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

Overview, Economic Effects and Regulatory Issues

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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 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].

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[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).

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 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

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

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, 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) <u>The consumerization of digital technologies:</u> 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

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[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.

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 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;

[4] I discuss these technological drivers in some more detail in The Sharing Economy (http://youtu.be/nOVjP59NS0o).

[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%.

'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.

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 cooperatives 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.

<u>Expansion in consumption:</u> 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.

<u>Productivity gains:</u> 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 productivity-enhancing technological change is that in the long run, it typically leads to economic growth.

<u>Entrepreneurship and innovation:</u> 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.

<u>The emergence of 'invisible work':</u> 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 surveys[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.)

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

[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.

insufficient solution to today's regulatory barriers to peer-to-peer business. In particular, the central issues 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.

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.

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