Like Uber, but for Local Government Law: The Future of Local Regulation of the Sharing Economy

DANIEL E. RAUCH* DAVID SCHLEICHER†

In the past five years, sharing economy firms like Uber, Zipcar, Airbnb and TaskRabbit have generated both huge market valuations and fierce regulatory contests in America's cities. Incumbent firms in the taxi, hotel, and other industries, as well as consumer protection, labor, and neighborhood activists, have pushed for regulations stifling or banning new sharing economy entrants. Sharing firms have fought back, using their popularity with consumers and novel political strategies, lobbying for freedom to operate as broadly as possible without government interference. But to date, both participants and observers of these "sharing wars" have relied on an unstated assumption: if the sharing firms win these fights, their future will be largely free from government regulation. Local governments will either shut sharing down, or they will leave it alone.

But this assumption is almost surely wrong. If sharing firms prevail in the current fights over the right to operate (and indications suggest they will), it is unlikely that cities and states will ignore them. Instead, as sharing economy firms move from being upstarts to important and permanent players in key urban industries like transportation, hospitality, and dining, local and state governments are likely to adopt the type of mixed regulatory strategies they apply to types of firms with whom sharing firms share important traits, from property developers to incumbent taxi operators. Using tools of agglomeration economics and public choice, this Article sketches the future of such policy regimes.

Specifically, local and state governments will adopt some combination of the following policies in addition to insisting on consumer/incumbent protections: (1) subsidizing sharing firms to encourage expansion of services that produce public goods, generate substantial consumer surplus, and/or minimize the need for excessive regulation of the property market; (2) harnessing sharing firms as a tool for economic redistribution; and/or (3) contracting with sharing firms to provide traditional government services. The future of sharing

^{*} Yale Law School, J.D. Candidate 2016.

[†]Associate Professor, Yale Law School. Thanks to Nestor Davidson, Christopher Elmendorf, David Fontana, Clayton Gillette, and Rick Hills for comments on early drafts on this piece.

economy regulation will be very different from its present, and these changes will pose profound legal, political, and ethical questions for our cities.

TABLE OF CONTENTS

I.	INTRODUCTION: LIKE UBER, BUT FOR LOCAL GOVERNMENT	002
**	LAW	903
II.	AN OVERVIEW OF TODAY'S SHARING ECONOMY: QUESTIONS	000
	AND ANSWERS	909
	A. What Is "Sharing"? Origins of the Disaggregation	010
	Economy	910
	B. How Do People "Share": Structures of the Sharing	
	Economy	913
	1. Asset Hubs: Rise of the Microrental	913
	2. Peer-to-Peer Sharing Networks: Share and Share	
	Alike	915
	3. Why Is the Sharing Economy Important? The	
	Economic Effects of "Sharing"	916
	a. The End of Idle Capacity: Platforms for Trading	
	the Use of Existing Goods and Services	917
	b. From Commitment to Choice: Markets for	
	Non-Professional Services and Non-Commercial	
	Goods	919
	4. When Have Problems with the Sharing Economy	
	Emerged? The Policy Content of Today's "Sharing"	
	Conflicts	920
	a. Use Intensiveness and Local Regulation	920
	b. Regulating Non-Professional Services and Non-	
	Commercial Goods	922
	5. Who Has Problems with the Sharing Economy?	
	Sharers v. Incumbents and "Neighbors"	926
III.	TOMORROW'S SHARING ECONOMY UNDERSTOOD: THE	
	CONTINUING BONDS BETWEEN SHARING FIRMS AND CITY	
	GOVERNMENTS	937
	A. On Agglomeration Economics	938
	B. The Sharing Economy, Agglomeration, and Local	
	Governmental Powers	940
IV.	TOMORROW'S "SHARING" REGULATION: THREE PREDICTIONS.	942
	A. Like Uber, but for Government Largess: Subsidizing the	
	Sharing Economy Like a Sports Stadium	943
	1. Public Goods and Consumer Surplus	944

	2. Sharing Firms and the "World Class" City	945
	3. Sharing Firms as a Regulatory "Hack"	
	4. Sharing Firms as Decongestant	
	a. How Will Subsidies Work?	
	b. Where Will Subsidization Happen?	
	B. Like Uber, but for Services for the Urban Poor: The Sho	
	Economy as Instrument of Economic Redistribution	953
	C. Like Uber, but for Government Services: The Sharing	
	Economy as a Government Contractor	959
V.	CONCLUSION	963

I. INTRODUCTION: LIKE UBER, BUT FOR LOCAL GOVERNMENT LAW

The rise of sharing economy firms is one of leading business stories of the last half-decade. Sharing firms like Uber, Lyft, BlaBlaCar, Airbnb, Zipcar, car2go, and TaskRabbit have received enormous investments from venture capital firms and other sources, and have been the subjects of seemingly endless press coverage. In general, sharing firms either (1) own goods or services that they rent to customers on a short-term basis or (2) create peer-to-peer platforms connecting providers and users for short-term exchanges of goods or services.

Unlike previous start-up booms, sharing firms have seldom been in conflict with large technology firms or federal regulators.⁴ Instead, their

¹ See, e.g., Sarah Cannon & Lawrence H. Summers, How Uber and the Sharing Economy Can Win Over Regulators, HARV. BUS. REV. (Oct. 13, 2014), https://hbr.org/2014/10/how-uber-and-the-sharing-economy-can-win-over-regulators/ [https://perma.cc/9ALF-855Q] (noting sharing firms Uber and Airbnb have enormous implicit valuations); Tom Slee, The Secret Libertarianism of Uber & Airbnb, SALON (Jan. 28, 2014), http://www.salon.com/2014/01/28/the_big_business_behind_the_sharing_economy_partner/[http://perma.cc/4TTC-KDYP] (discussing investments across the universe of sharing economy firms).

² See, e.g., Alison Griswold, *Airbnb's Latest Milestone: 1 Million Homes, and Hardly Anyone Who Noticed*, SLATE: MONEYBOX (Dec. 8, 2014, 5:48 PM), http://www.slate.com/blogs/moneybox/2014/12/08/airbnb_has_1_million_homes_brian_ch esky_announces_milestone_and_almost_no.html [http://perma.cc/B9LC-GMCL] ("Uber can hardly budge without eliciting a flood of press coverage."); Janice Stein, "Sharing Economy" Benefits May Not Live Up to Hype, CBC NEWS (Dec. 11, 2014), http://www.cbc.ca/news/business/sharing-economy-benefits-may-not-live-up-to-hype-janice-stein-1.2867041 [http://perma.cc/T9PS-7LLW] ("Everyone is talking about the sharing economy . . . [.]").

³ That said, crafting a precise definition for the sharing economy remains problematic. *See infra* Part II.A.

⁴There are, however, some conflicts looming between sharing firms and federal regulators. Currently, service providers employed through sharing firms, like Uber drivers, are classified as independent contractors, not employees. This means such workers are not eligible for health benefits, unemployment insurance, worker's compensation, or retirement

biggest problems have come from city and state politics, where locally regulated "real economy" competitors and other groups have aggressively fought the sharing newcomers. The taxi industry claims Uber, the leading "ride sharing" firm, enjoys an unfair advantage because it need not purchase medallions or comply with consumer protection or pricing regulations.⁵ Hotels and neighborhood groups argue Airbnb, the leading "house sharing" firm, skirts taxes, violates lease terms, uses residentially zoned property for commercial purposes, and lacks safeguards for guests and operators.⁶ And so on.

At some times and in some cities, anti-sharing lobbying has been effective, leading to regulations that have either barred sharing firms from entering entirely or forced them to change their practices substantially. On the whole, though, it has not: sharing firms have proven remarkably resistant to regulatory pushes to limit their growth, displaying uncanny abilities to rally consumers as political advocates. In most American cities, most of the important sharing economy firms are able to provide most of their services most of the time, and likely will be able to do so for the foreseeable future.

plans, nor are they compensated for lunch breaks or vacation time. Several sharing economy firms already face lawsuits challenging independent contractor status under state law that have proceeded to a jury. See Kashmir Hill, Meet the Lawver Taking on Uber and the Rest of the On-Demand Economy, FUSION (Apr. 16, 2015), http://fusion.net/story/ 118401/meet-the-lawyer-taking-on-uber-and-the-on-demand-economy/?utm source=facebook &utm_medium=social&utm_campaign=socialshare&utm_content=sticky+nav [http://perma.cc/ Z3P9-RPWN]. The IRS might someday exercise its power to determine that such workers are, in fact, employees, and so must be granted such benefits and protections. See Kevin Roose, Does Silicon Valley Have a Contract-Worker Problem?, NYMAG.COM (Sept. 18, 2014), http://nymag.com/daily/intelligencer/2014/09/silicon-valleys-contract-worker-problem.html [http://perma.cc/2KTU-FRLH]. Further, as they expand, sharing firms may also begin competing with national technology firms. See, e.g., TJ McCue, Nevermind Amazon Prime Drones, Google Has Future Delivery Vehicle with Uber, FORBES (Dec. 31, 2013), http://www.forbes.com/sites/tjmccue/2013/12/31/nevermind-amazon-prime-drones-googlehas-future-delivery-vehicle-with-uber/ [http://perma.cc/PJU8-JPZ8] (discussing potential conflict with Amazon as Uber offers same-day delivery).

⁵ See, e.g., Luz Lazo, Cab Companies Unite Against Uber and Other Ride-Share Services, WASH. POST (Aug. 10, 2014), http://www.washingtonpost.com/local/trafficand commuting/cab-companies-unite-against-uber-and-other-ride-share-services/2014/08/10/11 b23d52-1e3f-11e4-82f9-2cd6fa8da5c4_story.html [http://perma.cc/H3JF-WASP].

⁶ See, e.g., Carolyn Said, S.F. Planners Support, Toughen "Airbnb Law," SF GATE (Aug. 9, 2014), http://www.sfgate.com/realestate/article/S-F-planners-support-toughen-Airbnb-law-5677368.php [http://perma.cc/5JD7-E638] (describing criticisms of Airbnb); Bruce Watson, Airbnb's Legal Troubles: The Tip of the Iceberg for the Sharing Economy?, GUARDIAN (Nov. 20, 2013), http://www.theguardian.com/sustainable-business/airbnb-legal-trouble-sharing-economy [http://perma.cc/ATC8-TPQR].

⁷ See infra notes 137–39 and accompanying text.

⁸ For discussions of the political strategies of sharing firms, see *infra* notes 139–42 and accompanying text.

⁹ Cf. LOUIS HENKIN, HOW NATIONS BEHAVE 47 (2d ed. 1979) ("[A]lmost all nations observe almost all principles of international law and almost all of their obligations almost

To date, discussion of these local "sharing wars" has embraced an unstated assumption: if the sharing firms survive the current fight, their future will be mostly free from government regulation.¹⁰ In this telling, cities will either shut sharing firms down, or they will leave them largely alone.

This assumption, however, is inconsistent with how local governments generally behave. The industries sharing economy firms participate in—e.g., taxi transport, housing, hotels, and restaurants—have long been subject to extensive local-level policymaking. Cities subsidize firms in these industries, regulate them to achieve the ends of social policy, tax them, promote them to tourists and visitors, and rely on them to help provide government services. This focus is no accident. Cities have long had both the political incentives and the legal powers to closely regulate activity in these sectors to ensure local market depth and efficient matching and to minimize effects on urban congestion. Potential residents will only be willing to pay high urban property prices if cities provide access to "agglomeration gains" like those generated by deep markets in these goods and services. Thus, promoting and regulating such industries is an essential part of urban development policy.

The sharing economy will be no exception to this trend. Instead, as sharing firms permanently establish themselves in industries like transportation, hospitality, and consumer goods, local governments will increasingly harness such firms to realize nuanced urban development goals. Today, cities express their power over sharing firms mainly in the form of restrictions, limiting sharing in the name of consumer protection (or, more cynically, incumbent-industry protection). Tomorrow, however, the interaction between the economic forces driving urban development and the legal powers of cities will mean that cities pursue a more complex set of policy outcomes. And for their part, sharing firms themselves will likely want more from local governments than to be simply let alone. Instead, they will actively pursue benefits, subsidies, and contracts from local and state governments.

This Article offers three predictions about the approaches local governments will take toward the sharing economy in the medium-term future:

_

all of the time." (emphasis omitted)). Henkin's point was that the fact most international law is followed is more interesting than the small percentage of times international law is ignored, despite the ordinary focus on the latter. Similarly, the wide availability of "sharing" services is the story, not their occasional absence due to regulatory limits. *See* Andrew Leonard, *How Uber Will Conquer America*, SALON (Aug. 22, 2014), http://www.salon.com/2014/08/22/how_uber_will_conquer_america/ [http://perma.cc/NZJ7-WG96] (discussing the inevitability of the success of sharing firms to persist in urban markets).

¹⁰ A perception reinforced by the often-libertarian rhetoric of sharing gurus like Uber CEO Travis Kalanick and Airbnb CEO Brian Chesky. *See* Slee, *supra* note 1 (discussing libertarianism of Airbnb and Uber).

¹¹ See infra notes 263–64 and accompanying text.

¹² See infra notes 315–28 and accompanying text.

¹³ See David Schleicher, The City as a Law and Economic Subject, 2010 U. ILL. L. REV. 1507, 1558.

cities will (1) subsidize sharing firms to get them to enter or expand certain services; (2) harness sharing firms for economic redistribution; and (3) hire sharing firms as contractors to provide city services. The focus of this Article is positive, and not normative, predicting the emergence of these policies but not advocating for them. However, the Article will highlight both the policy and political reasons for these predictions and the important legal and policy questions that will emerge if they come to pass.

Our first prediction is city-level subsidization. In coming years, local governments will increasingly shift from inhibiting sharing firms to actively subsidizing them, either with cash or, more likely, with in-kind benefits. To illuminate this possibility, we look to the model offered by a comparable development question: city subsidies of professional sports stadiums.

Of the many different arguments offered to justify stadium subsidies, the best are that they: (1) generate substantial public goods in the form of civic pride and joy that teams cannot themselves capture, as well as consumer surplus for fanatical fans, (2) signal a city is "on the map," thus boosting industries like tourism and reducing "brain drain" emigration to other, larger cities, and (3) can be necessary catalysts to overcome political opposition that otherwise blocks necessary urban improvements.¹⁴

In many ways, these "stadium" dynamics are also applicable to sharing firms. By serving as exchange markets for goods, residents already own and that have few easily purchasable substitutes, such firms generate abnormally large producer and consumer surplus for participants on their exchanges. Sharing firms also provide the public good of generating valuable price information, such as house rental rates within a given city. Further, the presence of vibrant sharing firms can signal that a city is "on the map," particularly for young, well-educated, and mobile citizens. Like stadiums, sharing firms can also "hack" local political blockages by bypassing—thus reducing—the influence of incumbent firms, neighborhood groups, and unions over local regulators. Subsidies to sharing firms may thus be attractive to citywide politicians and state leaders seeking to overcome perceived capture of local regulators. Moreover, unlike stadiums, sharing firms also serve to reduce urban "congestion," those factors that ultimately constrain agglomeration gains. The density and prosperity of cities is ultimately limited by factors like land costs and traffic. Sharing firms can reduce such congestion by reducing demand for space for goods like cars or closet space for consumer goods. Further, the existence of sharing markets may reduce the need for governments to regulate in the name of ensuring surge capacity for things like parking or hotel space.

Therefore, like stadiums, sharing economy firms can make strong arguments for receiving monetary or in-kind subsidies. This trend is already

¹⁴This is not to say that stadium subsidies are a good idea, only that these are powerful and frequently successful arguments for them in local politics. *See infra* notes 233–38 and accompanying text.

emerging in some cities.¹⁵ Going forward, we predict it will be especially salient in cities where regulatory bodies are particularly recalcitrant, in smaller cities looking to signal "bigness," in cities seeking to prop up competitor sharing firms where one sharing firm has gained too much market power, or in places where being "tech-savvy" or "politically progressive" is seen as core to the local ethos. While there is a theoretical case for such subsidies, cities will face challenges figuring out exactly when and to what degree they are justified, and limiting their amount to the extent of the public benefits. Further, there are substantial questions about which entities will have the power to provide such subsidies under state law and constitutions, and about whether certain forms of subsidies violate state constitutions.

Our second prediction is that local governments will use sharing firms as means to redistribute income. Localities frequently want to engage in redistribution on behalf of the urban poor, or to redistribute from rich neighborhoods to poor neighborhoods. ¹⁶ In principle, sharing firms offer a powerful means for doing so. Specifically, such firms allow consumers to avoid capital expenditures, such as when car-sharing firms like Zipcar or ridesharing firms like Uber make car ownership less necessary. ¹⁷ Sharing firms also allow sellers to mitigate the costs of previous capital expenditures. For example, owners of electronics can offset purchase costs by lending them out on Zilok, while homeowners can offset costs by renting rooms on Airbnb. ¹⁸ Sharing firms also create opportunities for low-paid second jobs or piecework, like doing odd jobs on TaskRabbit. ¹⁹ As such, sharing services hold out possibilities for low-income residents in search of cheap access to goods or secondary work opportunities.

Today, however, sharing services are often unavailable to poor urban residents.²⁰ In the future, cities will take steps to change this, regulating

¹⁵ See infra notes 307–11 and accompanying text.

¹⁶ See Clayton Gillette, Local Redistribution, Living Wage Ordinances, and Judicial Intervention, 101 Nw. U. L. REV. 1057, 1061–62 (2007) (describing the extent of local efforts to redistribute income).

¹⁷ Mark Rogowsky, *Zipcar, Uber and the Beginning of Trouble for the Auto Industry*, FORBES (Feb. 8, 2014), http://www.forbes.com/sites/markrogowsky/2014/02/08/viral-marketing-car-sharing-apps-are-beginning-to-infect-auto-sales/ [http://perma.cc/D4BQ-3XL3].

¹⁸ Thomas L. Friedman, *Welcome to the "Sharing Economy*," N.Y. TIMES (July 20, 2013), http://www.nytimes.com/2013/07/21/opinion/sunday/friedman-welcome-to-the-sharing-economy.html [http://perma.cc/2DH2-MBXQ] ("More than 50 percent of Airbnb hosts depend on it to pay their rent or mortgage today . . . "); Peter Ha, *Zilok Allows You to Rent Anything from Anyone*, TECHCRUNCH (Nov. 5, 2007), http://techcrunch.com/2007/11/05/zilok-allows-you-to-rent-anything-from-anyone/ [http://perma.cc/526R-MTFY].

¹⁹ See Natasha Singer, In the Sharing Economy, Workers Find Both Freedom and Uncertainty, N.Y. TIMES (Aug. 16, 2014), http://www.nytimes.com/2014/08/17/technology/in-the-sharing-economy-workers-find-both-freedom-and-uncertainty.html [http://perma.cc/G7TP-C99C] (discussing the benefits and drawbacks of working in the sharing economy).

²⁰ See infra Part IV.B.

sharing firms in ways that bring their redistributive potential to the fore. This will echo a familiar urban-economic pattern. To circumvent limits on taxing authority²¹ or to avoid negative popular reactions to tax increases, cities have long favored off-budget, in-kind means of redistribution. A notable workaround in this vein has been "exactions"—policies that condition approval for zoning changes on the provision of redistributive services like affordable housing units.²² Following this pattern, cities may condition approval for sharing-firm operations on the provision of in-kind redistribution, such as requiring cut-rate taxi service in poor areas or requiring short-term hiring services to give disadvantaged groups a leg up.

As the history of exactions shows, such policies may prove highly controversial, risking challenges under both state laws and the Federal Constitution's Takings Clause.²³ And, as is the case with traditional exactions, cities will need to weigh carefully whether such measures are efficient means of achieving redistribution, and whether putting such burdens on sharing economy firms and users is fair, efficient, or likely to actually improve the welfare of the urban poor.

Third, we predict cities will hire sharing firms as contractors to provide many city services, just as many have already done by replacing huge city-owned car fleets with internal car-share programs or car-sharing memberships for city employees.²⁴ In particular, cities may use sharing firms to replace costly capital outlays that are rarely used (think road paving machines for cities that seldom pave new roads) with short term, rent-as-needed arrangements.²⁵ And cities may also serve as sharing economy "sellers," allowing under-used resources like idle government buildings or equipment to be rented for cash.

These efforts will surely face political challenges from public employees and existing government contractors. Further, they will face legal challenges under state civil service laws or regulations on government contracts.²⁶ And

²¹ See Erin Adele Scharff, Taxes as Regulatory Tools: An Argument for Expanding New York City's Taxing Authority, 86 N.Y.U. L. REV. 1556, 1572 (2011) (collecting state law limits on municipal taxing powers).

²² Mark Fenster, Regulating Land Use in a Constitutional Shadow: The Institutional Contexts of Exactions, 58 HASTINGS L.J. 729, 729–30, 734 (2007) (discussing exactions); Ronald H. Rosenberg, The Changing Culture of American Land Use Regulation: Paying for Growth with Impact Fees, 59 SMU L. REV. 177, 182 (2006) (discussing development impact fees).

²³ See, e.g., Koontz v. St. Johns River Water Mgmt. Dist., 133 S. Ct. 2586, 2595 (2013) (finding monetary exaction for building approval subject to Takings Clause review).

²⁴ See infra notes 276–77 and accompanying text.

²⁵ See Ben Schiller, Now Cities and States Can Get Involved in the Sharing Economy, Instead of Just Slowing It Down, FAST COMPANY (Aug. 6, 2014), http://www.fastcoexist.com/3033971/now-cities-and-states-can-get-involved-in-the-sharing-economy-instead-of-just-slowing-it-dow [http://perma.cc/GRM5-7RGR] (discussing possibilities for government use of sharing economy services).

²⁶ See infra notes 316–89 and accompanying text.

beyond these hurdles, governments looking to set such contracts would need to think carefully about how to monitor sharing firms to ensure meaningful accountability.

This Article outlines the economic and policy reasons why cities will take these three approaches to regulate the sharing economy. Our goal is both to descriptively sketch what the future will look like and to highlight some of the normative questions this future poses for local policymakers and sharing firms alike. To the extent that sharing firms are increasingly an inevitable part of some industries, governments should consider what policies towards them are most valuable. Consumer protection is an important policy aim, but governments must carefully assess if other goals—such as economic development or distributional equity—should take a higher priority in sharing regulation. And to the extent sharing firms seek to justify their enormous market valuations, they should start to see local governments not as a mere hurdle, but as a potential source of valuable contracts or other benefits.

* * *

The rest of the Article is organized as follows: Part II describes the current sharing economy. Part III then explains the economic factors that dictate why cities are likely to be deeply engaged in this sector going forward. Part IV discusses each of three types of regulation—subsidy, redistribution, and city services—that will define the future of sharing economy regulation. Part V provides a conclusion.

II. AN OVERVIEW OF TODAY'S SHARING ECONOMY: QUESTIONS AND ANSWERS

Today millions of Americans rent or borrow spare rooms, cars, boats, clothing, and even power tools from total strangers.²⁷ The cache of owning capital goods, particularly among younger consumers, is increasingly supplanted by the appeal of "Uber Cool"²⁸ or joining the "Zipsters."²⁹ "Sharing," it seems, has gone mainstream. What happened?

²⁷ See John Burbank, *The Rise of the "Sharing" Economy*, HUFFINGTON POST (June 5, 2014), http://www.huffingtonpost.com/john-burbank/the-rise-of-the-sharing-e_b_5454710.html [http://perma.ccZKS#-A3T5] (describing sharing communities as becoming a "bona fide economic phenomenon"); Cannon & Summers, *supra* note 1 (noting the sharing economy is or will soon reach a valuation of \$110 billion—eclipsing that of the U.S. chain restaurant industry).

²⁸ Fleura Bardhi & Giana M. Eckhardt, *Access-Based Consumption: The Case of Car Sharing*, 39 J. CONSUMER RES. 881, 881, 893 (2012); Richard Hytner, *Has Uber Cool Become Uber Cunning*?, FORBES (Aug. 22, 2014), http://www.forbes.com/sites/lbs businessstrategyreview/2014/08/22/has-uber-cool-become-uber-cunning/ [http://perma.cc/XZ9Z-VGM3].

²⁹ Bardhi & Eckhardt, *supra* note 28, at 881, 893. Whether anything has ever been less cool than the term "Zipster," however, is an open question.

In this Part, we briefly sketch today's sharing economy. We first outline the trends behind the phenomenon. Next, we highlight ways the sharing economy has already altered urban economies—and the conflicts these changes have caused. Finally, we illustrate these trends by describing today's most prominent—and most controversial—sharing firms.

A. What Is "Sharing"? Origins of the Disaggregation Economy

Today's sharing economy stems from the confluence of several demand-side trends and most importantly, a set of supply-side technological changes.³⁰ On the demand side, growing ecological consciousness leads some consumers to choose borrowing or reusing goods over buying new ones.³¹ Urbanization is on the rise, and people in metropolitan areas can more easily find sharing and renting opportunities.³² Further, the Great Recession was a crucial catalyst. On the "consumer" side, the crash raised thriftiness and imposed credit constraints, creating new interest in renting over owning.³³ At the same time, unemployment and underemployment created a large pool of "gig" workers available to drive for Uber, sell odd-jobs through Taskrabbit, or otherwise work in the sharing economy.³⁴

The most important change, however, has been technological. Improved data storage and analytics make the cost of matching buyers and sellers lower than ever. And with the mass spread of smartphones,³⁵ people can access webbased sharing services anywhere, at any time. Likewise, widespread GPS tracking allows for both better customer service (Uber knows where to meet you) and more careful monitoring (Citi Bike, New York's bike-share service,

³⁰ For discussions of and explanations for the rise of the sharing economy, see generally Rachel Botsman & Roo Rogers, What's Mine Is Yours: The Rise of Collaborative Consumption (2010); Janelle Orsi, Practicing Law in the Sharing Economy: Helping People Build Cooperatives, Social Enterprise, and Local Sustainable Economies (2012); Jeremy Rifkin, The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism (2014); Jay Walljasper, All That We Share: How to Save the Economy, the Environment, the Internet, Democracy, Our Communities and Everything Else that Belongs to All of Us (2010).

³¹ See Lisa Gansky, The Mesh: Why the Future of Business is Sharing 4–5 (2010).

³² *Id.* at 81; Bardhi & Eckhardt, *supra* note 28, at 884.

³³ GANSKY, *supra* note 31, at 4–5; *see* David Brooks, *The Evolution of Trust*, N.Y. TIMES (June 30, 2014), http://www.nytimes.com/2014/07/01/opinion/david-brooks-the-evolution-of-trust.html?_r=0 [http://perma.cc/F73J-PK4B] (discussing the cultural effect of the Great Recession on consumer behavior).

³⁴ Singer, *supra* note 19.

³⁵ See Aaron Smith, Smartphone Ownership 2013, PEW RES. CTR. (June 5, 2013), http://www.pewinternet.org/2013/06/05/smartphone-ownership-2013/ [http://perma.cc/QG2L-UD7F] ("56% of American adults are now smartphone owners."). Notably, this study found that even a majority of low-income young people had such phones. *Id*.

prevents theft by tracking bikes).³⁶ And as scholars like Lior Strahilevitz have found with respect to eBay auctions, digital reputation "ratings" can form a functional substitute for personal trust, making more, and more credible, transactions possible³⁷—if a Lyft driver has 800 "five star" reviews, a rider may be willing board her car even if she lacks classic indicia of trustworthiness, like a business license.

Taken together, these changes gave rise to the constellation of activity known as the sharing economy. And rise it has. Today, the sharing sector has an estimated value of over \$100 billion.³⁸ Airbnb, the room rental platform, has a higher valuation than hotel chain Hyatt.³⁹ Uber's valuation equals that of car rental titan Hertz.⁴⁰ Meanwhile, sharing startups have arisen in industries from boats⁴¹ to house moving⁴² to, apparently, marijuana delivery.⁴³ In the

³⁶ Tina Rosenberg, Opinion, *It's Not Just Nice to Share, It's the Future*, N.Y. TIMES: OPINIONATOR (June 5, 2013, 9:00 AM), http://opinionator.blogs.nytimes.com/2013/06/05/its-not-just-nice-to-share-its-the-future [http://perma.cc/89YT-VHVF] ("When you are lending out your goods, you need to track them, maintain them, protect them and connect customers to them over and over. There were bikeshares in the 1990s, but they failed because they couldn't charge users or track and secure bikes.").

³⁷ Lior Jacob Strahilevitz, "How's My Driving?" for Everyone (and Everything?), 81 N.Y.U. L. REV. 1699, 1713–14 (2006); see also BOTSMAN & ROGERS, supra note 30, at 92.

³⁸NPR Staff, *Share and Share Alike: A Time of Collaborative Consumption*, NPR (Nov. 11, 2013), http://www.npr.org/sections/alltechconsidered/2013/11/11/244570695/q-a-a-time-of-collaborative-consumption [http://perma.cc/2SAJ-NBKM] (describing the sharing economy as a "\$100 billion opportunity"); Michelle Regner, *How the World's Biggest Brands Came to Love the Sharing Economy*, VIRGIN (June 30, 2014), http://www.virgin.com/entrepreneur/how-the-worlds-biggest-brands-came-to-love-the-sharing-economy [http://perma.cc/2SAJ-NBKM] (describing the sharing economy as valued at \$110 billion).

³⁹Cannon & Summers, *supra* note 1.

⁴⁰ See Id. And Hertz itself is now a sharing economy player, offering short-term car rentals in a challenge to Zipcar (now part of Avis) and car2go (owned by Daimler Chrysler). Mark Clothier, Can Hertz Outrun Zipcar in Hourly Car Rentals?, BLOOMBERG (Mar. 29, 2012), http://www.bloomberg.com/bw/articles/2012-03-29/can-hertz-outrun-zipcar-in-hourly-car-rentals [http://perma.cc/A6C6-AEX2].

⁴¹ As seen in Boatbound, the "Airbnb" of boats. Vicky Hallett, *Boatbound Borrows the Airbnb Model to Encourage People to Get Their Feet Wet*, WASH. POST (July 22, 2014), http://www.washingtonpost.com/express/wp/2014/07/22/boatbound-borrows-the-airbnb-model-to-encourage-people-to-get-their-feet-wet/ [http://perma.cc/G3G5-XWRK].

⁴² Julian Chokkattu, *Buddytruk Is a Sharing Service Like Lyft for Moving*, TECHCRUNCH (Aug. 14, 2014), http://techcrunch.com/2014/08/14/buddytruk-is-a-sharing-service-like-lyft-for-moving/ [http://perma.cc/8GRX-FYD9].

⁴³ For instance, "Eaze," a purported "Uber for Weed." Liz Gannes, *I Want It, and I Want It Now—It's Time for Instant Gratification*, RE/CODE (Aug. 4, 2014), http://recode.net/2014/08/04/i-want-it-and-i-want-it-now-its-time-for-instant-gratification/[http://perma.cc/V4T5-J54F].

process, "sharing" has spawned popular books, 44 prominent newspaper commentary, 45 and innumerable blog posts. 46

Yet for all this attention, a central question often remains unanswered: What, exactly, defines the sharing economy? After all, the term "sharing" is an odd fit for companies making multi-billion dollar profits. And given the range of entities involved—from non-profit "timebanks" to Fortune 500 companies even sharing's boosters concede there is no one meaning of the term. 49

Still, a common thread is visible. Virtually everything described as part of the sharing economy—from Zipcar to DogVacay—relies on a single dynamic: a stark reduction in transaction costs that allows for radically disaggregated consumption.⁵⁰ The sharing economy allows users to buy, sell, or donate eversmaller units of goods, services, or experiences. Rental companies can lend

⁴⁴ E.g., BOTSMAN & ROGERS, supra note 30; GANSKY, supra note 31, at 4–5.

⁴⁵ E.g., RIFKIN, supra note 30; Friedman, supra note 18.

⁴⁶ See, e.g., Kurt Abrahamson, The Sharing Economy: It's About to Get Real, WIRED: INNOVATION INSIGHTS (Dec. 11, 2013), http://insights.wired.com/profiles/blogs/sharing-economy-get-real#axzz3BE3LJY41 [http://perma.cc/W4W2-V5ES]; Lauren Anderson, Hotels Get Collaborative with a New Range of Rentals, COLLABORATIVE CONSUMPTION (Jan. 8, 2014, 2:04 PM), http://www.collaborativeconsumption.com/2014/01/08/hotels-get-collaborative-with-a-new-range-of-rentals/ [http://perma.cc/2VF8-JNKQ]; Chokkattu, supra note 42; Mike Hower, Uber Taps Users in Fight Against California Anti-Ridesharing Bill, TRIPLE PUNDIT (Aug. 22, 2014), http://www.triplepundit.com/2014/08/uber-taps-users-fight-california-anti-ridesharing-bill/ [http://perma.cc/4YSV-5W48].

⁴⁷Erin Morgan Gore, *Nonprofits Should Lead the Sharing Economy*, STAN. Soc. INNOVATION REV. (Mar. 3, 2014), http://www.ssireview.org/blog/entry/nonprofits_should_lead_the_sharing_economy [http://perma.cc/VX2L-MP98].

⁴⁸ Anderson, *supra* note 46; Heather Duncan, *Looking to Save Money, Big Business Dives into the Sharing Economy*, GUARDIAN (May 9, 2014), http://www.theguardian.com/sustainable-business/sharing-airlines-caterpillar-komatsu-cloud-zipcar [http://perma.cc/4DK9-AFYS]; Regner, *supra* note 38.

⁴⁹ GANSKY, *supra* note 31, at 16 (stating that a "Mesh," or sharing business, is one whose "core offering is something that can be shared, within a community, market, or value chain, ... [involving] advanced Web and mobile data networks. The focus is on shareable physical goods, including the materials used, which makes local delivery of services and products ... valuable" (emphasis and numbering omitted)); Rachel Botsman & Roo Rogers, Beyond Zipcar: Collaborative Consumption, HARV. BUS. REV., Oct. 2010, at 30, http://hbr.org/2010/10/beyond-zipcar-collaborative-consumption/ar/1 [http://perma.cc/7U2R-TNDK] (defining "collaborative consumption" as "systems of organized sharing, bartering, lending, trading, renting, gifting, and swapping. Collaborative consumption gives people the benefits of ownership with reduced personal burden and cost and also lower environmental impact"); Rachel Botsman, The Sharing Economy Lacks a Shared Definition, COLLABORATIVE CONSUMPTION (Nov. 22, 2013), http://www.collaborativeconsumption.com/2013/11/22/the-sharing-economy-lacks-a-shareddefinition/[http://perma.cc/YA9V-KSJB]. For some candidates, however, see ORSI, supra note 30, at 7 ("A sharing enterprise is aimed at sharing and offsetting the costs of ownership and maintenance of an item . . . ").

⁵⁰ See BOTSMAN & ROGERS, supra note 30, at 126–27.

cars for thirteen minutes at a time, and drivers can seamlessly take advantage. Workers can offer exactly three hours a week of furniture assembly services, and IKEA-toting yuppies can easily hire them. Individuals need not commit to running a "bed and breakfast," complete with license, advertising, and insurance. Instead, they can open their home for precisely five nights a year and find trusting—and trustworthy—guests. It is this disaggregation revolution that defines the sharing economy and that drives the dynamics we consider in the balance of this Part.

One note: our overview focuses only on the exchange of physical goods or services that must be provided in person. Sharing entities taking other forms, such as money lending groups, implicate a qualitatively different set of concerns, and so are not considered in this Article. With this caveat in mind, we can now turn to the sharing economy and, in particular, consider the two main types of sharing firms.

B. How Do People "Share": Structures of the Sharing Economy

Under the wide umbrella of the sharing economy, two broad categories of entities have emerged: asset hubs and peer-to-peer networks.

1. Asset Hubs: Rise of the Microrental

Asset-hub firms involve a single "hub" entity selling access to physical assets that it directly owns. Zipcar is a paradigm asset hub: the firm owns a large vehicle fleet, which it loans to drivers on a per hour basis.⁵¹ Not all asset hubs are for-profits. Consider municipally-provided bike sharing, like Paris's Velib⁵² or Washington D.C.'s Capital Bikeshare,⁵³ through which governments or public–private partnerships own fleets that they rent to bikers by-the-hour. In places from Paris to Buffalo, this model has even been extended to city-provided car sharing.⁵⁴

In many ways, this asset-hub paradigm merely modernizes a traditional business model. After all, hotels and rental car companies purchase costly physical assets (buildings, cars) and then rent them out in whole or in part for brief periods of time.

What makes the new crop of asset hubs different, however, is the degree of disaggregation now possible. Before GPS tracking, remote locking, and

⁵¹ *Id.* at 74.

⁵² See VELIB, http://en.velib.paris.fr/ [http://perma.cc/X75W-4QHR].

⁵³ See Capital Bikeshare, http://www.capitalbikeshare.com/ [http://perma.cc/XV4U-MTOK].

⁵⁴ However, Paris's public–private Autolib does face competition from private carsharing firms like Drivy. Katie Fehrenbacher, *Car-Sharing Services Take Paris by Storm*, BLOOMBERG (June 28, 2013), http://www.bloomberg.com/bw/articles/2013-06-28/carsharing-services-take-paris-by-storm [http://perma.cc/B7FS-96J6].

online reservations, it was not viable to rent bikes or cars by the minute from unmanned terminals. Now it is.

Still, the basic idea is not radically different from established business practices, a fact that might explain why "traditional" companies have often embraced asset-hub models of their own. Avis, for example, recently bought Zipcar, 55 while Daimler AG started car2go, a challenger that allows "one-way" rentals-by-the-minute of tiny Smartcar Fortwos. 56

Asset-hub sharing firms have occasionally caused controversy, most often due to their impact on resource use. For example, cities that allocate parking spaces or civic property for asset-hub users have sometimes drawn opprobrium from disaffected neighbors.⁵⁷ Relatedly, businesses undermined by the entry of asset hubs have complained about the level of public subsidies such ventures receive.⁵⁸ On the whole, however, asset hub firms have drawn nowhere near the controversy of the second branch of the sharing economy.

⁵⁸ See Danielle Tcholakian, Citi Bike Drove Me Out of Business, West Village Bike Shop Owner Says, DNAINFO (Nov. 20, 2014), http://www.dnainfo.com/new-york/20141120/west-village/citi-bike-drove-me-out-of-business-west-village-bike-shop-owner-says [http://perma.cc/CUA3-UCMW] (discussing now-out-of-business bike shop that blamed Citi Bike for lost business).

⁵⁵ John Kell, *Avis to Buy Car-Sharing Service Zipcar*, WALL STREET J. (Jan. 2, 2013), http://www.wsj.com/articles/SB10001424127887324374004578217121433322386 [http://perma.cc/AAC7-7J52].

⁵⁶ A "one-way" car rental does not require returning the car to its initial parking space. Chris Reidy, *Zipcar Rolls Out One-Way Service with Guaranteed Parking*, Bos. GLOBE (May 2, 2014), http://www.bostonglobe.com/business/2014/05/01/zipcar-test-one-way-car-sharing/5WkDIkVEwtK4B2m2CF6NhK/story.html [http://perma.cc/PS3W-4LRA].

⁵⁷The most famous example of this response is Wall Street Journal editorial page editor Dorothy Rabinowitz's ill-tempered rant against Citi Bike. Dorothy Rabinowitz, Opinion, Video: Death by Bicycle, WALL STREET J. (May 31, 2013), http://live.wsj.com/ video/opinion-death-by-bicycle/C6D8BBCE-B405-4D3C-A381-4CA50BDD8D4D.html#! C6D8BBCE-B405-4D3C-A381-4CA50BDD8D4D [http://perma.cc/HW3F-ZBYQ]; see also Ben Fried, Judge Rejects Plaza Hotel's Citi Bike Lawsuit, STREETSBLOG (Apr. 29, 2014), http://www.streetsblog.org/2014/04/29/judge-rejects-plaza-hotels-citi-bike-lawsuit/ [http://perma.cc/PU7Y-HN9R] (discussing failed litigation challenging the location of Citi Bike docks); Karen Klinger, City Plan to Allow Residential Zipcar Parking Sparks (May CAMBRIDGE COMMUNITY **TELEVISION** Controversy, 21, https://www.cctvcambridge.org/node/18076 [https://perma.cc/6MA9-VQ9T] (discussing criticism of zoning change to allow Zipcar parking in residential areas on the grounds that users will be "coming and going at all hours of the day and night," and will cause the loss of parking spaces for residents); Jessica Kwong, SFMTA Board Expands Locations for Care Share Vehicles, S.F. EXAMINER (June 26, 2014), http://archives.sfexaminer.com/ sanfrancisco/sfmta-board-expands-locations-for-car-share-vehicles/Content?oid=2832120 [http://perma.cc/MQ3Y-HE9D] (discussing criticism of San Francisco decision to give parking spaces to car-sharing firms on the ground that there is limited parking available).

2. Peer-to-Peer Sharing Networks: Share and Share Alike

The second major sharing paradigm is that of the peer-to-peer network. Peer-to-peer networks connect *many* would-be sellers or workers with *many* would-be buyers or employers. These networks can include either assets or services or both. In terms of assets, firms like Airbnb connect people with vacant rooms or houses to people looking for short-term stays. LiquidSpace⁵⁹ and ShareDesk⁶⁰ provide the same service but for office space, while Parking Panda⁶¹ does the same but for parking spots. Meanwhile, companies like Zilok connect owners of consumer goods like costly power tools with individuals who want to rent them.⁶² On the service side, firms like TaskRabbit⁶³ connect workers looking for quick gigs like building IKEA furniture with one-off employers interested in hiring. And perhaps most famously, services like Uber,⁶⁴ Lyft,⁶⁵ and Sidecar⁶⁶ connect different types of motorists—from "black car" limousine drivers to ordinary car owners—with riders seeking taxi services.

Some peer-to-peer networks operate for free or as non-profits. Non-profit time banks, for example, connect community members looking to trade jobsfor-jobs (e.g., you paint my fence, I'll water your garden).⁶⁷ Likewise, services like Craigslist connect would-be buyers to would-be sellers without, generally speaking, charging a fee.⁶⁸

Many sharing platforms, however, have become big businesses. Companies like Uber, Lyft, and Airbnb make it easy to exchange goods and services and offer to backstop and insure transactions among users.⁶⁹ In exchange, they collect a "broker's fee" on each peer-to-peer transaction. This model has created huge customer bases and big profits. It has also bred substantial controversy: proponents laud such network firms for creating new

⁵⁹ See LIQUID SPACE, https://liquidspace.com [https://perma.cc/H2BT-RR58].

⁶⁰ See SHAREDESK, https://www.sharedesk.net [https://perma.cc/QB4S-72R7].

⁶¹ See Parking Panda, https://www.parkingpanda.com [https://perma.cc/TQ57-PH3Z].

⁶² Ha, *supra* note 18.

⁶³ See TASKRABBIT, https://www.taskrabbit.com [https://perma.cc/7FLS-V9T].

⁶⁴ See UBER, https://www.uber.com [https://perma.cc/RT2C-6CYZ].

⁶⁵ See Lyft, https://www.lyft.com [https://perma.cc/BVL2-EZMZ].

⁶⁶ See SIDECAR, https://www.side.cr [https://perma.cc/EQP9-NN4T].

⁶⁷ Grace Edquist, *The Sharing Economy Is Here to Stay*, MADISON MAG. (Dec. 18, 2013), http://www.channel3000.com/madison-magazine/business-city-life/The-Sharing-Economy-Is-Here-to-Stay/30728184 [http://perma.cc/33DB-T4ZY]; Gore, *supra* note 47.

⁶⁸ Except for job postings in many markets, brokered apartments in New York, tickets by dealer, therapeutic services, and cars and trucks. *See All Craigslist Postings Are Free, Except for:*, CRAIGSLIST, http://www.craigslist.org/about/help/posting_fees [http://perma.cc/5USV-W6TK].

⁶⁹ See Watson, supra note 6.

markets in previously untraded sectors,⁷⁰ for bypassing sclerotic competitors,⁷¹ and for opening new opportunities for the underemployed.⁷² Critics, meanwhile, slam them for exploiting "desperate" employees,⁷³ flouting local regulation,⁷⁴ and claiming vast profits under the guise of community collaboration.⁷⁵ Yet despite, or perhaps because of, this controversy, such firms have become highly influential.⁷⁶

3. Why Is the Sharing Economy Important? The Economic Effects of "Sharing"

Asset hubs and peer-to-peer networks differ in many respects, but both result from the same force: radical disaggregation of consumption. Accordingly, both have overlapping ramifications for America's cities. One need not overstate the effect such companies are having—they are still just a small part of urban economies. Yet in just a few years, these firms have already had several important impacts.

⁷⁰ Tomio Geron, Airbnb and the Unstoppable Rise of the Share Economy, FORBES (Feb. 11, 2014), http://www.forbes.com/sites/tomiogeron/2013/01/23/airbnb-and-the-unstoppable-rise-of-the-share-economy/ [http://perma.cc/77AN-W22K].
⁷¹ John Kartch, Uber Battle of New Orleans Pits Old Guard vs. New, FORBES (July

¹¹ John Kartch, *Uber Battle of New Orleans Pits Old Guard vs. New*, FORBES (July 22, 2014), http://www.forbes.com/sites/johnkartch/2014/07/22/uber-battle-of-new-orleans-pits-old-guard-vs-new/ [http://perma.cc/MSB3-9YFH].

⁷² Singer, *supra* note 19.

⁷³ See Kevin Roose, *The Sharing Economy Isn't About Trust, It's About Desperation*, NYMAG.COM (Apr. 24, 2014), http://nymag.com/daily/intelligencer/2014/04/sharing-economy-is-about-desperation.html [http://perma.cc/NJ9B-ADUB].

⁷⁴ Dean Baker, *Don't Buy the "Sharing Economy" Hype: Airbnb and Uber Are Facilitating Rip-Offs*, GUARDIAN (May 27, 2014), http://www.theguardian.com/commentisfree/2014/may/27/airbnb-uber-taxes-regulation [http://perma.cc/4C9A-W8HN].

⁷⁵ Andrew Leonard, "Sharing Economy" Shams: Deception at the Core of the Internet's Hottest Businesses, SALON (Mar. 14, 2014), http://www.salon.com/2014/03/14/sharing_economy_shams_deception_at_the_core_of_the_internets_hottest_businesses/[http://perma.cc/8E5H-T55M].

⁷⁶Of course, at least some of these conflicts are implicated in any context where regulated incumbents must compete against less-regulated newcomers. Recent years offer prominent examples including tensions between Amazon and conventionally regulated (and taxed) booksellers and between PayPal and conventionally regulated (and taxed) financial institutions. See ERIC M. JACKSON, THE PAYPAL WARS: BATTLES WITH EBAY, THE MEDIA, THE MAFIA, AND THE REST OF PLANET EARTH 141–65 (2004); Kyung M. Song, Amazon Lobbies Heavily for Internet Sales Tax, SEATTLE TIMES (Sept. 7, 2013), http://seattletimes.com/html/localnews/2021778597_amazonlobbyingxml.html [http://perma.cc/2W2D-Y5TV].

a. The End of Idle Capacity: Platforms for Trading the Use of Existing Goods and Services

Idle capacity surrounds us. The average power drill is used only 13 minutes a year, spending the other 525,587 on the shelf.⁷⁷ The average car is used only an hour a day, lying idle for 23.⁷⁸ There are almost three parking spaces per vehicle in the United States, leaving huge amounts of land unused.⁷⁹ And at any given time, millions of underemployed workers are idle, eager to trade labor for pay.⁸⁰

The sharing economy—the disaggregated economy—absorbs idle capacity. If someone cannot use her boat on a nice day, she can lend it out on BoatBound. If a housemate leaves town for the week, her room can be rented on Airbnb. And if someone has a free half-day, she can run errands for cash on TaskRabbit. At Rather than owning a bike and leaving it unused for most of the week, consumers can instead rent one from a city-owned bike-share when they need it. In sum, the sharing economy means goods and people can be employed more intensively than before, making already existing products and service providers more valuable.

To understand how this works, it is important to understand that sharing platforms create and serve "two-sided" markets: their users include both market-buyers and market-sellers. Examples include Uber, which serves drivers *and* riders; Airbnb, which serves homeowners *and* renters; and DogVacay,⁸⁵ which serves pet-owners *and* pet-sitters.

In general, two-sided platforms are created to mitigate coordination problems between buyers and sellers.⁸⁶ Stock exchanges are the classic case:

⁷⁷ Friedman, *supra* note 18. This has led some to suggest libraries ought to rent out drills. Matthew Yglesias, *Power Tools: The Libraries of the Future*, SLATE: MONEYBOX (July 3, 2012, 5:34 PM), http://www.slate.com/blogs/moneybox/2012/07/03/power_tools_the libraries of the future.html [http://perma.cc/CXQ6-99NR].

⁷⁸ See April Rinne, How Shareable is Your City?, COLLABORATIVE CONSUMPTION (Oct. 25, 2013), http://www.collaborativeconsumption.com/2013/10/25/how-shareable-is-your-city/ [http://perma.cc/7K4U-YLR4].

⁷⁹ David Biello, *No Such Thing as a Free Parking Spot*, SCI. AM. (Jan. 9, 2011), http://www.scientificamerican.com/podcast/episode/no-such-thing-as-a-free-parking-spo-11-01-09/ [http://perma.cc/TJQ2-QF4J].

⁸⁰Rinne, *supra* note 78.

⁸¹ See Hallett, supra note 41.

⁸² See id

⁸³ See TASKRABBIT, supra note 63.

⁸⁴ See supra notes 52–53 and accompanying text.

⁸⁵ DOGVACAY, https://dogvacay.com [https://perma.cc/H792-3DKY].

⁸⁶ David S. Evans & Richard Schmalensee, *The Industrial Organization of Markets with Two-Sided Platforms*, 3 COMPETITION POL'Y INT'L 151, 154 (2007) ("Generally, one can think of two-sided platforms as arising in situations in which there are externalities and in which transactions costs, broadly considered, prevent the two sides from solving this externality directly.").

sellers of stock need deep, liquid markets in purchasers, buyers need the same in sellers, and a third-party exchange can efficiently unite the two. Two-sided markets permeate our economy: examples range from newspapers that target both readers and advertisers to singles' bars that target both men and women.⁸⁷

In the sharing context, this two-sided structure has important ramifications. First, two-sided platforms can generate useful information whose value the platform itself cannot capture. Reference of trades at a stock exchange offers valuable information to the public—whether or not they are exchange members. So, too, in the sharing economy: Airbnb rental prices are useful information for anyone looking to rent out their flat, irrespective of whether they are Airbnb customers. The result is a classic public good: non-rival, non-excludable information, which makes the exploitation of resources easier for customers and non-customers alike.

Additionally, for users, two-sided sharing platforms can generate vast producer and consumer surplus, since they allow already-existing assets to be traded in new ways. Many people already own cars, parking spaces, power tools, or houses, and use sharing services to reduce the cost of such ownership. And while the marginal seller may be a professional, investing in goods exclusively to rent them on sharing platforms, there are large populations of infra-marginal sellers that gain vast producer surplus when sharing firms enter the market. Further, there are few easy substitutes for some of the services the sharing economy enables, such as hourly rentals of cars or daily rentals of children's toys. This means new sharing firms leave high-demand consumers much better off—in sum, a major increase in consumer surplus.

Apart from surplus effects, two-sided platforms characteristically have complex economies of scale. Sharing firms are no exception: on one hand, there are intuitive economies of scale due to the high fixed cost of developing sharing platforms compared to the minimal cost of adding members. This is doubly true because each new "buyer" makes the market more valuable to the "sellers," and vice versa. However, two-sided markets also risk diseconomies of scale since, as more members join, it becomes more difficult for participants to identify high-value matches. In a city with thousands of available options on Airbnb, finding ones that match particular needs becomes more difficult. Accordingly, the optimal size of sharing platforms may be difficult to determine.

Further, two-sided platforms may take actions that look anticompetitive but are ultimately not: for instance, pricing below cost on one side of the

⁸⁷ Marc Rysman, *The Economics of Two-Sided Markets*, 23 J. ECON. PERSP. 125, 128, 130–31 (2009). The article that began research into two-sided markets is Jean-Charles Rochet & Jean Tirole, *Platform Competition in Two-Sided Markets*, 1 J. EUR. ECON. ASS'N 990, 990 (2003). For a nice summary of this literature, see Evans & Schmalensee, *supra* note 86.

⁸⁸ See Paul G. Mahoney, *The Exchange as Regulator*, 83 VA. L. REV. 1453, 1456 (1997).

⁸⁹ Evans & Schmalensee, *supra* note 86, at 155.

market to attract entrants on the other side. ⁹⁰ Notably, sharing firms like Uber already appear to engage in this practice—charging cut-rate fares for passengers to build a larger customer base for drivers. ⁹¹ Among other consequences, this means traditional tools for regulating competition may need to be adjusted for the sharing-economy context.

b. From Commitment to Choice: Markets for Non-Professional Services and Non-Commercial Goods

Another related change wrought by the sharing economy is highlighted on the Zipcar website: "Today's a BMW Day... or is it a Volvo day?" This glib advert carries an important truth: with reduced transaction costs, sharing firms make it easier than ever to eschew commitment to products or services. Instead of renting a given office, freelancers can choose space in different places on different days through Sharedesk. In place of hiring employees, bosses can farm out discrete jobs through TaskRabbit or Wonolo.93

This flexibility offers benefits, from the freedom to work unconventional schedules⁹⁴ to the ability to access more, and more varied, consumer goods.⁹⁵ It has always been possible to buy a high-fashion outfit, to retain a personal chef, or to rent monthly parking spaces. But before sharing platforms, it was infeasible to match owners of high-fashion outfits with people needing clothes for a single event, personal chefs with people paying for a single at-home dinner, or prime parking spaces with drivers seeking a single night's parking. The sharing economy, however, makes such transactions commonplace. Further, it allows anyone with a car to offer rides—not just licensed livery drivers; anyone who has a kitchen to sell meals—not just chefs with the capital

⁹⁰ Id. at 173_7/

 $^{^{91}}$ Rafi Mohammed, Regulation Is Hurting Cabs and Helping Uber, HARV. BUS. REV. (July 9, 2014), https://hbr.org/2014/07/regulation-is-hurting-cabs-and-helping-uber/ [http://perma.cc/DGG3-WQE3].

⁹² MARK PETERSON, SUSTAINABLE ENTERPRISE: A MACROMARKETING APPROACH 228 (2013).

⁹³ See Noam Scheiber, Corporate America Is Using the Sharing Economy to Turn Us Into Temps, NEW REPUBLIC (Nov. 23, 2014), http://www.newrepublic.com/article/120378/wonolo-temp-worker-app-shows-scary-future-sharing-economy [http://perma.cc/3DCU-NEYF] (discussing sharing economy apps for labor).

⁹⁴ Singer, *supra* note 19.

⁹⁵ BOTSMAN & ROGERS, *supra* note 30, at 105 (discussing toy sharing and the need to sanitize toys after each use); Patricia Marx, *The Borrowers: Why Buy When You Can Rent?*, NEW YORKER (Jan. 31, 2011), http://www.newyorker.com/magazine/2011/01/31/the-borrowers [http://perma.cc/8S2F-2NQ8] (profiling the rise of high-end dress rental service "Rent the Runway").

and reputation to start a restaurant. Thus, the sharing economy effectively opens the "bottom" of the market for many goods and services. 96

This lack of commitment, however, also carries costs. Traditional guarantees of stability for workers, such as pensions or 401(k) accounts, are often unavailable in these "choice-friendly" markets. 97 Meanwhile, consumers and vendors alike are often less experienced and less professionally qualified than before. If an Airbnber rents out her home for just three nights a year, she likely will not invest in developing substantial inn-keeping skills. Likewise, goods rented on Zilok98 will not have the same quality guarantees as those sold at BestBuy. The result is an increased risk to consumers, as seen in several high profile (though rare) lapses in "quality control." 99

4. When Have Problems with the Sharing Economy Emerged? The Policy Content of Today's "Sharing" Conflicts

Given these forces, the sharing economy has generated several characteristic controversies. For our purposes, the most important such conflicts are those implicating (1) heightened use intensiveness and (2) the rise of non-professional workers.

a. Use Intensiveness and Local Regulation

The first set of controversies caused by the sharing economy stems from the decline in idle capacity. Much local regulation, from parking minimums to zoning law, is based on traditional assumptions on how civic resources should be used. Some homeowners constantly have guests over; most do not. Some cars are driven twelve hours a day; most are not. The sharing economy flips many of these assumptions on their heads, leading to more intensive resource uses than originally expected.

⁹⁶ Which is to say, presumably lower quality goods are now available for sale at cheaper prices. That said, as the above examples show, whether the quality is actually lower is debatable.

⁹⁷ See Moira Herbst, Let's Get Real: The 'Sharing Economy' Won't Solve Our Jobs Crisis, GUARDIAN (Jan. 7, 2014), http://www.theguardian.com/commentisfree/2014/jan/ 07/sharing-economy-not-solution-to-jobs-crisis [http://perma.cc/S93S-ZRZS]; Slee, supra note 1.

98 See ZILOK, http://us.zilok.com [http://perma.cc/7D2N-VUTW].

⁹⁹ E.g., Jay Barmann, Airbnb Squatters Leave Palm Springs Condo in Dead of Night, SFIST (Mar. 17, 2014), http://sfist.com/2014/08/21/airbnb squatters leave palm springs.php [http://perma.cc/8W5A-5NAT] (describing Airbnb users who invoked tenant protections to overstay in rental for approximately three months); Austin Carr, The Secret to Airbnb's Freakishly Rapid Orgy Response: "Scenario Planning," FAST COMPANY (Mar. 17, 2014), http://www.fastcompany.com/3027798/the-secret-to-airbnbs-freakishly-rapid-orgy-responsescenario-planning [http://perma.cc/9KFT-F6G3] (describing Airbnb's reaction to renter's unauthorized use of apartment for an adult "swingers" party).

A clear example of such conflict stems from the rise of Airbnb, OneFineStay¹⁰⁰ and VRBO,¹⁰¹ services permitting owners and tenants to rent out rooms for short-term stays. Because many of these properties constantly have "guests," they use neighborhoods more intensively than originally planned for.¹⁰² The upshot is that areas once zoned as residential can become de facto commercial "hotel" districts. Because of this, neighbors to Airbnb renters have often lodged complaints under zoning, landlord–tenant, or contract law.¹⁰³

On this point, some fear that as building owners gain a new, more-intensive means of making profit (namely, renting rooms for highly profitable short-term stays), housing stock is being taken off the long-term rental market and converted to "hotel stock" for tourists, ¹⁰⁴ exacerbating affordable housing shortages in space-starved places like San Francisco and Manhattan. ¹⁰⁵

¹⁰⁰ See ONEFINESTAY, http://www.onefinestay.com [http://perma.cc/25BS-VTGH].

¹⁰¹ See VRBO, http://www.vrbo.com [http://perma.cc/3YZS-QS6T].

¹⁰² Sometimes, much more intensive uses. Brittany Levine, *Airbnb "Party House" in Glendale Shut Down After Police Visits*, L.A. TIMES (Jan. 6, 2014), http://www.latimes.com/local/lanow/la-me-ln-airbnb-party-house-glendale-20140106-story.html [http://perma.cc/2RZW-9TCA]; Dana Sauchelli & Bruce Golding, *Hookers Turning Airbnb Apartments into Brothels*, N.Y. POST (Apr. 14, 2014), http://nypost.com/2014/04/14/hookers-using-airbnb-to-use-apartments-for-sex-sessions [http://perma.cc/EA2H-8SCN].

¹⁰³ See infra notes 167–71 and accompanying text.

¹⁰⁴ See, e.g., Rachel Monroe, More Guests, Empty Houses: Airbnb Is Great for Tourists. Is It Great for the Housing Market?, SLATE (Feb. 13, 2014), http://www.slate.com/articles/business/moneybox/2014/02/airbnb_gentrification_how_the_sharing_economy_drives_up_housing_prices.html [http://perma.cc/82FQ-WZKC].

¹⁰⁵ E.g., Editorial Bd., The Dark Side of the Sharing Economy, N.Y. TIMES (Apr. 30, 2014), http://www.nytimes.com/2014/05/01/opinion/the-dark-side-of-the-sharing-economy .html? r=0 [http://perma.cc/A7BD-PXPT]; Miranda Neubauer, NYC Politicians and Advocacy Groups Say Airbnb Misrepresents Sharing Economy, TECHPRESIDENT (Sept. 12, 2014), http://techpresident.com/news/25269/nyc-politicians-and-advocacy-groups-say-airbnbmisrepresents-sharing-economy [http://perma.cc/M69S-HR58]; Ben Fox Rubin & Joan E. Solsman, Vexed in the City: San Francisco Strife Spurs Tech Defectors Elsewhere, CNET (Aug. 22, 2014), http://www.cnet.com/news/vexed-in-the-city-san-francisco-strife-spurstech-defectors-elsewhere [http://perma.cc/9KXQ-KHHE]. For what it's worth, this argument is somewhat strange. Airbnb et al. make owning a home more valuable, as they allow spare capacity (rooms or time) in a home to be rented by others (or, if it is used entirely as a hotel room, to divide its use among renters who are willing to pay more for it). The ability to rent out space in apartments will increase the cost of housing, but only for the same reasons that reductions in crime rates, great new parks, or anything else positive increases the cost of housing—it increases demand. Using public policy to depress demand for housing, whether it is by barring house sharing, or by not stopping crime, is an odd policy response to say the least. The very goal of such a policy is to destroy wealth by making houses less valuable. It is far more reasonable to encourage increases in demand but change land use policy to allow more housing construction to meet the increase in demand, muting price increases. Further, suppressing Airbnb on the basis of its effect on housing prices will reduce local property tax revenue available for redistribution.

Other examples abound. It has always been possible to ride and park a bike in New York. Yet residents protest the placement of bike-share hubs because they cause more foot-traffic and volume than previously planned for. ¹⁰⁶ It has always been possible to use public parking for as long as legally permitted, but far more people do so when such spaces can be electronically re-rented to the highest bidder. ¹⁰⁷

Relatedly, some fear the sheer volume of sharing-firm users allows the collection of data in ways that threaten personal privacy. Cab companies and rental car companies *could* have comprehensively tracked their customers, but it would have been practically infeasible to do so. Not so with sharing firms. Zipcar and car2go automatically track where and when their customers drive, while the most controversial data-collector, Uber, has vast amounts of information about users' travel habits and, by extension, their private lives. ¹⁰⁸

b. Regulating Non-Professional Services and Non-Commercial Goods

A second conflict stems from the massive rise of non-professional—and non-regulated—service and goods providers that the sharing economy has enabled. This trend creates particular tension when professionalized and regulated incumbents complain of unfair competition. In the taxi industry, for example, traditional drivers must pay for cab medallions and pass numerous city tests and requirements; ¹⁰⁹ Lyft drivers, by contrast, need only strap a pink

¹⁰⁶ Alex Davies, *New York's Bike Share Is Brilliant, and Every Complaint About It Is Bogus*, Bus. Insider (June 3, 2013), http://www.businessinsider.com/complaints-about-citi-bike-share-are-wrong-2013-6 [http://perma.cc/CC7B-GEFC] (describing and responding to critiques of New York's Citi Bike system).

¹⁰⁷ See Monkey Parking App's CEO Refuses to Halt Operations in SF, Despite Order from City Attorney's Office, CBS S.F. (June 26, 2014), http://sanfrancisco.cbslocal.com/2014/06/26/monkey-parking-apps-ceo-refuses-to-halt-operations-in-sf-despite-order-from-city-attorneys-office/ [http://perma.cc/PB4T-CBPL] (describing MonkeyParking service, which allows people sitting in public parking spaces to sell the information that they are planning on leaving the space).

¹⁰⁸ See Timothy B. Lee, *Uber's Vast Trove of Customer Data Is Ripe for Abuse*, VOX (Nov. 18, 2014), http://www.vox.com/2014/11/18/7243093/uber-privacy-problems [http://perma.cc/Q9DH-X6ML] ("And we know...that Uber can use customer data to draw conclusions about customers' sex lives.").

¹⁰⁹ See Andrea Peterson, What it Looks Like When Taxi Drivers Protest Uber and Lyft in D.C., WASH. POST (Oct. 28, 2014), https://www.washingtonpost.com/news/the-switch/wp/2014/10/28/what-it-looks-like-when-taxi-drivers-protest-uber-and-lyft-in-d-c/[https://perma.cc/HWV5-YDXR] (describing D.C. taxi cab drivers as being at a competitive disadvantage compared to Uber and Lyft drivers because of the complex licensing requirements and accompanying fees taxi drivers face).

novelty mustache to their car.¹¹⁰ Likewise, traditional hotels must pay taxes; Airbnb hosts, by contrast, often do not.¹¹¹

So far, this conflict over unfair competition has been resolved in several ways. Some cities strike deals with sharing firms, such as requiring tax payment in return for allowing operations. Others try to level the regulatory playing field, as when Colorado and Washington D.C. required that Uber conduct more extensive driver background checks and buy additional insurance, or as New Orleans proposed doing through a standardized limousine tax on both Uber and non-Uber cars. Others, however, take stricter tactics, either effectively or explicitly banning such sharing firms.

The sharing economy's "de-professionalization" of goods and services also creates consumer protection concerns: rentals on Airbnb do not need to meet hotel fire standards, 115 Lyft drivers do not need city certification or licensure, 116 and community chefs on Kitchensurfing 117 have no obligation to

¹¹⁰ See Christine Lagorio-Chafkin, *The Origin—and Evolution—of Lyft's Pink Mustache*, INC. (Aug. 1, 2014), http://www.inc.com/christine-lagorio/evolution-of-lyft-mustache.html [http://perma.cc/9T9T-XQ66].

¹¹¹ Notably, the Airbnb *platform* has attempted to pay taxes to legitimate itself in new markets. However, these efforts have often been rebuffed. Ryan Lawler, *Airbnb Offers to Pay Hotel Taxes in NY, Hotel Lobby Says "No Thanks,"* TECHCRUNCH (Apr. 17, 2014), http://techcrunch.com/2014/04/17/airbnb-hotel-taxes-hotel-lobby-flip-flop/ [http://perma.cc/3JZA-8QMB].

¹¹² See infra notes 303–06 and accompanying text.

¹¹³ Ely Portillo, *Uber Points to DC Regulations as Model for Charlotte*, CHARLOTTE OBSERVER (Oct. 29, 2014), http://www.charlotteobserver.com/news/business/article 9207485.html [http://perma.cc/7MPN-QCX2] (describing D.C. regulations and Uber's advocacy that other cities adopt them); Andy Vuong, *Colorado First to Authorize Lyft and Uber's Ridesharing Services*, DENVER POST (June 5, 2014), http://www.denverpost.com/business/ci_25907057/colorado-first-authorize-lyft-and-ubers-ridesharing-services [http://perma.cc/W6ZY-64CC].

¹¹⁴ Lauren Frayer, *Uber, Airbnb Under Attack in Spain as Old and New Economies Clash*, NPR (July 29, 2014), http://www.npr.org/sections/parallels/2014/07/29/327796899/uber-airbnb-under-attack-in-spain-as-old-and-new-economy-clash [http://perma.cc/BL23-859U]; Alison Griswold, *Seoul Is Taking a Hard Line on Uber. Will Other Cities Follow?*, SLATE: MONEYBOX (July 22, 2014, 10:35 AM), http://www.slate.com/blogs/moneybox/2014/07/22/seoul_fights_uber_bans_the_service_and_plans_its_own_app.html [http://perma.cc/67AJ-2ZKQ]; Brad Tuttle, *7 Cities Where the Sharing Economy Is Freshly Under Attack*, MONEY (June 9, 2014), http://time.com/money/2800742/uber-lyft-airbnb-sharing-economy-city-regulation/ [http://perma.cc/L97Y-H5FF].

¹¹⁵ Baker, *supra* note 74.

¹¹⁶ See Bobby Kerlik, Rivals Try to Block Uber, Lyft in Pittsburgh, TRIBLIVE (Aug. 2, 2014), http://triblive.com/news/allegheny/6543923-74/lyft-puc-ride#axzz3BDwh7wLz [http://perma.cc/N5UM-BN9A]. This fact has led many states to issue ominous—if vague—warnings. See also Ben Popken, States Warn of Rideshare Risks for Passengers, NBC NEWS (June 5, 2014), http://www.nbcnews.com/business/consumer/states-warn-rideshare-risks-passengers-n116736 [http://perma.cc/4C9A-W8HN].

¹¹⁷ See KITCHENSURFING, https://www.kitchensurfing.com [https://perma.cc/8QDB-ZXWQ].

follow local health regulations.¹¹⁸ Sharing economy proponents claim self-regulation and market incentives sufficiently protect the public from these dangers.¹¹⁹ For example, online reviews help ensure "bad apples" are known to all.¹²⁰ Also, successful sharing companies generally offer substantial backstop guarantees and insurance for users. Airbnb, for example, offers a one million dollar guarantee to both guests and hosts for property damage, a protection deployed "freakishly" fast in several high profile cases.¹²¹

Yet notwithstanding such self-regulation, many cities remain understandably anxious about consumer protection issues. Several have banned sharing firms outright based on such issues, 122 while others demand heightened consumer protections before sharing firms may operate. 123

Relatedly, there have also been consumer protection complaints about sharing-firm prices. Uber has (in)famously used "surge pricing" when demand is high, driving prices up in the name of attracting more drivers. 124 While economists generally believe surge pricing is efficient, such measures are

¹¹⁸ See Terms of Service Agreement, KITCHENSURFING, https://www.kitchensurfing.com/tos [http://perma.cc/8LDK-4FVQ] (last updated May 22, 2012).

¹¹⁹ See Jasmine Gardner, Your Most Valuable Digital Asset? It Might Just Be Your Integrity..., EVENING STANDARD (Mar. 18, 2014), http://www.standard.co.uk/lifestyle/london-life/your-most-valuable-digital-asset-it-might-just-be-your-integrity-9199057.html [http://perma.cc/ENS5-PKX6].

¹²⁰ Of course, this itself could raise a host or privacy issues. *Id.*

¹²¹ Carr, supra note 99.

¹²² Mark J. Perry, *Minneapolis and Seattle Restrict Ride-Sharing Services Lyft and Uber as Crony Capitalism Prevails and Consumers Lose*, AEIDEAS (Feb. 28, 2014, 11:07 AM), https://www.aei.org/publication/minneapolis-and-seattle-restrict-ride-sharing-services-lyft-and-uber-as-crony-capitalism-prevails-and-consumers-lose/ [https://perma.cc/4DHM-8XG4].

¹²³ For instance, Portland's regulations on Airbnb require would-be lenders to notify neighbors and obtain a \$180 permit. Eliot Njus, *Portland Legalizes Airbnb-Style Short Term Rentals*, OREGONLIVE (July 30, 2014), http://www.oregonlive.com/front-portch/index.ssf/2014/07/portland_legalizes_airbnb-styl.html [http://perma.cc/8RT4-DKS7]. California imposes substantial consumer protection regulations on Uber and Lyft. Barbara Soderlin, *How Are Ridesharing Services Like Lyft and Uber Regulated Across the U.S.?*, OMAHA WORLD HERALD (July 6, 2014), http://www.omaha.com/money/how-are-ridesharing-services-like-lyft-and-uber-regulated-across/article_f5a082eb-dfed-51e2-8f76-a13222e181ed.html [http://perma.cc/6P5X-KEWJ] ("Drivers must have criminal background checks, and [Sharing Economy] companies are required to inspect vehicles, establish a driver training program, have a zero-tolerance policy on drugs and alcohol, and hold a commercial liability insurance policy that is in force while the driver is on the way to pick up a rider or is giving a ride.").

¹²⁴ Annie Lowrey, *Is Über's Surge-Pricing an Example of HighTech Gouging?*, N.Y. TIMES MAG. (Jan. 10, 2014), http://www.nytimes.com/2014/01/12/magazine/is-ubers-surge-pricing-an-example-of-high-tech-gouging.html?_r=0 [http://perma.cc/M6EU-QVLT] (describing critiques of Uber's surge pricing policy).

decidedly unpopular.¹²⁵ Indeed, in response to public pressure, Uber has agreed to limit such surge pricing during emergencies and to donate surge profits to charities.¹²⁶

The "employment" side of the sharing market has also been criticized. Sellers of sharing services—Uber drivers and TaskRabbits—are not full-time employees and lack benefits like health insurance, training, or 401(k) donations. This has been the subject not only of political debate, but also lawsuits, with well-publicized litigation challenging whether workers in the sharing economy are properly classified as employees rather than independent contractors and thus deserving of greater protections and benefits. Wages can also be quite low. Thus, the 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 earn more than those in comparable "traditional" companies and that they are given supplementary income that would otherwise be unavailable.

¹²⁵ See Ben Popper, *Uber Surge Pricing: Sound Economic Theory, Bad Business Practice*, VERGE (Dec. 18 2013), http://www.theverge.com/2013/12/18/5221428/ubersurge-pricing-vs-price-gouging-law [http://perma.cc/WC9F-C4BY].

126 Ben Popper, *Uber Agrees to New National Policy that Will Limit Surge Pricing During Emergencies*, VERGE (July 8, 2014), http://www.theverge.com/2014/7/8/5881535/uber-price-gouging-surge-pricing-new-york-agreement [http://perma.cc/X7UN-P8JW] (describing Uber's new policy for surge pricing during emergencies).

127 See Lydia DePillis, At the Uber for Home Cleaning, Workers Pay a Price for Convenience, WASH. POST (Sept. 10, 2014), http://www.washingtonpost.com/news/storyline/wp/2014/09/10/at-the-uber-for-home-cleaning-workers-pay-a-price-for-convenience [http://perma.cc/B2ML-L444] (describing the lack of worker protections and benefits for sharing economy independent contractors).

128 See Hill, supra note 4. This issue—a dispute about state and federal labor law—has been extensively discussed elsewhere. See, e.g., Brishen Rogers, The Social Costs of Uber, 82 U. CHI. L. REV. DIALOGUE 85, 100 (2015). It also has little to do with the subjects here, which is how cities—which traditionally have little direct control over labor law—react to the sharing economy. So we will not discuss it here, despite it being of great importance.

¹²⁹ See Dan Kedmey, Do UberX Drivers Really Take Home \$90K a Year on Average? Not Exactly, TIME (May 27, 2014), http://time.com/119587/do-uberx-drivers-really-take-home-90k-a-year-on-average-not-exactly [http://perma.cc/MKP8-D3HE].

¹³⁰ See Roose, supra note 4.

131 See Emily Badger, Now We Know How Many Drivers Uber Has—And Have a Better Idea of What They're Making, WASH. POST: WONKBLOG (Jan. 22, 2015), http://www.washingtonpost.com/blogs/wonkblog/wp/2015/01/22/now-we-know-many-drivers-uber-has-and-how-much-money-theyre-making%E2%80%8B/ [http://perma.cc/G22A-ZAG4] (concluding that Uber drivers make \$6 more per hour on average than traditional cab drivers, nearly half have college degrees, and only a quarter of them rely on it for all of their income); Farhad Manjoo, Grocery Deliveries in Sharing Economy, N.Y. TIMES (May 21, 2014), http://www.nytimes.com/2014/05/22/technology/personaltech/online-grocery-start-up-takes-page-from-sharing-services.html [http://perma.cc/B8BN-SWL8].

5. Who Has Problems with the Sharing Economy? Sharers v. Incumbents and "Neighbors"

Each of these policy conflicts has a common political dimension: restrictive regulations on sharing firms are advocated by incumbent firms, workers for incumbent firms, and wary "neighbors" of sharing economy users. 132 Conversely, these restrictions are opposed by sharing firms and their customers. 133 Notably, these conflicts have played out largely in local and state politics. 134

At first blush, this conflict seems heavily tilted in the incumbents' favor. Incumbent firms are intensely harmed by the rise of sharing services, as seen in the hotel¹³⁵ and taxi industries.¹³⁶ Yet the benefits of sharing services are

135 Georgios Zervas et al., *The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry* (Bos. Univ. Sch. of Mgmt., Research Paper No. 2013-16, first draft 2013) ("[A] 1% increase in Airbnb listings in Texas results in a 0.05% decrease in quarterly hotel revenues, an estimate compounded by Airbnb's rapid growth.").

136 Josh Barro, *Under Pressure from Uber, Taxi Medallion Prices Are Plummeting*, N.Y. TIMES (Nov. 27, 2014), http://www.nytimes.com/2014/11/28/upshot/under-pressure-from-uber-taxi-medallion-prices-are-plummeting.html?abt=0002&abg=1 [http://perma.cc/T77U-3SMN] (discussing fast-falling prices of taxi medallions across the country following introduction of Uber); Megan Garber, *After Uber, San Francisco Has Seen a 65*

¹³² We are here leaving out criticisms waged by customers of the services themselves, in favor, for instance, of increased data privacy protections. These conflicts are not existential for the firms and feature a very different politics. *See* Dana Rubinstein, *Uber Objects, Selectively, to Data-Sharing Requirement*, POLITICO N.Y. (Nov. 20, 2014, 5:53 AM), http://www.capitalnewyork.com/article/city-hall/2014/11/8557041/uber-objects-selectively-data-sharing-requirement [http://perma.cc/3F9Q-TTB5] (noting that Uber's traditional allies abandoned it in fight over data privacy). Similarly, the challenges brought against sharing firms by workers challenging their status as independent contractors have a very different politics to the disputes discussed above. *See* Hill, *supra* note 4.

¹³³ See Hill, supra note 4.

¹³⁴ Though, to be sure, some federal officials and agencies have taken note. The Republican National Committee openly allied itself with Uber in a public letter, supporting reduced regulations on the company. Kevin Robillard & Byron Tau, GOP Chases Youth Vote with Uber, POLITICO (Aug. 6, 2014), http://www.politico.com/story/2014/08/uberrepublicans-youth-vote-109785.html [http://perma.cc/B5XG-M2L6]. However, state and local policy towards Uber does not breakdown on party lines. Josh Barro, Republicans Are Sometimes the **Party** N.Y. TIMES of Uber, (Nov. http://www.nytimes.com/2014/11/09/upshot/republicans-are-only-sometimes-the-party-ofuber.html?abt=0002&abg=1 [http://perma.cc/WS9Z-XNQ8]. Further, Uber's chief executive has recently argued that the Affordable Care Act is central to his business's successes, making a Republican/Uber alliance less likely. Jonathan Chait, Uber Just Stuck a Knife in the Republican Party's Heart, NYMAG.COM (Nov. 17, 2014), http://nymag.com/daily/intelligencer/2014/11/uber-just-stuck-a-knife-in-the-gops-heart.html [http://perma.cc/G8T2-KQH3]. The Federal Trade Commission has been very critical of local regulations of Uber and other ride-sharing services in letters to local regulators and has considered litigation. Marvin Ammori, Can the FTC Save Uber?, SLATE (Mar. 12, 2014), http://www.slate.com/articles/technology/future_tense/2013/03/uber_lyft_sidecar can the ftc fight local taxi commissions.html [http://perma.cc/4Q4R-U5SQ].

spread diffusely across many consumers and part-time employees. Therefore, the conflict between industry incumbents and sharing advocates at first seems a classic "Olsonian mismatch," in which an intensely interested minority has the incentives to invest enough in politics to overcome the majority's broad (but shallow) preferences.¹³⁷ Relatedly, incumbent firms and homeowner groups are repeat players in local politics, with well-organized lobbying shops and long-term political relationships that new sharing entrants often lack. And indeed, by many conventional metrics of interest group competition, the incumbents seem far ahead. For instance, since 1990, the taxi industry has spent roughly 3,500 times as much on campaign donations as Uber, Sidecar, and Lyft combined.¹³⁸ And even without considering their longer histories, incumbent firms have far larger political operations than sharing economy start-ups. In tech-friendly California, for instance, the taxi industry alone spent some \$6.1 million on lobbying in a two-year span, compared with the entire sharing economy's \$384,000.¹³⁹

Yet despite this apparent imbalance, sharing firms have proven creative and effective in executing a now-familiar "playbook" to bend urban politics to their advantage. Step one is to open and develop customer bases *before* getting regulatory approval, creating "facts on the ground." Next, once regulators begin to crack down, sharing firms claim they are not themselves service providers, but rather networks for connecting third-parties to one another. 141

Percent Decline in Cab Use, ATLANTIC: CITYLAB (Sept. 17, 2014), http://www.citylab.com/commute/2014/09/after-uber-san-francisco-has-seen-a-65-percent-decline-in-cab-use/380397/ [http://perma.cc/3XQA-LVG8] (observing that since the introduction of Uber, ordinary San Francisco cab ridership has fallen by sixty-five percent).

¹³⁷ See MANCUR OLSON JR., THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS 1–18 (1971) (discussing advantages small groups facing concentrated harms from some change have in political conflicts with large groups where the individual benefit to each from the change is small).

¹³⁸ Stan Oklobdzija, Will Big Taxi's Massive Political Spending Advantage Leave Ride-Sharing Groups Stranded?, SUNLIGHT FOUND. BLOG (July 31, 2014, 1:54 PM), http://sunlightfoundation.com/blog/2014/07/31/will-big-taxis-massive-political-spending-advantage-leave-ride-sharing-groups-stranded [http://perma.cc/PNB2-PETT].
¹³⁹ Id.

¹⁴⁰ Amusingly, employees at Uber apparently actually refer to their strategy as the "playbook." There are other elements, including wooing local VIPs with parties and promoting a Twitter hashtag. Christine Lagorio-Chafkin, *Resistance Is Futile*, INC. MAG. (July/Aug. 2013), http://www.inc.com/magazine/201307/christine-lagorio/uber-the-car-service-explosive-growth.html [http://perma.cc/L8CK-CT9K]. For discussions of how this strategy works, see Andrew Leonard, *The Sharing Economy Muscles Up*, SALON (Sept. 27, 2013), http://www.salon.com/2013/09/17/the_sharing_economy_muscles_up [http://perma.cc/BWP8-7FYS]; Marcus Wohlsen, *Uber's Brilliant Strategy to Make Itself Too Big to Ban*, WIRED (July 8, 2014), http://www.wired.com/2014/07/ubers-brilliant-strategy-to-make-itself-too-big-to-ban/ [http://perma.cc/VE3G-QEHJ].

141 This claim can be found in sharing firms' user agreements. *See, e.g., TaskRabbit Terms of Service*, TASKRABBIT, https://www.taskrabbit.com/terms [https://perma.cc/39UR-EBSZ] ("The Service is a communications platform which enables the connection between

This forces cities onto the costly and politically dangerous terrain of enforcing against individual buyers and sellers.¹⁴² Finally, sharing firms leverage their huge base of loyal consumers to bombard politicians and regulators with emails and protests, compensating for a lack of entrenched organizing with tech and marketing savvy.¹⁴³ The end result is that before cities can act, or incumbents can effectively counterpunch, sharing firms are simply "too big to ban."¹⁴⁴

Apart from this "playbook," high-profile sharing firms also have begun to develop sophisticated political arms. ¹⁴⁵ Uber hired David Plouffe, mastermind of Barack Obama's presidential campaigns, to run its public affairs shop, while Lyft hired David Yassky, former head of New York City's Taxi and Limousine Commission, as a consultant. ¹⁴⁶ Airbnb has hired political experts including the gurus behind New York Mayor Bill DeBlasio's successful election campaign. ¹⁴⁷ And another Airbnb official helped form Peers, a grassroots organizing group aimed at promoting and protecting the sharing economy. ¹⁴⁸ Peers, in turn, has become a powerful political force under

Clients and Taskers. Clients are individuals and/or businesses seeking to obtain task services ('Tasks') from Taskers and are therefore clients of Taskers, and Taskers are individuals and/or businesses seeking to perform Tasks ('Taskers') for Clients.").

¹⁴² See Nathan Mattisse, Airbnb Identifies 124 Hosts in Data Handover to NY Attorney General, ARS TECHNICA (Aug. 24, 2014), http://arstechnica.com/tech-policy/2014/08/airbnb-identifies-124-hosts-in-data-handover-to-ny-attorney-general [http://perma.cc/RH6F-TAZU].

¹⁴³ Noam Scheiber, *Uber and Airbnb Are Waging a Libertarian War on Regulators*, NEW REPUBLIC (May 20, 2014), http://www.newrepublic.com/article/117837/airbnb-uberwage-war-regulators-army-customers [http://perma.cc/8BU8-DTYW] ("Like Airbnb, Uber also invites its diehard customers to mau-mau . . . regulators").

¹⁴⁴ See Wohlsen, supra note 140.

145 See generally Anna Palmer & Scott Wong, Uber Uses Lobbying to Drive Expansion, POLITICO (Sept. 18, 2013), http://www.politico.com/story/2013/09/uber-taxi-lobbying-expansion-97028_Page2.html [http://perma.cc/CX46-3ELK] (describing Uber's lobbying strategy); Tess VanderDolder, Sharing Economy Companies Like Uber and Airbnb Make Lobbying a Priority, DCINNO (July 1, 2014, 1:35 PM), http://inthecapital.streetwise.co/all-series/sharing-economy-companies-like-uber-and-airbnb-make-lobbying-a-priority/ [http://perma.cc/2NEN-UTND] (describing lobbying by Uber and Airbnb).

¹⁴⁶ Mike Issac, *Uber Picks David Plouffe to Wage Regulatory Fight*, N.Y. TIMES (Aug. 19, 2014), http://www.nytimes.com/2014/08/20/technology/uber-picks-a-political-insider-to-wage-its-regulatory-battles.html?_r=0 [http://perma.cc/6LDJ-RZ5U] (discussing Uber's hiring of Plouffe); Dana Rubinstein, *Former Taxi Commissioner Now Advising Lyft*, CAPITAL N.Y. (Sept. 16, 2014), http://www.capitalnewyork.com/article/city-hall/2014/09/8552703/former-taxi-commissioner-now-advising-lyft [http://perma.cc/5DKD-TWFB] (noting Lyft hires David Yassky as consultant).

¹⁴⁷ Jessica Pressler, "The Dumbest Person in Your Building Is Passing Out Keys to Your Front Door!," NYMAG.COM (Sept. 23, 2014), http://nymag.com/news/features/airbnb-in-new-york-debate-2014-9/ [http://perma.cc/TAU8-FLGT] (describing Airbnb's lobbying hires).

¹⁴⁸ See PEERS, http://www.peers.org [http://perma.cc/CFU9-NJTY].

director, and experienced politico, Natalie Foster (formerly of Obama for America, MoveOn.org, and the Sierra Club). 149

The result, for now, is that sharing firms have generally fought off incumbent challenges and won the right to provide most of their services in most places. Yet as several prominent examples illustrate, the twists and turns of this conflict are far from over.

Uber: Today, Uber is the most valuable and prominent sharing firm. ¹⁵⁰ As noted, Uber allows riders to "e-hail" a variety of taxi options: limosuines (UberBlack), standard cabs (UberTaxi), SUVs (UberXL or UberSUV), rides with car seats for children (UberFamily), and amateur drivers (UberX or UberPop). Nor is it alone in the "sharing taxi" space: competitors Lyft and SideCar are both widely available, and BlaBlaCar a long-distance ride-sharing outfit, now has more European riders than the Eurostar train. ¹⁵¹

Despite (and because of) its popularity with consumers, Uber faces stiff pushback from incumbent taxi firms and regulators in almost every market it enters. To date, the anti-incumbent "playbook" has overcome many such attacks. In California, for example, Uber convinced state regulators to classify it as "transportation network company," allowing it to operate in exchange for requiring driver background checks and increased insurance coverage. Likewise, Washington D.C., Houston, and a number of other cities have passed ordinances explicitly permitting Uber to operate, imposing only limited rules about pricing, insurance, and taxes. Meanwhile, Uber has received

¹⁴⁹ Anya Kamenetz, *Is Peers the Sharing Economy's Future or Just a Great Silicon Valley PR Stunt?*, FAST COMPANY (Dec. 9, 2013), http://www.fastcompany.com/3022974/tech-forecast/is-peers-the-sharing-economys-future-or-just-a-great-silicon-valley-pr-stunt [http://perma.cc/HA7U-P7D4] (discussing Peers and Fosters's background); Andrew Leonard, *Who Owns the Sharing Economy?*, SALON (Aug. 2, 2013), http://www.salon.com/2013/08/02/who_owns_the_sharing_economy [http://perma.cc/N5YK-JXF3] (discussing the creation and influence of Peers). Peers is also supported by Lyft, TaskRabbit, and many other sharing economy firms. *Id*.

¹⁵⁰ See Harry Campbell, Have We Become Too Dependent on Uber?, FORBES (June 9, 2015), http://www.forbes.com/sites/harrycampbell/2015/06/09/have-we-becometoo-dependent-on-uber/ [http://perma.cc/4SSM-X274].

¹⁵ See Tim Bradshaw, BlaBlaCar Sets Course of \$100M Fundraising, FIN. TIMES (July 2, 2014), http://www.ft.com/cms/s/0/7babac34-0184-11e4-9750-00144feab7de.html# axzz3nyg4xhH6 [http://perma.cc/PUL8-NKDT] (describing BlaBlaCar).

¹⁵² Anthony Ha, California Regulator Passes First Ridesharing Rules, a Big Win for Lyft, SideCar, and Uber, TechCrunch (Sept. 19, 2013), http://techcrunch.com/2013/09/19/cpuc-ridesharing-regulations/ [http://perma.cc/KL3P-DEC4]; Marc Scribner, Ridesharing Wars: Uber, Regulators, and the California Compromise, COMPETITIVE ENTERPRISE INST. (June 6, 2014), http://cei.org/blog/ridesharing-wars-uber-regulators-and-california-compromise [http://perma.cc/LX4P-NCHA].

¹⁵³ See Dug Begley, Houston Approves New Regulations, Allowing Uber and Lyft, Hous. Chron.: Highwayman (Aug. 6, 2014, 2:13 PM), http://blog.chron.com/the highwayman/2014/08/houston-approves-new-regulations-allowing-uber-and-lyft/#25694101= 0&25524103=0 [http://perma.cc/MPF7-MC65] (describing Houston's new ride-sharing law); Portillo, *supra* note 113 (describing D.C. regulations on ride-sharing firms).

favorable audiences in state executive branches, with Governors like Virginia's Terry McCaullife and Massachusetts's Deval Patrick working to overturn state-regulatory bans on the service. 154

This is not to say Über's ascent has been entirely smooth. In some cities, particularly New York, regulators have forced it to change business models by requiring even (amateur) UberX drivers to be city-licensed drivers. Pennsylvania's Public Utility Commission has flirted with barring ride sharing entirely, though it allows Uber to operate on a conditional permit in most of the state. Maryland is considering similar regulations. More drastically, cities like Little Rock, Las Vegas, and Miami have made services like Uber effectively or actually illegal.

On another front, Uber has been sued by drivers claiming they have been misclassified as independent contractors and are thus entitled to reimbursement.¹⁵⁹ Users and cities have also complained about Uber's inappropriate gathering or use of rider data.¹⁶⁰ Beyond the United States, Uber has faced substantial limitations, with UberPop (amateur) drivers being banned

¹⁵⁴ Michael B. Farrell, *State Reverses Ban on Uber Car Service Ordering App*, Bos. GLOBE (Aug. 16, 2012), http://www.bostonglobe.com/business/2012/08/15/state-reverses-ban-uber-car-service-ordering-app/yQTQNP9c1BQiEM3Mrri2oO/story.html [http://perma.cc/F9M8-WEJ3] (discussing Gov. Patrick's actions to reverse ban on Uber); Luz Lazo, *Virginia Reaches Deal with Uber, Lyft, to Allow Services to Operate in the State*, WASH. POST (Aug. 6, 2014), https://www.washingtonpost.com/news/dr-gridlock/wp/2014/08/06/virginia-reaches-deal-with-uber-lyft-to-allow-services-to-operate-in-the-state/ [http://perma.cc/8ES3-QHX3] (describing deal between Gov. McCaullife, the Virginia Attorney General, and ride-sharing firms).

¹⁵⁵ Christopher Bonanos, *Hail Storm*, NYMAG.COM (July 31, 2014), http://nymag.com/news/features/taxis-2014-7 [http://perma.cc/8YGX-HB83] (New York City requires Lyft and UberX drivers to get taxi license).

¹⁵⁶MaryClaire Dale, *Uber Gets OK for Much of Pennsylvania, Not Philly*, BLACKPRESSUSA (Nov. 13, 2014), http://www.blackpressusa.com/uber-gets-ok-for-much-of-pennsylvania-not-philly/#sthash.UopDYMQl.IZBVjrXN.dpbs [http://perma.cc/9NT5-FF7H] (noting that PUC gives Uber temporary license to operate in the state, except in Philadelphia).

¹⁵⁷ Meghan McCorkell, New Regulations Could Drive "Uber" Out of Maryland, CBS BALT. (Aug. 7, 2014), http://baltimore.cbslocal.com/2014/08/07/maryland-commission-rules-uber-must-be-regulated-2 [http://perma.cc/XX4E-H4ZV] (quoting Uber spokesperson as saying that proposed regulations would make "Uber's operation near impossible in the state").

¹⁵⁸ See Laurie Kulikowski, 5 U.S. Cities Where Uber Is Unwelcome but Wants Your Taxi Business, TheStreet (Sept. 2, 2014), http://www.thestreet.com/story/12863816/1/5-us-cities-where-uber-is-unwelcome-but-wants-your-taxi-business.html [http://perma.cc/X2RL-7M2Q] (describing restrictions on ride sharing in five cities).

¹⁵⁹Michael B. Farrell, *New Lawsuit Claims Über Exploits Its Drivers*, Bos. GLOBE (June 26, 2014), http://www.bostonglobe.com/business/2014/06/26/uber-hit-with-class-action-lawsuit/JFlTJLMuBoXuEmMU3elTAI/story.html [http://perma.cc/5TDG-UEXP] (describing class action lawsuit by drivers against Über).

¹⁶⁰ See Rubinstein, supra note 132; see also Lee, supra note 108 and accompanying text.

from Belgium, France, Germany, the Netherlands, and Spain. 161 Uber's CEO was even indicted in South Korea. 162

On the whole, however, Uber has been a resounding success; the network operates across most of America's major metropolises, as well as smaller cities from Akron, Ohio to Tuscaloosa, Alabama. It has also branched out into a host of different services, from delivery to direct sales of consumer goods. Most notably, the firm and its main competitor, Lyft, recently started bringing more actual sharing to the sharing economy by allowing riders to share taxis trips in a service some predict could eventually compete with jitneys or public buses. 165

Airbnb: Airbnb, along with firms like Couchsurfing, ¹⁶⁶ OneFineStay, and VRBO, allows owners (and lessors) of houses and apartments to rent out spaces from single rooms to full mansions on a short-term basis. In many ways, Airbnb's regulatory problems are more serious than Uber's. ¹⁶⁷ Houses used for such short-term rental may be in violation of zoning laws barring hotels from residential areas. ¹⁶⁸ Many cities and states also bar leases of less than thirty days unless the homeowner is also on premises. ¹⁶⁹ And even if the

¹⁶¹ See Mark Scott, *Uber Suspends Operations in Spain*, N.Y. TIMES: BITS (Dec. 31, 2014, 6:09 AM), http://bits.blogs.nytimes.com/2014/12/31/uber-suspends-operations-in-spain/? r=0 [http://perma.cc/33BX-LAEP] (discussing bans across Europe).

¹⁶²See Sam Kim, *Uber CEO Indicted in South Korea over Its Taxi Service*, BLOOMBERG (Dec. 23, 2014), http://www.bloomberg.com/news/articles/2014-12-24/uber-ceo-indicted-in-south-korea-over-its-taxi-service [http://perma.cc/WU7M-7JC6].

¹⁶³ For a list, see UBER, https://www.uber.com/cities [https://perma.cc/SE4W-E2D5]. This list, however, includes any city in which the company seeks to operate even if it doing so only in part of the region or without legal authorization.

¹⁶⁴ Jeff Bercovici, *Meet the Latest Über for Home Delivery: Über*, FORBES (Aug. 19, 2014), http://www.forbes.com/sites/jeffbercovici/2014/08/19/meet-the-latest-uber-for-home-delivery-uber/ [http://perma.cc/Q7CX-WFDZ].

¹⁶⁵ Timothy B. Lee, *Lyft's New Carpooling Service Is the Beginning of the End for Public Buses*, Vox (Aug. 7, 2014), http://www.vox.com/2014/8/7/5977685/lyfts-new-ridesharing-service-is-the-beginning-of-the-end-for-public [http://perma.cc/8NR2-WYM8] (describing LyftLine and UberPool and their potential conflict with public buses).

¹⁶⁶ See COUSHSURFING, https://www.couchsurfing.com [https://perma.cc/8N66-DTJA]. 167 See N.Y. STATE OFFICE OF THE ATTORNEY GEN., AIRBNB IN THE CITY (Oct. 2014), http://www.ag.ny.gov/pdfs/AIRBNB%20REPORT.pdf [http://perma.cc/H73Y-D4RN] (detailing the various New York State law violated by Airbnb and its renters); Will Coldwell, Airbnb's Legal Troubles: What Are the Issues?, GUARDIAN (July 8, 2014), http://www.theguardian.com/travel/2014/jul/08/airbnb-legal-troubles-what-are-the-issues [http://perma.cc/KZ22-8YQ6] (describing Airbnb's legal troubles).

¹⁶⁸ Brian Summers, *Airbnb's Short-Term Rentals Break Law in Los Angeles, Says City Memo*, DAILY BREEZE (Mar. 21, 2014), http://www.dailybreeze.com/business/20140321/airbnbs-short-term-rentals-break-law-in-los-angeles-says-city-memo [http://perma.cc/2NW4-75E4] (noting that short-term rentals not allowed in residentially zoned areas).

¹⁶⁹ See, e.g., Ron Lieber, A Warning for Hosts of Airbnb Travelers, N.Y. TIMES (Nov. 30, 2012), http://www.nytimes.com/2012/12/01/your-money/a-warning-for-airbnb-hosts-who-may-be-breaking-the-law.html [http://perma.cc/Z8DJ-XBXV] (noting illegality of short-term rentals).

host is present, short-term rentals frequently require formal bed and breakfast licenses.¹⁷⁰ Meanwhile, existing tenant protection laws can, ironically, limit the ability of sharing-hosts to evict their "guests" once a stay is over, leading to incidents of "Airbnb squatters."¹⁷¹ Sub-leasing through Airbnb can also violate the terms of lease agreements, giving landlords grounds to evict tenants (a tactic particularly used against those living in rent controlled units).¹⁷² Short-term rentals can also run afoul of condo or co-op agreements, as well as homeowner association rules.¹⁷³ And turning houses from primary residences into investment properties may violate the terms of most home mortgages.¹⁷⁴

Each of these issues is gleefully noted by the incumbent hotel industry and its political allies.¹⁷⁵ For instance, Eric Schneiderman, New York's Attorney General and a major recipient of hotel industry donations,¹⁷⁶ has issued subpoenas for Airbnb's records in order to crack down on individual housing violators.¹⁷⁷ Likewise, a few Los Angeles County cities have begun targeting individual Airbnb hosts for failure to pay hotel taxes.¹⁷⁸

¹⁷⁰ See, e.g., Lark Turner, As D.C.'s Airbnb Economy Thrives, Legal Issues Remain, URB. TURF (Jan. 31, 2014), http://dc.urbanturf.com/articles/blog/the_growing_airbnb_economy_and_what_it_might_mean_for_dc/8069 [http://perma.cc/4JDY-CFKB] (describing bed and breakfast rules in Washington, D.C.).

¹⁷¹ See Barmann, supra note 99 (describing invocation of tenant protections by Airbnb renter).

^{1&}lt;sup>72</sup>Carolyn Said, *Airbnb Sublets in S.F. Land Some Renters in the Doghouse*, SF GATE (Mar. 18, 2014), http://www.sfgate.com/realestate/article/Airbnb-sublets-in-S-F-land-some-renters-in-the-5326019.php [http://perma.cc/WPR5-846X] (noting Airbnb rental violates many leases, serving as a justification for evictions, particularly for rent controlled tenants). *But see* Julia Marsh & Kevin Fasick, *Judge Nixes Airbnb Subletter's Eviction*, N.Y. POST (June 18, 2014), http://nypost.com/2014/06/18/judge-nixes-illegal-airbnb-subletters-eviction/ [http://perma.cc/UNX5-HY9J] (discussing judicial holding that use of Airbnb in violation of terms of lease is not a justification for eviction).

¹⁷³ Rich Vetstein, Airbnb Rentals Raise Thorny Legal Issues, MASS. REAL EST. L. BLOG (July 24, 2014), http://massrealestatelawblog.com/2014/07/24/airbnb-rentals-raise-thorny-legal-issues [http://perma.cc/N3XG-GPBY].
¹⁷⁴ Id.

¹⁷⁵ Matthew Chayes, *Airbnb Foes Call for Tougher Enforcement*, NEWSDAY (Sept. 12, 2014), http://www.newsday.com/news/new-york/airbnb-foes-call-for-tougher-enforcement-1.9301042 [http://perma.cc/R2UV-KEVW].

¹⁷⁶ See Laura Nahmias, As Schneiderman Probes Airbnb, Hotel Industry Donates, POLITICO N.Y. (Oct. 23, 2014), http://www.capitalnewyork.com/article/albany/2014/10/8555054/schneiderman-probes-airbnb-hotel-industry-donates [http://perma.cc/2DGU-XM5Q].

¹⁷⁷ Julie Bort, *Airbnb: 124 New York Airbnb Hosts "May Be Flagrantly Misusing Our Platform*," BUS. INSIDER (Aug. 22, 2014), http://www.businessinsider.com/airbnb-gives-ag-info-on-124-ny-hosts-2014-8 [http://perma.cc/QSS8-JCG8].

¹⁷⁸ Adrian Glick Kudler, *L.A. Airbnb Landlords Going to Have to Start Paying Their Taxes*, CURBED L.A. (Sept. 9, 2014), http://la.curbed.com/archives/2014/09/la_airbnb_landlords_going_to_have_to_start_paying_their_taxes.php [http://perma.cc/SEW6-3].

To date, Airbnb's primary rejoinder is that it is merely a platform, and so does not directly violate any housing laws.¹⁷⁹ Indeed, it attempts to distance itself from violations by warning online users that they are (ostensibly) responsible for complying with all relevant local regulations.¹⁸⁰ Yet the company has also responded through politics. In San Francisco and Portland, Airbnb successfully lobbied for regulations to legalize short term rentals (provided they comply with various tax and registration conditions).¹⁸¹ In New York, Airbnb has posted political advocacy ads on city subways and even sponsored the New York City Marathon.¹⁸² Elsewhere, sharing umbrella group Peers has organized national campaigns against crackdowns on home sharing.¹⁸³

Despite these legal and political challenges, Airbnb listings are now available in most American cities. 184 Airbnb also continues to raise substantial funds from investors, suggesting a market unconvinced that legal or political problems will derail the company. 185 This bet seems well founded, for notwithstanding the examples highlighted above, there is scant evidence that regulators have systematically cracked down on home-sharing services

179 See Jason Abbruzzese & Jessica Plautz, New York Goes to War Against Airbnb for Disrupting Hotel Business, MASHABLE (Apr. 26, 2014), http://mashable.com/2014/04/26/new-york-vs-airbnb/ [http://perma.cc/4GRX-HX5N]; Nick Wingfield, A Victory for Airbnb in New York, N.Y. TIMES (May 13, 2014), http://www.nytimes.com/2014/05/14/technology/judge-quashes-new-york-subpoena-for-airbnb-records.html [http://perma.cc/3PX8-KBEF].

¹⁸⁰Carolyn Said, *Airbnb Issues Strong Reminder to Hosts to Obey Laws, Leases*, SF GATE (Apr. 11, 2014), http://www.sfgate.com/business/article/Airbnb-issues-strong-reminder-to-hosts-to-obey-5393565.php [http://perma.cc/Z9WS-5DEY].

¹⁸¹ See Carmel DeAmicis, Now that Airbnb Has Won Over San Francisco, Other Regulators Are Watching Closely, GIGAOM (Oct. 8, 2014), https://gigaom.com/2014/10/08/now-that-airbnb-has-won-over-san-francisco-other-regulators-are-watching-closely/ [https://perma.cc/GZG4-ALYD]; David Owen, A Huge Step Forward for Home Sharing in Portland, AIRBNB: PUB. POL'Y BLOG (July 30, 2014), http://publicpolicy.airbnb.com/home-sharing-in-portland/ [http://perma.cc/3M38-7GYQ].

¹⁸² Alison Griswold, *Airbnb to Sponsor NYC Marathon*, SLATE: MONEYBOX (July 7, 2014, 5:24 PM), http://www.slate.com/blogs/moneybox/2014/07/07/airbnb_to_sponsor_new york city marathon the state can t be happy about.html [http://perma.cc/3T64-SKTP].

T83 See Leonard, supra note 140; Adrian Glick Kudler, Airbnb-Affiliated Lobbying Group Defeats Venice's Attempts to Regulate Vacation Rentals in Los Angeles, CURBED L.A. (Nov. 25, 2013), http://la.curbed.com/archives/2013/11/airbnbaffiliated_lobbying_group_defeats_venices_attempt_to_regulate_vacation_rentals_in_los_angeles.php [http://perma.cc/X6BN-P2YU].

¹⁸⁴Oddly, while taxi sharing economy firms have done much worse with European regulators than American ones, home-sharing firms have done better in Europe. Coldwell, *supra* note 167.

¹⁸⁵ Ainsley O'Connell, *Investors Say Lawbreakers Like Airbnb, Aereo, and Uber Are Increasingly Worth the Legal Bills*, FAST COMPANY: Co.LABS (Apr. 1, 2014), http://www.fastcolabs.com/3028547/investors-say-lawbreakers-like-airbnb-aereo-and-uberare-increasingly-worth-the-legal-bills [http://perma.cc/35UP-YW2K].

(perhaps because doing so would be quite unpopular). ¹⁸⁶ Airbnb thus appears to be a relatively permanent force in city life, ¹⁸⁷ leading *The New York Times* to report, *as a fact in a news story*, that "Airbnb is already too popular to dislodge completely, no matter what the housing laws say. It also delights travelers, who get a cheaper and usually more interesting place to stay." ¹⁸⁸

Uber, but for _____¹⁸⁹: Beyond ride- and home-sharing platforms, other important conflicts loom. Food sharing, for example, is a fast-growing sharing economy niche. Operators include Kitchensurfing, a labor market for home chefs, and LeftoverSwap, which allows people to donate leftovers.¹⁹⁰ The most frequent food-share model, however, matches diners with people willing to cook for them. These companies, such as EatWith,¹⁹¹ Feastly,¹⁹² and Kitchen.ly,¹⁹³ allow people to operate de facto "home restaurants" where they charge "suggested donations" in return for meals.¹⁹⁴

Cities have begun investigating such services for tax and health code violations. 195 The response by food-share firms—arguing they are merely

¹⁸⁶ David Hantman, *New Quinnipiac Poll: New Yorkers Back Home Sharing*, AIRBNB: PUB. POL'Y BLOG (Sept. 2, 2014), http://publicpolicy.airbnb.com/new-quinnipiac-poll-new-yorkers-back-home-sharing [http://perma.cc/NU4Q-97GP].

¹⁸⁷ As seen in the recent inclusion of Airbnb into a trade group formerly dominated by more traditional travel companies. *See* Dennis Schaal, *Changing of the Guard as Airbnb*, *TripAdvisor and HomeAway Join Travel Tech Trade* Group, SKIFT (July 22, 2014), http://skift.com/2014/07/22/changing-of-the-guard-as-airbnb-tripadvisor-and-homeaway-join-travel-tech-trade-group/ [http://perma.cc/5WLG-GTE3].

¹⁸⁸ David Streitfeld, *Airbnb Listings Mostly Illegal, New York State Contends*, N.Y. TIMES (Oct. 15, 2014), http://www.nytimes.com/2014/10/16/business/airbnb-listings-mostly-illegal-state-contends.html? r=0 [http://perma.cc/SRZ4-32HO].

¹⁸⁹ This construction has become a meme, with just about every new sharing company described as being like "Uber but for" some product. Aaron Sankin, *Every Tech Startup Is Like Uber but for (Something)*, DAILY DOT (Aug. 7, 2014), http://www.dailydot.com/technology/its-like-uber-but-for/ [http://perma.cc/K7WW-6RNR].

¹⁹⁰ As LeftoverSwap's founder notes, "[i]t's obviously not for everybody." Elise Hu, *A New App Will Let You Share Your Leftovers With Strangers*, NPR (July 29, 2013), http://www.npr.org/sections/alltechconsidered/2013/07/29/206493794/a-new-app-will-let-you-share-your-leftovers-with-strangers [http://perma.cc/DS24-42LG].

¹⁹¹ See EATWITH, http://www.eatwith.com [http://perma.cc/4YVP-2F2W].

¹⁹² See FEASTLY, https://eatfeastly.com [https://perma.cc/A38Q-FAXX].

¹⁹³ See Kitchen.ly, GUST, https://gust.com/companies/kitchenly [https://perma.cc/NX2E-SG4L] (providing an overview of Kitchen.ly and its startup "stage").

¹⁹⁴ See Ryan Lawler, Feastly Launches an "Airbnb for Dinner" Marketplace, TECHCRUNCH (Apr. 21, 2014), http://techcrunch.com/2014/04/21/feastly/ [http://perma.cc/HAY2-SDES]; see also John Tozzi, It Turns Homes into Restaurants (and Tests Food Laws' Boundaries), BLOOMBERG (July 26, 2013), http://www.bloomberg.com/bw/articles/2013-07-26/it-turns-homes-into-restaurants-and-tests-food-laws-boundaries [http://perma.cc/8ZZL-2Z3H].

¹⁹⁵ Jim Epstein, Eating Out at a Home Restaurant: Should the Government Regulate Paid Dinner Parties?, REASON (May 13, 2014), http://reason.com/reasontv/2014/05/13/therise-of-home-restaurants; see also Tozzi, supra note 194 (discussing food-sharing firms regulatory strategy).

"network services" and not, themselves, restaurants—takes a page straight from the Uber/Airbnb playbook. 196 And if these services continue to build momentum, it seems clear the ensuing political fight will take a familiar form: incumbent restaurants will attempt to use influence with regulators and make arguments about use intensiveness, tax and regulatory fairness, or consumer protection, while sharing economy entrants will attempt to leverage their popularity to fight off regulations. 197

A second field to watch is municipal parking. American properties feature an enormous number of surplus parking spaces, a product both of consumer demand and of zoning regulations that set mandatory parking minimums at "peak demand" levels. 198 Rentals of home parking spaces during special events like football games has long occurred in some cities. 199 Yet in recent years, firms like ParkingPanda have started providing such services en masse through sharing economy tools (it's like Airbnb, but for parking spaces). 200 As the price of parking spaces in urban areas continues to increase (up to \$1 million parking spots in New York), 201 demand for such services will likely surge. And if such services become more prominent, "traditional" patterns of sharing conflict will emerge. Private parking garages will claim PandaParkers

¹⁹⁶ See Tozzi, supra note 194 (observing that EatWith is "following the playbook of other 'sharing' businesses").

¹⁹⁷ Interestingly, a preview of this debate can be found in the various arguments for or against permitting the operation of "food trucks" in cities. For examples of how this conflict can play out, see M.D. Dupuy, *Landrieu Dishes Food Truck Compromise*, NOLA DEFENDER (June 21, 2013), http://www.noladefender.com/content/landri45eu-int2roduces-food-truck-compromise [http://perma.cc/UGK9-YQKD]; Hilary Gowins, *Three Cities Show How Food Trucks Live and Die on Political Whim*, HUFFINGTON POST (SEPT. 25, 2014), http://www.huffingtonpost.com/hilary-gowins/three-cities-show-how-food-trucks_b_56216 79.html [http://perma.cc/K5SJ-CP4Z] (last updated Sept. 25, 2014, 5:59 AM); Eleanor Mueller, *Cities Struggle to Develop Fair Food-Truck Rules*, USA TODAY (Dec. 11, 2014), http://www.usatoday.com/story/news/nation/2014/12/11/food-truck-regulations/20215643 [http://perma.cc/7P2M-MZ99].

¹⁹⁸ Donald C. Shoup, *The Trouble with Minimum Parking Requirements*, 33 TRANSP. RES. PART A 549, 552, 568 (1999), http://shoup.bol.ucla.edu/Trouble.pdf [http://perma.cc/UH2T-HATP].

¹⁹⁹ Donald Shoup, *Informal Parking Markets: Turning Problems into Solutions*, *in* THE INFORMAL AMERICAN CITY 277, 278–79 (Vinit Mukhija & Anastasia Loukaitou-Sideris eds., 2014).

²⁰⁰ Christopher Seward, *Parking Panda Offers to Ease Headaches with Online Reservations*, ATLANTA J.-CONST. (Aug. 29, 2014), http://www.ajc.com/news/business/parking-panda-offers-to-ease-atlanta-parking-heada/nhB5P/ [http://perma.cc/T95V-RXTY]. These are distinct from parking apps like MonkeyParking, which allow current users of public parking spaces to sell the information that they are about to leave, which have been shut down in some cities. Laura Entis, *San Francisco Says Enough Monkey Business: Tells Parking Spot App to Shut Down*, ENTREPRENEUR (July 11, 2014), http://www.entrepreneur.com/article/235575 [http://perma.cc/2CG6-A5NN].

²⁰¹ Michelle Higgins, *Buy Condo, Then Add Parking Spot for \$1 Million*, N.Y. TIMES (Sept. 9, 2014), http://www.nytimes.com/2014/09/10/realestate/million-dollar-parking-spot.html [http://perma.cc/WJ4Y-U2DN].

are not complying with consumer-protection regulations, while neighbors will protest new traffic and use intensiveness.²⁰²

In sum, a pattern emerges from these conflicts²⁰³: incumbents, neighbors, and allied politicians have waged repeated campaigns against sharing firms. Sometimes there are solid public policy reasons behind these regulatory moves; often, there are not.²⁰⁴ Yet against this barrage, sharing firms have

²⁰²However, broad use may change the politics of parking. As Donald Shoup famously argued, homeowners regularly argue for and get cities to require new development to include excessive amounts of parking spaces, as they are worried that new entrants will take up scarce public parking spaces (a public good only because the city does not charge high enough prices). *See generally* DONALD SHOUP, THE HIGH COST OF FREE PARKING (2011). However, if people were renting out their own spaces, their interests would change, and they would have good reason to want to restrict new parking development. Matthew Yglesias, *The End of Parking Misery*, SLATE (Dec. 26, 2012), http://www.slate.com/articles/business/small_business/2012/12/parking_panda_rent_your_unused_parking_space.html [http://perma.cc/8QTW-Q4XL].

²⁰³ Another neat example: RelayRides and GetAround, which provide peer-to-peer car rental and provide insurance for accidents, have faced many problems with state insurance regulators because renting a car out can lead to cancellation of insurance or to car owner having liability notwithstanding service policies. *See* Herb Weisbaum, *Car Sharing Hits Some Bumps in the Road*, CNBC (June 5, 2013), http://www.cnbc.com/id/100789535 [http://perma.cc/73RJ-FLGM]. But in California, Oregon, and Washington, car-sharing firms successfully lobbied for laws explicitly barring insurance companies from dropping coverage on the basis of their use as short-term rental as long as there is third-party (i.e., sharing company) insurance and the car is not being rented for profit. *See* Janelle Orsi, *Car Sharing Laws for Everyone*, SHAREABLE (Mar. 9, 2011), http://www.shareable.net/blog/car-sharing-laws-for-everyone [http://perma.cc/HHM2-2VLX] (crediting car–sharing entrepreneur Sunil Paul for lobbying to get the law passed); *Weisbaum, supra*. Currently, RelayRides is available in 49 states (New York banned them on the basis of their insurance policy). *See id*.

policy). See id.

204 Although the purpose of this article is not to argue the case for and against such services, we should put our cards on the table. Generally speaking, we think the case for using regulation to bar, or substantially curtail, the largest sharing services is not a very good idea, although the strength of such arguments differs between industries. For instance, the case against home-sharing firms seems more defensible than that against ridesharing services, although neither seems particularly compelling.

The strongest plank in the case against home-sharing firms is premised on the reasonability of local zoning ordinances. If one thinks these laws are well-drawn, then allowing rentals that avoid them would be unadvisable. One of us has written, however, about how excessively restrictive many local zoning rules are, and how they destroy much valuable economic activity. See David Schleicher, City Unplanning, 122 YALE L.J. 1670 (2013); see also Daniel B. Rodriguez & David Schleicher, The Location Market, 19 GEO. MASON L. REV. 637 (2012). The regulatory limits on short-term rentals and zoning limits on the location of rentals are excessive; the reticence of regulators to crack down on them is wise. However, we can think of no public policy reason to limit contract-based remedies by landlords, co-ops, condos, or homeowner's associations, and regulations that would make such claims easier may be attractive. See Richard A. Epstein, The War Against Airbnb, DEFINING IDEAS (Oct. 20, 2014), http://www.hoover.org/research/war-against-airbnb [http://perma.cc/DQW9-DVDE] (describing how contract based remedies could solve many of the use conflicts inherent in the use of Airbnb). The case for substantially

shown unexpected political resilience, relying on popularity, financial resources, and political savvy.²⁰⁵ And as these firms grow, it is likely that they will become stronger still.

Yet even if sharing firms do win these fights, the final result will not be a simple end to government regulation. Instead, it will be something considerably more complex. To see why, we must first examine the forces at the core of urban economics.

III. TOMORROW'S SHARING ECONOMY UNDERSTOOD: THE CONTINUING BONDS BETWEEN SHARING FIRMS AND CITY GOVERNMENTS

Discussions of the sharing economy suggest the end-state for such firms is to be barred either from participating in local markets or to be left wholly alone. In Part II, we showed why the former outcome is unlikely: for good or ill, the sharing firms seem here to stay. In this Part, however we show the latter outcome is equally unlikely: should sharing firms persist, cities will not ignore them. Instead, they will regulate them in a host of nuanced and complex ways. But to get there, we must first take a brief trip through urban economic theory.

regulating other similar types of sharing firms, particularly home restaurant sharing, strikes us as pretty compelling though.

In contrast, it is hard to find even decent arguments in favor of limiting ride-sharing firms like Uber and Lyft. Taxi markets in many cities are swamps of rent-seeking, with incumbent holders of medallions realizing huge profits at the expense of consumers. See Katrina Miriam Wyman, Problematic Private Property: The Case of New York Taxicab Medallions, 30 YALE J. REG. 125, 136-38, 148-56 (2013). To the extent Uber et al. introduce competition into such fields—bringing down prices, increasing availability, and promoting an easier method of hailing taxis—it seems clear that consumer welfare will improve. See Badger, supra note 131 (finding surveyed economists universally agree that allowing entry by taxi sharing firms improves consumer welfare). Further, the evidence suggests ride-sharing services are equally or more available in poor areas than traditional taxis, and their drivers may also discriminate less on the basis of race. See infra notes 299-300 and accompanying text. While some have raised concerns about ride-sharing firms engaging in unfair competition by charging below-cost prices, this is almost certainly a function of their role as platforms in two-sided markets—they are driving prices down in order to attract riders who will attract drivers. (Surge pricing represents the reversal of this pattern.) The firms do not appear to have any substantial market power yet, and while there are some economies of scale and network effects, two-sided markets do not, as a general matter, regularly result in monopolies. See Evans & Schmalensee, supra note 86, at 158. Further, there are few barriers to entry and many opportunities for product differentiation in the taxi field, making antitrust concerns at the very least far too soon. So, while there are many useful regulations of ride sharing in terms of privacy, consumer protection, insurance, and on other issues as well, there is little reason to categorically bar them from urban markets.

²⁰⁵ See, e.g., supra note 203.

A. On Agglomeration Economics

The central question of urban economics is why cities exist, or more precisely, why anyone would choose to live in them. The question is harder than it seems: property and labor cost more inside cities, so for individuals or businesses to stay, there must be some special compensating benefit.²⁰⁶

This benefit, it turns out, is density itself: the advantages that come from putting consumers and producers close to one another.²⁰⁷ Or, per Robert Lucas, "What can people be paying Manhattan or downtown Chicago rents for, if not for being near other people?"²⁰⁸ Specifically, when people and businesses are close together, they can realize several important forms of "agglomeration" benefits.²⁰⁹ It is this insight that forms the heart of modern urban economics.

The first such benefit comes in shipping costs. Manufacturers that locate near suppliers (and vice versa) save money because their products need only travel across town (not cross-country).²¹⁰ Mid-century auto-part suppliers had strong incentives to move to Detroit, which in turn made it an even more attractive site for car production.²¹¹ Over time, however, inventions like the combustion engine and the shipping container have substantially cut the cost of transporting goods, reducing the importance of this agglomerative dynamic.²¹²

Other forms of agglomeration benefit, however, stem not from the (now-low) cost of shipping goods, but from the (still) high opportunity cost of

²⁰⁶ "If we postulate only the usual list of economic forces, cities should fly apart. . . . A city is simply a collection of factors of production—capital, people and land—and land is always far cheaper outside cities than inside." Robert E. Lucas, Jr., *On the Mechanics of Economic Development*, 22 J. MONETARY ECON. 3, 38–39 (1988).

²⁰⁷"[T]o understand agglomeration economies is to go back to a fundamental definition of cities: the absence of physical space between people and firms. Cities are density, proximity, closeness." *See* EDWARD L. GLAESER, CITIES, AGGLOMERATION, AND SPATIAL EQUILIBRIUM 6 (2008).

²⁰⁸ Lucas, *supra* note 206, at 39.

²⁰⁹ See Alfred Marshall, Principles of Economics 267–77 (8th ed. 1956); Edward L. Glaeser, *Are Cities Dying?*, 12 J. Econ. Persp. 139, 140 (1998); Schleicher, *supra* note 13, at 1509–22.

²¹⁰ Schleicher, *supra* note 13, at 1514 (reviewing literature).

²¹¹ Edward L. Glaeser & Janet E. Kohlhase, *Cities, Regions and the Decline of Transport Costs*, 83 PAPERS REGIONAL SCI. 197, 198 (2004). Some sharing firms—like Uber and Postmates—are or are moving into logistics, making inter-urban deliveries easier, but to date, this has more to do with consumer goods than with parts and supplies for production. But Transfix, "Uber for trucks," may reduce shipping costs by better connecting trucks with routes, substantially cutting shipping costs at the regional level. *See* Eric Jaffe, *How the Trucking Industry Could Be Vastly More Efficient*, ATLANTIC: CITYLAB (Jan. 21, 2015), http://www.citylab.com/tech/2015/01/the-trucking-of-tomorrow-is-here-and-its-a-huge-win-for-city-traffic/384672/ [http://perma.cc/YV6B-UCHB].

²¹² See Virginia Postrel, *The Container that Changed the World*, N.Y. TIMES (Mar. 23, 2006), www.nytimes.com/2006/03/23/business/23scene.html [http://perma.cc/7M3H-NAWJ].

shipping people. People generally talk to and interact with people nearby (and don't travel far to brainstorm), meaning that the denser an area is, the more new ideas people can pick up.²¹³ A banker in suburban Ohio might interact with (and learn from) several dozen colleagues; the same banker in New York has access to thousands. The result, as Alfred Marshall famously noted, is that in dense cities, "[t]he mysteries of the trade become no mysteries; but are as it were in the air."²¹⁴ People in Silicon Valley learn about technology entrepreneurship by going to coffee shops; people on Capitol Hill learn about Congress by grabbing bad Mexican food with their friends.²¹⁵ These "information spillovers" are reflected in the "urban wage premium"—the fact people in cities earn more than rural counterparts doing the same jobs.²¹⁶ Indeed, as Edward Glaeser and David Mare have shown, such spillovers lead to faster wage growth for urbanites, who become more productive through informal learning.²¹⁷

The final main form of urban agglomerative benefit is also the most relevant for our purposes: cities feature deep markets, with many buyers and many sellers. Market depth, in turn, offers many benefits. For workers, moving to a dense city brings opportunities to specialize, incentives to invest in human capital, easier "matching" with employers, and insurance against firm-specific risk. An actor who moves to L.A. can become a specialist in, say, playing zombies; the same actor in Duluth, Minnesota, would have to play any role available. The L.A. actor can thus invest in learning about zombies and how they have been portrayed, confident that the investment will be useful. Meanwhile, L.A.-based film studios can more easily match with actors good at playing zombies, whereas in Duluth, it would take considerable work to learn if anyone would be fit to play the undead. And an actor in L.A. can be confident that if her particular studio goes bust, other firms would be available; in a dense market, there are always other places to work.

Notably, this labor-market dynamic is equally true of consumption and even non-pecuniary markets. "Restaurant rows" form because such groupings provide consumers with both "insurance" (against one place being full or a last minute change of preference) and the benefits of specialization. ²¹⁹ Diamond retailers in Manhattan largely crowd along one street for similar reasons. ²²⁰

²¹³ To the extent that sharing economy firms encourage or allow new combinations of people in houses and offices, perhaps they encourage spillovers of this type. Schleicher, *supra* note 13, at 1536.

²¹⁴ Marshall, *supra* note 209, at 271.

²¹⁵ See Rodriguez & Schleicher, supra note 204, at 650–51.

²¹⁶ Edward L. Glaeser & David C. Mare, *Cities and Skills*, 19 J. LAB. ECON. 316, 316–19 (2001) (discussing causes of urban wage premium).

²¹⁷ Id. at 322.

²¹⁸ This example is drawn from Rodriguez & Schleicher, *supra* note 204, at 642, although that is far from the first time something similar has been used to illustrate this idea.

²¹⁹ *Id.* at 643–44 (summarizing literature).

²²⁰ West 47th Street, between 5th and 6th Avenues. *Id.* at 643.

And many young people move to cities precisely for their deep "dating markets," climates that allow for specialization in tastes, easier matching, and the insurance that there are always "more fish in the sea" after a breakup.²²¹

If moving to a city is so attractive, why doesn't everyone do it? Because, as we noted, city life is expensive. More formally, even as it offers benefits, urban density also brings "congestion"—those costs related to packing many people close together. ²²² Congestion costs include higher rent per square foot, increased traffic and noise, and a deeper "market" for "negative agglomerations" like crime. ²²³ Thus, even as agglomeration benefits explain why cities exist, congestion detriments explain why their expansion is ultimately limited.

B. The Sharing Economy, Agglomeration, and Local Governmental Powers

At a macro level, the "disaggregation economy" of sharing firms can provide cities with even more "agglomerative" benefits with even fewer "congestion" costs.

The sharing economy improves the operation of agglomeration. Prior to the entry of sharing firms, it was surely possible to rent a room, to pay someone with a car for a ride, or to hire someone to dog sit. It was also far easier to do these things in dense urban areas than it is in rural areas, as there was greater market depth in hotels, drivers, and day-laborers.

Yet, before the Internet, transaction costs rendered much of this dense market inaccessible. An ideal dog-sitter might have been a short subway ride away, but an interested dog owner would be unlikely to find her. A perfect chauffer might live across the street from an interested rider, but driver and passenger would have no way to find (or trust) each other.

Sharing platforms remove such limits. By offering standardized pricing systems, web-hosted exchanges, searchable databases, reputational

-

²²¹ *Id.* Dating websites are generally not considered part of the sharing economy, but this is because they predate the development of the firms we ordinarily put in this group and because of hesitation about thinking of dating as a market. But services like OkCupid, eHarmony, and Tindr do the same thing as Uber: they serve as a platform permitting transactions/interactions between physically proximate parties. Indeed, some of the dynamics discussed in this Article have happened with dating sites, particularly state subsidies. The Fukui Prefectatuture in Japan funded its own dating website as part of an effort to boost population growth. *See* Aki Ito, *Japan's Government Plays Matchmaker*, BLOOMBERG (Aug. 26, 2010), http://www.bloomberg.com/bw/magazine/content/10_36/b41 93012837623.htm [http://perma.cc/AH9C-K5K2]. Something similar has happened in South Korea, where local governments have taken over a federal program to promote "dating parties" to encourage match-making. Su-Hyun Lee, *Mom Wants You Married? So Does the State*, N.Y. TIMES (Aug. 14, 2013), http://www.nytimes.com/2013/08/05/world/asia/mom-wants-you-married-so-does-the-state.html [http://perma.cc/N5LZ-8HDS].

²²² See Schleicher, supra note 13, at 1528–29.

²²³ Id.

information, and smart phone accessibility, services like Uber, Craigslist, and Airbnb connect a city's myriad buyers with its myriad sellers. In doing so, they substantially deepen already deep urban markets.

At the same time, sharing firms reduce congestion by permitting the borrowing and reuse of goods and reducing the need for costly space. People who rent power tools through Zilok have less need for closet space. People who use car2go or Uber may not need parking spaces at all. If under-used apartment units become de facto hotels, there is less need for stand-alone hotel construction.²²⁴ At the margin, these dynamics reduce urban congestion.

Developing deeply agglomerative markets and reducing urban congestion are crucial to a city's growth. Accordingly, city regulators have long had both the legal power and the political incentives to regulate industries that directly implicate the costs of congestion or involve trades between city residents. Local governmental powers are at their strongest when regulating property markets through zoning powers, regulating hotel and restaurant markets with tools like taxes and safety inspections, and regulating transportation through direct oversight and city-provided services.²²⁵

Many sharing firms sell products and services squarely implicating such regulatory domains: taxi policy, food sales, land use, and others. Today, this dynamic leads to bitter conflict between entrenched incumbents and sharing-firm upstarts. Yet if (as we predict) the sharing firms win out, cities will still retain a powerful interest in regulating and guiding these sectors, since they are crucial to the city's agglomerative potential. Thus, the end result of the "sharing wars" is unlikely to be a libertarian paradise of minimal regulation. Instead, we will see complex webs of subsidies, taxes, regulatory redistributions, and reliance aimed at using sharing firms to achieve key governmental ends.

In part, this involvement will be driven by the incentives of city policymakers. If we assume local governments are concerned with the public interest (even if imperfect at promoting it), we would expect cities to spend substantial effort in regulating industries at the heart of agglomerative prosperity.

Another reason to expect intricate regulation stems from structure of local government powers. In general, American cities only have those limited powers granted to them by state governments or state constitutions.²²⁶ However, in the fields where sharing firms participate—such as transit and housing—local government power is often at a zenith, and local regulatory

²²⁴Even unused office space can be, and has been, rented out as a hotel. Melissa O'Young, *Turning Vacant New York Office Space into Midtown Hotels*, COLLABORATIVE CONSUMPTION (June 28, 2013), http://www.collaborativeconsumption.com/2013/06/28/turning-vacant-new-york-office-space-into-midtown-hotels/[http://perma.cc/3ADT-VGG7].

²²⁵ In contrast, local governments traditionally have little control over labor markets, which are usually regional in scope.

²²⁶ See generally Gerald E. Frug & David Barron, City Bound: How States Stifle Urban Innovation (2008).

bodies are already in existence (think taxi commissions and city health departments). Thus, given their structurally limited options, it would be unsurprising to see local governments using the powers they do have to achieve policy ends through sharing-economy regulation.

To see how these dynamics play out in practice, we need only consider how cities already regulate incumbent industries in these sectors. Consider taxis. In New York, taxis must buy medallions before picking up riders, a source of city revenue.²²⁷ In turn, cabbies are largely protected against competition, since the city never sells enough medallions to ensure a fully competitive market. Taxi rates are also closely controlled by the Taxi and Limousine Commission (TLC).²²⁸ Acceptable vehicles and vehicle conditions, accessibility for the disabled, and payment methods are all regulated and standardized,²²⁹ as is the behavior of taxi drivers,²³⁰ and the TLC has the power to levy fines for violations like overcharging.²³¹ Meanwhile "yellow cabs" are also officially promoted as authentically "New York" experiences for tourists.²³² Nor are taxis unique: one can tell similar stories about the extensive, complicated relationships between city regulators and hotels, housing developers, labor providers, and restaurants.

History's lesson is clear. When it comes to industries at the heart of urban connectivity—transit, housing, consumer retail, and others—cities have both the power and incentives to be deeply and thoroughly involved. The next Part will discuss *how* cities will engage with sharing economy firms.

IV. TOMORROW'S "SHARING" REGULATION: THREE PREDICTIONS

Up to now, the relationship between sharing firms and city governments has been marked by adversarial conflict. Yet, as sharing firms establish themselves, this relationship will instead come to resemble the mishmash of policies that cities use to regulate incumbents like taxis, property developers, government contractors, restaurants, hotels, or parking garages. Just as these

²²⁷ Wyman, *supra* note 204, at 125 (explaining how medallions function).

²²⁸ N.Y.C TAXI & LIMOUSINE COMM'N RULES § 52-04(b)(1) (2014), http://www.nyc.gov/html/tlc/downloads/pdf/rule book current chapter 52.pdf [http://perma.cc/YUP9-9QRT].

²²⁹ See id. § 58-29 to -41 (2015), http://www.nyc.gov/html/tlc/downloads/pdf/rule_book current chapter 58.pdf [http://perma.cc/QFY7-KK3G].

²³⁰ Medallion Taxicab Passenger Bill of Rights, N.Y.C. TAXI & LIMOUSINE COMM'N, http://www.nyc.gov/html/tlc/html/passenger/taxicab_rights.shtml [http://perma.cc/M69S-HR58].

²³¹ See N.Y.C. TAXI & LIMOUSINE COMM'N RULES, supra note 228, § 54-02(e) see also id. at ch. 68, http://www.nyc.gov/html/tlc/downloads/pdf/rule_book_current_chapter_68.pdf [http://perma.cc/ALU5-9VFS].

html/media/totweb/taxioftomorrow_taxiasicon.html [http://perma.cc/YE9L-F5TS] ("The taxicab is a symbol of New York to millions of tourists.").

entities both benefit from local government largesse *and* are required to provide a mix of services and payments to the city, so too will sharing firms.

This Part sets out three predictions about where the local regulation of sharing economy is heading. Our analysis stems largely from the characteristics these firms share with current objects of local regulation. We do not suggest these policies will emerge everywhere and all at once, or that they will wholly supplant today's conflicts over consumer protection, tax fairness, or use intensiveness. Yet, on the whole, tomorrow's sharing economy will be regulated very differently from today's.

A. Like Uber, but for Government Largess: Subsidizing the Sharing Economy Like a Sports Stadium

Today, cities often seek to curb sharing-firm operations. In coming years, however, we predict an almost opposite phenomenon: increasingly, cities will actively *subsidize* sharing-firm operations.²³³

To see why, we must compare sharing firms to another high-profile urban industry: sports franchises. Historically, city governments have offered sports teams extensive subsidies—particularly in the form of stadium construction—in exchange for their locating in the city.²³⁴ Few policies divide economists from laypeople as starkly as these subsidies. Economists often see publicly funded stadiums as wasteful albatrosses, arguing that generous loans, sweetheart financing and upfront payments mean stadiums usually leave cities poorer than they started.²³⁵ Promised job growth, meanwhile, rarely materializes.²³⁶

Why, then, do cities subsidize stadiums? Some say the answer is more emotion than logic: stadiums are beloved symbols, winning consistent support

²³³ Here, we are talking about local and state subsidies, not federal policies that have the effect of making freelancing generally easier. *See* Evan McMorris-Santoro & Johana Bhuiyan, *How Obamacare Drives the Sharing Economy*, BUZZFEED (Oct. 14, 2014), http://www.buzzfeed.com/evanmcsan/how-obamacare-drives-the-sharing-economy [http://perma.cc/X2P2-4X5X] (quoting venture capitalist Marc Andreessen as arguing that the Affordable Care Act is "perhaps the single biggest key enabler for the sharing/gig/1099 economy").

²³⁴ See, e.g., Richard Florida, *The Never-Ending Stadium Boondoggle*, ATLANTIC: CITYLAB (Sept. 10, 2015), http://www.citylab.com/politics/2015/09/the-never-ending-stadium-boondoggle/403666 [http://perma.cc/DL3S-AYWY].

²³⁵ See Roger G. Noll & Andrew Zimbalist, *The Economic Impact of Sports Teams and Facilities, in Sports, Jobs, AND TAXES* 55, 88–89 (Roger G. Noll & Andrew Zimbalist eds., 1997) [hereinafter *Economic Impact*].

²³⁶Robert A. Baade & Allen R. Sanderson, *The Employment Effect of Teams and Sports Facilities*, *in* Sports, Jobs, and Taxes, *supra* note 235, at 92, 112 ("[T]he results of this study do not support a positive correlation between professional sports and job creation."); Mark S. Rosentraub, *Stadiums and Urban Space*, *in* Sports, Jobs, and Taxes, *supra*, at 178, 205.

from both politicians and voters whatever the cost.²³⁷ Indeed, sports teams often get such favorable terms only because citizens so adamantly support them.

But such subsidies might be explained—and at least partly justified—by three economic dynamics: (1) the creation of "uncaptured" consumer surplus, (2) the desire to be seen as a "world class city," and (3) their potential to overcome entrenched political opposition to allow other infrastructure investments to be made.²³⁸ In varying forms, these forces are also at work in the sharing economy. Moreover, sharing subsidies offer a fourth benefit that stadiums do not: reducing congestion. Thus, for at least some sharing sectors, stadium-style subsidies will likely emerge.

1. Public Goods and Consumer Surplus

Perhaps the most prominent argument for stadium subsidies is that, as economist Allen Sanderson notes, they make people happy in ways that teams or cities cannot capture as economic gain.²³⁹ Conventional metrics like job creation or tax revenue cannot account for the "joy" and "civic pride" that local teams give citizens.²⁴⁰ Anecdotally, this phenomenon is well supported,²⁴¹ while empirically, there is evidence that major sports events do offer broad, non-captured benefits to the public; when countries host the World Cup or Olympics, for example, self-reported resident happiness rises significantly.²⁴² Such joy, in turn, is a classic public good.²⁴³ Civic and team pride are neither excludable nor rivalrous: the Kansas City Royals cannot stop (or cannot stop at reasonable cost) Kansas City residents from being happy about their victories or from following the team in mass media. Nor does one fan's joy take away from another's. Further, since many fans are obsessive ("fan" being derived from "fanatic"), they may value tickets and other chances

²³⁷ See Roger G. Noll & Andrew Zimbalist, Sports, Jobs, and Taxes: The Real Connection, in SPORTS, JOBS, AND TAXES, supra note 235, at 494, 507 ("Professional sports in the United States are subsidized because they are very popular monopolies.").

²³⁸ We are not going to discuss dynamics that are not shared with sharing economy firms. For instance, sports team subsidies are sometimes caused by the "unit problem" or the fact that you cannot have fifty percent of a sports team. Sharing services, by contrast, can be provided in granular ways.

²³⁹ See Allen R. Sanderson, In Defense of New Sports Stadiums, Ballparks and Arenas, 10 MARQ. SPORTS L.J. 173, 176 (2000).

²⁴⁰ Id.

²⁴¹ E.g., Ramon Antonio Vargas, New Orleans Saints Super Bowl Parade Crowd Was Largest in Memory, Organizer Says, TIMES-PICAYUNE (NEW ORLEANS) (Feb. 10, 2010), http://www.nola.com/superbowl/index.ssf/2010/02/new_orleans_saints_super_bowl_9.html [http://perma.cc/95P7-ZK58].

²⁴²Georgios Kavetsos & Stefan Syzmanski, *National Well-Being and International Sports Events*, 31 J. ECON. PSYCHOL. 158, 159 (2010).

²⁴³ See Sanderson, supra note 239, at 190.

to watch their team far more than the marginal price of doing so.²⁴⁴ Thus, at the level of individual cities, subsidizing a stadium can create considerable consumer surplus, justifying otherwise irrational spending.²⁴⁵

Where sharing firms are successful, they too create public goods and substantial consumer and producer surplus for residents. As noted in Part II.B.3, this tendency stems from the "two-sided" markets many sharing firms create.²⁴⁶ First, platforms generate the public good of valuable price information. For example, the existence of Airbnb allows renters—whether they use the service or not—to know how valuable their apartments are. Peerto-peer sharing networks also create markets for goods many people already have on hand or own for other purposes (i.e., spare power tools, idle cars, etc.). Once a sharing firm begins operations, there will be many sellers for whom the market creates pure producer surplus—profit where none was previously possible. Moreover, on the "buy" side, many goods offered by the sharing economy do not have easy substitutes (e.g., before "Rent the Runway,"247 the selection of high-end clothes rentable for exactly one day was quite limited). Thus, just as the markets created by eBay and Craigslist generated substantial wealth from people's existing possessions, so too do sharing services offer vast consumer and producer surplus.²⁴⁸

So, as in the case of stadiums, sharing firms can make a city richer and happier, but in ways sharing firms themselves cannot capture. And as in the stadium context, this may provide a key justification for subsidies.

A final, related similarity turns not on economics but on politics. Because they create mass producer and consumer surplus, sharing firms can generate the same sorts of mass popular support that often accompany pushes for stadiums. Indeed, while sharing firms do not have sports teams' ability to threaten exit to extract gains, they do have the capacity to rally "fans" for political gain.

2. Sharing Firms and the "World Class" City

A second common justification for stadium subsidies is that stadiums "put a city on the map." On this account, cities subsidize sports teams in hopes of being seen as "world class"—or at least nationally prominent. Being "on the map" might offer two types of benefits. First, being "world class" might

²⁴⁴ Id. at 191.

²⁴⁵ And theoretically, if cities only bid up to the amount of their added value, it might lead to an efficient market. *Economic Impact*, *supra* note 235, at 86.

²⁴⁶ See Mahoney, supra note 88, at 1475.

²⁴⁷ See Marx, supra note 95.

²⁴⁸ See Ravi Bapna et al., Consumer Surplus in Online Auctions, 19 INFO. SYS. RES. 400, 400 (2008) (finding that "eBay's auctions generated \$7.05 billion in total consumer surplus in 2003").

²⁴⁹ See John Siegfried & Andrew Zimbalist, *The Economics of Sports Facilities and Their Communities*, 14 J. ECON. PERSP. 95, 109 (2000).

directly raise a city's profile for industries like tourism (though empirical support for this proposition is uncertain).²⁵⁰ Second, being "on the map" might make cities more attractive or exciting places to live, drawing in new residents and keeping existing ones from needing to leave for a "real city." This concern is particularly salient as applied to mobile and well-educated workers.²⁵¹ As Richard Florida has famously argued, a city's prosperity is increasingly tied to its ability to attract well-educated and highly skilled human capital, suggesting cultural amenities can be economically essential.²⁵² To be sure, not everyone agrees that "on-the-mapness" is an essential investment for cities, or that stadiums achieve this goal.²⁵³ Yet even critics concede that, whatever its empirical soundness, this argument carries considerable influence with city policymakers.²⁵⁴

Increasingly, sharing firms are crucial markers of "on-the-mapness." The American Planning Association found sixty-seven percent of urban residents and seventy-three percent of the young "millennial generation" saw access to sharing services as at least somewhat important to them.²⁵⁵ Echoing this, Pittsburgh's mayor opposed new regulations on ride sharing by stating: "I will not let Pittsburgh's emerging status as a 21st-century technological hub be sacrificed by unaccountable bureaucrats clinging to the past."²⁵⁶

On this account, the presence of bike- or car- or home-sharing services conveys something important about how progressive,²⁵⁷ how technologically advanced,²⁵⁸ and indeed how "world class" a city is.²⁵⁹ In the same way an

²⁵⁰ Economic Impact, supra note 235, at 69–70; Siegfried & Zimbalist, supra note 249. ²⁵¹ Though this, too, has been challenged empirically. See DENNIS ZIMMERMAN, CONG. RESEARCH SERV., CRS-1996-ECN-0240, TAX-EXEMPT BONDS AND THE ECONOMICS OF PROFESSIONAL SPORTS STADIUMS 18 (1996) (presenting empirical results inconsistent with the theory that stadiums promote development or population inflows).

²⁵² See generally RICHARD FLORIDA, THE RISE OF THE CREATIVE CLASS, REVISITED (rev. ed. 2014) (2012). This is not to say Florida endorses stadium subsidies—far from it actually.

²⁵³ See, e.g., ENRICO MORETTI, THE NEW GEOGRAPHY OF JOBS 188–93 (2012) (critiquing Florida's theory that investment in cultural amenities with the aim of attracting knowledgeable workers represents a sound investment).

²⁵⁴ *Id.* at 188.

²⁵⁵ Am. Planning Ass'n, Investing in Place for Economy Growth and Competitiveness 29 (2014), https://www.planning.org/policy/polls/investing/pdf/poll investingreport.pdf [https://perma.cc/X7KF-HHQ3].

²⁵⁶Kim Lyons, *Mayor Bill Peduto Promises Ride-Share "Fight" in Pittsburgh*, GovTech (July 3, 2014), http://www.govtech.com/local/Peduto-promises-ride-share-fight-in-Pittsburgh.html [http://perma.cc/S3VK-5M97].

²⁵⁷Ben Fried, Sadik-Khan Announces a Bike-Share Program That's Big Enough to Succeed, STREETSBLOG (Sept. 14, 2011), http://www.streetsblog.org/2011/09/14/sadik-khan-announces-a-bike-share-program-thats-big-enough-to-succeed [http://perma.cc/UL4X-X4N8] (describing a left-wing Working Families Party leader arguing that bike sharing was obviously progressive).

²⁵⁸ See Gabriel Metcalf & Jennifer Warburg, A Policy Agenda for the Sharing Economy, SPUR (Oct. 9, 2012), http://www.spur.org/publications/article/2012-10-09/policy-

NFL team signaled to previous generations that mid-sized cities were "real places," Uber availability might signal to their grandchildren that such cities are vibrant hubs worth moving to (or at least not fleeing from). This, too, may justify subsidies.

Further, it could provide political allies for sharing economy firms: in the stadium subsidy context, for example, big business often provides key support by arguing that a sports stadium today helps recruit talent tomorrow.²⁶⁰ To the extent sharing firms make it easier to recruit talented workers, business elites may likewise lobby to subsidize such services.²⁶¹

3. Sharing Firms as a Regulatory "Hack"

A final justification for stadium subsidies is the need to "bypass" entrenched political interests. Under ordinary political conditions, necessary reforms and changes can be bogged down by gridlock, regulatory capture, or destructive "NIMBY-ism." Neighborhoods can remain blighted or transit hubs unbuilt because of disagreement over who will bear the immediate costs of solving the problem.

Big projects like new stadiums, however, can override such political sclerosis. ²⁶² By requiring tight deadlines and generating substantial public will, such projects force local interests to "get in line" or risk the wrath of constituents. Sports projects can also coordinate planning across otherwise

agenda-sharing-economy [http://perma.cc/M82B-83KS] (arguing San Francisco should promote sharing economy because it works with its regional advantage in being technologically advanced and environmentally conscious).

²⁵⁹ Esmé E. Deprez & Gillian White, *NYC Risks "Bikelash" as 10,000 Rental Cycles Hit Streets*, BLOOMBERG (June 20, 2012), http://www.bloomberg.com/news/2012-06-20/new-york-risks-bikelash-as-10-000-rental-cycles-hit-streets.html [http://perma.cc/7X3J-PS7K] (quoting former New York City Transportation Commissioner, Janet Sadik-Kahn, saying: "Having a bike-share is going to be the mark of a world-class city.").

²⁶⁰ See Kevin J. Delaney & Rick Eckstein, Public Dollars, Private Stadiums: The Battle over Building Sports Stadiums 57–58 (2003).

²⁶¹ See Aaron Mesh, *Drive: Portland Tried to Run from Uber. Then the Mayor Grabbed the Wheel*, WILLIAMETTE WEEK (Dec. 31, 2014), http://www.wweek.com/portland/article-23752-drive.html [http://perma.cc/UVJ4-X7H4] (describing how big businesses lobbied the city of Portland to allow Uber to enter).

²⁶² For discussions of the ways in which "mega-projects" like the Olympics can lead to increased infrastructure spending, see Stephen Essex & Brian Chalkley, *Urban Transformation from Hosting the Olympic Games* 7–12 (Centre d'Estudis Olímpics (UAB), University Lecture on the Olympics, 2003), http://olympicstudies.uab.es/lectures/web/pdf/essex.pdf [http://perma.cc/9BBA-QXP7]; Binyamin Appelbaum, *Does Hosting the Olympics Actually Pay Off?*, N.Y. TIMES (Aug. 5, 2014), http://www.nytimes.com/2014/08/10/magazine/does-hosting-the-olympics-actually-pay-off.html?_r=1 [http://perma.cc/CQ8N-55B5]; Stephen Essex & Brian Chalkley, *Mega-Events as a Strategy for Urban Regeneration*, LENTE D'INGRANDIMENTO 18, 19 (2007), http://www.mi.camcom.it/c/document_library/get_file?uuid=a9ac0fca-975b-41a6-aab5-36bb9b4e0610&groupId=10157 [http://perma.cc/J6UC-MTF4].

unconnected agencies and offices, overcoming traditional intra-agency "stovepipes." Such projects may also mean the arrival of subsidies from other levels of government or from private sources, largess that offers latitude to "buy off" otherwise recalcitrant interests with "side payments." In sum, stadium projects can galvanize political momentum in ways that can quickly and profoundly reshape a city. Thus, even if stadium subsidies do not make *economic* sense, they may carry crucial *political* benefits.

Like stadiums, sharing firms offer a sort of political bypass. Frequently, incumbent firms capture city regulatory bodies like taxi and limousine commissions or tourism boards. Moreover, ordinary Olsonian dynamics mean that established incumbents, from hotel employee unions to neighborhood advisory boards, have substantial influence over local policymaking. And because city councils rarely face much majoritarian pressure—voters know little about them or their stances, and majority party candidates and incumbents rarely lose—they are particularly subject to capture by powerful interests or co-option by NIMBY neighborhood groups. Thus, in normal times, citywide officials who want to pursue broad goals like increasing tourism, increasing property tax receipts, or redefining mass transit face a host of local "veto points."

But if the current "sharing wars" show anything, it is that sharing firms, once established, "bypass" many traditional political obstacles. Powerful incumbent firms, pugnacious labor unions, and influential homeowner groups have met their match when facing the widespread consumer demand for sharing services.²⁶⁶ The upshot is that once sharing firms come to town,

²⁶³ Economist and sports-subsidies critic Andrew Zimbalist argues that this is the best argument in favor of hosting the Olympics. "The good news is that municipal and state decision-making, which may be gridlocked under normal circumstances, is forced to overcome political bickering to approve financing for construction projects." Andrew Zimbalist, *Why Hosting the Olympics is Bad for Cities*, ATLANTIC: CITYLAB (July 24, 2012), http://www.citylab.com/politics/2012/07/why-hosting-olympics-bad-cities/2689 [http://perma.cc/9DXF-7AKJ].

²⁶⁴ In the case of taxi and limousine commissions, it is sometimes even their explicit mandate to reduce competition. Robert M. Hardaway, *Taxi and Limousines: The Last Bastion of Economic Regulation*, 21 HAMLINE J. PUB. L. & POL'Y 319, 331–32 (2000). The Federal Trade Commission has been critical of taxi and limousine commissions for being anti-competitive since the 1980s, bringing suits and occasionally winning despite the state action doctrine that protects policies that are clearly articulated by state law. *See* Ammori, *supra* note 134.

²⁶⁵ See Schleicher, supra note 204, at 1682–83 (discussing home voter influence in big city councils). For a dramatic example of the influence of hotel workers unions in city councils, see Matt Chaban, No Vacancies: Union, Pols Push for Hotel Restrictions in Midtown East Rezoning, N.Y. OBSERVER (Sept. 27, 2014), http://observer.com/2012/09/midtown-east-hotels/ [http://perma.cc/JDU5-GS3E].

²⁶⁶ See Tim Redmond, Seems Like Everyone is Against the Airbnb Bill, 48 HILLS (Oct. 3, 2014), http://48hillsonline.org/2014/10/03/seems-like-everyone-airbnb-bill/[http://perma.cc/5JJZ-8AKJ] (noting widespread opposition to proposed San Francisco law regularizing home-sharing rentals); Carolyn Said, Supes Back "Airbnb Law" to Allow

incumbent industries and entrenched interests can be more readily dislodged, and broader reforms become possible.²⁶⁷ Thus, even if sharing economy subsidies did not make economic sense, they may still be important tools to achieve city wide change. Citywide officials may view the cost of subsidies as not worth it on its own, but in a second-best world, benefits provided to sharing firms might help provide political support for removing policies that are worse.²⁶⁸

4. Sharing Firms as Decongestant

Finally, subsidies to sharing firms offer a key benefit that stadium subsidies do not: reducing urban "congestion." As noted in Part III.A, "congestion" refers to those negative effects of urban density, particularly high rents, that cap a city's growth potential. Sharing firms, however, have the positive externality of reducing such congestion, since they allow property to be used more efficiently. Further, they also may allow cities to avoid costly policies that are designed to reduce congestion.

As an example, consider parking minimums—the number of parking spaces cities require new stores, offices or apartments to provide. Today, such minimums are often set at levels aimed at ensuring that no shopper, new office worker, or new resident at any time, displaces public parking.²⁶⁹ To meet this bar, stores must generally provide enough parking to accommodate peak

Short-Term Rentals, with Limits, SF GATE (Oct. 8, 2014), http://www.sfgate.com/news/article/Supervisors-approve-Airbnb-law-5807858.php [http://perma.cc/N2NU-49T6] (noting that San Francisco passed law regularizing home-sharing rentals over widespread interest group opposition).

²⁶⁷ See Lori Aratani, D.C. Taxi Commission Chief Offers a Final Plan to Push Fleet into the Modern Age, WASH. POST (Oct. 7, 2014), http://www.washingtonpost.com/local/trafficandcommuting/dc-taxi-commission-chief-offers-a-final-plan-to-push-fleet-into-the-modern-age/2014/10/07/46847c00-4e39-11e4-babe-e91da079cb8a_story.html [http://perma.cc/Y83X-4L49] (reporting that D.C. government promotes reform of taxi industry to make it better able to compete with Uber).

²⁶⁸ Consider the recent breakthrough in the long-running conflict between Uber and the city of Portland, Oregon. *See* Mesh, *supra* note 261, at 4–5. Portland has long had the fewest cabs per capita of major American cities, in part due to the influence of two powerful incumbent taxi firms over the Private For Hire Transportation Board of Review and the City Council (although that power started to ebb in recent years). After a showdown with Uber and its big business supporters, the city struck a deal with the firm where Uber would turn over consumer data and in return the city would strike down all limits on the number of cabs and the price those cabs charge. The necessity of dealing with Uber allowed the Mayor to break the hold the taxi companies had over taxi policy, allowing the city to develop a solution to its long-standing poor taxi service problems.

²⁶⁹ Shoup, *supra* note 202, at 21. As Donald Shoup notes, this is a "commons" problem created by the government itself—if the government either did not provide public parking (letting it be provided by the private sector) or charged market prices for it, then new construction would not harm a commons, as a commons would not exist. *Id.* at 7–8.

traffic.²⁷⁰ Likewise, bowling alleys are required to provide five spaces per alley plus one for each employee, so they can accommodate all bowlers and employees if an alley is full.²⁷¹ Unsurprisingly, this results in vastly excessive parking spaces, increasing the costs of construction, housing, office space, and retail goods. If sharing firms like ParkingPanda make spaces more readily available for rent, or if firms like Uber and Lyft reduce the number of shoppers who need to park at all, such inefficient parking maxima can be greatly reduced.²⁷²

Similarly, services like Airbnb can save cities space and money that might otherwise be needed for hotels and lodging. In turn, it can also enable cities to host larger events than previously possible by providing "surge capacity" for times of peak demand. Brazil failed to build sufficient hotel rooms for the World Cup in 2014, but Airbnb and other house rental firms were able to shelter twenty percent of visiting fans, averting a potential crisis.²⁷³ Similar dynamics have been seen in business travel, where sharing firms permit larger conventions and gatherings than otherwise possible.²⁷⁴

In sum, reducing congestion is an externality that sharing firms offer cities, one that might justify subsidies even if it does not immediately appear on local balance sheets.

a. How Will Subsidies Work?

While the principles behind stadium subsidies and sharing-firm subsidies are similar, the forms they take will differ. In the case of stadiums, common subsidies include infrastructure improvements, discounted land, and tax-exempt financing.²⁷⁵

Sharing firms, by contrast, will sometimes be subsidized by direct ownership: cities operating proprietary sharing services of their own. This is

²⁷⁰ Id. at 85–86.

²⁷¹ *Id.* at 80.

²⁷² Applications for zoning amendments and variances for apartment buildings in fact have increasingly used justification for not including parking places, including requiring apartment purchasers to forego local parking passes and including car-sharing spots in buildings to reduce car use among tenants. *See* Shilpi Paul, *Can Prohibition Ease DC's Parking Crush?*, URB. TURF (June 7, 2013), http://dc.urbanturf.com/articles/blog/can_prohibiting_parking_permits_ease_the_parking_crush/7157 [http://perma.cc/T9Z8-WUSB]. One could imagine such applications noting the availability of spaces on services like ParkingPanda. *See supra* note 200 and accompanying text.

²⁷³ Kriston Capps, *The Sharing Economy Could Drive Down the Price of Mega-Events*, ATLANTIC: CITYLAB (Sept. 29, 2014), http://www.citylab.com/tech/2014/09/the-sharing-economy-could-drive-down-the-price-of-mega-events/380908 [http://perma.cc/4XHP-IOPP]

²⁷⁴ See Matt Krupnic, Businesses Turn to Airbnb, N.Y. TIMES (Oct. 6, 2014), http://www.nytimes.com/2014/10/07/business/businesses-turn-to-airbnb-for-corporate-travel.html [http://perma.cc/XY92-XGTP].

²⁷⁵ Economic Impact, supra note 235, at 65.

the model seen in urban bike-shares, where cities buy and own a public fleet or hire firms to do so on their behalf.²⁷⁶ Yet while bike-shares are the best-known "city owned" sharing, they are not alone. Several cities own car fleets that, through state and federal subsidies, are rented out at subsidized rates via public car-share programs.²⁷⁷ Meanwhile, cities from Seoul to Washington D.C. have tried to develop Uber-type apps for their municipal taxi fleets.²⁷⁸

Elsewhere, cities might simply use direct payments. Already, some sharing firms receive cash subsidies in exchange for expanding service: Getaround,²⁷⁹ for example, received a federal grant in return for expanding car sharing in Portland, Oregon.²⁸⁰ Other cities subsidize the sharing economy through with tax breaks. Multnomah County, Portland, Boston, and Chicago have all imposed lower taxes on car-sharing firms than on ordinary car rental services.²⁸¹

Cities also might subsidize sharing firms through free or reduced-cost city services. Cities like Denver and San Francisco, for instance, offer free street parking to car-share users. ²⁸² In the future, such cities might go further, requiring buildings to designate parking spaces for shared cars, or conditioning the approval of new apartments on a developer's paying for residents' car-share memberships. ²⁸³

²⁷⁶ The estimated cost of New York City's Citi Bike, for example, was \$5,000 per bike, not including fixed costs. The Jersey Journal, *Jersey City Snubs North Hudson Bike-Share Program for NYC's Citi Bike System*, NJ.COM (Sept. 29, 2014), http://www.nj.com/jjournal-news/index.ssf/2014/09/jersey_city_snubs_north_hudson.html [http://perma.cc/ES9N-4AKN].

²⁷⁷See, e.g., ADAM BLAIR & JENNIFER DOTSON, CARSHARING IN A SMALL CITY: ITHACA CARSHARE'S FIRST TWO YEARS FINAL REPORT NO. C-06-33, at S-1 (Mar. 2011), https://www.dot.ny.gov/divisions/engineering/technical-services/trans-r-and-d-repository/C-06-33%20Ithaca%20Carshare%20Final%20Report%20NYSERDA%20Agreement%209821.pdf [http://perma.cc/ M5JB-YGQF].

²⁷⁸ Andrea Peterson, Seoul is Planning Its Own Version of Uber's Ride Hailing App. But It Wants the Original Banned, WASH. POST: SWITCH (July 21, 2014), http://www.washingtonpost.com/blogs/the-switch/wp/2014/07/21/seoul-is-planning-its-own-version-of-ubers-ride-hailing-app-but-it-wants-the-original-banned [https://perma.cc/E35T-QGO5].

²⁷⁹ See Getaround, https://www.getaround.com [https://perma.cc/V5JX-8ZBD].

²⁸⁰ See Joseph Rose, Peer-to-Peer Car-Sharing Company Getaround Ready to Launch in Portland, with Help from \$1.7 Million Federal Grant, OR. LIVE (Dec. 13, 2011), http://blog.oregonlive.com/commuting/2011/12/peer-to-peer_car-sharing_servi.html [http://perma.cc/2S4Q-YZXP] (discussing federal grant to car-sharing firm Getaround to open in area unserved by other such firms).

²⁸¹ Policies for Shareable Cities: Transportation, SHAREABLE (Dec. 3, 2013), http://www.shareable.net/blog/policies-for-shareable-cities-transportation#fn29 [http://perma.cc/5FTJ-QGHS].

²⁸² car2go Denver Parking FAQs, CAR2GO, https://www.car2go.com/common/data/locations/usa/denver/Denver Parking FAQ.pdf [http://perma.cc/Z7Q2-G4ML].

²⁸³ Neha Bhatt, *Smarter Parking Codes to Promote Smart Growth*, SMART GROWTH AM. (Aug. 12, 2014), http://www.smartgrowthamerica.org/2014/08/12/smarter-parking-codes-to-promote-smart-growth [http://perma.cc/HE4W-6FPA] (reviewing car-sharing

Finally, cities may offer de facto "subsidies" in the form of regulatory laxity, allowing sharing upstarts to avoid costly compliance with regulations. Today, this state of affairs is less a matter of intentional policy and more a matter of outmoded regulation. Yet as cities codify their approach to sharing firms, the rigor of enforcement could serve as a powerful way to "tilt the playing field" toward being sharing friendly.²⁸⁴

b. Where Will Subsidization Happen?

The final question is where subsidization behavior should be expected. Based on the dynamics we outline, several types of cities are especially likely to embrace subsidization. These include:

Cities Seeking "Bigness": Sharing firms, like sports stadiums, will "organically" arrive in America's biggest cities. Places like New York, Chicago, and Los Angeles will almost always have full panoply of sharers. For smaller cities, however, the dynamic is different. Car-sharing firms that rely on economies of scale might think twice before jumping into Colorado Springs, Colorado or Mobile, Alabama.²⁸⁵ Lyft strategists looking to expand to a new city may find Ann Arbor, Michigan and State College, Pennsylvania to be equally attractive, but only have the resources to operate in one.²⁸⁶

Likewise, smaller cities may see the entry of one sharing firm, but not its competitors, creating concerns about market power. These cities might consider providing subsidies in order to promote competition among sharing firms. For these smaller cities, the availability of sharing subsidies might be particularly important and worthwhile.

Sites of Political Conflict: Subsidies may also be embraced by cities where political gridlock is especially formidable. Where entrenched interest groups wield great sway, citywide officials might propose sharing subsidies to make an "end-run" around opponents' influence. That is, where citywide officials confront powerful opposition in industries like transportation, tourism, or retail goods, direct or implicit sharing subsidies may well proliferate. Notably, other fields, like education, have seen similar dynamics, as when mayors in Newark,

parking requirements); *Car-Sharing Requirements and Guidelines*, CITY & COUNTY S.F. PLANNING DEP'T, http://www.sf-planning.org/index.aspx?page=2347 [http://perma.cc/S3YA-HBLM] (last updated Oct. 6, 2015) (noting Planning Department has power to require developers to pay car-sharing-firm membership fees).

-

²⁸⁴ See Steve Law, City Legalizes Airbnb, Other Short-Term Home Rental Services, PORTLAND TRIB. (July 30, 2014), http://portlandtribune.com/pt/9-news/228670-92077-city-legalizes-airbnb-other-short-term-home-rental-services [http://perma.cc/U4N2-V848] (describing the inspections required by Portland's new "Airbnb" law as "cursory").

²⁸⁵ Zipcar is not available in these cities. *Where the Cars Are*, ZIPCAR, http://www.zipcar.com/cities [http://perma.cc/5YX7-W5ZQ].

²⁸⁶ Which, as of press time, is the case. *See Cities We're In*, LYFT, https://www.lyft.com/cities [http://perma.cc/Y48H-3XYU].

New Jersey or New York City have pushed charter schools as a way to circumvent the influence of teachers' unions.²⁸⁷

"Sharing Mad" Cities: Finally, some places, like San Francisco or Portland, may have populations that derive especially high civic pride from a robust sharing scene.²⁸⁸ In such cities, being at the cutting edge of technology or being environmentally sustainable is important to a very high number of citizens, suggesting sharing subsidies would enjoy broader support. A useful comparison might be to "sports mad" cities, places where no elected official could conceive of losing the home team, and where said team thus has great leverage to extract concessions.²⁸⁹

* * *

Of course, wherever sharing subsidies are offered, they will raise important normative, legal, and policy questions. The experience of stadiums shows such expenditures are far from "sure winners," and even if they make economic sense, they might still run afoul of "public purpose" requirements that limit city subsidies to private corporations.²⁹⁰ Nevertheless, as a descriptive matter, such subsidies will likely increase in prominence in coming years, bringing such questions to the fore.

B. Like Uber, but for Services for the Urban Poor: The Sharing Economy as Instrument of Economic Redistribution

In theory, sharing firms can offer important benefits to lower income residents, like access to otherwise unaffordable goods or to new work opportunities. To date, however, this potential is largely unrealized: sharing

²⁸⁷ See generally STEVEN BRILL, CLASS WARFARE (2011); PAULINE LIPMAN, THE NEW POLITICAL ECONOMY OF URBAN EDUCATION: NEOLIBERALISM, RACE, AND THE RIGHT TO THE CITY (2011); Owen Davis, *The Newark School Reform Wars*, NATION (May 28, 2014), http://www.thenation.com/article/180044/newark-school-reform-wars [http://perma.cc/6564-3YSZ]; Joy Resmovits, *Taking Schools into Their Own Hands*, WALL STREET J. (Aug. 16, 2010), http://www.wsj.com/articles/SB1000142405274870426 8004575417301793522096 [http://perma.cc/TZU9-EGX2].

²⁸⁸ Metcalf & Warburg, *supra* note 258.

²⁸⁹ Interestingly, the classic example of a sports mad city would be Boston, but the owners of the Red Sox agreed to renovate Fenway Park without much in the way of public subsidies. Mark Yost, *The Green Monster Goes It Alone*, WALL STREET J. (July 13, 2010), http://online.wsj.com/news/articles/SB10001424052748703426004575338773305482494? mg=reno64wsj&url=http%3A%2F%2Fonline.wsj.com%2Farticle%2FSB10001424052748 703426004575338773305482494.html [http://perma.cc/3FCA-Q7CV].

²⁹⁰ Though to date, courts have generally taken a highly deferential understanding of public purpose, meaning such legal challenges have generally fallen short in the stadium subsidy context and elsewhere. *See, e.g.*, CLEAN v. State, 928 P.2d 1054, 1059–61 (Wash. 1996) (en banc).

firms have concentrated both their marketing and their operations on upscale consumers.

Enter local governments: cities often seek to redistribute resources to poorer residents and neighborhoods by using tools other than taxes and direct spending. Sharing firms offer a potential vehicle for doing so. Therefore, in the near future, we expect cities will harness sharing firms as instruments of redistribution, such as by making sharing operations conditional on providing redistributive services. These services, in turn, could include expanded operations in poorer areas, mandated discounts in such areas, or hiring advantages for workers from disadvantaged backgrounds. If cities take this path, they will echo a long tradition of requiring antipoverty "exactions" from firms seeking market access, such as urban property developers. Importantly, this form of regulation may actually be welcomed by the regulated, for it might allow sharing firms to tout their redistributive function and, in doing so, broaden their support.

Sharing firms have the potential to be especially beneficial for the urban poor. On a direct level, they allow rental access to goods that might otherwise be unobtainable. There is nothing new about people choosing to rent when money is tight. Yet "analog" rental operations catering to low-income areas have a troubled history of customer exploitation, suggesting new peer-to-peer entrants could create broader and fairer opportunities. At the same time, sharing firms could also allow low-income sellers to mitigate the cost of capital expenditures. Rents can be partially offset by letting rooms on Airbnb, car costs can be offset by renting on RelayRides, and so on. Finally, sharing firms like TaskRabbit, Wonolo, UberX, and Lyft could provide opportunities for second and third jobs for un- and under-employed city residents.

These benefits for the less well-off are not speculative; a key reason sharing services are already popular with young adults is that they offer particular benefit to the (relatively) cash-poor, the capital constrained, and the jobless.²⁹²

However, with few exceptions, most sharing firms do not do much business in poor communities.²⁹³ Instead, they are criticized for preaching a communitarian "collaborative consumption" while in practice mostly serving

²⁹¹ See, e.g., Zac Bissonnette, How Magic Johnson Uses His Name to Exploit Low-Income Consumers, BUZZFEED (Aug. 5, 2013), http://www.buzzfeed.com/zacbissonnette/how-magic-johnson-uses-his-name-to-exploit-low-income-consum# [http://perma.cc/49PG-WX76] (charging that Rent-A-Center, a rental store catering to low income customers, exploits customers with exorbitant terms). Nor is this a new phenomenon: rental shops catering to low-income communities were at the heart of the creation of modern "unconscionability" doctrine in contract law. See Williams v. Walker-Thomas Furniture Co., 350 F.2d 445, 447, 449 (D.C. Cir. 1965).

²⁹² See supra notes 33–34 and accompanying text.

²⁹³Rob Reich & Lucy Bernholz, *ReCoding Good: Part 2*, STAN. SOC. INNOVATION REV. (Feb. 13, 2012), http://www.ssireview.org/blog/entry/recoding_good_part_2 [http://perma.cc/R5L9-9J5V] ("Most sharing businesses currently serve middle class or affluent, educated, and tech-enabled populations.").

urban yuppies.²⁹⁴ Why is this so? One possibility is poorer communities already feature extensive non-commercial borrowing, reducing opportunities for sharing-firm entrants. Poor neighborhoods often feature elaborate informal ecosystems of "insurance" and sharing—tacit agreements to provide services like day care, opportunities to borrow goods like cars, and unofficial employment networks.²⁹⁵ Thus, perhaps such informal networks outperform and displace any sharing economy benefits.

Yet even if such informal arrangements offer *some* sharing-firm benefits, they are not perfect substitutes. When share or rental markets are limited to one neighborhood, this naturally limits the types and quality of goods available. Moreover, notwithstanding this informal ecosystem, for-profit "analog" rental stores have long flourished in low-income areas, suggesting informal sharing leaves many needs unmet.²⁹⁶ And "gigs" undertaken through Taskrabbit or Uber would allow un- and under-employed residents to more readily transition to employment beyond the local informal market. So, the existence of informal sharing cannot explain why sharing firms have yet to arrive in many poor areas.

A second possibility is that the design of sharing platforms—which generally require Internet access and credit cards—may deter low-income residents who have neither. Today, however, access to the Internet, smartphones and pre-paid payment cards is fairly widespread even among the urban poor, certainly providing enough potential consumers if firms wanted to serve them.²⁹⁷ And the fact that sharing services are structured to require smart phones and/or credit cards is likely as much a function of a decision not to try to reach poorer consumers as it is a technological hurdle.

A third possibility is that the use of online "reputation" in sharing platforms has disadvantaged poor communities. As noted, many sharing firms rely on participant ratings to establish credibility. This feature can have important consumer protection benefits. But perhaps these systems are also

²⁹⁴ See Andrew Leonard, You're Not Fooling Us, Uber! 8 Reasons Why the "Sharing Economy" Is All About Corporate Greed, SALON (Feb. 17, 2014), http://www.salon.com/2014/02/17/youre_not_fooling_us_uber_8_reasons_why_the_sharing_economy_is_all_about corporate greed [http://perma.cc/8ED8-4V9N]; see also Leonard, supra note 75.

²⁹⁵ See SUDHIR ALLADI VENKATESH, OFF THE BOOKS: THE UNDERGROUND ECONOMY OF THE URBAN POOR 45–56 (2006) (explaining that poor urban areas often provide residents with informal food, shelter and child care networks, and opportunities for informal employment).

²⁹⁶ See Bissonnette, supra note 291 and accompanying text.

²⁹⁷ Depending on your source, somewhere between forty-three percent and eighty percent of low-income households had access to smartphones in 2013. Smith, *supra* note 35; Alexis Stephens, *Low-Income Smartphone Users Want an App for That Too*, NEXTCITY (Sept. 9, 2014), http://nextcity.org/daily/entry/food-stamp-app [https://perma.cc/Q3Q2-UKN9].

vulnerable to racial or socioeconomic biases, leading marginalized communities to "underperform" on sharing platforms.²⁹⁸

This explanation, however, is also suspect. Reputation scores should allow even biased users to rely on actual performance rather than stereotypes or assumptions.²⁹⁹ For instance, Uber has been promoted as a solution to the problem of racist discrimination by cab drivers, as it allows drivers to make performance-based judgments about particular passengers rather than relying on often-bigoted stereotypes.³⁰⁰

A final possibility is that sharing firms focus less on poor consumers simply because such firms are relatively new. It is not surprising that emerging companies would focus on richer consumers first, creating limousine services before bus jitneys, or promoting villa rentals before housing in poor areas. On this telling, sharing firms target yuppies for the same reason Willie Sutton robbed banks: that's where the money is.³⁰¹ Indeed, even government-provided "sharing" usually starts in rich areas: city-supported bike-shares are usually rolled out in rich areas and tourist venues, and only expand to poorer neighborhoods later (if at all).³⁰² On this count, sharing firms might *someday* build a customer base in poorer areas, but for now the available margins may be too small to justify expansion.

Whatever the reason, this state of affairs provides a window for redistribution-minded city governments. On one hand, the urban poor could benefit greatly from more access to sharing firms. At the same time, sharing firms depend on local approval to operate freely. This presents a natural "trade": redistribution-minded cities may expressly or implicitly require sharing firms to serve poor residents in exchange for regulatory approval.

²⁹⁸ For instance, on Airbnb, African-American renters get less money than white renters controlling for location and quality of the apartment. Benjamin G. Edelman & Michael Luca, *Digital Discrimination: The Case of Airbnb.com* (Harvard Bus. Sch., Working Paper No. 14-054, 2014), http://hbswk.hbs.edu/item/7429.html [http://perma.cc/68VF-TG5K].

²⁹⁹ See Lior Jacob Strahilevitz, Reputation Nation: Law in an Era of Ubiquitous Personal Information, 102 Nw. U. L. REV. 1667, 1682–87 (2008).

³⁰⁰ See Latoya Peterson, Cab Drivers, Uber, and the Costs of Racism, RACIALICIOUS (Nov. 28, 2012), http://www.racialicious.com/2012/11/28/cab-drivers-uber-and-the-costs-of-racism/ [http://perma.cc/7ZHV-A45N]; Clinton Yates, Uber: When Cabs Whiz by, It's a Pick Me Up, Wash. Post: Root DC (Sept. 28, 2012), http://www.washingtonpost.com/blogs/therootdc/post/uber-when-cabs-whiz-by-its-a-pick-me-up/2012/09/28/06a41f0c-082f-11e2-858a-5311df86ab04_blog.html [http://perma.cc/8M83-MZZL].

³⁰¹ As quoted in Paul Polak, Out of Poverty: What Works when Traditional Approaches Fail 80 (2009).

³⁰² Luz Lazo, Capital Bikeshare Works to Recruit Minorities and Low-Income Residents, WASH. POST (June 28, 2014), http://www.washingtonpost.com/local/trafficandcommuting/capital-bikeshare-works-to-recruit-minorities-and-low-income-residents/2014/06/28/d36eda68-fbad-11e3-932c-0a55b81f48ce_story.html [http://perma.cc/2U4E-DAPH]; Angie Schmitt, Why Isn't Bike-Share Reaching More Low Income People?, STREETSBLOG (Oct. 3, 2012), http://usa.streetsblog.org/2012/10/03/why-isnt-bike-share-reaching-more-low-income-people [http://perma.cc/7WWA-N9E4].

Notably, such measures avoid the limits on tax-and-revenue raising that state law imposes on many municipalities.

In comparable urban industries, this is a familiar story. Consider property development. Local governments routinely require developers to build affordable housing or rent-restricted apartment units in return for favorable zoning changes or tax benefits.³⁰³ Such requirements are best thought of the "price of entry" into a city's housing market, allowing cities to provide cheap apartments in new development to people who could not otherwise afford them, a redistributive measure that might otherwise be infeasible.³⁰⁴

Just so in the sharing economy, where we already see the beginnings of such "transactions." For instance, in Uber's fight to get approval to operate in Chicago, a key issue has been whether it provides cars in underserved areas (and whether it does so as well as traditional cabs).³⁰⁵ Similarly, to fend off regulations by the state of New York, Airbnb has advertised both how it benefits economically stressed homeowners and how it brings tourism to places like the Bronx, which have few traditional hotels.³⁰⁶

If local governments do condition sharing-firm operations on the provision of economic redistribution, three basic questions would emerge: (1) where we might see this, (2) what form it might take, and (3) would it be legal?

In terms of location, larger and more affluent cities would have more power to demand redistributive payments of some sort in return for market access.³⁰⁷ We also expect to see more exactions in cities otherwise inclined toward redistribution due to their social or political makeups.

In terms of form such redistribution could take, two possibilities are salient: requiring direct cash payments, or requiring in-kind benefits. On the first count, cities might condition approval for sharing services on a firm's offering help in collecting taxes from network users—an otherwise fiendishly

³⁰³ Though this tactic is far from uncontroversial. *See* Robert C. Ellickson, *The Irony of "Inclusionary" Zoning*, 54 S. CAL. L. REV. 1167, 1215–16 (1981) (showing how affordable housing requirements can increase the cost of housing generally).

³⁰⁴ *Id.* at 1209.

³⁰⁵ Ted Cox, *Uber, Taxis Clash Over Rides to Underserved Areas*, DNAINFO (Mar. 6, 2014), http://www.dnainfo.com/chicago/20140306/downtown/uber-taxis-clash-over-rides-underserved-areas [http://perma.cc/HBC5-BK59]; Andrew MacDonald, *Uber Economic Study: Uber Serves Underserved Neighborhoods in Chicago as well as the Loop. Does Taxi?*, UBER NEWSROOM (Mar. 3, 2014), http://blog.uber.com/chicagoneighborhoodstudy [http://perma.cc/J6AJ-9VHX]. More recently, the ride-sharing giant has also reached a deal with New York City allowing it to avoid city-imposed caps on the number of permitted Uber cars in exchange for, among other concessions, offering enhanced services for the handicapped. *See* Matt Flegenheimer, *De Blasio Administration Dropping Plan for Uber Cap, for Now*, N.Y. TIMES (July 22, 2015), http://www.nytimes.com/2015/07/23/nyregion/de-blasio-administration-dropping-plan-for-uber-cap-for-now.html [http://perma.cc/W47Q-DVUL].

³⁰⁶ Adrianne Jeffries & Russell Brandom, *Hey, New York: Airbnb Wants to Get You in Bed*, VERGE (July 14, 2014), http://www.theverge.com/2014/7/14/5896785/hey-new-york-airbnb-wants-to-get-you-in-bed [https://perma.cc/Y4QP-9924?type=source].

³⁰⁷ See Gillette, supra note 16, at 1083.

difficult task.³⁰⁸ This approach has already been used in cities like Portland, San Francisco, and Amsterdam, which impose such requirements on the Airbnb network.³⁰⁹ More directly, cities might simply request direct payment in return for the right to operate (though it is unclear if they have the legal power to do so).³¹⁰

A more interesting possibility, however, is for redistribution-minded cities to require in-kind contributions. For instance, cities might condition approval for sharing companies on guarantees of service for poor areas. They might condition approval on requiring a "living wage" to "gig" employees, giving hiring advantages to workers from disadvantaged backgrounds, or reducing prices for consumers in certain areas. Cities could even ask firms to roll out new services in return for allowing their main business line to operate. For example, a city might require Lyft to operate its cut-rate "LyftLine" carpool service in exchange for the right to offer premium ride options.³¹¹

Perhaps most strikingly, such regulations may be actively welcomed by regulated sharing firms, as the cost of providing such benefits may be lower than trying to comply with other regulatory expectations of city governments. Providing employment and opportunities to vulnerable sub-populations could allow sharing firms to both burnish their image and gain political allies to further entrench their operations.³¹²

Yet notwithstanding the "win-win" potential of such measures, one might imagine several challenges to such efforts. On a direct level, state law might limit local authority to request direct payments from sharing firms.³¹³ More fundamentally, such exactions may violate the Takings Clause; in an analogous context, the Supreme Court has held cities can only require developers to pay "exactions" so long as such expenses have a direct "nexus"

³⁰⁸ Baker, *supra* note 74; John Kuo, *How Should Government Regulate the Sharing Economy?*, NERDWALLET (Mar. 11, 2014), http://www.nerdwallet.com/blog/investing/2013/government-regulate-sharing-economy [http://perma.cc/56PN-SVJA].

³⁰⁹ See Nius, supra note 123.

³¹⁰ See Lee, supra note 165 and accompanying text.

³¹¹ See id. Thus far, however, state regulators in California and city regulators in San Francisco and Los Angeles have been skeptical of the new service. Bryan Goebel & Dan Brekke, San Francisco District Attorney Threatens Action Against Uber, Lyft, Sidecar, KQED News (Sept. 26, 2014), http://ww2.kqed.org/news/2014/09/25/george-gasconthreatens-action-against-uber-lyft-sidecar [http://perma.cc/YQW5-RD9L]; Patrick Hoge, State Legal Warning Doesn't Stop New Uber, Lyft and Sidecar Carpooling, S.F. Bus. TIMES (Sept. 12, 2014), http://m.bizjournals.com/sanfrancisco/blog/2014/09/california-uber-carpool-service-uberpool-lyft.html [http://perma.cc/8A3V-6UR3].

³¹² In one prominent example, Lyft has recently begun promoting its efforts at outreach to deaf drivers. *See* Eric Jaffe, *Lyft Is Hiring a Lot of Deaf Drivers*, ATLANTIC: CITYLAB (Sept. 24, 2014), http://www.citylab.com/work/2014/09/lyft-is-quietly-hiring-a-lot-of-deaf-drivers/380672 [http://perma.cc/YQW5-RD9L].

³¹³ See Rosenberg, supra note 22, at 186–87.

to a property use and the payment is "proportional." Some types of redistributive sharing exactions would likely run afoul of such strictures.

Of course, this discussion omits a fourth, crucial question: *should* cities (as opposed to state or federal government) engage in redistribution at all? This is not our focus, as for good or ill, local governments *do* engage in substantial redistribution, both across populations and across neighborhoods.³¹⁵

That said, it is worth flagging two final normative concerns. First, as with more traditional exactions, a question of horizontal equity arises: why should *new* entrants be expected to pay for redistribution if existing firms are not (i.e., why make Lyft shoulder the costs of serving poorer neighborhoods and not incumbent taxis)? Second, any effort at taxing sharing services will make those services more expensive. Just as affordable housing requirements provide cheap apartments to some by raising the cost of market-rate housing, redistributive requirements on sharing firms may increase prices. As with any redistributive policy, this balance will need to be carefully considered.

C. Like Uber, but for Government Services: The Sharing Economy as a Government Contractor

Finally, we predict a third new relationship between sharing firms and local governments: that of government contractor for municipal services.³¹⁶ Already, sharing firms provide services to city governments from car rentals to disaster preparation logistics. This trend will likely continue and expand. At the same time, government contracts could give city governments further leverage over sharing firms, allowing them to require stronger consumer protections, deeper economic redistribution, or to achieve other policy aims.

There is an important set of expensive goods and services that cities require—but only infrequently. Municipal employees need government-provided cars, but these cars spend most of their time in parking lots. Cities need road-paving machines for post-winter street repair, but not for most of the year. School buildings are needed for nine hours a day, but can sit largely unused for fifteen. In short, cities face precisely the types of idle-capacity dynamics that make for ideal sharing economy consumers.

³¹⁴ See Koontz v. St. Johns River Water Mgmt. Dist., 133 S. Ct. 2586, 2599 (2013).

³¹⁵ See Gillette, supra note 16, at 1060.

³¹⁶The notion of cities contracting for social services is not novel; to the contrary, the phenomenon of "contract cities" buying city services from others (whether other local governments or private-sector providers) is long-standing and often fiercely contentious. See Gerald E. Frug, Beyond Regional Government, 115 HARV. L. REV. 1763, 1786 (2002); Laurie Reynolds, Intergovernmental Cooperation, Metropolitan Equity, and the New Regionalism, 78 WASH. L. REV. 93, 125–27 (2003). That said, the special features of sharing firms as contractors that we outline here suggests that—at a minimum—future debates over the propriety of sharing-firm contracting will have a different valence and emphasis than these prior discussions.

This has not gone unnoticed. Even today, many local governments use carshare companies to cut the cost of providing city vehicles. Boston, Houston, and Washington D.C., and even federal agencies like the General Service Administration, have contracted with Zipcar to run their car fleets as carsharing operations among government workers.³¹⁷ Meanwhile, cities like Chicago pay for Zipcar or other car-share memberships on behalf of city employees.³¹⁸ For its part, San Francisco is considering abandoning its entire non-emergency fleet in favor of car sharing.³¹⁹

But car-shares are only the beginning. A service called Munirent has emerged in Michigan and Oregon, allowing governments to share all sorts of government-owned, heavy-duty property.³²⁰ Intergovernmental agreements in Oregon effectively allow for the same thing, with municipalities sharing everything from road stripping trucks to cold planers. Eventually, sharing platforms like Munirent could allow cities to share employees as well, allowing cities to share the costs of not only specialized equipment but also the cost of hiring a highly trained employee to operate the equipment. And in the future, such platforms might expand further still, to allow the government to share goods owned by the general public (i.e., to readily rent privately owned cameras, private parking lots, or other useful property). Doing so could greatly expand the number and kinds of things the government might rent instead of buying, leading to reduced costs.

³¹⁷ The effect of this can be dramatic. Boston reduced the size of its car fleet by fifty percent. INST. FOR SUSTAINABLE COMMUNITIES, CASE STUDY: HOUSTON ELECTRIC VEHICLE FLEET CAR SHARING PROGRAM, http://sustainablecommunitiesleadershipacademy.org/resource_files/documents/Houston-Electric-Vehicle.pdf [http://perma.cc/W7ZN-PQ35]; Alex Howard, *Carsharing Saves U.S. City Governments Millions in Operating Costs*, O'REILLY RADAR (Apr. 10, 2012), http://radar.oreilly.com/2012/04/carsharing-through-zipcar-save.html [http://perma.cc/4GRG-GK7M]; Lisa Rein, *Will the Federal Fleet be Run by Zipcar*, WASH. POST: FEDERAL EYE (Nov. 6, 2013), http://www.washingtonpost.com/blogs/federal-eye/wp/2013/11/06/will-the-federal-fleet-be-run-by-zipcar [http://perma.cc/PZM9-D9EG].

³¹⁸ Michael Grass, *How Big Cities Are Saving Big Bucks with Car Sharing*, GOV'T EXECUTIVE (July 9, 2014), http://www.govexec.com/state-local/2014/07/car-sharing-chicago-zipcar-indianapolis-blueindy/88141 [http://perma.cc/B93L-9DUX]. Indianapolis's system is perhaps the most interesting. Indianapolis's Unigov created a public–private car-sharing system of electric vehicles, which can be used by both government employees and by members of the public who join the service. *Id*.

³¹⁹ John Coté, *S.F. Supervisor Seeks to Phase Out Fleet, Use Car Sharing*, SF GATE (Sept. 8, 2014), http://www.sfgate.com/bayarea/article/S-F-supervisor-seeks-to-phase-out-fleet-use-car-5743051.php [http://perma.cc/YZ6R-8HDM].

³²⁰ Ben Schiller, Now Cities and States Can Get Involved in the Sharing Economy, Instead of Just Slowing It Down, FAST COMPANY (Aug. 6, 2014), http://www.fastcoexist.com/3033971/now-cities-and-states-can-get-involved-in-the-sharing-economy-instead-of-just-slowing-it-dow [http://perma.cc/GRM5-7RGR]; Colin Wood, Munirent Brings the Sharing Economy to Government, Gov't Tech. (Aug. 21, 2014), http://www.govtech.com/internet/Munirent-Brings-Sharing-Economy-to-Government.html [http://perma.cc/96QA-YTBR].

Yet another possibility is using sharing firms to provide the government with valuable data. Taxi-sharing firms like Uber and Lyft produce and own a huge amount of information about where people want to go and leave and when, which could aid everything from public transportation routing to land use planning.³²¹ Uber has begun sharing this data with cities,³²² and it is not hard to imagine governments either requiring other sharing economy firms to turn over data in return for market access or purchasing it.

As a preview of things to come, consider the evolving partnership between San Francisco's Department of Emergency Preparedness and BayShare, an advocacy group funded by sharing economy firms to deploy privately owned sharing services in response to citywide crises.³²³ For instance, during a natural disaster, the partnership provides Airbnb listings to house those made homeless, food sharing sites to coordinate charitable food offers, and Lyft cars to transport people away from affected areas, all at lower cost and higher efficiency than operating the same services through government coffers.³²⁴

Just as cities might be buyers on sharing sites, they might also become sellers, mitigating the costs of capital expenditures. The most widely discussed possibility is sharing government buildings. Cities have long made government buildings like schools available to private groups after hours, whether for free or for rent.³²⁵ Listing them on popular sharing websites might greatly expand the market for such services, presumably generating additional funds.

Whether as a buyer or a seller, government participation in the sharing economy raises important legal, political, and policy questions. First, government contracting is often governed by complex regimes imposing a bevy of conditions and requirements on contractors (such as minority set-asides, transparency rules, and low-bid requirements).³²⁶ Contracts with asset-

³²¹ See Badger, supra note 131 (discussing value of such information to cities).

³²² Justin Kintz, *Driving Solutions to Build Smarter Cities*, UBER (Jan. 13, 2015), http://newsroom.uber.com/boston/2015/01/driving-solutions-to-build-smarter-cities/ [http://perma.cc/M7WM-JHUF] (describing new data sharing program).

³²³ Rory Smith, *San Francisco's Mayor Lee Launches Sharing Economy Partnership for Disaster Response*, SHAREABLE (June 12, 2013), http://www.shareable.net/blog/san-franciscos-mayor-lee-launches-sharing-economy-partnership-for-disaster-response [http://perma.cc/NE24-FQF4].

³²⁴ Mayor Lee & Board President Chiu Announce New Sharing Economy Emergency Preparedness Partnership, CITY & COUNTY S.F., OFF. MAYOR (June 11, 2013), http://www.sfmayor.org/index.aspx?recordid=333&page=941 [http://perma.cc/SJ7J-BQJK].

³²⁵ As an example, consider Denver's policy on the use of school buildings. *Welcome to Community Use*, DENVER PUB. SCHS., http://schooluse.dpsk12.ord/DPSCommunity UsePolicy[http://perma.cc/ZW23-ALWZ].

³²⁶ See Janna J. Hansen, Note, *Limits of Competition: Accountability in Government Contracting*, 112 YALE L.J. 2465, 2474 (2003) ("Most states and large cities give some statutory structure to government contracting. These regimes generally focus on corruption in the contracting process and often say little about specific service delivery or ongoing management of contracts.").

hub firms like Zipcar would fit well within this framework. Yet contracts with peer-to-peer models might prove far more challenging. To start, it is unclear whether compliance would be determined at the "platform level" (i.e., is Lyft compliant?) or the "peer level" (i.e., is Tara, the Lyft driver, compliant?). If it is the latter, then the rigors of complying with government contract law may put peer-to-peer contracting effectively off-limits for governments. Similarly, selling or leasing government property often requires compliance with considerable regulations along with express political approval, making participation as a sharing "seller" potentially cumbersome. 327 The same goes for services; many state civil service laws bar the privatization of services traditionally provided by government employees, posing another limit to the ready use of sharing firms as contractors. 328

And even if such limits could legally be circumvented, it is unclear if doing so would be sound policy. As with any government spending, removing restrictions on privatization risks making "sweetheart deals" more likely, delegates key government functions to workers less accountable to the public, and otherwise might undermine civil service protections.

Such contracting would also face stiff opposition from municipal employee unions and incumbent government contractors, as the replacement of full-time, unionized workers with non-unionized part-timers would be deeply controversial. Therefore, all else equal, the use of sharing firms as service contractors seems more likely in places where municipal unions are weaker.³²⁹

Most city government sharing, however, will likely take the form of goods or properties. Here, the major challenge will likely come from contractors themselves. Selling goods to governments is big business, and contractors are sure to bring substantial muscle to bear in preventing sharing entrants. And unlike in other contexts, sharing firms providing goods to city-customers may lack access to the "playbook" Uber and others use to rally support: if the consumer is the government, such firms will not have the ability to rally a mass consumer base.

In any event, influence is a two-way street. Cities may use the carrot of government contracts as a way of achieving the goals discussed above, such as income redistribution; if a city offers Zipcar with a rich contract, Zipcar may

³²⁷ For instance, by the terms of the Detroit City Charter, the City Council must approve all sales of public property. CITY OF DETROIT, CHARTER § 4-112 (2012).

³²⁸ See, e.g., Colo. Ass'n of Pub. Emps. v. Dep't of Highways, 809 P.2d 988, 996 (Colo. 1991) (holding that civil service laws barred state from contracting with private parties to perform services historically provided by state personnel); Konno v. Cty. of Haw., 937 P.2d 397, 407, 410 (Haw. 1997) (holding private contractors providing traditional government services like garbage disposal are bound by state civil service requirements).

³²⁹This suggests that they are more likely in places with fewer amenities and less density. Jan Brueckner & David Neumark, *Beaches, Sunshine, and Public Sector Pay: Theory and Evidence on Amenities and Rent Extraction by Government Workers*, 6 AM. ECON. J. ECON. POL'Y 198, 222 n.31 (2014).

more willingly accept city demands that it site cars in poor neighborhoods. Similarly, a city contract may be enough to get otherwise recalcitrant sharing firms to open or expand in the city. Finally, contracts may be a lever to achieve regulatory or other interests cities have with sharing economy firms.

V. CONCLUSION

Today's sharing economy is marked by fierce conflicts between new sharing firms and entrenched incumbents. Tomorrow's sharing economy, however, is likely to see a markedly different relationship between such firms and the governments that regulate them. With this knowledge in mind, both cities and sharing firms are going to need to rethink their approach to local regulation.

Two thoughts should guide our thinking about these next steps, one from the perspective of city officials, and another from the perspective of the firms themselves. City governments approaching sharing regulation should consider what they really want from these firms. There are both political and financial limits to the costs they can impose, with the result that the adoption of the more nuanced strategies outlined above could mean de-emphasizing the current priorities of consumer protection (or incumbent protectionism). City officials should thus carefully consider whether today's priorities provide the biggest policy or political benefits they can achieve. Given the possibilities sketched in this piece, the menu of options is broader than most officials have considered to date.

On the firm side, investors have showered sharing firms with huge amounts of capital. For even the most successful, it is unclear how they are going to justify their mammoth valuations. One possibility, suggested by this Article, is to become less oppositional to local governments, and in fact, to seek rents and contracts through lobbying and bidding rather than engaging exclusively in defense against local regulation.

Finally, citizens and analysts alike need to think hard about the normative implications that these new structures could have both for cities and for sharing firms themselves. We have (for the most part) avoided trying to answer the question of what the best policies are towards sharing regulation. We have done so for a reason. It is hard to know in the abstract, without data and specific applications in specific cities. But having sketched some possible futures, we all must now consider which—if any—our cities should pursue.