguishing factor for policymakers to focus on is infrastructure: whether the goods are primarily designated for a commercial purpose or only intermittently converted for commercial use. If the provider uses her goods predominantly for her own leisure, and only occasionally for commercial purposes, this indicates that she is selling idle capacity.

The type of indicators that lawmakers can consider to pinpoint the frequency of use and the function of the infrastructure depends on the type of regulation at stake. For example, in determining the appropriate employment classification of providers and the protections that workers should get, the factors that lawmakers should contemplate include: the number of hours the worker puts into the work, the portion of that worker's income derived from this work, the number of miles she drives over a period of time, and the function of the vehicle (e.g., private versus rented car). For short-term rentals, lawmakers should take into consideration the number of transactions per year (the total nights per year that the provider offers the unit on a short-term basis) and whether the provider is a principal resident, because these factors indicate whether the provider uses her property primarily for commercial purposes.

¹⁸²*See supra* Part II.

A few municipalities have commenced crafting and implementing regulations that aim to distinguish between these different uses.¹⁸³ While the content of these rules are still open to debate and do not embed this concept perfectly, they generally delineate what such regulations should look like. California, the first state to legalize and regulate on-demand transportation services, defines TNC as an “online-enabled app or platform to connect passengers with drivers using their *personal vehicles*.”¹⁸⁴ In promulgating these rules, the California Public Utilities Commission said, “The primary distinction between a TNC and other TCPs [Transportation Charter Permits] is that a TNC connects riders to drivers who drive their personal vehicle, not a vehicle such as a limousine purchased primarily for a commercial purpose. To that end, a TNC is not permitted to itself own vehicles used in its operation or own fleets of vehicles.”¹⁸⁵ The definition, thus, relies on the provider’s and firms’ infrastructures: i.e., whether it is a private car used to leverage idle capacity or a car designated predominantly for commercial use.

The interpretation of the term “personal vehicle” is a source of fierce debate.¹⁸⁶ On the one hand, opponents of on-demand firms argue that Uber’s and Lyft’s programs to lease and sell vehicles to their drivers blur this line between traditional taxi drivers who use cars designated primarily to drive passengers and TNC drivers who, under these programs, do the same.¹⁸⁷ Thus, critics argue, TNCs that sell and lease cars to their providers should abide by traditional regulations.¹⁸⁸ On the other hand, the TNCs

¹⁸³ See, e.g., Order Instituting Rulemaking on Regulations Relating to Passenger Carriers, Ridesharing, and New Online-Enabled Transp. Servs. (Cal. P.U.C. Dec. 27, 2012), <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M040/K862/40862944.pdf>; Decision Adopting Rules and Regulations to Protect Public Safety While Allowing New Entrants to the Transportation Industry, 24 (Cal. P.U.C. Sept. 19, 2013), <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M077/K122/77122741.pdf>.

¹⁸⁴ *Id.* (emphasis added).

¹⁸⁵ *Id.*

¹⁸⁶ See, e.g., S.F. Int’l Airport et al., Reply Comments on the Concept of Personal Vehicles, Rulemaking on Regulations Relating to Passenger Carriers, Ridesharing, and New Online-Enabled Transp. Servs. (Cal. P.U.C. July 25, 2016), <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M167/K737/167737529.pdf>.

¹⁸⁷ See *id.* at 1 (“In September 2013, the Commission drew a bright line in its decision to recognize and regulate a new type of charter-party carrier It appears that line is being erased.”).

¹⁸⁸ See *id.* at 7. In their concluding discussion, the commentators argued:

With the proliferation of business relationships between TNCs and car rental agencies and manufacturers for the express purpose of providing vehicles to be used for TNC services, it seems clear that there is no meaningful difference between TCP limousine services and TNC services. TNCs now control fleets by proxy, and TNC drivers drive vehicles procured for purely commercial purposes. As TNC law continues to evolve,

oppose what they perceive as a narrow definition of “personal vehicle”; and, further, they contest imposing restrictions based on a vehicle’s designation.¹⁸⁹ When first promulgating these rules, the Commission did not clarify the definition of “personal vehicle.”¹⁹⁰ In the second phase of rulemaking, the Commission decided to postpone its ruling on the topic until the third phase, to allow parties to submit their comments,¹⁹¹ but stated, for the time being, that “[l]ease or rental agreements with a term of less than four months are not permitted as a form of personal vehicle ownership for TNC drivers.”¹⁹² In its recent proposed decision regarding the definition of “personal vehicle,” the Commission revised its position to define “personal vehicle” to mean a vehicle that is “owned, leased, rented for a term that does not exceed 30 days[,]” instead of the previous definition of “less than four months.”¹⁹³ Thus, although the issue has still not been finally determined, it seems that California’s regulations concerning operation of TNCs incorporate distinctions between activities involved with excess capacity and those that are not.

The particular details about where the Commission will draw the line between cars for professional use and those involving increased utilization are still unclear and subject to modification.¹⁹⁴ It is still to be seen whether the Commission will embed these characteristics further,¹⁹⁵ creating

we urge the Commission to subject TNCs to the same safety requirements imposed on TCP limousine services.

Id.

¹⁸⁹ See Decision on Phase II Issues and Reserving Additional Issues for Resolution in Phase III, at 58 (Cal. P.U.C. Apr. 21, 2016), <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M161/K474/161474505.pdf>.

¹⁹⁰ See *id.* at 39 (“SFO/MTA requests the Commission amend the scope to: (1) clarify the definition of ‘personal vehicle’ Below, we clarify the definition of personal vehicles”), 51 (“SFMTA and SFIA claim the definition of personal vehicle is confusing Our clarification is set out . . . above.”).

¹⁹¹ *Id.* at 58 (“The Commission will issue a separate ruling posing questions about . . . the definition of personal vehicle for party comment.”).

¹⁹² *Id.* at 3.

¹⁹³ See Proposed Decision for Phase III.A.: Definition of Personal Vehicle, at 4 (Cal. P.U.C. Dec. 16, 2016), <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M171/K329/171329614.pdf>. Compare *id.*, with Decision on Phase II Issues, *supra* note 189, at 3 (imposing temporary definition of “personal vehicle”).

¹⁹⁴ See *supra* note 191 and accompanying text.

¹⁹⁵ On October 26, 2016, the California Public Utilities Commission opened a Phase III in the rulemaking proceeding. Phase III.B. Scoping Memo and Ruling of Assigned Comm’r, at 1 (Cal. P.U.C. Apr. 4, 2017), <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M183/K388/183388905.pdf>. The Commission separated Phase III into two sub-phases, Phase III.A. and Phase III.B. *Id.* On December 15, 2016, the Commission issued a proposed decision for Phase III.A, which addresses the definition of “personal vehicle.” See Proposed Decision for Phase III.A., *supra* note 193. Although the Commission has not yet adopted

genuine distinctions between workers in increased excess capacity and those who essentially operate the same as traditional taxicabs but have less burdensome regulatory requirements to follow. In any case, the Commission's work illustrates regulations that attempt to distinguish between the two activities based on the infrastructure used.

In the short-term rental market, some municipalities—to differentiate casual lessors from those who do *not* leverage idle capacity—place a limit on the number of nights that residents can lease their properties for short-term stays.¹⁹⁶ The assumption is that a small number of transactions signals providers who are merely increasing their utilization of excess capacity, while those who exceed this threshold operate commercially. For example, in San Francisco, the threshold is ninety days a year,¹⁹⁷ and Seattle has introduced a similar restriction (currently pending).¹⁹⁸ Vancouver, British Columbia, in its pending proposal, has decided not to adopt a distinction based on maximum number nights because “tracking and enforcing a nightly rental cap is extremely difficult and poses a high administrative burden with unpredictable results.”¹⁹⁹ Instead, the proposed regulations in Vancouver will permit short-term rentals only by those who are defined as “principal residents.”²⁰⁰ For a lessor to demonstrate that she is the principal resident of a unit, she would have to present evidence that she controls the rented unit (as owner or tenant) and provide proof of regular personal business at this address—indicated by a utility bill with the lessor's name or other government identification that shows she actually lives at the address in question.²⁰¹ The premise of this “principal resident” proposal is that such category distinguishes between units that are *primarily* for short-term rentals and those that are available only through increased utilization.

the Proposed Decision for Phase III.A. because the period for comment on the Proposed Decision has not elapsed, on April 7, 2017, the Commission opened Phase III.B. of the rulemaking proceeding. Phase III.B. Scoping Memo and Ruling of Assigned Comm'r, *supra*, at 1. The Commission expects to issue a proposed ruling on Phase III.B. of the rulemaking proceeding in the third quarter of 2017. *See id.* at 8.

¹⁹⁶ *See infra* notes 197–198 and accompanying text.

¹⁹⁷ *See* S.F., CAL., ADMIN. CODE § 41A.5(g)(1)(A) (2016) (“[A] Permanent Resident may offer his or her Primary Residence as a Short-Term Residential Rental if: (A) the Permanent Resident occupies the Residential Unit for no less than 275 days out of the calendar year in which the Residential Unit is rented as a Short-Term Residential Rental[.]”).

¹⁹⁸ *See generally* Regulating Short Term Rentals, SEATTLE.GOV, <https://www.seattle.gov/council/issues/regulating-short-term-rentals> (last visited May 4, 2017).

¹⁹⁹ KRISHNA, *supra* note 58, at 17.

²⁰⁰ *Id.* at 18 (“To obtain a short-term rental business license, an operator must demonstrate Principal Residence through . . . [c]ontrol of the dwelling unit . . . [and] [p]roof of regular personal business[.]”).

²⁰¹ *Id.*

How should the policymaker decide which on-demand activity crosses the line from casual use (work in increased utilization) to commercial work? This is different from the previous query, which was how to differentiate between the two activities. Here, the examination is: at what point do lawmakers think an activity is becoming more commercial in nature? How do lawmakers draw such line between activities? Said differently, at what point does an activity considered to produce mainly positive externalities morph into one that produces more negative externalities? For instance, in short-term rentals, should the line be set at thirty days a year, sixty days a year, ninety days a year?

Indeed, in some cases, it is not easy to draw the line between pursuits. The resolution here should rely on the negative externalities that commercial use may produce. The city of San Francisco decided that ninety days a year was the limit, because they evaluated that that was the point at which short-term rental revenue would break even with long-term rentals (the amount of money a lessor would make renting from a tenant for a whole year).²⁰² Thus, if the city allows a provider to offer short-term rentals for more than ninety days a year, it incentivizes lessors to convert long-term rentals to short-term ones.²⁰³

Further, take, for example, the stories in this Introduction regarding individuals who use Airbnb in various ways. Ryan Scott, who owns twelve units in San Diego and manages an additional ten units, is on the extreme end of the spectrum (working consistently with new infrastructure and thus very likely inflicting damage on the housing market and possibly on the fabric of the community).²⁰⁴ Next, Jeannie Ralston, who converted an apartment originally used for resident rental to one for short-term rental, also does not work in increased excess capacity.²⁰⁵ Conversely, Jordan Reeves, a casual user who leases the property when it is otherwise not used,

²⁰² *Contra* Emily Green, *SF Deals Major Blow to Airbnb with Tough Short-Term Rental Law*, S.F. GATE (Nov. 15, 2016, 10:26 PM), <http://www.sfgate.com/news/article/SF-deals-major-blow-to-Airbnb-with-tough-10617319.php> (NYU business professor Arun Sandararajan disputes whether San Francisco's 90-day policy truly achieves the city's stated objective of promoting long-term rentals: "The story that is being told is that people take units off the long-term rental market to rent them on Airbnb . . . But if you look at the data . . . it is very clear that if there is any effect that Airbnb is having on the availability of long-term rentals, it is very small compared to the effects of rent stabilization and population growth.").

²⁰² *Cf. id.*

²⁰³ *See id.*

²⁰⁴ *See* Weisberg, *supra* note 4.

²⁰⁵ *See* Ralston, *supra* note 1.

is on the other end of the spectrum—a classic case of someone whose activities fall within the utilization of idle capacity.²⁰⁶

Of all the cases discussed, Michael Naess—who, seventy times per year, rents a room within his own property while he is present—introduces the most challenging case.²⁰⁷ On the one hand, if we look only at the infrastructure he uses, he is clearly leveraging otherwise-dead capital: the extra room in his own home.²⁰⁸ What is more, by always staying in the apartment, he insures that his guests are not going to be too noisy or create certain kinds of safety concerns; so, his situation avoids some negative externalities.²⁰⁹ It is not surprising, then, that such use is almost always considered legal.²¹⁰

On the other hand, looking at the frequency of transactions and other possible negative externalities, we might conclude that his activity is somewhere in the middle of the spectrum of utilization. This is because Naess uses the room for short-term rentals constantly (rather than casually).²¹¹ As a result, his neighbors might feel unsafe or uncomfortable having new people in the hallway every few days. In a municipality in which short-term rental owners do not pay hotel tax, it can also mean loss of revenue to the city.²¹² Therefore, Naess’s case presents a challenge in drawing the line. In a world with perfect legislation and no enforcement problems, lawmakers may designate it as a “semi-excess capacity” activity and impose only some limitations on its use. But in a less than perfect world, the lawmaker will need to decide whether such use crosses the line or not.

After policymakers are able to draw the line and differentiate the two activities, the next substantial issue is the content of the regulations: which obligations and rules are attached to each category? Fundamentally, activities in increased utilization produce positive externalities—they offer more choice for consumers and providers. Lawmakers should support the innovation and its results by allowing people to leverage their goods, time, and skills. Because transactions based on increased utilization are different

²⁰⁶ See Hajela, *supra* note 8.

²⁰⁷ See Kleinfeld, *supra* note 6.

²⁰⁸ *See id.*

²⁰⁹ *See id.*

²¹⁰ See KRISHNA, *supra* note 58, at 12–14 (surveying short-term rental regulations in several cities; in all of them, shared rooms are permitted for unlimited periods of time).

²¹¹ See Kleinfeld, *supra* note 6.

²¹² See *supra* notes 160–162 and accompanying text; O’NEILL & OUYOANG, *supra* note 42, at 11, 15, 24, 32, 40 (estimating the lost hotel tax revenue arising from short-term rentals in Phoenix, Los Angeles, Miami, New York City, and San Francisco).

from other, traditional work in the level of negative externalities they produce, each category should be governed by a different set of rules.²¹³

Lawmakers should, thus, create two different categories of activities based on the spectrum of excess-capacity utilization. Activities based on increased excess capacity should be regulated lightly and tailored to casual, unsophisticated providers. Traditional work done through platforms should be governed by the same rules as incumbents unless there is a significant reason justifying a departure from these regulations.

But this does not mean that transactions in increased excess capacity should be a regulation-free zone. For some types of regulations—such as safety—this distinction may not matter at all because lawmakers can reasonably insist that, for these critical areas, there is no difference between work in increased excess capacity and other work. A part-time driver can cause the same harm as one who drives regularly if she drives an unsafe vehicle or without adequate insurance. Thus, lawmakers should impose safety requirements—criminal-background checks, vehicle inspections, insurance coverage—in a way that assures public safety and reasonable allocation of risk. The category of activities in increased excess capacity, thus, should come under minimal regulation: only to protect safety and prevent market failures.

In other aspects, regulations can take a different form from those imposed on incumbents or on incumbent-like work operated through on-demand platforms. Hotel tax provides an interesting test case. San Francisco, which created a new regime responding to the problems caused by on-demand short-term rentals, imposes on short-term Airbnb transactions an occupancy tax (collected by Airbnb) equivalent to that levied on hotels.²¹⁴ However, a regime premised on the distinction between transactions on the spectrum of utilization may reasonably levy different tax rates for these activities since they may vary in the type of visitors they attract and in their use of municipalities' infrastructures. Hotels are more likely to draw businesspeople who use infrastructure as convention centers or performing arts centers.²¹⁵ Conversely, visitors who turn to Airbnb to experience a location from a local's perspective may be less likely to use some of these infrastructures.²¹⁶ Airbnb units offered by casual users also may be located in parts of town that are less touristic in their nature; thus,

²¹³ See *supra* Part II.

²¹⁴ See *Transient Occupancy Tax (TOT) Frequently Asked Questions for Hosts, Website Companies and Merchants of Record*, OFFICE OF THE TREASURER & TAX COLLECTOR, CITY & CNTY. OF S.F., http://sftreasurer.org/tot_host_website_merchant_faq#1 (last visited Mar. 24, 2017).

²¹⁵ See sources cited *supra* notes 160–162.

²¹⁶ See note 26 and accompanying text.

revenue from hotel tax is less targeted to these areas.²¹⁷ Further, as renting out rooms or units on a short-term basis provides more business to these less-visited municipal areas, lawmakers can even incentivize people to visit the areas.²¹⁸ Thus, unlike the path taken by San Francisco, a municipality may be justified in creating a different hotel-tax rate for transactions based on casual use.

Alternatively, municipalities can impose a tax—equal to its “regular” hotel tax—on short-term rentals located in the central tourist zones, while creating a reduced tax for short-term rentals in other zones. This should not create an extra administrative burden or confusion, because, in regulated regimes, lessors must register their units; the city can inform them of their hotel tax rate at the time of registration.

In a similar vein, in employment situations, lawmakers should treat full-time workers in the on-demand economy differently than they treat casual providers in that same economy. The former are not substantially different from traditional employees. On-demand firms exert a level of control over these workers very similar to employers’ control over traditional employees.²¹⁹ In the transportation arena, Uber and Lyft have created various programs to incentivize their drivers to provide more hours a week—to make them “super-drivers.”²²⁰ For instance, Lyft’s Power Driver Bonus program requires drivers to put in some minimum hours a week, plus maintain a 90% acceptance rate.²²¹ In return, Lyft waives most of its commission to drivers who fulfill these requirements, thus granting them approximately 20% more than they would otherwise be paid.²²² Lyft and Uber exert more control over workers who work voluminous hours. The flexibility attendant to the “independent contractor” status is lost once the driver is incentivized to work more hours a week and not to refuse riders. These drivers’ level of income dependence on the employer is also strong.²²³ Thus, when it comes to workers who are not using their increased

²¹⁷ See KRISHNA, *supra* note 58, at 5 (describing geographical distribution of Airbnb rentals in Vancouver).

²¹⁸ *See id.*

²¹⁹ See Cunningham-Parmeter, *supra* note 137, at 1687, 1717–23 (discussing the control of Uber and Lyft over their drivers).

²²⁰ See, e.g., *Power Driver Bonus*, LYFT, <https://help.lyft.com/hc/en-us/articles/214586477-Power-Driver-Bonus> (last visited May 5, 2017) (“The Power Driver Bonus program rewards drivers with bonuses based on how much they drove in a week.”).

²²¹ *Id.*

²²² *Id.* (“Power Driver Bonus has helped thousands of Lyft drivers earn back most or all of their commissions.”).

²²³ See Cunningham-Parmeter, *supra* note 137, at 1687, 1717–23 (arguing that workers for “gig economy” can be subject to less traditional—but legally meaningful—control by the firms).

excess capacity, they should be recognized as traditional “employees” for the purpose of benefits and protections. Indeed, some courts around the world have determined that Uber drivers should be classified as “employees.”²²⁴

However, treating such workers as traditional employees does not mean that more casual workers (those truly leveraging their excess capacity) should not enjoy any rights and benefits. While these providers are not akin to traditional employees and enjoy a degree of flexibility, they should still receive basic protections, including minimum wage and overtime pay. A few commentators have proposed that lawmakers create a special category—an intermediate level—between employee and independent contractor, which includes basic employment protections and benefits.²²⁵ So far, even jurisdictions that have regulated TNCs have not addressed the employment status of workers in that sector. The problem with this omission is that leaves the final decision about employment status to courts. Indeed, courts all around the globe are now facing lawsuits on this issue.²²⁶ But courts are limited in what they can do: they can decide whether workers are classified as employees or independent contractors but cannot create an intermediate status that incorporates the distinction between those who work in increased excess capacity and those who do not.

²²⁴ See, e.g., Reserved Judgment of the Employment Tribunal at 1, *Aslam v. Uber BV* [2016] IRLR 4 (U.K. Empl. Trib.) (No. 2202551/2015), (ruling that Uber drivers are “employed” as “workers” and not self-employed).

²²⁵ See SETH D. HARRIS & ALAN B. KRUEGER, BROOKINGS INST., A PROPOSAL FOR MODERNIZING LABOR LAWS FOR TWENTY-FIRST-CENTURY WORK: THE “INDEPENDENT WORKER” 2 (2015), www.hamiltonproject.org/assets/files/modernizing_labor_laws_for_twenty_first_century_work_krueger_harris.pdf (proposing new legal category of “independent workers, for those who occupy the gray area between employers and independent contractors”); SARAH LEBERSTEIN, NAT’L EMP’T LAW PROJECT, RIGHTS ON DEMAND: ENSURING WORKPLACE STANDARDS AND WORKER SECURITY IN THE ON-DEMAND ECONOMY 10 (2015), <http://www.nelp.org/content/uploads/Rights-On-Demand-Report.pdf> (“Some policymakers are advocating for a new category of worker, to be situated someplace between the present categories of “employee” and “independent contractor.”). *But see* Ross Eisenbrey & Lawrence Mishel, *Uber Business Model Does Not Justify a New “Independent Worker” Category*, ECON. POL’Y INST. (Mar. 17, 2016), <http://www.epi.org/publication/uber-business-model-does-not-justify-a-new-independent-worker-category/> (arguing that there is no justification for the formation of a new employment category because the “better approach is simply to establish that Uber and Lyft drivers and similar workers are employees with all attendant rights”).

²²⁶ See, e.g., Michael Lewis, *Proposed Ontario Class-Action Claims Uber Drivers Are Employees Not Contractors*, THESTAR.COM (Jan. 24, 2017), <https://www.thestar.com/business/2017/01/24/proposed-ontario-class-action-claims-uber-drivers-are-employees-not-contractors.html>.

In addition to creating new content, the new rules for the increased excess capacity category must be clear and easy to follow, and impose the least administrative burdens possible. They should be designed with the awareness that these providers are micro-earners rather than sophisticated players with resources to hire legal counsel. Another benefit of a clear and easy-to-follow regulatory regime is that it prevents the lost benefits that stem from evasion of the law. The risk of not having such a regime is a market that operates underground, thus reducing revenue from tax collection and putting drivers and customers at risk.

San Francisco provides a tale about how *not* to do it. The City created a license regime not only limiting the number of nights a lessor may offer her unit for short-term use but also requiring registration with the municipality.²²⁷ The registration is comprised of two steps. First, the lessor must obtain a San Francisco Business Registration Certificate.²²⁸ Afterward, the lessor must schedule an in-person appointment to register her unit with the Office of Short-Term Rentals.²²⁹ The fee for such application, initially set at \$50,²³⁰ was changed to \$250 in November 2016.²³¹ Lessors are also required to submit a quarterly report detailing all of the stays in their units during the past three months.²³²

With such an onerous and complicated process, it is not surprising that most lessors in San Francisco are out of compliance.²³³ As of April 2016, 2,587 lessors had obtained the business registration; yet, as of July 2016, only 1,472 had registered with the Office of Short-Term Rentals²³⁴ out of at least 7,000 entire-units that are regularly offered in San Francisco (and likely many more).²³⁵ Predictably, the City's Board of Supervisors

²²⁷ See FRED BROSSÉAU ET AL., S.F. BUDGET AND LEGISLATIVE ANALYST'S OFFICE, SHORT-TERM RENTALS 2016 UPDATE 19 (2016), <http://sfbos.org/sites/default/files/FileCenter/Documents/55575-BLA.ShortTermRentals%20040716.pdf>.

²²⁸ *Id.*

²²⁹ *Id.*

²³⁰ *Id.*

²³¹ See *Office of Short-Term Rental Registry & FAQs*, S.F. PLANNING DEP'T, <http://sfplanning.org/office-short-term-rental-registry-faqs> (last visited May 5, 2017).

²³² See S.F., CAL., ADMIN. CODE § 41A.5(g)(3)(C) (2016) (“[T]he Permanent Resident shall submit a quarterly report to the Department beginning on January 1, 2016, and on January 1, April 1, July 1, and October 1 of each year thereafter[.]”).

²³³ See Carolyn Said, *For Most Hosts, Rental Rules Mean Little*, S.F. CHRON. (July 22, 2016), <http://projects.sfchronicle.com/2016/airbnb/laws/> (“Vacation-rental hosts in San Francisco are supposed to meet a number of requirements, but only a fraction of the thousands of hosts comply.”).

²³⁴ *Id.*

²³⁵ According to a report by staff members of the San Francisco Budget and Legislative Analyst's Office, as of March 2016, the Office of Short-Term Rentals had received 1,647 registration applications out of 7,046 unique lessors on Airbnb at the time, which indicates

attributes some of this massive noncompliance to the complexity of the registration. The board states that “[t]he two-stage process with separate business tax registration and short-term rental host registration processes might deter or confuse otherwise compliant short-term rental hosts.”²³⁶ The report also questioned the fact that registration requires physical attendance at the office: “Ideally, the entire registration process could be completed online, assuming sufficient mechanisms could be established to verify the identity of hosts, as well as home ownership and residency status. This would remove what could be one of the most significant barriers to compliance”²³⁷

Compare San Francisco’s approach to the one currently pending in Vancouver. In recommending a system that will require “principal residents” to register if they want to offer their units for short-term rent, the process will be “easy to understand, [and] inspires high levels of voluntary compliance.”²³⁸ To achieve this goal, the proposal states, “Lessons learned from short-term rental licensing recommend a simple, inexpensive, online licensing system where applicants post copies of the above evidence and self-declare the evidence is true and that they will comply with short-term rental regulations.”²³⁹ The approach taken by Vancouver thus distinguishes between casual and commercial users not only by differentiating the activities but also by reducing barriers to compliance. San Francisco’s system, which aims to do the same, creates obstacles to participation by laypeople who harmlessly wish to capitalize on their underutilized goods.

In summary, various municipalities are now experimenting with regulations that embed these principles. And while no state, city, or town has yet promulgated a perfect set of rules, these initial responses provide a good guideline for what works and what does not. There is a challenge in crafting policy that distinguishes between on-demand activities, encouraging one and constraining the other. But there is also some promise.

CONCLUSION

The on-demand firms and their proponents often emphasize the way that microearners—nonprofessional providers—are now able to participate in markets that were previously reserved to incumbents. The new economy is

that around 76.6% of Airbnb lessors are noncompliant with the law. *See* BROUSSEAU ET AL., *supra* note 227, at 2.

²³⁶ *Id.* at 26.

²³⁷ *Id.* at 27.

²³⁸ KRISHNA, *supra* note 58, at 15.

²³⁹ *Id.* at 18.

equalizing in allowing anyone, without the need to invest in new materials, the chance to maximize her skills, time, and goods.²⁴⁰ In this tale, the new economy disrupts monopolies, obsolete regulations, and corrupted industries.²⁴¹ Those who oppose this view are portrayed as self-serving or as oppositionists to innovation who cannot get used to new technologies.²⁴² For consumers, it is easy to buy into this narrative. They see that they are now paying less for accommodations at their favorite tourist destinations and they can find cheaper rides.²⁴³ For others, renting their home occasionally is a means to survive the growing cost of housing and other basic services.²⁴⁴ Imposing restrictions on such usage reasonably seems like hampering a legitimate way to improve their well-being.

But this narrative ignores a sea change that is occurring under the auspices of the storyline proffered by the on-demand firms, their lobbyists, and their supporters.²⁴⁵ The on-demand economy opens a wide door to those who are far from being laypersons who maximize their underutilized excess capacity.²⁴⁶ Too often, on-demand platforms are used for commercial services without in any way leveraging idle capacity—and without the protection of the rules that control incumbent markets.²⁴⁷ The on-demand firms turn a blind eye to these usages and frequently even feed them.²⁴⁸ The consequences of this phenomenon of the on-demand market on our lives are becoming clear: it impacts fundamental employment structures, threatens the fabric of neighborhoods, and further restricts housing availability.²⁴⁹ The boosters of this non-gig economy attempt to hide this aspect of the market, but it is sizeable and noticeable: companies now advise people where they should buy units for short-term investment, and more workers provide services without having basic employee protections. If the on-demand firms wanted to curtail commercial use of their goods and services, they could easily do so. However, these commercial transactions are vastly profitable to them; therefore, more often than not, despite their contrary rhetoric, they encourage such transactions. For consumers, it is easy to ignore the problems of the commercial side of the on-demand economy, since they see the more convenient and less

²⁴⁰ *See supra* Part I.

²⁴¹ *See id.*

²⁴² *See id.*

²⁴³ *See id.*

²⁴⁴ *See id.*

²⁴⁵ *See supra* Part II.

²⁴⁶ *See supra* Part I.

²⁴⁷ *See supra* Part II.

²⁴⁸ *See id.*

²⁴⁹ *See id.*

expensive services that that economy has helped to create. But this head-in-the-sand attitude comes with a price to others: one's cheaper vacation or more-available ride is another's difficulty in finding housing or stable employment.

Obviously, not all is bad in the on-demand economy. The opposite, in fact, is true: in its essence, the narrative that the on-demand firms sell us is real. It does offer exciting new economic and social opportunities for those who use these platforms to maximize their underutilized resources. A policy that distinguishes between the two types of activities discussed here would allow our society to get the most benefit out of this model while restraining the harms that can be—and are being—inflicted.²⁵⁰

²⁵⁰ *See supra* Part III.