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THE POWER OF CONNECTION: PEER-TO-PEER BUSINESSES

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BEFORE THE

COMMITTEE ON SMALL BUSINESS
UNITED STATES
HOUSE OF REPRESENTATIVES

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THE POWER OF CONNECTION: PEER-TO-PEER BUSINESSES

WEDNESDAY, JANUARY 15, 2014

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SMALL BUSINESS,
Washington, DC.

The Committee met, pursuant to call, at 1:00 p.m., in Room 2360, Rayburn House Office Building. Hon. Sam Graves [chairman of the Committee] presiding.

Present: Representatives Graves, Chabot, Luetkemeyer, Herrera Beutler, Hanna, Schweikert, Collins, Velázquez, Schrader, and Kuster.

Chairman GRAVES. We will go ahead and call the hearing to order.

Good afternoon, everybody. And thank you for being with us. I thank all of our witnesses for being with us today.

Today's hearing will continue the Committee's examination into new types of business models which are propelling entrepreneurship and small business formation and growth.

As the ability to connect through innovative platforms has increased, there has been a rise in peer-to-peer businesses. Peer-to-peer businesses create new marketplaces to access goods and services by utilizing technologies such as smartphone apps, GPS locators, and the Internet to easily and efficiently connect individuals who may be able to meet each other's needs. While the newness of these platforms limits our ability to know the true economic impact, these new businesses appear to be creating significant shifts in the economy and demonstrate potential for significant economic growth and job creation. Forbes estimated in 2013 that revenue from the so-called sharing economy was likely to surpass $3.5 billion. With these sorts of numbers, it is necessary for the Committee to understand what these businesses are and what challenges they face. Notably, many of us have already seen the effects of peer-to-peer businesses in our daily lives as we utilize things like eBay or Etsy to purchase unique goods or use an app to contact a ride-sharing company for a lift.

At the state and local level, the rise of peer-to-peer businesses has fostered interesting debates over whether existing laws and regulations accurately fit these new companies. For example, in 2013, California became the first state to legalize and regulate peer-to-peer transportation companies finding that those firms were distinctive from traditional charter carrier companies.

And again, I want to thank all of our witnesses for being here today and taking the time away from your jobs and making the

travel here to Washington for this important hearing. I look forward to your testimony, and I now turn to Ranking Member Velázquez.

Ms. VELÁZQUEZ. Thank you, Mr. Chairman.

Technology has long been a catalyst for entrepreneurship. Just as small businesses often drive some of the most important scientific breakthroughs, developing new products and services, major technological advances also create opportunities for small firms to reach customers. This symbiotic relationship between entrepreneurship and technology has been an important source of economic growth and job creation.

In keeping with this trend, development of the peer-to-peer business model has created new channels for entrepreneurs to sell goods and services. Technology innovators are harnessing the web to create new platforms and markets that allow the selling, renting, and trading of everything from apartment space to transportation to artisan craft goods.

The numbers strongly suggest that this new sharing company based largely on interactions between consumers rather than traditional brick and mortar businesses is here to stay. On a single Friday night, 150,000 travelers are finding rooms to rent from private homes on their B&B website. More than 1.5 million Internet users have used TaskRabbit to hire people for odd jobs. Lending Club, which facilitates loans between consumers, has led to $2 billion in lending so far and doubles almost every month. eBay has seen product sales reaching nearly $70 billion in a single year.

One reason for this sector's rapid growth may be rooted in broader economic struggles. With job growth still sluggish, enterprising Americans and dislocated workers are seeking new ways to replace revenue. Renting out rooms, providing lifts in their car, and selling homemade goods, food goods, have all become ways for ordinary Americans to experiment with entrepreneurship and stay afloat during tougher economic times.

While the explosive growth of these networks has created new opportunities, the rapid rise raises questions. As always, it is important that consumers utilizing these sites be protected against fraud and unscrupulous actors. Most of these sites contain a review and rating system to ensure users on both sides of this transaction live up to their commitments. However, as the popularity of peer-to-peer transactions grow and become a larger part of the mainstream economy, additional safeguards may be necessary. As always, the challenge will be ensuring businesses and consumers are protected without question or discouraging promising innovation.

Many peer-to-peer networks are themselves small businesses. Orders are larger entities but are helping self-employed Americans and small firms identify new channels for reaching customers. It is important that as this technological revolution advances, government policy keeps pace. As of yet, the Small Business Administration's initiatives appear ill-suited to help bolster this growing sector, something that I hope can be rectified. It is important this Committee fully understand what is happening in the new sharing economy and has a grasp on how we can minimize risk for consumers while maximizing growth and productivity from peer-to-peer business models.

On that note, I would like to thank all of our witnesses for taking the time to be here. Your perspective will add significant value as the Committee seeks to learn about this rapidly emerging marketplace.

Thank you, Mr. Chairman. I yield back the balance of my time.

Chairman GRAVES. All right. Our first witness is Professor Arun Sundararajan, who teaches at New York University Stern School of Business where he studies how information transforms businesses and society. He has been published in Bloomberg, Harvard Business Review, and many other reputable journals.

Thank you for being here. I appreciate you coming in.

STATEMENTS OF ARUN SUNDARARAJAN, PROFESSOR AND NEC FELLOW, STERN SCHOOL OF BUSINESS, HEAD SOCIAL CITIES INITIATIVE, CENTER FOR URBAN SCIENCE AND PROGRESS, NEW YORK UNIVERSITY; BETH STEVENS, ASSISTANT GENERAL COUNSEL, SIDECAR TECHNOLOGIES, INC.; ALAN MOND, CEO, 1000 TOOLS, INC.; PHILIP AUERSWALD, ASSOCIATE PROFESSOR, SCHOOL OF PUBLIC POLICY, GEORGE MASON UNIVERSITY

STATEMENT OF ARUN SUNDARARAJAN

Mr. SUNDARARAJAN. Okay. Thank you, Chairman Graves, Ranking Member Velázquez, and Committee Members.

I am delighted to have been invited to speak to you about digitally-enabled peer-to-peer business. Thank you for convening this important hearing. More light needs to be shed on this promising new segment, so I hope this hearing is the first of many.

We need a clear understanding of the economic impacts of peer-to-peer businesses and changes to regulatory frameworks that nurture this rapidly growing segment of the economy because this segment will create work, stimulate consumption, raise productivity, catalyze innovation, and facilitate entrepreneurship. The new peer-to-peer economy is enabled by a set of platforms, new marketplaces powered by digital technologies. These platforms enable entrepreneurs, people who want to supply goods and services, to fulfill demand from consumers, people who want to buy, rent, or consume. Thus, they create millions of new, very small businesses or what are being called micro-entrepreneurs. In my written testimony, I discuss some of the technological drivers—consumerization, institutions, urbanization, ecological issues in some detail.

Some platforms allow entrepreneurs to create services by using their own personal labor and assets, like Airbnb, and Relay Rides create new versions of familiar, commercially available services like short-term accommodation and car rental. Eatwith and Feastly, and perhaps even Sidecar, increase the efficiency and scope of familiar activities like supper clubs and paid ridesharing. Others, like Yodle and 1000 Tools, create new services for the rental of owned assets from one peer to another.

There are a few other categories of platforms I discuss in some detail in my written testimony. Platforms like Uber and Kitchit that allow professionals of different kinds to leverage their skills and operate sole proprietorships. Markets like oDesk and TaskRabbit that connect freelance workers with new sources of

work, marketplaces like Etsy and eBay that allow individuals to operate new online retailing businesses, often for products that otherwise would not have a mass market. There is also a host of new peer-to-peer finance and peer-to-peer education platforms that I do not cover because they have unique issues and impacts that I think require a separate discussion.

I believe that peer-to-peer businesses enabled by digital platforms will constitute a significant segment of the economy in the coming years and will have a positive impact on economic growth.

Why do I think so? First, these businesses and platforms put people to work, not always in traditional jobs but they are nevertheless creating work that generates income. We need to measure this work creation better.

Next, they create new consumption. The peer-to-peer sharing economy expands the variety and quality of existing goods and services, as well as creating entirely new consumption experiences.

Next, they will be a gateway to entrepreneurship. If you want to start a small business but the risks seem too high, you can transition as a peer-to-peer supplier or dip your toes in the water part-time on one of these platforms. As my colleague Lisa Gansky says, they may be like finishing school for entrepreneurs.

Next, they are likely to increase productivity by tapping into underutilized labor sources, by increasing the efficiency of asset usage, and by increasing motivation levels for workers who can now better capture the value created by their labor. Again, further details in my written testimony.

Over the next few years, we need robust measurement of the economic impacts of peer-to-peer business and especially of the small businesses created. We also need to refine existing economic measures so that they fully capture the new forms of production, consumption, and work facilitated by peer-to-peer business.

The current regulatory infrastructure is likely impeding the growth of these businesses. The regulations are not fundamentally flawed and the safe harbors are not the issue here. It is primarily because this wage of digital disruption is altering how we experience familiar services. So there is a misalignment between the business models and roles of these new peer-to-peer businesses and the rules and guidelines for the older analog industrial-age ways of providing services through hotels, taxis, or car rental companies.

So I believe that a self-regulatory solution with some government oversight, perhaps through the creation of new self-regulatory organizations or SROs is worth exploring for these peer-to-peer business markets. The SROs could be the platforms themselves, new industry consortia, or may even emerge from consumer-collectives like peers, with government oversight.

The reason why I believe this is a good solution is that delegating some regulation will ease the tremendous strain that government at all levels would otherwise bear from constantly having to monitor and correct misalignment as hundreds of new peer-to-peer businesses emerge in coming years. It is also that these new marketplaces have sophisticated digital controls, reputation systems, identity verification, quality screening built in, which play a natural regulatory role that we can rely on to some extent. Consumers already do.

The interests of the platforms are also naturally aligned with the interests of a tax book regulator. They can also identify new regulatory issues faster as they arise and take action against infringing market participants more easily.

To summarize, these peer-to-peer businesses and the platforms that enable them will create work, stimulate consumption, raise productivity, catalyze innovation, and facilitate entrepreneurship. We should make sure that our regulatory framework nurtures their progress. Thank you.

Chairman GRAVES. Thank you, Professor.

Our next witness is Beth Stevens. Ms. Stevens serves as the assistant general counsel for Sidecar Technologies, which is headquartered in San Francisco, California. Sidecar is a ride-sharing phone app that operates on a peer-to-peer level connecting car owners with folks that need rides.

So thank you for being here and coming all the way.

STATEMENT OF BETH STEVENS

Ms. STEVENS. Thank you.

On behalf of Sidecar Technologies, I would like to thank Chairman Graves, Ranking Member Velázquez, and the members of the Small Business Committee for this invitation to speak on peer-to-peer businesses and ridesharing in particular.

Sidecar was founded over a year ago and is a ridesharing or carpooling, if you will, information service that enables members to exchange information via the Sidecar smartphone mobile application or app with other members to enable ridesharing in a privately-owned vehicle.

So the way that our service works is a passenger can enter their pickup and destination locations and the app will send that information out to available drivers and drivers will then choose to share a ride. In other words, we offer the digital equivalent of an on-demand carpooling service or for those of you who do slugging here in the District, a dynamic slug line. So instead of having to show up at a particular location or look on an employee corkboard, you can open up your GPS-enabled smartphone and say, "I need a ride and here is where I am going," and a driver can say, "I have got a car and I am going that direction."

So trust and safety is vitally important to the Sidecar community. The app is built with a number of important safety features, including a dual rating system. So just like eBay allows buyers and sellers to rate each other, Sidecar's mobile app allows a passenger and driver to rate each other. We also have a Share My ETA function which allows riders to text, tweet, Facebook, e-mail their estimated arrival time to a loved one or friend. We also have an in-app ability to contact the passenger or driver, so there is no need to share or avail personal contact information when trying to coordinate. We also include a picture of the driver and the driver's vehicle so that passengers can verify that the correct driver is showing up. We have an in-app receipt of the ride with the driver's name. Most often this gets used for lost items, but it also, if something were to go wrong on the ride, it enables the passenger to have comfort that they know who they shared a ride with.

There is also an in-app ability to immediately call the Sidecar support team should there be an issue on either the driver or passenger side, and it is a completely cashless system, which protects drivers against potential crimes.

We also have a $1 million commercial liability policy that covers passengers and third parties for any damage or bodily harm that is the result of the driver.

We also prescreen our drivers. So we conduct Social Security Number-based background checks consistent with federal and state laws, which screen for sex offenses, DUIs, reckless drivings, and a whole host of other criminal offenses. We collect the driver's personal information, including their driver's license and personal insurance, and we train drivers how to use our app and provide tips on distracted driving.

I am sure at this point you are saying, "Well, yeah, I can just carpool with my neighbor. I do not need all this." And what this program allows you to do over traditional ridesharing programs and carpoolings and vanpools is to develop a critical mass to make sure that these ridesharing programs can succeed. The research shows that even though carpooling has been around since World War II, programs have failed because there has not been a critical mass of users. Users need to know if they are going to take a shared ride somewhere that they can get home, and we also have to encourage drivers and incentivize them to participate. One way to do that is through financial incentives. Allowing them to either earn the expense of operating a vehicle, which in an urban area can be quite a bit if you talk about $400 a month to park downtown, the cost of gas, the depreciation of the vehicle, insurance, and maintenance of a vehicle. And ridesharing allows individuals—micro-entrepreneurs, if you will—to either earn those costs of the vehicle or maybe earn a little bit more as part of supplemental income that they bring in.

Sidecar's mobile application offers the opportunity with the ubiquitous use of mobile location-based services to accelerate a broad-based adoption of ridesharing or carpooling. This adoption of ridesharing has the potential to produce large-scale public benefits, including easing traffic congestion and the strain on existing infrastructure, reducing pollution, and fostering a sense of community, all while providing car owners an opportunity to offset the cost of car ownership.

Sidecar is grateful for the opportunity to discuss ridesharing with you, and I look forward to your questions.

Chairman GRAVES. Thank you very much.

Our next witness is Alan Mond, CEO and Co-Founder of 1000 Tools located in Ann Arbor, Michigan. Mr. Mond is a self-described mechanical engineer turned web developer and entrepreneur. He launched his company in June of 2003. 1000 Tools is an online platform that allows individuals to rent tools from the neighbors.

Mr. Mond, thanks for being here.

STATEMENT OF ALAN MOND

Mr. MOND. Thank you very much.

Chairman Graves, Ranking Member Velázquez, and members of the Committee, I am Alan Mond. I am the CEO of 1000 Tools and

I am very grateful for the opportunity to speak with you regarding our peer-to-peer business. We actually started in June 2013, so we are one of the youngest around here.

1000 Tools is an online platform that enables people to rent tools from each other. Our latest product allows local governments to rent underutilized equipment to one another, but we will get to that in a minute.

We are based in Ann Arbor, Michigan, and it is an honor for me to be here today. I come from a family of tinkerers, and the idea for 1000 tools came when I had to replace the timing belt on my 1995 Ford Probe. I had the willingness to do it myself but I did not have the right tools for the job. So my solutions at the time were to buy a bunch of expensive tools that I am never going to use again or to borrow from my friends, but my friends did not have all the tools either, and if I continuously borrow from my friends that is going to erode even the best of friendships. So I thought, "I wonder if anyone else has this problem? And would it not be nice if I could just access tools, a large network of tools?"

So with this idea in mind, we built 1000Tools.com and we launched in June 2013 to test this hypothesis. Our website offers a secure interface for tool renters to pay with a credit card and for tool owners to get funded via direct deposit straight into their bank account. Prices are set by the tool owner and they compete directly against established tool rental stores. Tool exchange happens locally, in person, so no shipping is required. Reviews and ratings are also provided for each transaction.

1000 Tools provides Americans the opportunity to become micro-entrepreneurs using assets they already own. This new generation of collaborative consumers and micro-entrepreneurs live in an ecosystem called the sharing economy and it has already crossed the chasm into mainstream adoption. As many of us have already explained here, Airbnb, for instance, the online marketplace for listing and booking short-term housing accommodations, announced in June 2012 that they have reached their 10 millionth booking and they compete head-to-head against even the largest hotel chains in the country.

Most of our users in our space of tools rentals are early adopters. They have participated in other areas of the sharing economy, however, there are still some concerns about liability and property damage, and these are still predominant barriers to mass adoption. Additionally, there are very few insurance companies that are familiar with this type of exposure, and there are even fewer that are able to offer liability insurance for micro-entrepreneurs.

So as we grow our user base, we started looking at a different customer segment, and this is how we found out the really interesting niche in local governments. Three months ago we started focusing on local government equipment sharing and after interviewing 30 municipalities in the southeastern Michigan region, we discovered an incredible gap. Large municipalities have expensive equipment that goes underutilized and small municipalities tend to rent at high premium rates instead of purchasing equipment. Out of the 30 city managers that I interviewed, 70 percent were extremely eager to try our prototype.

So with this information in hand, we retooled our existing technology to cater straight and directly to municipalities. That is how we created Muni Rent. Muni Rent is a new website that spun out of 1000 Tools that allows different levels of local governments—like municipalities, counties, road commissions—to rent out the equipment to each other.

Now, some of you may be asking, why are municipalities not doing this already? And that is really a great question. But as with most areas of local government, resources are limited. It takes a lot of resources for municipalities to set up a rental agreement, maintain some sort of catalogue of all the equipment they have, and let alone keep track of invoicing, hours, maintenance records, et cetera.

Muni Rent. We provide a vetted roundtable agreement between the different municipalities and handle all the details, including insurance verification, payment, invoicing, and all of this is available through an extremely easy to use website and a just released yesterday Android app.

Our journey began building a peer-to-peer tool rental marketplace, but we now look forward to welcoming municipalities as the newest members of this brave new sharing economy. Thank you very much.

Ms. VELÁZQUEZ. It is my pleasure to introduce Professor Philip Auerswald. He is an associate professor at the George Mason University, School of Public Policy, where he focuses on entrepreneurship and innovation in a global context. Previously, he was a senior fellow at the Kauffman Foundation and has served as an advisor to the Clinton Global Initiative since 2010 on topics related to job creation, education, and market-based strategy. Professor Auerswald is the co-founded and co-editor of Innovations, Technology, Governance, Globalization, a quarterly journal about entrepreneurial solutions to global challenges and is the author of The Coming Prosperity: How Entrepreneurs are Transforming the Global Economy.

Professor, you are most welcome.

STATEMENT OF PHILIP AUERSWALD

Mr. AUERSWALD. Thank you very much.

Chairman Graves, Ranking Member Velázquez, members of the Committee, I appreciate the opportunity to share with you this afternoon some thoughts on the economic context for peer-to-peer business models.

In 1988, a quarter century ago, I drove a stranger's Nissan Sentra from Washington, D.C. to Seattle, Washington. In the process, I earned $250 with the added bonus of moving both myself and my stuff across the country. The vehicle's owner made out well, too. She got her car transported 3,000 miles for less money than she would have had to pay if she had hired a commercial service and certainly at a lower opportunity cost of time than she would have incurred if she drove the car herself.

Peer-to-peer, win-win.

At its human core, the peer-to-peer or sharing economy is not a new phenomenon. Had Alexis de Tocqueville had the chance to write about the United States of today in addition to that of the

1830s, he would have found in peer-to-peer businesses like Sidecar and 1000 Tools, much of a distinctly American character.

So is there any fundamentally new about the sorts of peer-to-peer businesses that have been proliferating in the past five years? Yes. The difference between the past and the present is in the platforms over which people find one another, conclude transactions, and establish reputations? The triple revolutions in computation, communications, and algorithmic power that have unfolded over the past half century have, as we have been hearing, dramatically lowered the costs of finding a provider of a service, assessing their reliability, and ensuring that the transaction can be performed in an equitable manner.

Participants in the peer-to-peer marketplaces are clearly drawn by the straightforward gains from trade that are made possible by lower search and transaction costs. Simply put, buyers pay less than they would without the service and sellers earn more, if only because they often would not be able to bring their service to market without the peer-to-peer platform. Furthermore, buyers have access to previously unavailable options in the marketplace, while sellers have opportunities to diversify their sources of income and increase their financial resilience.

Of course, new business models that gain market acceptance almost invariably invite challenges from incumbents. New peer-to-peer businesses are no exception. Wherever peer-to-peer platforms have gained traction across other country, regulatory challenges have followed. Invoking regulatory equity, for example, taxicab drivers have sought to slow the growth of car and ridesharing services like Sidecar and so forth in other areas of the peer-to-peer economy, these are largely local issues.

So what does this all mean for the formulation of policy at the federal level? From the standpoint of the United States Congress, the peer-to-peer business models that matter most are the ones that we have not seen yet. It is instructive to ask ourselves while we are focused today on local transportation, hospitality, food service, and the rental of consumer goods as the most significant domains of innovation in peer-to-peer business models. The reason arguably is that these are industries in which regulatory complexity is relatively low.

In contrast, there has been relatively little innovation of peer-to-peer business models within healthcare, energy, and education where regulatory complexity is relatively high. These three industries comprise more than a quarter of U.S. GDP. The greatest macroeconomic impacts of peer-to-peer business models for the United States thus will not be realized until we have established the training, certification, licensing and auditing mechanisms at all levels of governments that allow neighbors to earn their livelihoods by taking care of neighbors and by providing power to their communities and offering validated work-relevant training to people anywhere who seek expanded opportunities.

In more general terms, the bottom line is this. Shared prosperity requires not only innovations that scale up to create new wealth but also innovations that scale out to create new opportunities. Let me be very clear about this point. Much of my own work, as well as important research conducted over the past decade at the

Kauffman Foundation in Kansas City with which I have been affiliated, is about the value to society of scale-up innovation, particularly via new entrepreneurial entrants. This research had demonstrated that the small proportion of new ventures that scale up rapidly are responsible for a disproportionate share of value creation in the economy.

But here is the problem we have run into. While some scale-ups creates large numbers of new jobs, many do not. Companies like Apple, Google, Facebook, Instagram, and Twitter have all achieved valuations in the tens and even hundreds of billions of dollars but they directly employ far fewer people per dollar of revenue than their Fortune 500 counterparts did a generation ago.

This is where peer-to-peer platforms come into play. By their very structure, peer-to-peer platforms scale out success to reach tens of thousands, even hundreds of thousands of people with opportunities to create viable livelihoods for themselves. They create new and enticing invitations to latent producers within the economy to employ their individual assets, talents, to create economic value.

In the coming decades, the United States and other advanced industrialized economies will no sooner return to the routinized and manufacturing-centric economy of the 20th century than to the agrarian economy that preceded it. The issue is not whether new livelihoods based on peer-to-peer business models are better or worse than the industrial-aged jobs that are disappearing from large corporations. The real point is when jobs are eliminated in the process of digital disruption, they will not be coming back in their old form. As that happens, we humans have no choice but to fall back on our fundamental social skillset, creating and sharing with one another.

There is, however, one big difference. Unlike our isolated ancestors of millennia past, Americans in this century are empowered by architectures of collaboration that allow for the creation of new and diverse livelihood at unprecedented rates. Therein lies the power of today's peer-to-peer economy.

Chairman GRAVES. Thank you all very much. And we will now go on with questions.

I am going to turn to Mr. Collins for the first questions.

Mr. COLLINS. Thank you, Mr. Chairman.

I think this is a great hearing because I, for one, really had not heard of peer-to-peer. We all know about Uber here in D.C., but I guess I had not considered the tool-to-tool, the 1000 Tools and what Sidecar is doing. I am intrigued by that and I think your hearing today might spur some other entrepreneurs to think, well, there are people that want to borrow more than just tools.

So I am curious, Mr. Mond, you have been in this year, and my first question is I am assuming you have a fee charged because yours is a cashless transaction so you must just charge a percentage?

Mr. MOND. Yes, that is correct.

Mr. COLLINS. And so what issues, I mean, do you have any issues, for instance, do you have to give out 1099s or if somebody really sees this going and they are renting out a lot of tools, it is kind of an underground economy so there is always the question

of sales taxes. There is a question of income taxes, underground economy. Because you are conducting the financial transaction, what is your liability or what issues do you face?

Mr. MOND. So we have not had to come across that point yet because we are not old enough as a company, but yeah, typically—I am also a super host on Airbnb, on the room sharing website. And, yeah, we receive 1099s as hosts. Basically, we receive an income.

Mr. COLLINS. No, I am thinking more the person that is renting the tool. He is getting money. How does his income get reported?

Mr. MOND. Right. Yeah. There is a form that you receive as the owner.

Mr. COLLINS. Oh, from you? That you prepare?

Mr. MOND. Yes.

Mr. COLLINS. Oh, okay. All right.

So you are a year in and is it—are you nationwide or are you in specific markets? And how do you, I mean, I wanted to replace my faucet the other day. I recognized I did not have the tools either so I just hired a plumber. But that was probably safer as well. But you need a critical mass as well, because if I go to Tool-to-Tool, 1000 Tools, and I cannot find what I need, I may not come back. And so how many cities or markets are you in?

Mr. MOND. Well, Mr. Collins, hopefully after this hearing we will go nationwide. But right now we are very strong in Ann Arbor which is where we started. We actually have, for some reason, a critical mass in the D.C. area because when we were at the Maker Faire event in Detroit, we have had a contingency of people from the D.C. area and they said please open this up in the D.C. area. And so we did. And it is open here, so if you have tools that you would like to post for rent, it would be our honor to have you.

Mr. COLLINS. I would think, too, I mean, you have developed the IP to the software. I mean, whether it is tools or whether it is boats or whether it is jet skis or, I mean, I would think it could expand beyond just tools; right?

Mr. MOND. Yeah. We wanted to stay very focused on tools for an important reason and that is kind of dilution of focus. When people come to our site, we want them to know that what they are going to find are tools, and if they think of any tool that they will need, they can automatically relate that to 1000 Tools. There are other sites that came and went that were very broad. So you could rent anything that you could possibly think of but that is the problem. Sometimes you just do not know what is going to be available so you get turned away.

Mr. COLLINS. Sure.

So Ms. Stevens, how do you make money? Is yours cashless and you charge a transaction fee?

Ms. STEVENS. That is correct. We take a percentage of the ride payment that the passenger makes to the driver.

Mr. COLLINS. And the driver sets that payment?

Ms. STEVENS. Not currently. That may be an option in the future. We are just over a year old but currently the payment is determined based on time and distance using a third-party API.

Mr. COLLINS. Okay. And I am assuming you must track repeat customers and the like. What is the biggest complaint you get?

Ms. STEVENS. The biggest complaint. From drivers or passengers?

Mr. COLLINS. Both.

Ms. STEVENS. From drivers, the biggest complaint currently would be declined credit cards. So we are working on a preauthorization system and we are guaranteeing payment on all rides to drivers if for some reason that credit card is declined.

From passengers, I am not sure we get a whole lot of complaints. We get a whole lot of questions of I left my cellphone in the back of the car. And fortunately, since we track every ride and they know who gave them a ride, we can usually find it pretty quickly.

Mr. COLLINS. Very good. Well, my time is expired, but again, thank you for coming in because I think you are on the cutting edge of something new. It is intriguing. Thank you.

Ms. STEVENS. Thank you.

Chairman GRAVES. Ms. Velázquez.

Ms. VELAZQUEZ. Thank you, Mr. Chairman.

Professor Sundararajan, given the nature of the peer-to-peer platform, it will be difficult, if not impossible to capture their contribution in official employment statistics. What are the ramifications of excluding job creation from these government employment indicators?

Mr. SUNDARARAJAN. I think that one of the ramifications is that we may be under—we may be not measuring the full extent to which the country is employed because we tend to count employment in terms of whole jobs. We do try and capture to some extent people's second jobs, but in a lot of cases individuals who are providing labor and assets through say a marketplace for renting tools or occasionally being an Airbnb host or selling stuff on Etsy do not think of this as a job and so they do not report it in the statistics. So one ramification could be that we are not measuring the extent of job creation as much as we should be. Another ramification might be that we may be moving into sort of an economy where a fraction of the population does not hold a full-time job but gets their income from providing sort of assets and services on a number of different peer-to-peer platforms. And if this is the case, then we need to start thinking about a bunch of issues that surround what happens when, you know, rather than people having sort of mainstream jobs from traditional corporations, a much larger fraction of the country are freelancers or self-employed.

Ms. VELAZQUEZ. Professor Auerswald, do you have any thoughts?

Mr. AUERSWALD. Thank you, Ranking Member Velázquez. I think you have asked an extremely important question.

The statistics that we have came out of the middle of the 20th century when the concentration of economic activity was essentially the way in which the economy grew. And employment within large-scale firms was considered to be employment success. We are really moving into a very different world today and I fully endorse the notion that we have to think about different forms of measurement. I am not representing George Mason today but I can say that we are daily facing the question of how best we can equip a new generation to be successful in the 21st century. We are well aware that we need to train students and train young people or people of all

ages to adapt flexibly in a changing economy. But I think that this dimension of being able to provide services directly to other people, particularly in those large areas of the economy as I mentioned, a health above all, but also energy and education. Peer-to-peer services and the ability to serve other people directly and provide services directly, I think is a tremendous area of growth.

Ms. VELAZQUEZ. Thank you.

Many of the new peer-to-peer entrepreneurs have had difficulty operating their businesses in a regulatory scheme that was formed for traditional brick-and-mortar businesses. With the changing environment in which companies conduct daily businesses, how can we adapt existing laws and regulations? To work for the entire marketplace?

Mr. AUERSWALD. So entrepreneurs always will work within whatever the structure, regulatory and market that they are facing. I think peer-to-peer businesses have done the same thing. They have, as I noted, been most successful and have grown most quickly in those areas where that has been some sort of regulatory clearing. Maybe there is some uncertainty as to how the business model will be received, but that is part of the risk of being an entrepreneur.

I think the important thing is for regulators to appreciate the contribution of the peer-to-peer economy, and that is exactly why this hearing is so welcome. And to understand that this is a new and valid mode of economic activity, neither better nor worse than what we have seen in the past, but something that brings a lot, even if it, of course, is going to be associated with new risks and new ways of thinking. I do not know that it varies greatly from industry to industry, what the appropriate responses are, but I think the most important thing is that regulators understand that these open spaces for innovation are not just important; they are, I think, critical for the economic future of this country.

Ms. VELAZQUEZ. What we hear is that some of the peer-to-peer businesses, the kind of obstacles that they face is in terms of regulations at the state and local levels. So my question is what can we do at the federal level to help foster growth with these businesses?

Mr. AUERSWALD. Well, obviously, given our federal system and distributed authority, there are limits to what the federal government can do at the state and local levels. But I think there really are signaling issues. There are issues about coordination of regulation at different stages. And I think at the federal level there are issues of focusing in those areas where the federal role is particularly significant. And so that is why I say healthcare is one area where we could have very significant innovation in peer-to-peer models that would be cost lowering and that would reach particularly people over 50 with care in their homes and through mobile services, business models that are nascent but really have not been seen because the regulatory environment is not inviting them. So I would say that that is the most important role for Congress is to focus on the areas where its regulatory oversight is most direct.

Ms. VELAZQUEZ. Professor Sundararajan.

Mr. SUNDARARAJAN. Yeah. This is a really important question. I think that the reason why we have seen state and city regu-

latory barriers to peer-to-peer businesses thus far is that a lot of the issues that have come up in the industries that are being disrupted—accommodation, transportation, urban transportation—tend to be regulated by city and state authorities. However, I do believe that there is a role for the federal government to play here on two fronts. One is to sort of provide the groundwork that might sort of lead to the creation of something resembling self-regulatory organizations for some of these industries. I think that there are going to be a lot of new regulatory issues that come up as more and more industries become peer-to-peer businesses and it helps to sort of delegate responsibility with oversight to the people who are closest to the changes and who also have the ability to take action most easily. So a platform can disconnect an infringing supplier from their platform very easily.

Ms. VELÁZQUEZ. But how do we provide a level playing field for those brick-and-mortar businesses that have to comply with regulations that might put them at a disadvantage with peer-to-peer?

Mr. SUNDARARAJAN. Well, it seems to me that a lot of the regulations that are in question here are ones that were developed to address specific issues that are sort of like prevalent in brick-and-mortar provision of say like if you are running a hotel chain or if you are sort of providing taxi services. Some of these regulations may be supplanted by digital technologies. I have also always had the impression that a brick-and-mortar company can also in addition, especially a large brick and mortar company. There is nothing that is preventing them from adding a peer-to-peer or a rental or a sharing dimension. I fully expect that Wal-Mart and Amazon will enter the space. BMW has entered sort of like the space. GM is an investor in Relay Rides. And so they are not sitting on their hands and waiting. They certainly have the opportunity to adopt these new business models themselves if it turns out that the lowered regulations on those fronts are going to sort of give them business advantage.

Ms. VELÁZQUEZ. Thank you, Mr. Chairman.

Chairman GRAVES. Mr. Schweikert.

Mr. SCHWEIKERT. Thank you, Mr. Chairman.

Professor, you were starting to go down a couple paths there that——

Mr. SUNDARARAJAN. Which professor?

Mr. SCHWEIKERT. I am sorry. I am not wearing my glasses. How many do I have?

Mr. AUERSWALD. There are two professors.

Mr. SCHWEIKERT. Okay. All right.

Professor Number One.

Mr. AUERSWALD. Okay.

Mr. SCHWEIKERT. Okay. We actually have a number of examples of this in our economy that have been going on for quite a long time. In many ways private jets have been leasing out their excess capacity. I know of large printing facilities that, you know, you have these huge capital expenditures and the equipment is designed to run 24/7, so well your excess capacity. And many of us have always thought of the peer-to-peer type sales as business-to-business, for those who have engaged in large capital expenditures,

to basically maximize out, you know, how do you amortize out the cost of this? What is fascinating here, and to my friend from 1000 Tools, I am your new best customer because I own every tool you can imagine. I own tools I have no idea what they actually do. But it is fascinating. And Professor, have you looked at some of the modeling of what upheaval but also what opportunities? Because in many ways you are creating these high levels of efficiencies in the economy but you also may now change certain need for certain capital expenditures. If I have to go buy a $3,000 swaging machine that I am only going to use for one project, I no longer need to do that. So you may slow down capital expenditures but actually make the economy much more efficient.

Mr. SUNDARARAJAN. That is true.

Mr. SCHWEIKERT. So it is an allocation.

Mr. SUNDARARAJAN. Yep. That is true and that is a very good point. At this point, the evidence suggests the direction of change is unclear. I mean, there are many different effects as you point out. On the one hand, you know, the increased efficiency of usage may cause some people to say, well, I do not need to buy a car. I can just sort of rent one through Relay Rides whenever I want one, or I do not need to buy a bunch of power tools. I can just rent them through 1000 Tools. On the other hand, there may be some people who are not incurring these capital expenditures because they cannot afford them. They want the asset but they cannot afford, like, I want that nice car but I cannot buy it. And now that there is a secondary market over which I can rent it when I am not using it, maybe I am going to increase my acquisition.

Mr. SCHWEIKERT. It is a simple example. The person who buys the house with the guest room and they intend to rent it.

Mr. SUNDARARAJAN. What I am reassured by is that historically whenever there has been a technological change that has led to greater asset efficiency, this tends to grow the economy rather than shrink it. It sort of creates new forms of consumption that tend to sort of have a positive rather than a negative effect. But as you say, the jury is still out. We need to gather data over the next few years to actually quantify the extent to which this is altering both welfare and capital expenditures.

Mr. SCHWEIKERT. And to Professor—is it Auerswald?

Mr. AUERSWALD. Auerswald.

Mr. SCHWEIKERT. Auerswald. Do you agree with Professor Number One in regards that this actually makes an economy more efficient, therefore, you get a multiplier effect and economic growth?

Mr. AUERSWALD. So the professors are in agreement. That is a good thing.

Mr. SCHWEIKERT. But also just sitting here I can come up with probably a couple dozen examples of this that have existed for years in our economy in some fashion and have done actually quite healthy and quite well with actually a very soft touch from a regulatory environment?

Mr. AUERSWALD. Well, I think that is partly what is fascinating about this space. Before the 20th century, the peer-to-peer economy was the economy. There was no other economy. We did not have large corporations providing services. This is a relatively

new thing. Now we have platforms where we can return to something like an economy that we had in the past but with the efficiencies of the 21st century and with the computational power that we have developed over the past 50 years with billions and trillions of dollars of investment.

So what I think is different here is that—and I think part of the answer to your question is that there is a threshold to undertaking a project, and so I think that there are certain projects, whether in the home or for other people, that people would not have undertaken did they not have access to the tools once 1000 Tools grows to scale.

Mr. SCHWEIKERT. But in that same is the threshold for—is it Ms. Mond?

Ms. STEVENS. Stevens.

Mr. SCHWEIKERT. So, no, Mr.——

Mr. MOND. Mond.

Chairman GRAVES. Mr. Mond. Yeah.

Mr. SCHWEIKERT. Okay. On 1000 Tools, so your biggest barrier is to actually in many ways have participants in many, many different places willing to take their privately-held capital assets and make them available. So your biggest barrier right now is actually one of information and liability I would assume. And so now you have sort of a whole new world of law of what liability do I have? What sort of insurance do you require a driver to have if they pick up someone, if you let me loose with someone else's skill saw and I do not know how to ratchet it down. And I will not show you my toe that I put a nail gun through earlier this year.

With that, Mr. Chairman, I am well over time. Thanks.

Chairman GRAVES. And we have a set of votes coming up so we will try to get through everybody real quick.

Mr. Luetkemeyer.

Mr. LUETKEMEYER. Mr. Mond, everybody is sitting on the edge of the chair here wondering after your testimony did you get your car fixed?

Mr. MOND. Yes.

Mr. LUETKEMEYER. Did you use your own service? Did you find somebody else's tools or did you go to a rental place? Or how did you get it fixed?

Mr. MOND. Actually, I went to Sears and bought a bunch of tools.

Mr. LUETKEMEYER. So now you are one of your own members of your own company; right?

Mr. MOND. Absolutely.

Mr. LUETKEMEYER. Renting out your tools?

Mr. MOND. I eat my own dog food.

Mr. LUETKEMEYER. Okay.

I am kind of curious, what is the biggest impediment that you have come across so far in your business, Mr. Mond and Ms. Stevens?

Mr. MOND. So the biggest barrier was or still is education about this. And essentially, mass adoption of this type of business model. And the second impediment has been the litigious society that we live in prevents a lot of people from just joining blindly. They are very careful about liability. So having some sort of liability insur-

ance for micro-entrepreneurs would be, if I were an insurance company, something I would seriously look into because Airbnb, who is kind of been around for a while, since 2008, they do not offer liability insurance. So just so that is on the record. On their website they say that you have to protect yourself from liability.

Mr. LUETKEMEYER. Ms. Stevens.

Ms. STEVENS. Our biggest issue is local regulators and viewing these—what we really believe is an information and technology platform in an online marketplace in the lens of a traditional taxi or a commercial carrier. So while we have made good progress with regulators in California and here in the District of Columbia who are willing to look at this in a different lens, the Seattle City Council has reacted quite aggressively and with the express and stated purpose of protecting incumbent taxi drivers. So it is really about competition and protecting the status quo in some local municipalities, which we think does not benefit the consumer. So that is our largest hurdle. We were shut down in New York and Philly and Austin by local regulators.

Mr. LUETKEMEYER. I assume that you are probably not too capital intensive so you probably do not need lots of funding, but do you have any access to credit problems from the standpoint that you are a startup company and you are doing something that is unique, never been done, or has not been done very much anyway? Do you find that to be a problem?

Ms. STEVENS. We are the traditional startup with VC backing. We have not experienced limitations in that way, the way that maybe a traditional small business would going to a bank, asking for a loan, so I cannot say that we have suffered that. But the challenge here is proving that this can work in a way that is cash flow positive.

Mr. LUETKEMEYER. Mr. Mond, have you had any problems with that?

Mr. MOND. We are even less traditional of a startup because we are bootstrapped, meaning we pay for our own way through other means.

Mr. LUETKEMEYER. Okay. To attract people to list their tools with you, how much marketing do you do? Do you have somebody that goes out and contacts all these people or do you just have a mass mailing? How do you do that?

Mr. MOND. So our main means of marketing this is actually going to the biggest Maker Faires that we can find. There is where it is our biggest bang for our buck. So Maker Faires are places where a lot of people congregate and they are all people that work with tools. And people just go nuts when we go there. But that is really our best way, just word of mouth.

Mr. LUETKEMEYER. How do you market your product then to the consumer? How do you market the product to your consumer?

Mr. MOND. What do we tell them or what is the vehicle?

Mr. LUETKEMEYER. How do people find out about you?

Mr. MOND. Mostly through word of mouth.

Mr. LUETKEMEYER. Word of mouth. Really?

Ms. Stevens.

Ms. STEVENS. For us, there is a lot of traditional social media advertising. So Facebook, Twitter, et cetera. Word of mouth is real-

ly important. So for any peer-to-peer marketplace, the secret is how do you crack virality? How do you get people to talk about your product, to share referral codes, to use it?

Mr. LUETKEMEYER. Are you on Craigslist? Will Craigslist have you?

Ms. STEVENS. We do have some ads on Craigslist to attract drivers.

Mr. LUETKEMEYER. Wow. Fantastic.

I will stop right there, Mr. Chairman. Thank you very much.

Chairman GRAVES. Ms. Herrera Beutler. And welcome back. We have been thinking about you and your baby.

Ms. HERRERA BEUTLER. Thank you very much.

Ms. Stevens, I was really intrigued. I am from Washington State. I was intrigued to hear you say that the City of Seattle focused a little bit more on what it sounds like protecting a certain subset of—I guess I do not know if it would be workers or owners—taxi drivers versus the entire commuting population of a very busy city with a lot of really bad traffic. And it sounds like you have experienced—because when you were talking about it I thought, well, similar with 1000 Tools, go to a big city. It does not surprise me that 1000 Tools works well here in D.C. People do not have a lot of space to store stuff. They do not want to invest in going to buy a bunch of tools. I have been in this place myself. My car broke. We had serpentine belts. We had to go buy some big weird tool, like this big, that was more than the belt that we will never use again. And then I think we left it somewhere because it is like I do not have room for this.

So that does not surprise me when I think about your services. You are going to look in the big cities. And it sounds like several of them have created either a regulatory barrier or almost kind of, I do not know, I think you described it as defending the status quo which to me is just absolutely nuts because congestion in some of these cities is some of our biggest problems. So why would you not want to develop this system?

I actually was in the state legislature when someone brought up slugging. And having been back here I said, "Hey, slugging is a good option for us." How could we help with that? I mean, do you see that as just kind of protectionism? Is it education? I mean, how could we help?

Ms. STEVENS. I absolutely agree. We are flabbergasted by it. And our goals, and this is why we have always included destination, passengers entering their designations because we want to get to true ridesharing. And there is this idea with perhaps some of our competitors that suggests that this is really just quasi-tax. And so it is education. It is also signals that you all can send to your home states about the importance of this and the potential. But it is really about fostering innovation and waiting for, not cutting off before we can achieve all of the potential that I mentioned in my opening remarks about reducing congestion, reducing strain on existing road infrastructure, and potentially reducing pollution.

Chairman GRAVES. I want to thank all of you for participating today. I really appreciate you taking the time out of your hectic schedules to come and help us understand better some of the peer-to-peer businesses out there and get your perspective on how these

are affecting our economy. Particularly when we have jobs that are so scarce, these new business are offering unique opportunities for individuals to monetize some assets and for entrepreneurs to pursue some really good ideas. But I do appreciate you all coming in.

We do have a series of votes coming up, so the timing ended up being just about right.

I would ask unanimous consent that members have five legislative days to submit statements and supporting materials for the record. Without objection, that is so ordered. And with that, the hearing is adjourned. Thank you.

[Whereupon, at 1:59 p.m., the Committee was adjourned.]

APPENDIX

Peer-to-Peer Businesses and the Sharing (Collaborative) Economy:

Overview, Economic Effects and Regulatory Issues

Arun Sundararajan

Professor and NEC Faculty Fellow, NYU Stern School of Business

Head, Social Cities Initiative, NYU Center for Urban Science and Progress

Written testimony for the hearing titled, *The Power of Connection: Peer-to-Peer Businesses,* held by the Committee on Small Business of the United States House of Representatives, January 15th, 2014.

Chairman Graves, Ranking Member Velázquez, and Committee Members, I am delighted to have been invited to speak to you about digitally-enabled peer-to-peer businesses. Thank you for convening this important hearing. More light needs to be shed on this promising new area, and I hope this is the first of many such hearings that contribute towards an understanding the economic impacts of peer-to-peer businesses, while facilitating changes to the regulatory framework that nurture this important and rapidly growing part of the economy.

To summarize: I believe that peer-to-peer business enabled by digital platforms will constitute a significant segment of the economy in the coming years. It is likely that this transition will have a positive impact on economic growth and welfare, by stimulating new consumption, by raising productivity, and by catalyzing individual innovation and entrepreneurship. Robust measurement of the economic impact of peer-to-peer businesses, and especially small businesses, is important, as is the possible refinement of existing economic measures so that they fully capture new forms of production, consumption and work facilitated by smaller peer-to-peer businesses. The current regulatory infrastructure can impede the growth of these businesses, in part because of misalignment between newer peer-to-peer business models/roles and older guidelines developed to mitigate safety concerns and economic externalities for the existing ways of providing the same or similar services. A path to lowering these barriers while ensuring that market failure is avoided could be to restructure the regulatory framework to address new issues raised by the expansion of peer-to-peer businesses, delegating more regulatory responsibility to the marketplaces and platforms, while simultaneously preserving some government oversight.

Overview

A classification all the different kinds of businesses in this new economy that is comprehensive and useful would make this section quite lengthy. Rather than attempting to be exhaustive, I provide

a few examples (along with a detailed discussion of the forces shaping peer-to-peer business) that will motivate the subsequent discussion about economic impacts and regulatory issues. More information about the 'sharing economy', the 'collaborative economy', or peer-to-peer commerce is available from a variety of sources [1].

First, let's distinguish between three different constituents: platforms (marketplaces), entrepreneurs (small businesses, micro-entrepreneurs) and consumers. The **platforms** are the person-to-person marketplaces which facilitate the exchange of goods and services between peers. The **entrepreneurs** are the individuals or small businesses that supply goods and services in these marketplaces. The **consumers** are the individuals who demand: buy, rent, consume. (Both the entrepreneurs and the consumers are often referred to as 'peers'.) Typically, the payment from the consumer to the entrepreneur is mediated by the platform, which often charges a commission to one or the other trading party.

For example, in the context of peer-to-peer accommodation: Airbnb and VRBO are platforms, an individual who offers living space for short-term rentals is the entrepreneur, and an individual who rents the living space from the entrepreneur is the consumer. In the context of peer-to-peer car rentals: Getaround and RelayRides are platforms, a car-owner who offers their vehicle for short-term rentals is the entrepreneur, and an individual who rents this vehicle from the car-owner is the consumer.

The forms of peer-to-peer business facilitated by the new platforms are of many kinds. I describe some of these (again, non-exhaustively) below [2].

(1) Repurposing owned assets as 'rental' services: These platforms create a marketplace for the provision of asset-based *services,* often generating new labor opportunities for individuals who are not professional providers. Many of these services bear a resemblance to those that have historically been provided by more 'traditional' business. For example, the platform Airbnb allows individuals to become entrepreneurs who offer part or all of their living space to their peers as short-term accommodation (a service traditionally provided by different kinds of hotels). The platforms RelayRides and Getaround allow car owners to become entrepreneurs who offer their vehicles to their peers as short-term car rentals (a service traditionally provided by car rentals companies like Hertz and Avis). The platforms Lyft and Sidecar allow people who own and drive their cars to offer short-range (and sometimes, point-to-point) ridesharing or chauffeured urban transportation (a service traditionally provided by taxicabs and limousine services).

Often, the emergence of these peer-to-peer platforms increases the scale and scope of small business that is traditionally local. For

[1] Detailed early discussions are in Rachel Botsman and Roo Rogers, What's Mine Is Yours: The Rise of Collaborative Consumption (Harper Business, 2010), or Lisa Gansky, The Mesh: Why the Future of Business is Sharing (Portfolio Trade, 2010). For more recent and succinct discussions of definitions, drivers and business implications, see Arun Sundararajan, From Zipcar to the Sharing Economy (Harvard Business Review, 2013), or Rachel Botsman, The Sharing Economy Lacks a Shared Definition (Fast Company, 2013).

[2] A evolving directory of different peer-to-peer, sharing and collaborative businesses and platforms is maintained at http://www. collaborativeconsumption.com/directory/

example, the platforms Eatwith and Feastly allow entrepreneurs to offer 'social dining' services where a small group of semi-anonymous peers dine on a meal prepared by the entrepreneur at his or her home (historically provided by informal 'supper clubs').

In other cases, the platforms create a new category of commerce that converts an informal peer activity into a business. For example, the platform 1000tools.com facilitates the short-term rental between peers of power tools and equipment that a consumer would traditionally purchase (or borrow from a neighbor). The platform SnapGoods allows individuals to offer short-term rentals of their household appliances (like vacuum cleaners) to others (who would traditionally either buy the asset themselves, or borrow it from a friend/neighbor).

(2) Professional service provision: These platforms create a new channel for existing providers of different services, often expanding their business opportunities in a way that allows individuals to become entrepreneurs rather than working with a traditional organization. For example, the platform Uber allows professional drivers (entrepreneurs) to offer point-to-point chauffeured urban transportation to consumers. The platform Kitchit allows professionally trained chefs to become entrepreneurs who prepare meals in the kitchens of their consumers.

(3) General-purpose freelance labor provision: These platforms create new marketplaces for different kinds of freelance labor. For example, the platform oDesk allows a variety of technology professionals, translators and writers to find work[3]. Some other platforms like TaskRabbit and FancyHands are more closely associated with the creation of new categories of freelance work.

(4) Peer-to-peer asset sales: These platforms create marketplaces that allow entrepreneurs to sell goods directly to consumers. Some of these platforms, like eBay, have been operating for over a decade, and are more closely associated with peer-to-peer trade of traditional retail items, thus facilitating entrepreneurship in retailing. Other platforms, like Etsy, have emerged more recently, and are more closely associated with expanding peer-to-peer trade of items which do not have mass-markets, thus facilitating entrepreneurship in both manufacturing and retailing.

Two other categories of peer-to-peer businesses that require a different (and dedicated) economic impact and regulatory discussion are peer-to-peer education (including the provision of education and training by individuals directly to groups of others over platforms like Skillshare and Udemy), and peer-to-peer finance (including the provision of venture funding by individuals to others over platforms like Kickstarter, Rockethub and Indiegogo, or of peer-to-peer lending over platforms like LendingTree).

The new peer-to-peer businesses frequently involve new ways of providing familiar and "real world" services, like short-term accommodation (Airbnb, Couchsurfing), urban transportation (Lyft, Sidecar, Uber) and venture financing (Indiegogo, Kickstarter,

[3] The distinction between (2) and (3) is often not clear-cut. I make the distinction because providers on the marketplaces in (2) are more likely to be thought of as entrepreneurs rather than as contract or freelance workers.

Rockethub). This distinguishes them from many other disruptions of business that have been caused by digital technologies over the last two decades.

It is also worth pointing out that there are a number of new "rental" business models that, while not peer-to-peer, are associated with the 'sharing economy'. Some are in markets which have traditionally had rental markets: for example, Zipcar offers short-term flexible rentals while maintaining ownership over a fleet of cars; BMW's 'Drive Now' offers on-demand access to vehicles without the need to buy them. Other companies, like Rent the Runway (which offers short-term rentals of high-end apparel), are creating rental markets in new categories, which in turn, may stimulate peer-to-peer business in these categories.

A number of factors have led to the development of this new economy. I summarize a few of the key drivers below.

(1) The consumerization of digital technologies: In the 1980's and 1990's, innovation in digital technologies was driven by the needs of business and government; the needs of consumers were generally an afterthought, met by adapting technologies developed primarily for businesses into consumer products. However, over the last ten to fifteen years, we have witnessed the "consumerization" of information technologies, whereby radical innovation is driven by the needs of consumers rather than of businesses or government. (Social media and mobile technologies provide two recent examples.) This trend is pertinent because it is often the mass-market placing of the capabilities of these new digital technologies (powerful mobile computers, GPS technology) in the hands of millions of consumers that creates the possibility of digitally intermediated peer-to-peer business. It has also led to a growing familiarity[4]: with the idea of platform-enabled peer-to-peer exchange (initially of digital content) among consumers, as well as a greater level of acceptance of the idea of renting rather than ownership as a primary form of consumption (again, initially in markets for digital content)

(2) The emergence of "digital institutions": As a growing fraction of human interaction and exchange is mediated by digital technologies, we have witnessed the emergence of a number of different kinds of "digital institutions": digital technology-based platforms that facilitate economic exchange in the same way that economic institutions historically have done. For example, over the last 15 years, a digital 'reputation system' (which allows buyers and sellers to provide feedback about their transactions) has enabled semi-anonymous peers on the platform eBay to trade assets with each other without being physically collocated or having to relying on traditional business infrastructure. The digital rights management technologies of platforms like Apple's iTunes and Amazon's Kindle are, *de facto,* subsuming government-mediated intellectual property laws for digital music, video and books. Today, a wide variety of other digital identity verification, reputation and credit scoring systems (which often leverage the real-world social capital that mobile device usage, Facebook, LinkedIn and other social technologies

[4] I discuss these technological drivers in some more detail in The Sharing Economy (http://youtu.be/nOVjP59NSOo).

bring online) facilitate trusted economic exchange in hundreds of different peer-to-peer marketplaces.

(3) Urbanization and globalization: The U.S. is currently experiencing positive rates of urbanization, and there is also some evidence of a recent trend of migration to more densely populated metropolitan areas[5]. (Worldwide, both these trends are projected to be substantially more pronounced than in the US: the UN estimates that by 2050, the global urban population will double, and about 70% of the world's 9.3 billion people will be city dwellers). Cities are already natural "sharing economies"—the space constraints and population density of urban living favors consumption that involves access to shared resources over asset ownership. Urban residents have shared their assets and space informally for centuries, but innovative network technologies and social tools have made co-producing, lending, trading and renting assets cheaper and easier than ever before—and therefore possible on a much larger scale.

(4) Ecological and resource considerations: Many 'sharing economy' business models facilitate more efficient use of natural and other physical resources. Over time, people's desire to choose 'asset-light' forms of living that utilize fewer resources and lower their ecological footprint is likely to favor peer-to-peer sharing. Furthermore, the global pressure to rapidly create massive new urban infrastructure may induce city planners to adopt 'sharing economy' approaches less reliant on physical resources and more cost-effective than traditional approaches for managing growth and urbanization.

Economic Impacts of Peer-to-Peer Businesses

The expansion of peer-to-peer business that is being facilitated by these new platforms will have a number of economic impacts. The economic impacts stem from lower marketplace transaction costs; 'production' that is more efficient; a greater level of output being created from the same level of physical assets and labor; and the creation of production and exchange opportunities that were not previously possible. It also is likely that such platforms will be new engines for innovation by creating 'micro-entrepreneurship' opportunities that empower individuals previously constrained by employment at traditional corporations.

It is still too early in the evolution of this newly enabled peer-to-peer businesses to draw any robust empirical conclusions about whether their eventual economic impacts will have a positive effect on economic growth and welfare, although it seems very likely. During the next five years, ongoing measurement of the economic impact of peer-to-peer businesses, and especially small businesses over the next five years is important, as is the possible refinement of existing economic measures so that they fully capture new forms of production, consumption and work facilitated by smaller peer-to-peer businesses.

[5] The population in U.S. urban areas grew by about 30% between 1990 and 2010, accompanied by a growth in urban population density of about 10%.

The phrase 'sharing economy' often creates a misconception about these platforms and the businesses they enable. While some may facilitate sharing, they are typically not organized like food co-operatives or farmer collectives. Rather, they are grounded in simple free enterprise, individual property rights, external financing, trade-for-profit, market-based prices, and new opportunities for exchange.

Here is a discussion of some of the economic effects that are anticipated.

Expansion in consumption: The peer-to-peer businesses created by these new platforms are creating new consumption experiences of higher quality and greater variety that are likely to stimulate economic growth. It is thus very likely that the peer-to-peer business facilitated will not merely substitute old forms of commerce with new digitally enabled ones: they seem poised to grow the pie, rather than simply carving it up differently.

Productivity gains: The peer-to-peer businesses enabled by these new platforms can lead to more efficient use of physical capital by tapping into assets like real estate and automobiles that are not being fully utilized. They also draw on underutilized human capital: people supplementing their full-time jobs with extra work as Airbnb hosts or Lyft drivers, professional providers who find more employment via platforms like Uber, TaskRabbit and Kitchit. Technological change that generates more output from the same capital, or that facilitates more efficient usage of labor, increases productivity. A consistent historical pattern associated with this kind of producitivity-enhancing technological change is that in the long run, it typically leads to economic growth.

Entrepreneurship and innovation: There is very little doubt that the peer-to-peer business facilitated by new platforms will lead to an expansion in entrepreneurship and innovation. The creation of these platforms allows society to tap into abilities and aspirations that individuals have which would have otherwise not been realized (Etsy and the "maker movement" being prime examples). For many individuals, the relatively low-risk micro-entrepreneurship allowed by peer-to-peer business may be the first step to broader entrepreneurship, perhaps an "on-ramp" of sorts to freelancing or starting an independent business, by generating supplemental income, extending expertise and creating a broader professional network. The extent to which this will stimulate the creation of larger traditional businesses, and their ensuing economic impact, is an empirical question. However, there is very likely going to be a short-term rise in the number of freelance workers and sole proprietorships.

The emergence of 'invisible work': The peer-to-peer business facilitated by new platforms shifts labor from more narrowly specialized activities to a broader range of activities. Although many entrepreneurs work full-time to provide the services they supply, many do not. Moreover, many of this latter set are engaged in labor that does not reflect their primary skills. Thus, it is quite likely that the "work" that is being created by peer-to-peer businesses is not being fully measured by government employment sur-

veys[6]. As peer-to-peer business starts to constitute an increasing fraction of the economy, it seems important that these be updated to reflect work that is not considered by the worker as traditional "employment".

Shifts in asset markets: The creation of new peer-to-peer rental opportunities has a number of effects on the extent to which people purchase manufactured goods. For simplicity consider the example of peer-to-peer car rentals. The increased availability of short-term rentals is likely to expand overall consumption because consumers have access to a broader range of driving options (relative to when they were constrained to driving the car they owned). Some of these consumers will choose not to purchase their own vehicles, which lowers car sales. However, others who might not have made a purchase might now be induced to buy a vehicle because the supplementary income opportunities offered to them by the peer-to-peer rental marketplace facilitates making otherwise unaffordable car payments. The net effects (which bear some resemblance to those induced by secondary markets) are not immediately clear.

A brief discussion of some regulatory issues[7]

The platforms and businesses associated with the new forms of peer-to-peer businesses described earlier seem to face regulatory hurdles more frequently than one might expect from new technology businesses or small entrepreneurs. In part, this is due to a misalignment between newer peer-to-peer business models/roles and older guidelines developed with existing ways of providing the same or similar services in mind. For example, an entrepreneur ('host') who provides short-term accommodation occasionally via a platform like Airbnb is not a traditional 'hotelier'. Similarly, individuals who occasionally offer rideshares via a platform like Lyft or Sidecar are not traditional 'taxi drivers'.

The creation of new kinds of services has also been accompanied by new questions of liability, and the need for the creation of new forms of insurance: in particular, when assets owned by peers are now commercially "rented" to other peers for payment. For example, the platforms RelayRides and Getaround have created entirely new insurance products that cover entrepreneurs and consumers in the peer-to-peer rental marketplace.

Regulatory uncertainties and concerns about liability can impede individuals from pursuing otherwise productive and profitable peer-to-peer business opportunities. (In a recent example, the New York State Attorney General has subpoenaed information about the 15,000 or so Airbnb hosts operating in New York. This had led to many discussions about whether Airbnb is "legal" in New York, and it is quite likely that this situation has caused many potential entrepreneurs to become hesitant about being providers via this platform.)

[6] For a more detailed discussion on this point, see Emily Badger, The Rise of Invisible Work (Atlantic Cities, 2013)

[7] There are a distinct set of regulatory issues associated with peer-to-peer finance, and with peer-to-peer education, which are not covered as part of this testimony.

Existing federal "safe harbors," like those under the Digital Millennium Copyright Act that limit the liability of digital intermediaries for illegal activity conducted via their platforms, are likely to help nurture the evolution of peer-to-peer business platforms a little. However, by themselves, they are an insufficient solution to today's regulatory barriers to peer-to-peer business. In particular, the central issue here concern what constitutes legal peer-to-peer exchange. A platform cannot "take down" illegal providers unless there are clear and accepted definitions about what constitutes legal trade.

Typically, government intervention is necessary when it is required to ensure consumer safety, or to avoid *market failure*—the inability of a marketplace to facilitate trade that would be good for society, or to facilitate the provision of something society deems necessary. In thinking about how one might lower regulatory barriers for peer-to-peer business, I would suggest pursuing a path that delegates more regulatory responsibility to the marketplaces and platforms.

- The interests of the platforms are well aligned with facilitating safe and profitable peer-to-peer trade (since their revenues are directly linked to the volume and continued growth of such trade). The platforms are also better positioned to 'take action' against infringing entrepreneurs and consumers (for example, by simply disconnecting them from the platform).
- As discussed earlier in this document, the platforms that facilitate peer-to-peer business have created a wide variety of digital identity verification, reputation and credit scoring systems, often leveraging the real-world social capital that mobile device usage, Facebook, LinkedIn and other social technologies have digitized. These 'trust mechanisms' currently facilitate economic exchange in hundreds of different peer-to-peer marketplaces, and may play a significant "preventive" role that historically has required government oversight[8].
- New forms of technology-mediated peer-to-peer business are likely to continue to emerge rapidly over the coming years. It would strain the government's resources to be constantly monitoring and correcting regulatory misalignment across a wide variety of industries.

However, this does not imply that the new peer-to-peer marketplaces should be completely unregulated. There are, potentially, safety and equal access concerns that the market may not self-provide. Further, the newness of many peer-to-peer businesses is bound to raise new regulatory issues. (A recent example related to liability for accidents between fare-paying rides for a driver who connects and disconnects frequently from an urban transportation platform.) Some level of government oversight seems necessary, certainly until there is enough data about the extent to which the platforms can prevent market failure by themselves, and enough data about any new safety or liability issues.

[8] For further discussion on this point, see Balancing Innovation And Regulation In The Sharing Economy (TechCrunch, 2012)

A historical example that might be instructive in this regard is the 1934 Securities and Exchange Act (and its numerous subsequent amendments), which requires securities exchanges to operate as self-regulating organizations (SROs) with oversight from the Securities and Exchange Commission. While the nature of peer-to-peer trade on the newer platforms discussed in this testimony has complexities different from those associated with trade of financial securities, the structure—of creating a set of SROs with federal government oversight—seems like one that is worth exploring further.

TESTIMONY OF ELIZABETH STEVENS, ASSISTANT GENERAL COUNSEL OF SIDECAR TECHNOLOGIES, INC.

BEFORE THE HOUSE COMMITTEE ON SMALL BUSINESS

"THE POWER OF CONNECTION: PEER-TO-PEER BUSINESSES"

JANUARY 15, 2014

On behalf of Sidecar Technologies, Inc., I would like to thank the House Committee on Small Business and Chairman Graves for the invitation to speak on peer-to-peer ("P2P") businesses and ridesharing. On behalf of Sidecar Technologies, Inc. ("Sidecar"), a peer-to-peer ridesharing company, I respectfully submit this testimony to assist in understanding how modern ridesharing as a peer-to-peer business works and the significant and varied benefits its offers governments, communities, and citizens.

Overview of Sidecar Mobile App

Sidecar is a ridesharing, or carpooling, information service that enables members to exchange information via the Sidecar smartphone mobile application ("app") with other members to enable ridesharing in privately owned vehicles. Sidecar was founded over a year ago on the idea that private individuals would be willing to fill empty seats in their private vehicles with other private individuals seeking a ride with similar starting and destination locations. Sidecar enables carpoolers or ridesharers to find ride matches with greater convenience, security, and efficiency through its interactive app.

Sidecar is only the provide3r of the software and the operator of the technology platform that facilitates this peer-based exchange of information leading to a ridematch. In other words, Sidecar does not own the vehicles that are used to rideshare. Sidecar does not employ or control drivers or riders. Sidecar does not dictate hours, schedules or shifts for drivers, nor does Sidecar dispatch drivers to pick up riders. Rather, through the app, people choose to share carpool in a safer, more convenient, and more dynamic way than other electronic networks for carpooling and ridesharing, such as Craigslist or company bulletin boards.

As a trust and safety service to its users, Sidecar facilitates driver criminal background checks consistent with federal and state laws, which screen for sex offenses, DUIs, reckless driving and other criminal convictions, and bars any driver with the enumerated offenses from participating on the Sidecar platform. Sidecar also requires prospective drivers to provide proof of a current and valid drivers' license, proof of valid personal automobile insurance as required by state law. Sidecar additionally provides a commercial liability policy that covers passengers and third parties for up to one million dollars per occurrence.

The Sharing Economy

To understand the importance of Sidecar in the modern economy, a discussion of the "sharing economy"[1] and the history of ride-sharing is informative. Sharing personal assets is not a new concept; however, new technologies are facilitating the emergence of new sharing economy that enables peer-to-peer exchanges and the efficient use of underutilized assets. Other companies that are part of this sharing economy include eBay (matches sellers of goods with buyers), couchsurfing.com (matches travelers with available couches to "crash" on), AirBnb (allows home owners to share their empty rooms or homes), and TaskRabbit (matches handyman and deliverymen with individuals in need of limited support).

In this new economy, "asset owners use digital clearinghouses to capitalize the unused capacity of things they already have, and consumers rent from their peers rather than rent or buy from a company".[2] Or as Lisa Gansky, author of the *Mesh: Why the Future of Business is Sharing,* explains "[w]e're moving from a world where we're organized around ownership to one organized around access to assets."[3]

This technology-led sharing economy, of which shared transportation is just one segment, is growing rapidly, and, despite general economic slow-down in other sectors, the United States is poised to become a global leader in this enterprise. According to a recent *Economist* article, Rachel Botsman, a leading expert on the sharing economy, estimates that just one segment of this sharing economy, the peer-to-peer rental market, is worth at least $26 billion.[4] The shift to such collaborative consumption benefits owners, renters, companies and the wider society for several reasons:

> Owners make money from underused assets. Renters, meanwhile, pay less than they would if they bought the item themselves. And there are environmental benefits too: renting a car when you need it, rather than owning one, means fewer cars are required and fewer resources must be devoted to making them.[5]

As consumer and cultural patterns shift to broader participation in the sharing economy, established veterans in technology and e-commerce are forecasting significant change for existing businesses and for the economy at large. According to eBay's chief executive officer, John Donahoe, often "these businesses and entrepreneurs are portrayed as disrupters," but "[i]n many ways, you're empowering individual consumers to get what they want" and "empowering human beings to be able to create jobs."[6]

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[1] In addition to sharing economy, terms such as "collaborative consumption", "distributed capitalism" have been used. *See, e.g.,* Zuboff, Shoshanna, "Creating Value In The Age Of Distributed Capitalism", *McKinsey Insights,* September 2010, *available at http://www.mckinsey.com/insights/strategy/creating_value_in_the_age_of_distributed* (last accessed January 11, 2014).

[2] Geron, Tomio, "Airbnb and the Unstoppable Rise of the Share Economy", Forbes, January 11, 2013, *available at* http://www.forbes.com/sites/tomiogeron/2013/01/23/airbnb-and-the-unstoppable-rise-of-the-share-economy (last accessed January 10, 2014).

[3] *Id.*

[4] "The Rise of the Sharing Economy", *The Economist,* March 9, 2013, *available at* http://www.economist.com/news/leaders/21573104-internet-everything-hire-rise-sharing-economy (last accessed January 10, 2014).

[5] *Id.*

[6] Kramer, Katie, "Take a seat with Rising Stars of the Sharing Economy", CNBC.com, April 24th, 2013, *available at* http://www.cnbc.com/id/100668331 (last accessed May 6, 2013).

The sharing economy model addresses this cultural and economic change by delivering greater efficiencies with fewer environmental impacts, while creating a more interconnected community. Substantial literature and research suggests that sharing economy companies have great potential to support important federal and state policy initiatives and produce demonstrable, beneficial change that will improve individuals' daily quality of life, particularly in crowded urban areas. From housing to transportation to parking, the sharing economy marries the best of capitalist enterprise with societal and environmental consciousness.

Sharing economy companies, like Sidecar, are leading this wave of innovation, producing important changes in consumer behavior and consumption. This shift will be as profound as the Internet revolution that preceded and enabled it. Sidecar has the potential to create cascading social benefits by making car ownership and consumption more efficient, both financially and environmentally.

Ridesharing

Nowhere are the benefits of collaborative consumption more apparent than in the transportation sector. While carpooling and ridesharing have existed for decades, the shift towards cultural acceptance of peer-to-peer commerce and asset sharing between strangers has accelerated mainstream adoption of ridesharing.

Since the 1940s, federal, state and local governments in the United States, as well as non-profits and companies, have sponsored, funded, and managed carpooling and ridesharing networks to achieve critical and economic and social goals, including reducing energy consumption, environmental impact, commuting costs, and traffic and parking congestion. In the last thirty years, government-sponsored regional programs shifted, focusing on reducing traffic congestion and pollution, mainly by creating employer-sponsored vanpool incentives, including federal tax credits. With the advent of the Internet, this ridesharing evolved from telephone-based ridematching to online ridematching services. Today, federal, state, and local governments continue these carpool and vanpool initiatives to ease traffic congestion, reduce pollution, and reduce dependence on foreign oil.

Although federal, state, and local governments have expended resources to develop ridesharing, sustained successes have been scarce. The academic and government literature documenting these programs demonstrate that the majority of ridesharing programs are limited in scope or temporary.[7] This is because the ridesharing market, like many markets, benefits from economies of scale. Numerous studies have concluded that sustained ridesharing success is dependent on developing a "critical mass" of participants.[8] To transition from "casual carpooling" based primarily on repeated, common commutes to a more "dynamic" model focused on spontaneous trips, ridesharing demand must be stimulated.

[7] *See, e.g.,* John A. Volpe National Transportation Systems Center, "Ridesharing Options Analysis and Practitioner's Toolkit", Department of Transportation, Federal Highway Administration, December 2010.

[8] "Critical Mass", available at dynamicridesharing.org, (last accessed January 10, 2014).

The success of any ridesharing model depends on developing a critical mass of ridesharing economy participants, as discussed above. Most fledgling ridesharing trials have failed because they did not achieve the critical mass of users to sustain a dynamic ridesharing model. More plainly, if the number of participants is not high enough to support consistent and good ridesharing matches, riders will not continue using the system.[9]

Researchers have identified several barriers to achieving a critical mass of ridesharing participants: safety concerns; lack of comfort with technology; a preference for other modes of transportation such as conventional carpooling programs; and a basic lack of awareness of dynamic ridesharing programs. Study results found that major obstacles, however, appear to be a lack of perceived incentives such as savings in costs and time and a fear that a ridematch will not be available, leaving potential ridesharers stranded on the return commute.[10]

With the recent introduction of mobile, location-based services and real-time matching capabilities, there is a historic opportunity to accelerate the broad-based adoption of ridesharing, thereby producing large-scale public benefits. Regulatory frameworks and enforcement, having already long supported ridesharing goals, should support, not hinder, this opportunity.

[9] Deakin, Elizabeth, Karen Trapenberg Frick, and Kevin M. Shively "Markets for Dynamic Ridesharing?: Case of Berkeley, California,", *Transportation Research Record: Journal of the Transportation Research Board,* No. 2187, Transportation Research Board of the National Academies, Washington, D.C., 2010, pp. 131–37, at 131–32.

[10] *Id.*

Testimony of Alan Mond

CEO of 1000 Tools Inc

House Committee on Small Business

"The Power of Connection: Peer-to-Peer Businesses"

Wednesday, January 15, 2014

Chairman Graves, Ranking Member Velázquez and members of the committee, I am Alan Mond, CEO of 1000 Tools, and I'm very grateful for the opportunity to speak with you regarding our peer-to-peer sharing business.

1000 Tools is an online platform that enables people to rent tools from each other. Our latest product allows local governments to rent underutilized equipment to one another, which we'll get to in a minute. We are based in Ann Arbor, Michigan and it is an honor for me to be here today.

I come from a family of tinkerers and the idea for 1000 Tools came when I had to replace the timing belt on my 1995 Ford Probe. I had the willingness to do it myself, but not the right tools for the job. My solutions at the time were to:

- buy the tools outright - expensive and clutters your living space
- borrow from friends - don't' have the right tools, can erode friendship

So I thought:

1. Does anyone else have this problem?
2. Wouldn't it be nice if I could access a large network of tools to rent on a short term basis?

We built 1000tools.com and launched June 2013 to test this hypothesis. Our website offers a secure interface for tool renters to pay with a credit card and tool owners to get funded via direct deposit. Prices are set by the tool owner, competing directly against established tool rental stores. Tool exchange happens locally, in person - no shipping required.

1000 Tools provides Americans the opportunity to become micro-entrepreneurs using assets they already own. This new generation of collaborative consumers and micro-entrepreneurs live in an ecosystem called the sharing economy and it has crossed the chasm into mainstream adoption. As an example, Airbnb, the online marketplace for listing and booking short-term housing accommodations, announced in June 2012 they reached their 10 millionth booking. This competes head to head against the largest hotel chains in the country.

Most of our users are early adopters, who have participated in other areas of the sharing economy. However, concerns about liability and property damage are still predominant barriers to mass

adoption. Additionally, there are very few insurance companies that are familiar with this type of exposure to offer liability insurance for micro-entrepreneurs.

Due to the nature of our rental transaction technology, we decided to search for a customer segment which would already have liability covered by insurance. This is when we found a really interesting niche.

3 months ago, we started focusing on local government equipment sharing. After interviewing 30 municipalities in the southeastern Michigan region, we discovered an incredible gap. Large municipalities have expensive equipment that is underutilized and small municipalities tend to rent at a high premium rate instead of purchasing equipment. I interviewed 30 city managers about their equipment needs, and 70% were very eager to try out a prototype.

With this information in hand, we retooled our existing technology to cater to municipalities, and created MuniRent. MuniRent allows different levels of local government to rent out equipment to each other.

Some may ask why aren't municipalities dong this already? As with most areas of local government, resources are limited. It takes a lot of resources for a municipality to set up a rental agreement and maintain some sort of catalog, let alone keep track of invoicing, hours, maintenance records, etc. We provide a vetted round-table agreement between the different municipalities and handle all the details, including insurance verification, payment and invoicing. All of this is available through an easy-to-use website and mobile app.

Our journey began by building a peer-to-peer tool rental marketplace. We now look forward to welcoming municipalities as the newest members of the brave new sharing economy.

Written Testimony of Philip Auerswald

Associate Professor of Public Policy

George Mason University

U.S. House Committee Small Business

United States House of Representatives

January 15, 2014

Chairman Graves, Ranking Member Velázquez, Members of the Committee, I appreciate the opportunity to share with you this afternoon some thoughts on the economic context for peer-to-peer business models.

In 1988, a quarter century ago, I drove a stranger's Nissan Sentra from Washington, DC, to Seattle, WA. In the process I earned $250, with the added bonus of moving both myself and my stuff across the country. The vehicle's owner made out well too; she got her car transported 3,000 miles for less money than she would have had to pay for a commercial service, and certainly at a lower opportunity cost of time than she would have incurred if she drove the care herself.

Peer-to-peer. Win-win.

This personal anecdote is intended to support my first point, which is that peer-to-peer businesses were around long before the Internet. Indeed, there was a time in this country and elsewhere in the world (roughly until the end of the 19th century) when the peer-to-peer economy *was* the economy. Large corporations providing consumer services simply did not exist. Regulation governing consumer services was minimal. People provided services on a personal basis to other people who were very much like them. There were no call centers, no focus groups or strategic planning retreats. The archetypal entrepreneur hung up a shingle on Main Street. While not to be taken literally, this image correctly reflects a world in which barriers to entrepreneurial entry were very low.

Markets in the 19th century and earlier were not the anonymous and abstract entities they sometimes appear to be today. They were physical spaces where people met to exchange items that, in many cases, they themselves had created or harvested. This of course is what markets are fundamentally about: realizing the productive possibilities of *people*.

At its human core, then, the peer-to-peer or "sharing" economy is not a new phenomenon. Were Alexis de Tocqueville to write about the United States of today he likely would see a distinctly American character in the peer-to-peer businesses such as Sidecar and 1000Tools. The question is, therefore, whether there is anything fundamentally new about the sorts of peer-to-peer businesses

that have been proliferating in the past five years. The answer is yes. The difference between the past and the present is the platforms over which people find one another, conclude transactions, and establish reputations.

The triad of revolutions in computation, communications, and algorithmic power that have unfolded over the past half-century have, as we have been hearing, dramatically lowered the costs of finding the provider of a service, assessing their reliability, and concluding a contract to engage their services.[1] Two decades ago, the first Internet commerce companies brought consumer markets into new "virtual" spaces. Companies like eBay and Amazon (via Amazon Marketplace) made it newly possible for regular folks to find and exchange goods across large distances. Peer-to-peer businesses employ the same sort of powerful platforms to enable the exchange of services. Since services make up more than 84% of the economy, this is a big deal.

My colleague Lisa Gansky, author of *The Mesh* and cofounder of the photo-sharing site Ofoto, illustrates the popularity of peer-to-peer business models by comparing the Intercontinental Hotel chain with the room-sharing site Airbnb. Intercontinental Hotels have been around for 62 years, and they have an inventory of 650,000 hotel rooms of which they own 100%. In contrast, Airbnb has been around for five years and has an inventory of 500,000 listings, of which it owns 0%. This means that Airbnb has unlocked latent assets comparable to 62 years of cumulative investment within the corporate world, and it has done so with essentially no capital outlay beyond its investment in the platform itself.

In 1988, when I took the trip in the Nissan Sentra to which I alluded at the outset, the costs of finding a car-sharing match were sufficiently large that the relevant peer-to-peer services were limited to trips across the country. Today, costs have dropped to the point that using peer-to-peer car-sharing services makes sense for trips across town or down the street.

Participants in peer-to-peer marketplaces are clearly drawn by the straightforward gains from trade that are made possible by lower search and transactions costs. Simply put, buyers pay less than they would without the service, and sellers earn more—if only because they often would not be able to bring their service to market without the peer-to-peer platform.[2] Furthermore, buyers have access to previously unavailable options in the marketplace, while sellers have opportunities to diversify their sources of income and increase their financial resilience.

Buyers and sellers alike also report deriving a Tocquevillian satisfaction from participating in such markets.[3] They enjoy exchanging services on peer-to-peer platforms not just for the pecuniary

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[1] Butler, Patrick, Ted W. Hall, Alistair M. Hanna, Lenny Mendonca, Byron Auguste, James Manyika, and Anupam Sahay, "A Revolution in Interaction," *McKinsey Quarterly* no. 1 (1997): 4–23.

[2] See, for example, Etsy, "Redefining Entrepreneurship: Etsy Sellers' Economic Impact" (2010), https://www.etsy.com/blog/news/files/2013/11/Etsy_Redefining-Entrepreneurship_November-2013.pdf

[3] See, for example, Sonari Glinton, "For Ridesharing Apps Like Lyft, Commerce Is A Community," National Public Radio: All Tech Considered (2013). http://www.npr.org/blogs/alltechconsidered/2013/11/14/245242805/for-ridesharing-apps-like-lyft-commerce-is-a-community

benefits they derive but also for the sense of connectedness they experience with others in a community. In some cases these communities are geographically defined, in others they are organized by areas of interest. Such connections themselves have economic value, as informal relationships built across social and geographical boundaries create what sociologists have come to term "weak ties," which can materially enhance the success of entrepreneurial ventures and other collaborative undertakings.[4]

Of course, new business models that gain market acceptance almost invariably invite challenges from incumbents. New peer-to-peer businesses are no exception. Wherever peer-to-peer platforms have gained traction across the country, regulatory challenges have followed. Invoking regulatory equity, for example, taxi drivers have sought to slow the growth of car- and ride-sharing services like Sidecar. Invoking consumer safety and production, hotel and restaurant owners, respectively, have sought to slow the growth of room-sharing services like Airbnb and the proliferation of food trucks in urban areas that has been accelerated by ratings platforms such as Yelp. These, of course, are largely local issues.

So what does all this mean for the formulation of policy at the federal level?

From the standpoint of the United States Congress, the peer-to-peer business models that matter are the ones we've not yet seen.

It is instructive to ask ourselves why we are focused today on local transportation, hospitality, food service, and the rental of consumer goods as the most significant domains of innovation in peer-to-peer business models. The reason, arguably, is that these are industries in which regulatory complexity is relative low. In contrast, there has been relatively little innovation of peer-to-peer business models within healthcare, energy, and education, where regulatory complexity is relatively high. These three industries together comprise more than a quarter of U.S. GDP. The greatest macroeconomic impact of peer-to-peer business models for the United States thus will be realized when we have established the training, certification, licensing, and auditing mechanisms at all levels of government that allow neighbors to earn their livelihoods by taking care of neighbors, and by providing power to their communities and offering validated, work-relevant training to people anywhere who seek expanded opportunities.

In more general terms, the bottom line is this: shared prosperity requires not only innovations that scale-*up* to create new wealth but also innovations that scale-*out* to create new opportunities.

Let me be very clear on this point. Much of my own work, as well as important research conducted over the past decade at the Kauffman Foundation in Kansas City with which I have been affiliated, is about the value to society of scale-*up* innovation—particularly via new entrepreneurial entrants. This research has demonstrated that the small proportion of new ventures that scale-up

[4] Granovetter, Mark S. "The Strength of Weak Ties," *American Journal of Sociology* 78, no. 6 (May 1, 1973): 1360–1380.

rapidly are responsible for a disproportionate share of value creation in the economy.

But here's the problem we've run into: while some scale-ups create a large number of new jobs, many do not. Companies like Apple, Google, Facebook, Instagram, and Twitter have all achieved valuations in the tens and even hundreds of billions of dollars, but they directly employ far fewer people per dollar of revenue than their Fortune 500 counterparts did a generation ago.

This is where peer-to-peer platforms come into play. By their very structure, peer-to-peer platforms scale-out success to reach tens of thousands, even hundreds of thousands, of people with opportunities to create viable livelihoods for themselves. They create new and enticing invitations to latent producers within the economy to employ their individual assets[5] and talents[6] to create new economic value.

The significance of peer-to-peer business models thus is not effectively measured by adding up the share of GDP they represent in terms of monetized transactions. These innovations in work are rushing in at the fringes of the advanced economies to fill the void left behind as large corporations continue to "lean up"—that is, to shrink their payrolls by employing algorithms and machines to perform routine tasks previously performed by people. As Gansky puts it, "We're in a period of exploration. While we might be looking at a relatively small magnitude of overall economic activity now in the peer-to-peer economy, it's happening at a time when all the tried-and-true industries are going through significant transformations." Steven Straus, former managing director of the Center for Economic Transformation at the New York City Economic Development Corporation, looks at the same phenomenon from the standpoint of service providers: "We currently have about three job seekers for every available job and 11 million people looking for work—so the growth of the sharing economy isn't surprising."

In the coming decades, the United States and other advanced industrialized economies will no sooner return to the routinized, manufacturing-centric economy of the 20th century than to the agrarian economy that preceded it. The issue is not whether new livelihoods based on peer-to-peer business models are better or worse than the Industrial Age jobs that are disappearing from large corporations. The real point is that when jobs are eliminated in the process of digital disruption, they will not be coming back in their old form. As that happens, we humans have no choice but to fall back on our fundamental social skill set: creating and sharing with one another. There is, however, one big difference: unlike our isolated ancestors of millennia past, Americans in this century are empowered by architectures of collaboration that allow for the creation of new and diverse livelihoods at unprecedented rates. Therein lies the potential of today's peer-to-peer economy.

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[5] See, for example, Lyft, Sidecar, and Airbnb.
[6] See, for example, Task Rabbit, Zaarly, and Mealku.

WRITTEN TESTIMONY OF JOHN ZIMMER,

CO-FOUNDER OF LYFT, INC.

TO THE HOUSE COMMITTEE ON SMALL BUSINESS

"THE POWER OF CONNECTION: PEER-TO-PEER BUSINESSES"

JANUARY 15, 2014

Chairman Graves, Ranking Member Velázquez, and members of the Committee, my name is John Zimmer, Co-founder and President of Lyft, Inc., and I want to thank you for the opportunity to submit these written comments about the peer-to-peer sharing economy.

Before my Co-founder, Logan Green, and I came up with the concept for Lyft, we were struck by a statistic that showed that 80% of the seats in cars go unused everyday. We were inspired to maximize the number of unused passenger seats by creating a model that would incentivize ridesharing and make the ridesharing experience safe, friendly, and efficient. The greatest challenge to making this a reality is developing a model that creates a reliable base for critical mass. That model is Lyft, and since the beginning of 2013, we have expanded to 20 new markets and shared over one million rides.

Our story is only one of many that show how ubiquitous the sharing economy has become, and how peer-to-peer platforms can maximize existing resources. In just a few short years, the sharing economy has become a $350 billion industry with over 100 million participants. Cities worldwide are looking to the peer economy to drive sustainability, affordability, and local economic activity. Trailblazers like Mayor Ed Lee in San Francisco and Mayor Greg Ballard in Indianapolis are leading the push for safe and innovative consumer choices for products and services that are needed and used everyday. These leaders also recognize the economic benefits of a free and fair market that embraces this innovation as an economic driver for their community. They know that towns and cities with active sharing economies are more favorable places for people to live, commute, and even start a company.

As is often the case with innovation, government must now identify its role in this conversation. The Federal Trade Commission (FTC) has recognized the value and consumer benefits of the sharing economy, and ridesharing networks in particular. The FTC has demonstrated their belief that state and local jurisdictions should not enact protectionist and anti-competitive laws around the emerging ridesharing industry. They have sent letters to municipalities and state agencies advocating for an open market and pro-business policies while still addressing public safety and consumer protection.

This is the type of leadership we need from our Federal government. We need the Federal government to encourage state and

local governments to embrace innovation, and to look past powerful special interests that seek to stymie the sharing economy's place in a fair and open market.

We believe that Congress, and this Committee in particular, will play a critical role in shaping the future of the sharing economy. In order to promote the innovation, entrepreneurship, and economic development that go hand in hand wit the sharing economy, state and federal legislators and regulators must do their part in supporting and fostering this rapidly growing segment of the economy.

Thank You,

Written Comments Submitted by John Zimmer, Co-founder and President of Lyft, Inc.

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