

The Emergence of the Sharing Economy: Implications for Development

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ABSTRACT

With the spread of internet-based technologies, the sharing economy is emerging as a new and rapidly growing sector of the economy. This sector offers transformative potential for many other sectors of the economy, and possibilities for new economic activity and growth in the developing world. The sharing economy is a misnomer, as while there are possibilities for more cooperative economic approaches, the primary emphasis is on the reduction of transaction costs including the elimination of middlemen in sales between a good/service provider and a customer. In this introductory article to the special edition, we provide an overview of both the positive and negative potential for the contribution of the sharing economy to development. On the one hand, we find that the reduction in transactions costs and the low price of mobiles improves access to goods and services, and reduces the need for economies of scale for marginalized groups who lack access to capital and infrastructure. However, we point to the real obstacles that the poor experience in using internet-based platforms to start businesses or accumulate capital. We discuss the potential for labour substitution of traditional service providers, such as taxi drivers. In juxtaposition to some of its claimants, we find that the sharing economy changes the nature of institutional, regulatory and promotional challenges by the state and social groups, rather than reducing the need for them.

Keywords: Sharing economy, internet, development, transaction costs, cooperatives, bottom billion

In the contemporary moment, a new wave of companies is employing disruptive innovation through web-based platforms to facilitate new types of connections in the economy. These include Airbnb, which

connects renters to rooms; Zopa and M-Pesa, which use mobile platforms to connect lenders to borrowers; Kiva and Kickstarter, which facilitate crowdfunding, whereby anyone can invest in entrepreneurial or creative activities; Uber and Lyft, which allow car owners to act as taxis; and Bla-Bla car which allows drivers to find people willing to pay for a ride from one city to another. Similarly, sites like Amazon's Mechanical Turk connect users with short-term home-based work, such as computer programming or filling out surveys. These instances are part of a shift toward networked brokerage services that leverage data streams and internet infrastructure to reduce transaction costs and mobilize idyll capacity.

What all of these companies have in common is the use of an internet-based aggregator which brokers relations and payments between those seeking goods and services and those willing to provide them. This innovation greatly reduces the transaction costs involved in connecting service providers with users. It allows buyers and sellers who previously had no or limited ability to connect with each other; it reduces information uncertainty and increases knowledge, particularly through customer review and details about products and services, and it reduces the costs of negotiating through reducing communications costs. In turn the revolution creates a new business model that not only challenges traditional "bricks and mortar" companies, but also generates new types of relationships between "workers" and "employers" and between "regulators" and "companies." The backbones of this disruption are evidently the technological breakthroughs of the internet economy, including electronic payments and ubiquitous access to information and communication through mobiles.

Celebrated writers such as Rifkin (2014) see the sharing economy as part of a transformative breakthrough toward a prosperous "zero margins" production economy, where a "global Collaborative Commons" will soon be constructed, "marginalizing capitalism." The result, according to some authors, is the possibility for far more decentralized economic production, in which many participants' small contributions can be aggregated easily, including those not motivated by profit, such as open software and Wikipedia, hence the term "sharing economy" (Benkler, 2004). Some authors go even farther, suggesting that the sharing economy reflects in part a desire toward either "anti-consumption" or "pro-social" consumption that will lead to greater sustainability (Albinsson & Perera, 2012). Yet, sharing economy initiatives have been around for a long time, such as time-share ownership of vacation properties, local economic trading systems, ride-sharing arrangements and the like. So the revolutionary potential of this new model is not entirely clear.

At first glance, the advantages of this new model seem obvious. Brokerage arrangements are shared by a large group of users, which reduces costs and distributes risks. This happens with very little need for communication between participants, which reduces the possibility for collective action problems. These systems also introduce a series of society-wide efficiencies. For example, they create opportunities for those who cannot afford the capital costs of ownership, and ensure that material assets are used to maximum capacity. Meanwhile, socially held infrastructure, such as roads, may also be used more efficiently, creating costs savings and sustainability gains. For instance, privately held autos are used only a fraction of the time by commuters. Zipcars, on the other hand, create efficiencies in automobile use, support individuals who may not have access to mass transportation, and reduce strain on public assets, all without any need for public investment. Sharing economy services can also support labor flexibility; individuals with part-time availability, such as stay-at-home moms, can work at times that are convenient to them. Some workers, such as artisans, may also be able to differentiate their work and reach a wider market through these channels. Thus, we can move to an economy that is more customer-centric, where individual demands for products and services can be tailor-made. This is analogous to the shift from cable TV to on-demand services such as Netflix. Projecting into the future, as investments in hard assets becomes less and less important, we may see increased outsourcing in consulting, legal and computational services (Hira & Hira, 2008). In total, the sharing economy appears to offer substantial labor, environmental, and productivity benefits.

There is a particular hope that the sharing economy will start to create access and mobility for what is referred to as “the bottom of the pyramid,” or the approximately 4 billion people who live on less than \$8/day (2.6 billion on less than \$2/day) and have only indirect participation in formal economies due to lack of collateral, education, and perhaps other factors (Schwarten, Perini, & Comolli, 2011). As mobile phones are becoming increasingly available to the members of this group, the barriers to platform-based coordination are quickly disappearing (Reilly & Smith, 2014). To date, most applications of mobile phones to development problems have focused on information sharing and the brokerage of relationships. For example, MandiTrades is a mobile phone app for farmers in India. It distributes commodity price information, shares maps of crop locations, and allows buyers and sellers to connect directly with each other. The app helps farmers to maximize their profits by giving them access to demand patterns and pricing information, while it helps

buyers to coordinate shipping, warehousing, and sales. However, with the introduction of mobile banking, it is not hard to imagine the introduction of payment brokerage services as well. This is because mobile phones also overcome many of the difficulties of incorporating disadvantaged groups into the digital economy, as in the case of M-Pesa (see Hira article). In short, the sharing economy can make it easy for people to leverage the excess capacity in their material goods for either community development or financial gain. And the sharing economy can also make available goods or services that might not otherwise be available given the high transaction costs involved in sharing.

However, there are clear downsides to the sharing economy. The first is a phenomenon that occurs with any economic disruption, namely the precipitous decline of the incumbent industry, such as hotels in the case of AirBNB or taxi companies or cooperatives in the case of Uber, along with a loss of employee benefits and the security of long-term positions. Evidently, this largely unregulated economy can avoid the usual taxes, licensing fees, personnel training costs, insurance fees, and regulatory headaches, thus creating a plane of unfair competition with traditional industries. In addition, there is concern about lost tax revenues from this currently unregulated sector, as well as inadequate safety or insurance regulation. Prominent economists Hall and Krueger (2015, pp. 26–27) defend Uber's labor practices. In a study of Uber drivers made available to them from the company, they praise the flexibility offered by Uber and suggest that drivers earn at least as much, and possibly more, per hour than taxi drivers and chauffeurs. They also question whether casualization of the labor force really leads to inequality, or even whether it is occurring; they find no hard data to back this up. Yet, critics remain concerned about exploitation of part time employees who are given few opportunities for career advancement, and have little ability to organize or protest against the companies. In addition, the reliance on electronic data and transactions not only facilitates tax evasion, but could lead to privacy concerns as well. It would be all too tempting to gather customer data and create profiles for further marketing. Furthermore, there could be the loss of jobs for those who previously acted as intermediaries—as information and transaction brokers or sales people—ranging from bookstores to record companies to travel agencies.

Proponents argue that these problems will be alleviated by self-regulation, which takes place through peer reviews in platforms such as Yelp. However, this is questionable: the principal-agent problem remains a concern not only between customer and provider, but also between

provider and management company. Concerns about fraud from access to financial information are also warranted. The case of Ezubao that came to light in February 2016 puts the need for regulation into clear light. Ezubao was one of the largest peer-to-peer lenders in China, taking in more than \$7.6 billion in investment, while promising a 15 percent return. The company turned out to be a Ponzi scheme, putting money into dodgy real estate deals and skimming for hefty personal expenses. More than one-third of China's lightly regulated 3,800 P2P lenders were in financial difficulties as of 2016 (*Financial Times [FT]*, 2016).

The for-profit incentive has so far overtaken the beneficent instincts of sharing in many cases, with a few people making fortunes from sharing economy platforms. For example, couchsurfing.com, a platform for renting space in homes during travel, transformed from a non-profit to a profit model (Molz, 2013; Slee, 2015, p. 146), while non-profit Freegle, designed to reuse goods no longer needed, has become more commercially oriented over time (Martin, Upham, & Budd, 2015). There are also questions about the extent to which sharing programs lead to reduction in the usage of assets. For example, a global study of bike share programs found that most users were substituting for public transit or walking, rather than autos (Fishman, Washington, & Haworth, 2013).

There is also the problem of market failures. Sharing economy systems operate more like a free market than already existing systems, which are usually heavily regulated. Conventional bus lines and taxi companies operate under concessions that ensure service provision in less profitable markets. Systems like Uber and Airbnb are flexible, meaning the supply of cars and rooms can react to increases in demand, however, flexible workers have no incentive—and are not required—to service undesirable markets. As Slee (2015, p. 143) states, referring to Uber practices during peak demand times, “surge prices may put more cars on the street, but they are not available to those who cannot afford the prices.... Uber is deaf to such arguments.” Another market failure revolves around the ratings systems used by brokerage services to rank service providers. It can be very difficult for hosts to redeem themselves if they receive bad reviews on AirBNB, and Uber screens its drivers for criminal records, excluding potentially rehabilitated ex-felons from a potentially healthy economic activity. An additional concern is the relative lack of competition faced by these new companies. Uber for example has raised its commission from 20 percent to 25 percent and in October 2015 reached 30 percent in the Swiss market. The lack of ridesharing alternatives gives Uber a monopolistic stance in GPS-based ridesharing services, which harms drivers and

consumers who would profit from even lower rates if competition existed (for example, Lyft is not yet available in Europe). The low marginal costs of entry should mean a highly competitive marketplace, yet thus far first to market seems to be the prevailing source of concentrated advantage. This mirrors what we see in most parts of the internet economy—the dominance of Google, Microsoft, Apple, Facebook, and Amazon in their respective sub-sectors.

Finally, it is unclear whether the stream of tax revenues arising from shared economy activities surpasses the revenue of hotel VAT fees, taxi licenses or other conventional forms of tax revenue from established industries. For years, Amazon has been mired in controversy over whether its business model allows it to avoid taxes, thus giving it an unfair advantage over traditional retail outlets. Cost reductions often generate higher business volumes, but it is unclear whether the social and environmental externalities are higher or lower than those arising from conventional businesses and service providers, and who bears the cost of those externalities. While the individual positive externalities might be higher (e.g., individuals get a de-facto positive income effect; they get “richer” by the lower access costs related to services), the impact on tax revenue or public expenditure is uncertain. Lobbying groups from the for-profit sharing economy are pushing the idea that the sharing economy is about greater efficiency in a free market, one that requires avoiding regulation, in contradiction to alternative visions (Marchi & Parekh, 2015; Stephany, 2015, pp. 151–181). As of the writing of this piece, it appears increasingly that Uber and Airbnb are taking a pro-active stance toward regulation, marshalling strong lobbying efforts to create friendly regulations (Griswold, 2016). It also appears that class action lawsuits in the USA against Uber by drivers protesting working conditions and their cut off rates, are likely to fail, with fairly modest settlement concessions (Wong, 2016).

Can the Sharing Economy Benefit Development?

This brings us to the question of whether and how a sharing economy could contribute to development. At the outset, it bears mentioning that large numbers of individuals still do not have internet access. The World Bank estimates that, as of 2016, 2 billion people lack access to information and communication technologies, and half a billion lack access to a mobile signal. There is a clear urban-rural divide. Literacy is another barrier (World Bank, 2016, pp. 16, 201). Given this divide, it remains to be seen

whether and how the sharing economy will disrupt incumbent industries, and what level of income mobility new sharing economy jobs can offer.

At the level of individuals, it is interesting to consider how the sharing economy enables or constrains the potential for upward mobility, and through this, greater security and stability. In the South, even middle-class families tend to lack collateral and access to finance. Sharing platforms may help alleviate these concerns, giving individuals the capacity to leverage opportunities. In addition, the sharing economy may offer avenues to resolve chronic system-wide problems, such as poor regulatory compliance and corruption. For example, the review and ranking systems used by these platforms supplement or partially substitute for creaky regulatory systems. India and Nigeria have introduced electronic identification for voting, which can be used to access and monitor use of public services, reducing corruption (World Bank, 2016, pp. 16–19, 195). Yet a recent study by Edelman and Luca (2014) found that Airbnb reproduced racial bias in terms of rents given to comparable African-American as opposed to Anglo hosts in New York. Other studies find that lower income residents tend to participate in the sharing economy at lower rates. They suggest higher crime areas, transient populations, lack of background identification and references, and lack of a sense of community are possible obstacles (Dillahunt & Malone, 2015; Thebault-Spieker, Terveen, & Hecht, 2015).

More broadly, questions can be raised about the appropriate form of sharing platforms for developing country contexts. What kind of sharing platform is most likely to facilitate upward mobility at the bottom of the pyramid? For example, should sharing platforms be private enterprises, as in the case of AirBNB or Uber, or should they follow the newly emerging platform cooperativism model? Indeed, could the sharing economy lead to cooperative ownership? So far, sharing companies such as Uber and Airbnb have been run as for-profit privately held entities. However, in principle if assets can be shared, they could be co-owned, and in this sense, the sharing economy could be seen as an extension of long-standing work on the solidarity economy (Miller, 2010). Platform cooperativism can be as simple as user-producer ownership over the aggregator that brokers relations, sharing and payments, but could more broadly imply changes in the nature of production and ownership (Scholtz, 2015). For example, Bauwens (2014) argues that block chain technology can be leveraged to create peer-to-peer forms of co-ownership.

The case for co-ownership of sharing initiatives is not foolproof. It has long been argued that the cooperative form is likely to be less

productive than a for-profit one, as the incentive for individuals to work hard is diminished unless the co-op monitors individual productivity (Alchian & Demsetz, 1972). By contrast, in for-profit initiatives, individuals can be directly compensated for their labor. Moreover, the for-profit system acknowledges that individuals differ in how they prefer to trade off their leisure and labor time. This is supported by Mancur Olson's (1965) and Buchanan and Tullock's (1962) seminal works on collective action, whereby the larger and less resourced the group, the less likely cooperation around a collective good takes place. This being the case, selective enforcement mechanisms or incentives are needed to mitigate the free rider problem. A hierarchical corporation rewards the unit and the individual separately based upon outputs and outcomes, and is (supposedly) disciplined into efficiency by the market, shareholders, and the board of directors.

Jossa (2014, pp. 79–92) and others argue, however, that collective action problems (such as free riding) can be mitigated by organizational interventions, such as the inculcation of shared values, creating a culture of shared responsibility, the interventions of professional managers, and the use of monitoring systems to enhance productivity and quality control. It is not surprising, then, that we tend to see cooperatives most often in small, tight-knit religious communities such as kibbutz, or in harsh agricultural conditions (Scandinavia), where shared values and peer pressure enforce norms of cooperation around common survival.

In recent history, small-scale cooperatives have encountered difficulty in competing against larger corporations, particularly given the ability of private enterprises to raise massive amounts of capital by issuing shares. The pressure to expand is therefore significant, and this presents specific challenges. When co-operatives seek to expand, some members may be required to invest more time or funds, but they still only receive one vote. A related issue comes up when co-ops expand or increase their profits. Does this result in an increase in the value of shares? If an original member exits, are their shares valued at the original or new price? How can the value of that share be determined?

These organizational efficiencies present additional challenges. Ideally, cooperatives are governed by a one member, one vote rule. However, as they get larger, such arrangements become increasingly difficult to maintain, both because of the increased complexity of the organization, and the challenge of maintaining communications with members. In some cases, a board of directors is elected that can make some decisions without direct consultation. In effect, cooperative management's bifurcated

purpose—serving members while also seeking returns—can create financial and governance challenges, as when it becomes necessary to shut down unprofitable operations or shed employees. Meanwhile, organizational efficiencies can come at the cost of member empowerment. The most famous and largest cooperative in the world, Mondragon of Spain, is a vast international association of different enterprises. It is organized into sectoral divisions, where management decisions are made, and the managing council can make significant decisions without going to the General Assembly, such as the ability to spend up to 25 percent of a cooperative's assets for a takeover. Mondragon does have a General Assembly, however, participation of individual worker-members is low, and the organization does not allow for unionization or strikes. As a result, worker complaints, such as those about policies around absenteeism, must pass up through the management bureaucracy (Latinne, 2014, pp. 112–113, 120–121). These types of observations raise questions about the fundamental differences between cooperatives and community-owned enterprises (some of which may also be cooperatives), as well as the possibility of joint ownership by for-profit and cooperative enterprises. All of this reflects a fractured picture of the sharing economy, yet the opening for strategic shaping of its future is clear. As Schor observes (2014):

The sharing economy has been propelled by exciting new technologies. The ease with which individuals, even strangers, can now connect, exchange, share information, and cooperate is truly transformative. That's the promise of the sharing platforms about which virtually everyone agrees. But technologies are only as good as the political and social context in which they are employed. Software, crowdsourcing, and the information commons give us powerful tools for building social solidarity, democracy, and sustainability. Now our task is to build a movement to harness that power.

All of this raises questions about whether and how the sharing economy can contribute to planning, development or social change processes, how it shapes opportunities for empowerment or upward mobility, and the kinds of government policies are most conducive to a productive application of networks brokerage to resource mobilization and sharing activities.

Preview of Articles

The articles presented in this volume explore these issues as they apply to developing country contexts. If there is one thing that these cases

clearly suggest it is that additional research and theorization is required if we are to understand how best to support the application of sharing economy initiatives to social, economic, and ecological issues in developing countries. The first paper in this set, “Crowdsourcing, Sharing Economies and Development” by Taeihagh, offers us a useful framework for moving forward. Taeihagh starts from the observation that there is a great deal of overlap in the kinds of IT-mediated crowdsourcing and sharing economy initiatives that are being touted as potential solutions to development problems. However, developing countries face very unique and specialized issues, as well as unique barriers to IT-supported logistics initiatives. Meanwhile, our knowledge about the various models of IT-supported logistics for production and distribution is as incipient as the innovations that we are seeing unfold continuously before our eyes. As a result, decisions are often being made by the market place, despite or beyond the influence of policymakers, with implications for resource use, efficiencies, and development impacts. With this in mind, Taeihagh provides a much-needed typology of new IT-supported logistics enterprises, and then suggests which forms would be appropriate for particular developing country contexts. The benefit of having such a typology is that industry and policymakers can work together more effectively to leverage the potential of logistics platforms, and ensure that they are implemented in ways that maximize positive impacts and minimize negative side effects.

Anil Hira provides a substantive look into what is actually happening with his “Profile of the Sharing Economy in the Developing World.” His work offers a survey of 171 companies located in developing countries, plus a set of case studies that represent specific areas of innovation. These cases include the mobile banking platform M-Pesa from Kenya, the asset sharing platform Ride-IT from India, the crowd-learning platform Cinese from Brazil, the skills-matching platform Fix Forward from South Africa, and Terracycle, a global initiative, which supports eco-sharing. Hira observes that, despite key obstacles to leveraging IT-mediated logistics innovations in developing countries—such as the lack of start-up funding, fragmentation of digital services, lack of access to electronic payments, and weak regulatory, trust and reputation systems—we do see significant clusters of activity emerging in key countries and sectors. His survey shows concentrations of activity in Brazil and India, and a particular focus on P2P trading, ride sharing, skills matching, and crowd-funding activities. Trust and adequate government regulation emerge as key factors to explain success in the sector. Despite the dominance of for-profit models in certain spaces, particularly ride-sharing and crowdfunding,

Hira, finds that there are notable experiments from around the world that seek to fulfill the more egalitarian promise of the sharing economy in the developing world.

In some developing country contexts, the market plays a fundamental role in the emergence of sharing initiatives with very different implications for citizens and consumers. Rina Kashyap and Anjali Bhatia explore this issue in their study of the two largest ride-sharing services in Delhi, called “Taxi Drivers and *Taxidars*” (forthcoming in 2018). Delhi’s history of urbanization, rapid population growth, and transportation planning initiatives has left it with significant ecological, labor, and transport challenges. The American company, Uber, and Indian company, Ola, which share the local ride-sharing market about equally, are hyped as sources of ecologically friendly employment generation that will address Delhi’s transportation woes. But do they deliver on their promises? Based on historical analysis, desk research, and survey and interview work with both drivers and users, Kashyap and Bhatia offer a rich case study of the complex transformations taking place with the introduction of these new taxi “aggregators.” For example, these new services have caused considerable labor disruption in the traditional taxi and auto-rickshaw markets as younger workers migrate to aggregated platforms that serve young and up-and-coming middle-class markets. While Uber and Ola do offer more desirable avenues of employment to the young men who ply this trade, the authors question whether new patterns of ownership and entrepreneurship necessarily generate *new* jobs, or improve leverage of existing assets. Indeed, they point out that aggregators may well be creating a new tier of “Taxidars” who take on loans to finance newer automobiles, hire drivers on a fixed salary as a side business, and add to the congestion and pollution of Delhi’s already crowded streets.

M. Jae Moon explores the issue of government support further in “Government-Driven Sharing Economy: Lessons from the Sharing City Initiative of the Seoul Metropolitan Government.” Despite Korea’s favorable technological environment, large sharing economy initiatives face barriers to entry from the *Chaebol* system of conglomerates. More locally, however, the Seoul Metropolitan Government has been exploring sharing economy platforms as a policy tool to support sustainable economic and social development. This situation creates a unique opportunity to reflect on the policy context for sharing initiatives, as well as how to support successful and socially and economically beneficial implementation. Moon argues that Seoul’s Sharing City Initiative offers opportunities for

inclusive and sustainable economic growth by making access to essential public services easier and more transparent. While the Initiative's Share Hub lists 151 programs covering everything from arts and education to books and cars, the largest focus is on facilities and space sharing. Moon explores the government's process of legal and policy reform, community consultations, and implementation, and finds that success has been founded on provision of adequate funding for start-up initiatives, a supportive legal environment, partnerships with a range of stakeholders, and timely and transparency provision of information. The sharing economy is arguably more desirable in developing countries than elsewhere, argues Moon, because it aims to maximize asset and resource mobilization and minimize transaction costs and a competitive pricing mechanism. Also, it can bypass corruption, which produces administrative and economic burdens.

In producing this volume, Hira and Reilly have had ample opportunity to reflect on the broader question of whether and how the sharing economy can contribute to more ecologically sustainable development that also increases opportunities for underprivileged people. Some core themes have arisen through our readings and conversations. One of these is the issue of trust, which is not only an important ingredient for the success of sharing initiatives, but also a possible product of these platforms. In countries that suffer from high rates of corruption and a lack of social cohesion, sharing initiatives and their reputation platforms are seen as a potential source of coordination as well as a means to shift social norms. The hope is that sharing can lead to caring, as Moon points out.

Other significant issues are the questions of *logistics and resilience*, which are both emerging as key themes in the development studies literature. IT-supported coordination of resource use is not only a way to introduce efficiencies into social and economic processes, but it may offer a way to enhance the ability of communities to resist the effects of resource shortages caused by climate change and our still-growing global population, while also addressing quality of life issues for the world's poor urban communities. We do not think that it is a coincidence that our case studies emerged from urban environments in densely populated countries. These environments not only offer efficiencies for the roll out of mobile technologies, but they are also the environments where demand for time and space efficiencies is comparatively high and the cost of sharing is comparatively low. The question of how to set policy and organize industry to support these goals has become a key challenge for development.

This means that the role of governments in planning is changing, as they become more involved in questions of IT-supported logistics, and that this will have implications for their relationship to industry and civil society. Sharing economy initiatives require a unique combination of industrial and social policies related to infrastructure, information, IT, logistics, property, trade, and use. What is more, it is clear that sharing economy initiatives emerge in clusters, suggesting that organizations, both private and public, create ecologies that leverage each other's work to support the combined culture and capacity for sharing. How governments, industry, and civil society come together around this type of work will have significant implications for whether and how the sharing economy contributes to improvements in the lived experience of, and opportunities available to, poor and vulnerable people.

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