

Sharing Economy: A Paradigm Revolution and Chinese Narrative

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Abstract: Sharing economy delivers structural impact on traditional theories of social sciences. To a certain extent, it subverts the classic issues of “invisible hand,” “society must be defended,” “free-rider problem” and “big government vs. small government” in traditional Western theories of economics, public administration and sociology. Under such circumstances, it is imperative to examine this theoretical innovation from the perspective of paradigm revolution. The Chinese economy (the Internet-enabled sharing economy in particular) is a revolutionary innovation of great significance in world history. China should take this “sharing” tide as an opportunity to promote digital China construction and industrial restructuring and create a new landscape for the construction of a socio-cultural system, a new national regulatory system and a modern governance system. This will help develop a China-led theoretical system of social sciences and essentially support the building of a new world order and a global discourse system.

Keywords: sharing economy; paradigm revolution; Chinese path

1. The economic, social and cultural attributes of sharing economy

Sharing economy is now a popular term worldwide and its origin is closely related to sociology and anthropology. The concept of sharing economy was first proposed by American sociologists Marcus Felson and Joe L. Spaeth in 1978 in their essay “*Community Structure and Collaborative Consumption: A Routine Activity Approach*” published in *The American Behavioral Scientist*. Their creation of this idea was inspired by the concepts of symbiosis and commensalism and put forward

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by Amos Hawley in 1950. According to Felson and Spaeth, Hawley's philosophy unveils the quintessential essence of consumption, which is an interaction among individuals and is closely related to all aspects of social life. Collaborative consumption is exactly a daily activity that combines the satisfaction of daily needs with the establishment of relationships with others.^① Sharing economy features three dimensions; economy, society, and culture. The sociality of human activities is the basis of sharing economy and it indicates that sharing economy is a new reform of great significance in the history of mankind.

The transformation of such a "discourse revolution" to "revolutionary discourse" was completed by relevant economists and entrepreneurs in the context of the information technology revolution. In the book *What's Mine Is Yours*, economists Richel Botsman and Roo Rogers systematically elaborated the idea of "sharing economy," and completed its type analysis and framework building. Moreover, they classified "sharing economy" into three categories. The first is an information platform for goods sharing (such as online platforms for car-pooling and home-exchanging). The second is an online marketplace for second-hand trading (such as Craigslist, a large US-based website for free classifieds). The third is an expertise-sharing platform.^② Botsman and Rogers preliminarily revealed the industrial transformation that could be brought about by sharing economy, then Jeremy Rifkin, through his *The Zero Marginal Cost Society*, managed to make sharing economy a public topic within the sphere of the global economy. Rifkin regarded "sharing economy" as "the first new paradigm-shifting system" over the past 300 years, holding that sharing economy truly sparked a lifestyle-changing resource revolution and thus formed a brand-new mode for organizing economic life.^③ The combination of the Internet and sharing economy has brought the sharing economy onto the historical stage as an emerging social phenomenon.

Judging from existing academic research, a consensus on the concept of the sharing economy has been reached among scholars: the sharing economy refers to profit-driven peer-to-peer based sharing of access to goods and services. Users utilize these shared resources and services to create more value, realize effective use of resources and improve social welfare. Both its theoretical evolution and realistic logic indicate that the sharing economy covers three connotations in economic, sociological and anthropological senses. First, from a perspective of economics, the sharing economy, by virtue of IT platforms and tools like big data, successfully separates article ownership from "access" (right to use), thus significantly improving the efficiency of article use and public consumption. Second, from a perspective of sociology, the sharing economy helps to integrate people's consumption behavior with social life,^④ reducing overall waste of social resources and transforming impersonal consumption behaviors into organic parts of social life with great significance. Third, from a perspective of anthropology, the sharing economy frees people from the narrowly defined role of consumers and makes consumption itself an interaction full of trust and care.

A good understanding of the sharing economy's multi-dimensional attributes enables people to identify the challenges facing this new type of economy. These challenges are closely related to two aspects. The first concerns a thorough understanding of its theoretical basis. That is, the sharing economy, to a large extent, structurally challenges the existing theories of the social sciences developed since World War II and therefore

① Felson, 1978.

② Botsman & Rogers, 2010.

③ Rifkin, 2014, p. 27.

④ Granovetter, 2015.

it must sublate the framework of the social sciences interpretations. The second concerns a tight grasp of its realistic dimensions, which is particularly important for China as one of the world's largest economies. China should explore how to better integrate the sharing economy into its economic system and seize this great opportunity to take the lead in the next round of global economic innovations and governance.

2. A disruptive paradigm revolution triggered by the sharing economy

Theory without practice is empty, while practice without theoretical guidance is blind. Debating the sharing economy without any insight of the big-picture trends in social changes has become a universal defect among current studies in this regard. The existing research findings are either so restricted by the theories of traditional Western economics as to interpret the sharing economy in a superficial way, or divorced from established studies in blind pursuit of the sharing economy. Sensitive to the challenges imposed by the sharing economy on existing theories, Western scholars have studied it in terms of pricing mechanisms, supply-demand matching mechanisms and enterprise reputation creation, focusing on issues like market access and performance criteria, flexible employment and management, and big data and privacy protection.^① Yet, it is noteworthy that in the established Western market system, the sharing economy has not yet encountered any major structural challenges. Most relevant studies in the West remain at a micro-level, making it difficult to examine the sharing economy's revolutionary significance and further explore its challenges to the existing Western economic paradigms and theoretical bases from a perspective of paradigm revolution. In the new round of globalization, China is aware of the sharing economy's comprehensive challenge to traditional theories (traditional Western social sciences in particular). In order to build a new theoretical system suited to the sharing economy, China should see the sharing economy's disruptive challenge to the existing theories as an imperative need to build corresponding new theories based on existing, classical theories.

2.1 From “invisible hand” to “visible network”

The “asset value vs. use value” and “ownership vs. access (right to use)” debates are at the core of Western economics. According to traditional Western economics, ownership and access (right to use) form an indivisible whole. Assets are un-replicable and therefore all sharing behaviors are but “subtractions.” Out of “benefits-maximizing” considerations, people are unlikely to promote “sharing.” Modern consumption can be seen as such an equation: to have or to consume = to be.^② Consumption is the most direct and effective way for an individual to demonstrate his or her social status. If everyone tries to demonstrate their social status by “having / occupying something,” the competition among “social beings” is sure to be intensified, resulting in “intra-generational unfairness of consumption,” i.e. excessive consumption practiced by the upper and middle class vs. lower class's lack of basic consumption to maintain a decent life. Meanwhile, in the context of limited resources, the increasingly intensified whole-society competition in consumption stimulates people today to consume the part of natural resources that would ideally be reserved for the next generation. This will lead to “inter-generational unfairness” and subsequently weaken their public consciousness.^③ The rapidly developing

① Einav, Farronato & Levin, 2016.

② Fromm, 1989.

③ Zhu & Zhang, 2012.

Internet technology and sharing platforms, however, now enable efficient matching separate ownership from access (right to use) to generate more benefits, and satisfy a need for access (right to use), making it possible to access something without possessing it. This sharing economy-triggered ownership fission marks mankind's first time ever since the French Revolution to have separated access from ownership for more commercial interests.^① The in-depth integration of the sharing economy with the Internet's technology allows the supply and demand sides to explore and utilize consumers' "sunk costs" at ultra-low or even zero cost and shrink the original boundary of "market transaction" to "individual economy."

The sharing economy inevitably triggers a nuclear fission-like eruption of multi-type transactions beyond the scope of institutional trading. From a perspective of traditional economics, the sharing economy makes it even harder for people to grasp the law of economic activities and challenges the applicability of the "invisible hand" theory, which is arguably the cornerstone of Western theories of economics. Judging from the history of Western theories of economics, the "invisible hand" is played in the context of a relatively closed system of a national economy. Those government macro-control advocates, represented by Keynes, tried to intervene in economic activities with a "visible hand," only to find it impossible to give a full and in-depth interpretation of the increasingly intensified economic crises. The 2008 global economic crisis, believed to be the third great recession of a capitalist economy^②, virtually failed to unlock the black box of market economy operations. Economic globalization, the Internet-based sharing economy in particular, has significantly challenged the applicability of the "invisible hand" theory. The historical combination of the sharing economy, the Internet and big data is gradually unlocking this black box and presenting it in a series of forms such as visual LBS (Location Based Service), dynamic algorithm and pricing, and mutual-evaluation. In other words, the sharing economy is approaching and presenting the operational law of the "invisible hand" via a "visible network."

Moreover, supported by the Internet of Things (IoT) technology, the sharing economy is arousing an unprecedented Domino Effect in traditional theories of economics. Take Alibaba as an example. From its establishment in 1999 to 2016, its gross merchandise volume (GMV) reached USD 550 billion, ranking 21st in global GDP. Alibaba's GMV is expected to reach USD 1 trillion by 2020 and Alibaba itself is expected to become the world's fifth largest economy. Originally, Alibaba was nothing but a virtual platform for market transactions. After it was launched, it needed to be equipped with a payment system to enable customer transactions, and then a logistics system for commodity distributions. A drastic rise in transaction volume brought about hundreds of millions of buyers (mainly small and medium-sized enterprises) worldwide, which in turn pressured Alibaba to provide cloud computing support. It was not until then that the sharing economy's explosive power of boosting a traditional economy began to emerge. The study of science history has revealed that the rapid changes in modern society should be primarily attributed to technological progress. Previously, innovation in a single technology could generate coupling effects. Essentially different, the sharing economy can bring about a nuclear fission-like resonant multiplication effect. So far, no technological revolution can transform social structure and daily life as rapidly, thoroughly and profoundly as the sharing economy. The big data-enabled "visible network" clearly presents a profound transformation in the social operation structure,

① Jiang, 2015.

② Callinicos, 2017.

helping to cut public transaction costs and better understand the laws of social change.

2.2 From “maintaining society” to “society perfecting”

The theories of sociology, born out of the industrial revolution, whether they be Weber’s traditional authority or Marxism, all strive to respond to the social problems brought about by the market’s intrusion into society during the post-industrial era, and to design an institutional system of “maintaining society.”^① Western capitalist countries mainly rely on amendments to alleviate such a challenge, and regulate labor-capital relationships through social relief, social security systems and trade unions.^② Their employer system, based on full-time employment, enables fixed employers to hire laborers and afford their social security contributions to ensure their benefits during employment and after retirement. This is their primary approach to “maintaining society.” In the rapid advancement of globalization, however, the social security net, developed through revolution and long-term struggle, is suffering destruction. The “maintaining society” scheme, with a design concept centering on the nation-state, has been frequently faced with challenges, which can be exemplified by the social and economic problems tormenting Europe over the past two years and Donald Trump’s controversial slogan “America First.”

All of a sudden, in the community of the global economy, Amazon has re-shaped logistics and the retail sector, and at the same time created an automated “future of unemployment.”^③ By contrast, Uber adopts the largest hyper-exploitative employment model in the history of capitalism.^④ Such disruptive changes in a certain sector have taken place through the sharing economy in recent years in a more profound and comprehensive way and are more rapid and fierce than any previous impact in the history of globalization. The virtual form of capitalism has even forged a “global body-shopping” spanning time and space. In this system, transnational capital flows to the “low-lying area of low labor costs, without taking on any social security costs.”^⑤ The third wave of marketization has already given rise to new, crazy forms of monetization and commercialization, transforming currency from a medium of exchange to a profit-making tool. Through a variety of financial derivatives, futures and mortgage securitization, huge amounts of transnational capital that can be moved through hedge funds were far beyond the control of a country.^⑥ This results in the re-commodification of labor, i.e. withdrawal of labor power from commodification, forcing employees to take irregular jobs. Laborers are passively faced with a process of de-commodification which subsequently is giving rise to the largest gig economy in this history of the global economy. According to Mary Meeker in the report *Internet Trends 2015—Code Conference*, the population of freelancers in the USA had exceeded 53 million, accounting for 34% of the total US working population. These freelancers either lacked a permanent employer or took multiple jobs in their spare time. Of the labor group below age 35, over 20% took more than one job; 38% preferred freelance work; 32% expected their future career to be flexible. The growing unemployment and underemployment rates make “maintaining society” an increasingly unreachable daydream.^⑦ Ironically, “being

① Polanyi, 2007.

② Sun, 2009.

③ Wallsten, 2015.

④ Srnicek, 2017.

⑤ Xiang, 2012.

⑥ Zervas, Proserpio & Byers, 2017.

⑦ Webster, Lambert & Bezuidenhout, 2008.

exploited” is more and more regarded as a privilege, rather than a curse.^①

Without a good understanding of institutional and organizational factors, one cannot expect to truly comprehend a market economy and industrial revolutions, which grow out of market expansions.^② Likewise, without a good understanding of labor employment’s changing trends during the development of sharing economy, a government cannot expect to properly deal with it at the social level.^③ The new economic form, completely breaking the traditional design of the social security system, makes it impossible for any country to provide traditional social security for the massive numbers of practitioners of sharing economy. Social wealth will be concentrated in the hands of a privileged few.

The sharing economy will surely result in a higher unemployment rate. The income gap between rich and poor will continue to expand. These aspects form an inevitable trend for future globalization and impose severe challenges on a traditional governments’ public service system and theories. They must think about how to adjust existing social security systems to new technology and new economic forms, and how to establish social security and social welfare systems in the context of sharing economy.

2.3 From objecting “free-riding” to embracing “car-pooling”

The sharing economy has transformed existing social security systems worldwide, and now challenges its relevant theoretical basis, namely, public administration theory. In the *Logic of Collective Action: Public Goods and the Theory of Groups*, Mancur Olson put forward the theory of “free-rider,” analyzing the characteristics of the use of public goods (non-excludability or non-rivalry). According to Olson, the provision of public goods is usually accompanied with a chronological problem, i.e. reaping the profits without any cost. In this regard, there remains an enormous bug in the existing market mechanism. How to eliminate the negative impact of the “free-rider” issue on the supply of public goods remains at the core of Western debates on public administration theories.^④

However, much has changed in this era of the sharing economy. The positive externality of “free rider” has been further exploited. Also, taking advantage of consumers’ “free-rider” mentality, the sharing economy shapes an economic system that encourages “free-riding.” The pre-sharing economy era is like someone who lights firecrackers themselves, but unexpectedly pleases others nearby who do not need to pay for enjoying such a spectacular scene. By contrast, during the era of the sharing economy, most of the online social networking software and web search services are provided by the Internet companies for free. If these public services were provided by the government, their high costs and the corresponding individual satisfaction would become a major challenge. In the context of the sharing economy, these massive services are free of charge and attract more people to take a “free-ride,” helping to constantly expand the relevant platforms and the potential customer base. Theoretically, this indicates that capitalism itself is undergoing a profound change, and that the core of global economic competition is no longer traditional products but data, which are the basic resources for the development of relevant companies. To outperform rivals, a company should strive to grasp more data with higher quality. Under such circumstances, product producers in some sectors gradually evolve to “free-riders.” Those “free-rider” platforms and systems extract and use massive data to provide

① Burawoy, 2011.

② Wang, 2011.

③ North, 1994.

④ Olson, 1995.

infrastructure and intermediary services for different consumer groups. They place themselves at the center of all interactions with those groups to monitor and extract data^① and pave the way for their transformation into a global “unicorn company.”

2.4 From “big government vs. small government” debate to “intelligent government” construction

The “small government” argument is one of the most important views of Western economics. It insists that government should play the role of “night watchman.” Restricted by such a perspective, the Western community of economics turns a blind eye on or even stigmatizes the Chinese government’s irreplaceable role in its reform and opening up cause. For many years the Chinese economy was not referred to as a market economy but was labeled as “state capitalism.” Some Western moderates hold that the Chinese government’s positive role in economic development is a stage feature and that the government should gradually withdraw from the economic sphere as the Chinese economy further grows. The latest round of global financial crisis has demolished Western economics’ view of a government’s role. Even Francis Fukuyama, an acclaimed American political philosopher who declared the “end of history,” had pointed out “modern political order Consists of a bundle of three separate institutions: a modern state, the rule of law and accountability.”^②

In the context of sharing economy, the theoretical assumption of “small government” is under threat and the government’s public service management is also faced with a significant challenge. The public accountability of a traditional government should include primary social services and investments in infrastructure. The Internet dominated sharing economy makes information itself the most important new public goods, which is ever more unlikely to be supplied solely by the government. In the era of the new economy, it becomes more and more difficult to establish a new legal footing and a stable policy environment. The sharing economy gives rise to flexible employment, imposing an increasing pressure on government in fulfilling its duties of protecting the vulnerable and the environment. For example, a recent popular debate over bike sharing vs. public space utilization exposes the dual character of public-goods sharing. Investors in this area gain profits, leaving the costs to society. In this sense, they are very much like environmental polluters and will inevitably result in a barbaric growth of a “sharing economy,” in which “bad money drives out good.” The government should explore how to effectively play its role as a regulator and transform into an intelligent government that serves the sharing economy. Corresponding processes, costs and methods need to be mapped out within the integral context of the national governance system and capacity modernization.

3. Major practical issues facing the sharing economy and its development in China

Studies of the Chinese sharing economy have successively completed the following stages; profit modeling, operations modeling, and economic law analyses. Accordingly, the Chinese sharing economy has become a new social and economic normal.^③ The growth of the sharing economy will effectively improve the efficiency of social resources, bring more convenience to daily life, boost China’s Supply-side Structural

① Srnicek, 2017.

② Fukuyama, 2012.

③ Song & Wang, 2016.

Reform, advance the strategy of innovation-driven development, further develop popular entrepreneurship and innovation, and cultivate a new driving force for the Chinese economy. While implementing a cyber-power strategy, a Big Data strategy and the “Internet Plus” action plan China is expanding the market of the Internet economy and promoting the integrated development of the Internet, economy and society.^① The Chinese sharing economy has become a revolutionary innovation that is leading the growth of the global economy, bringing about qualitative change to the demand side of the global market, and is even likely to exert profound and far-reaching effects on the development of human civilization.^②

It is necessary to place new economic phenomena such as sharing, crowd-sourcing and crowd-funding in the overall social structure and review the development of the Chinese sharing economy from a new theoretical perspective. Only by basing the Chinese practice on the theory of the sharing economy can we expect to have a clearer picture of the social characteristics behind this economical phenomena, better estimate the medium and long term impacts on the Chinese society and economy, build a corresponding supporting system, and help the sharing economy to give full play to its positive potential.

3.1 Promoting digital China construction through the sharing economy

Technology plays an increasingly important role in global social transformations. The industrial revolution enabled by energy production and distribution has been the most vital dependent variable to the development of an industrial society over the past two centuries. As a brand-new approach to the re-organization of socio-economic structures and social interactions, the sharing economy effectively leverages multi-dimensional reforms in the era of globalization. According to the statistics released by the National Bureau of Statistics of the PRC, China's total retail sales of consumer goods exceeded RMB 30 trillion in 2015, becoming the world's second largest consumer. Meanwhile, consumption contributed over 66% to the national economy, becoming China's largest driving force for economic growth. Also, in 2015, China's total online retail sales reached RMB 3,877.3 billion, a year-on-year increase of 33.3%. Of this figure, online retail sales of physical commodities contributed RMB 3,242.4 billion, which was a year-on-year increase of 31.6% and accounted for 10.8% of the total retail sales of consumer goods.^③ In 2016, China's total online retail sales reached RMB 5,155.6 billion, a year-on-year increase of 26.2%. Of this figure, online retail sales of physical commodities contributed RMB 4,194.4 billion, which was a year-on-year increase of 25.6% and accounted for 12.6% of the total retail sales of consumer goods.^④ Now, the younger generation is playing a critical role in consumption upgrading. According to the demographic data collected from the 6th national population census in 2010, the post-80s group had a population of 228 million, the post-90s 174 million and the post 00s 147 million. The combined population of the three age groups reached 515 million. From a global perspective, the younger generation overall have contributed significantly to boosting the growth of the sharing economy. Take Germany as an example. Some 12% of the German population do “collaborative consumption” via the Internet, and this figure reached 25% among the German youth group aged 14-29.^① The sharing economy is extensively believed to be most

① Xi, 2017.

② Chen, 2017.

③ 2015 statistics bulletin of the national economic and social development. Official website of National Bureau of Statistics of the PRC. Retrieved from http://www.stats.gov.cn/tjsj/zxfb/201602/t20160229_1323991.html.

④ 2016 statistics bulletin of the national economic and social development. Official website of National Bureau of Statistics of the PRC. Retrieved from http://www.stats.gov.cn/tjsj/zxfb/201702/t20170228_1467424.html.

familiar and acceptable to the youth growing up with the Internet.^② In terms of consumption concepts, young people regard the sharing economy as a way of life and prefer “access” (right to use) to “ownership.” This is a transformation of wealth concept, which substantially alleviates the economic burden of the young and middle-aged group in the competition for consumer status. According to the statistics of Internet World Stats, the 2016 global Internet population consists of 49% in Asia, 17% in Europe, 9% in North America, 10% in Latin America, 10% in Africa, 4% in Middle East and 1% in Australia. The younger generation, who embrace the sharing economy, are likely to reshape the consumption structure of China, and the world.

The huge Internet user base and massive data of the sharing economy are combined to form the new basis for China’s social and economic development. From a perspective of a “visible network,” big data can help comprehensively present market transaction procedures and reveal the in-depth law of market development, and thereby significantly squeeze the intermediate costs of the sharing economy. China should pay more attention to the social impact of such technological progress, advance “Digital China” construction to support this major social restructuring in reality, and provide theoretical basis and data support for China’s industrial policy innovation and top-level design. The “visible network” itself is an important part of the digital economy in the new round of economic transformation. China should explore how to better make use of this platform to create new formats for the digital economy, and take advantage of its economic strength to take the lead in new global economic areas. This is to form a new economic growth point and is of great significance to environmental-friendly sustainable development. In doing so, China is expected to contribute a new development paradigm and an intelligent economic model to the world.

3.2 The development of Chinese society and culture in the context of the sharing economy

In the new round of globalization, the Internet connects billions of users. Yet, if such a connection remains at the level of information dissemination and interaction, the Internet will serve merely as an efficiency amplifier of economic operation. The activeness of sharing, on the premise of trust, is the igniter of an activate, real economy.^③ Only when the sharing economy is further “inter-embedded” with the development of social culture can an all-win situation be achieved and the construction of sharing society be possible.

From a micro-perspective, the “visible network” in the commercial transaction area has unprecedentedly enabled individual consumers to share information and supervise intermediate links. The Internet’s punishment of poor or fraudulent service has produced a ripple effect and significantly raised the default costs in online economic activities. Although identified as a “low trust” society, China is gaining abstract trust through the sharing economy, which also means a key opportunity for it to cultivate what Max Weber called the “spirit of capitalism.” Successful expansion of social influence during this reconstruction of the business spirit and ethics may help generate a solution to the market economy’s lack of trust in traditional Chinese society and create an opportunity for the sound development of social trust and social capital in the context of the sharing economy. In a deeper sense, the sharing economy is truly transforming the established view of social entities. According to Michael Mann, the outdated concept of a structured “society” should be replaced by a model of social power network inter-woven with the economy, ideology, military affairs and politics to

① Rifkin, 2014, p. 27.

② Chen, 2017.

③ Bolton, Greiner & Ockenfels, 2013.

help people better understand the society of which they are a part.^① The integrated development of the sharing economy with big data is now transforming the form of society from a theoretical concept to a reality. As the sharing awareness is further enhanced and sharing resources are increasingly enriched, the sharing between man and organization and between organizations is likely to engage more participants by exploring more approaches to multi-dimensional matching and integration in the business models. The sharing economy, by reshaping consumer behaviors, will surely reshape social psychology and social behaviors, and subsequently influence the values of the entire society. China should make the best of the current situation to create a socio-cultural system completely different from the one based on the industrial revolution.^② This socio-cultural system will impel China to stride across what Karl Marx called “Caudine Forks” to substantially reshape the Chinese society. This task will be high on the agenda of China’s socio-cultural reconstruction in the context of the sharing economy.

3.3. Sharing economy-driven industry restructuring in China

The sharing economy is accelerating the integration of assets ownership, the industrial model and employment structures. Over the past five years (2010-2015), the Chinese sharing economy has been significantly expanded, with its direct market size drastically increased to RMB 10 billion from RMB 10 million and its relevant (indirect) market size growing to RMB 2 trillion. There were also explosive increases in terms of enterprise numbers and participant numbers. According to the statistics in *2016 Report on the Development of the Chinese Sharing Economy*, in 2015 the Chinese sharing economy had a total of 50 million service providers, about 300 million platform users, and 500 million direct participants. The concept of the “sharing economy” was quickly introduced to multiple sectors such as lodging, crowd-outsourcing, knowledge and skills, and large agricultural equipment. Sharing transport, being a pioneer of the sharing economy, has been galloping. For example, with the strategic combination of “Didi” with “KuaiDi”(two Chinese car-hailing apps), the newly launched “Didi Chuxing” has risen to become the world’s largest platform of sharing transport.^③ What makes the Chinese sharing economy unique to others lies in the fact that China enjoys an enormous unified market, which most countries cannot expect to have due to their much smaller populations. Thank to such an enormous market, China is able to swiftly turn new ideas, like the sharing economy and cloud company, into huge sectors, remove barriers between different sectors, blur divisions between different industrial tiers, and form a new industrial eco-effect featuring industry-wide aggregations and integrations.^④ This enormous unified market gives China a leading edge in the global economy and has forced structural reforms in some industrial systems and even the global market.^⑤

Yet, throughout history, no major reform has been completed without cost. The sharing economy has created unprecedented challenges to China’s existing industrial structure and security. From the perspective of the business eco-system, the Internet-based sharing economy restricts consumers within cyberspace, significantly reducing their “random consumption” during an on-site shopping trip. By continually cutting operating costs, the sharing economy has destroyed numerous small and medium-sized economic units in

① Mann, 2007.

② Macfarlane, 2013.

③ Ma, 2016.

④ Gao, 2011.

⑤ Koopman, Mitchell & Thierier, 2015.



car sharing

real life, shaken the established social stratum and squeezed public space (commercial consumption space in particular). Judging from the actual economic situation in China, the total retail sales of consumer goods in 2014, 2015 and 2016 were respectively RMB 26.2 trillion, RMB 30.1 trillion and RMB 33.2 trillion, which meant year-on-year increases of 10.9%, 10.7% and 10.4%. Even so, the sharing economy has yet to form any substantial impact on total consumption. In the long run, however, the sharing economy will exert more impacts on China's industrial structure, and, more importantly, reduce jobs in the real economy and combined with AI technology will strike a nuclear fission-like blow to the employment market. In that way, it will further challenge China with a large population to develop ways to maintain its employment rate and people's livelihoods. It is noteworthy that the sharing economy in the West harvests excess profits by means of avoiding taxes, management costs and insurance expenses, as well as squeezing external costs. Such an approach significantly increases and triggers a range of social problems. The Internet "divides people around the planet, but no longer along the North/South boundaries, but between those connected to the global networks of value-making...and those switched off from these networks."^① There were recent cases of shared urban bicycles being vandalized by some motorbike-taxi drivers, which directly resulted from the sharing economy's blow to employment in certain sectors. Overall, while making life more convenient and easier,

① Castells, 2000.

the sharing economy also intensifies the divisions in the social stratum. As Norbert Wiener predicted in the 1970s, “To live effectively is to live with adequate information.”^① Such problems have emerged as the Chinese sharing economy has developed. If China wants to set up a new development model for the global economy, it should focus on giving full play to the big data-based “visible network” and the new industrial functions of the sharing economy and allow them to act as mainstays of the national governance system.

3.4. A new national regulatory system and a modern governance system to fit the sharing economy

In the context of the sharing economy, government regulations and supervision are often deemed inappropriate. According to Robin Chase, governments tend to run slower than markets. All governments should examine their existing rules and regulations, abandon those which were tailored to old technologies and therefore can no longer adapt to new technologies, and reform those which were designed to only support existing industries while expelling emerging industries. When it comes to the legislation of new business and trade models, the government should consider how to balance public interests with legislative normality. In order to adapt to a new business model and support its development, the government can regularly review and amend laws and regulations that no longer fit the new model.^② Yet it must be noted that venture capital-driven high-speed promotions can bring about the explosive development of new business formats, which will crush established formats and can directly affect the employment and social security of hundreds of millions of laborers. From a perspective of social security, the sharing economy facilitates massive hidden employment (unregistered employment) and freelancing. Corresponding enterprises do not have to support the laborers’ social security costs like those in the formal sectors do. Non-conventional labor relations will be divorced from the social security net, resulting in a drastic increase in labor disputes and rights-protection issues. Under such circumstances, large-scale management and control of social risks becomes much more challenging.^③ The new business model creates profits for the minority while incurring huge public costs^④ and exacerbating overall social risks. Unlike government regulation and supervision in traditional sectors, the postmortem regulation and supervision, which is advocated by the sharing economy community, features a major defect. The sharing economy can generate the strong effect of amplification and should any problem occur, it tends to transcend existing geographical boundaries and the scope of industry supervision, and may cause extensive social problems and even severe consequences.

China enjoys a prominent leading edge in infrastructure construction worldwide. For China, the “big government” pattern effectively facilitates the rapid development of society and the economy and shapes the brand-new development model of “strong government-strong market-strong society.” At the 2nd World Internet Conference, President Xi Jinping explicitly advocated the construction of a global network infrastructure, highlighting China’s great sense of responsibility and vision in the new era of globalization. Regarding specific institutional construction, on July 3, 2017, “Guiding Opinions of the State Council on Promotion of the Sharing Economy” was jointly issued by multiple ministries and commissions,^⑤ specifying new requirements for the promotion of the seamless connection of credit information between the

① Wiener, 1978.

② Ma, 2016.

③ Reardon, et al., 2002.

④ Jungik, Goldsmith & Thomas, 2010.

⑤ See http://www.ndrc.gov.cn/zcfb/zcfbtz/201707/t20170703_853853.html.

governmental and non-governmental sectors, and the delicate management of different economic formats. In the era of the sharing economy, there is a huge demand for virtual infrastructure, such as smart city, the Internet of things (IoT) and public data platforms. China should continue to give full play to the Central Government's powerful capacity of macroscopic readjustment and control, pioneer new solutions in different sectors, provide institutional guarantees for soft trial and error and deviation corrections, transform from a "big government" pattern to a "smart government" pattern, facilitate corresponding investments, and regulate economic behaviors within a framework of law and policy. These moves will hopefully help China to lead the future global sharing economy and dominate the new economic revolution.

4. Conclusion and discussion

The Fifth Plenary Session of the 18th Central Committee of the Communist Party of China reviewed and passed the proposal on the "13th Five-Year Plan," which highlighted the new development concept of "innovation, coordination, green, openness and sharing." The inclusion of "sharing" into the "13th Five-Year Plan" marked its rising to be a national strategic concept and direct driving force of China's social and economic development. Therefore, it is of great significance in the new round of global development. In 2016 the market turnover of the Chinese sharing economy was about RMB 3,452 billion, a year-on-year increase of 103%, which was far higher than the growth of China's real economy. In the coming years, the Chinese sharing economy is expected to maintain an annual growth of some 40%. In 2018, the scale of the Chinese market will exceed the combined scale of all other markets, making China the biggest single market worldwide.^① Judging from its complete form, the sharing economy includes a system of economic formats ranging from B2C sale by lease, B2B sharing from consumption to production and C2C perfectly competitive markets, to C2B crowd-sourcing and crowd-funding. At present, the Chinese sharing economy is still dominated by C2C and C2B, leaving a huge market potential to be explored. The sharing economy is likely to become one more miracle emerging against the backdrop of the gradual slowdown of China's high-speed economic growth. Meanwhile, the Internet, being borderless, can be integrated into the "Belt and Road" Initiative, and by combining the Internet with reality we can build a community with a shared future for mankind in cyberspace.^② This will help China provide better public goods in the new round of globalization and play a vital role in supporting China to build a new global order and discourse advocated by China.

Judging from historical experience, in the global context, the USA has made full use of its global talent pool to form a leading edge in innovation research, branded its image throughout the world, dominated global discourse power, and placed the intellectual property system at its core to establish the leadership in the global innovation system. By contrast, in Japan engineers are engaged in front-line work throughout the year, pursuing extreme delicacy in every component and part. Advocating the spirit of "piercing the sky with a needle," Japan has realized the centralized production of high-grade precision and sophisticated products in certain sectors, secured sustainable development of delicate production through a career-long employment system and other guarantee systems, and developed leading edges both in innovative technology

① See http://www.ce.cn/culture/gd/201703/01/t20170301_20605577.shtml

② Xi, 2017.

and production processes. China, in a seemingly no-chance situation, turns out to be the true disruptive creator in the global innovation system.^① In the early times of Reform and Opening-up, coastal SMEs (small and medium-sized enterprises) directly purchased the then most advanced products to copy their production process and swiftly localized it according to China's actual conditions. Later, making the most of its enormous market, China quickly developed and introduced corresponding standards of its own and facilitated modular production. China strives to combine the US and Japanese approaches to innovation to take full advantage of its huge population and firmly base itself on its enormous domestic market to gain an exclusive edge, promote industrial upgrading, develop an innovation system and discourse advocated by China, and step by step popularize Chinese standards worldwide.^② The sharing economy is a strategic opportunity with revolutionary significance for China in the context of the "Belt and Road" initiative and new globalization. Indeed, there is still a lot for the Chinese government to improve in terms of smart city construction and the IoT development. If the Chinese government can input more manpower and capital in the construction of public data platforms and regulate ill-formed behaviors of the sharing economy through laws and policies, China will complete its building of an ethical and cultural system for its market economy with Chinese characteristics, and introduce a new development model to the rest of the world. This new model is independently created by China and can be reproduced worldwide.

China has formed an actual leading edge in the global sharing economy. Even so, it should tackle insufficient production of "valid knowledge." The vast system of Western economics is based on the hypotheses of "individuals," "rational man" and "invisible hand." Throughout the history of globalization, the world has successively experienced Dutch hegemony, British hegemony and US hegemony. Responses to major changes was the fundamental driving force of the reform in, and development of, Western social science theories, and helped the West spread its interpretation paradigm to the non-Western world in the era of globalization. However, during the process of formation and development, the theories of Western economics have also undergone multiple reforms. The financial crisis and "Black Thursday" made the Western community question the effectiveness of its economic theories, to say nothing of the worldwide economic disasters such as the "economic mire in Latin America," which was the outcome of indiscriminate application of Western economics. Restricted by existing subject paradigms, contemporary Western sociologists and philosophers tend to overlook the potential impact of technological change, particularly the sharing economy, and interpret contemporary social reality with an outdated mindset.^③ In the context of the sharing economy, researchers ironically abbreviated major US Internet monopolists Facebook, Apple, Netflix and Google to FANG. Those Internet tycoons dominate the order of global cyberspace and combined form an organic part of the US foreign policies in the era of the Internet.

In essence, the "Belt and Road" Initiative is a Chinese scheme for economic globalization.^④ The rapid and robust growth of the Chinese economy makes corresponding theoretical support an urgent need. At the Fifth Plenary Session of the 18th Central Committee of the Chinese Communist Party, the top CPC leadership explicitly proposed to further develop an open economy at a higher level, take the initiative in the governance

① Jiao, 2017.

② Gao, 2016.

③ Castells, 2012.

④ Bai & Wang, 2017.

of the global economy and the supply of public goods, and enhance China's institutional discourse power in global economic governance. To this end, China should be equipped with the most solid theoretical support. The Chinese social sciences community, the economics community in particular, should walk out of the hegemonic shadow of Western economics, initiate a "discourse revolution" at the theoretical level, shift the focus of modern economic theories from the UK and the USA to China,^① further conclude the "revolutionary discourse" to guide the development of the Chinese economy, grasp the historical opportunity brought about by the sharing economy, carry out in-depth studies on the key links and mechanisms of the sharing economy, and develop new ideas and categories.^② With theoretical confidence, based on a complete logical architecture, China should build a theoretical system capable of interpreting and enabling the development of the Chinese sharing economy and cultivate development economics with Chinese characteristics. Such moves can create unprecedented opportunities for the Chinese social sciences to grow independently, and for the Chinese social scientists to improve and innovate the theories of economics, sociology and management to contribute to the social and economic development of China and other developing countries. With the advancement of the Belt and Road Initiative, China is expected to develop a model of the sharing economy featuring exclusive development and a new development system for the global economy.

REFERENCES

- Bai, Yongxiu, & Wang, Zerun. (2017). Subject orientation and research system of the Belt and Road economics. *Reform*, (2).
- Bolton, G, Greiner, B, & Ockenfels, A. (2013). Engineering trust: Reciprocity in the production of reputation information. *Management Science*, (2).
- Botsman, R, & Rogers, R. (2010). *What's mine is yours: The rise of collaborative consumption*. London: Harper Busess.
- Burawoy, Michael. (2011). From Polanyi to Pollyanna: The false optimism of global labor studies. In (Liu Jianzhou, Tran.). *Open Times*, (10).
- Callinicos, Alex. (2017, June 28). *Crisis of global capitalism: Today and the future of the anti-capitalist movement*. Retrieved September 14, 2017, from http://dxw.if-eng.com/a/20170628/44644423_0.shtml.
- Castells, M. (2012). *Networks of outrage and hope: Social movements in the Internet age*. Cambridge, UK: Polity Press.
- Castells, Manuel. (2000). *The rise of the network society*. In (Xia Zhujiu, et al. Trans.). Beijing: Social Sciences Academic Press (SSAP).
- Chen, Zhiwu. (2017, January 12). *Chinese economy approach the plateau*. Retrieved August 28, 2017, from <http://www.yicai.com/news/5203826.html>.
- Ding, Yuanzhu. (2016). On how to promote the development of sharing economy: Based on the investigation and reflection of "online chauffeur" services both in China and abroad. *Journal of Chinese Academy of Governance*, (2).
- Einav, L; Farronato, C & Levin, J. (2016). Peer-to-peer markets. *The Annual Review of Economics*, (8).
- Felson, M. (1978). Community structure and collaborative consumption: A routine activity approach. *American Behavioral Scientist*, (4).
- Fromm, Erich. (1989). *To have or to be*. In (Guan Shan, Tran.). Shanghai: SDX Joint Publishing Company.
- Fukuyama, Francis. (2012). *The Origins of Political Order*. In (Mao Junjie, Tran.) Guilin: Guangxi Normal University Press Group.
- Gao, Bai. (2011). The informal economy in the era of information revolution and globalization: The "shanzhai" cell phone industry in China. *Society*, (2).

① Lin, 2015.

② Li, 2017.

- Gao, Bai. (2016, January 15). 2016: The beginning of post globalization era? *China Times*. p. 34.
- Granovetter, Mark. (2015). *Embeddedness: social network and economic action*. In (Luo Jiade, Tran.). Beijing: Social Sciences Academic Press.
- Jiang, Qiping. (2015). The development of sharing economy: From theory to practice. *China Internet Weekly*. (16).
- Jiao, Ruoshui. (2017, February 13). A panoramic view of Chinese-style innovation. *Chinese Social Sciences Today*. p. 8.
- Jungik, K, Goldsmith, P, & Thomas, M. H. (2010). Economic impact and public costs of confined animal feeding operations at the parcel level of craven county, North Carolina. *Agriculture and Human Values*, (1).
- Koopman, C, Mitchell, M, & Thierer, A. (2015). The sharing economy and consumer protection regulation: The case for policy change. *The Journal of Business, Entrepreneurship and the Law*, (8).
- Li, Yang. (2017, July 13). *The Internet-triggered rewriting of all economics*. Retrieved September 14, 2017, from <http://gscass.cc/show-34-2572-1.html>.
- Lin, Yifu. (2015, August 17). *China still enjoys tremendous latecomer advantages*. Retrieved September 14, 2017, from http://finance.ifeng.com/a/20150817/13913433_0.shtml.
- Ma, Qiang. (2016). Chinese sharing economy: Development, bottleneck and countermeasures. *Modern Economic Research*, (10).
- Macfarlane, Alan. (2013). *The making of the modern world*. In (Guan Kenong, Tran.). Shanghai: Shanghai People's Publishing House.
- Mann, Michael. (2007). *The sources of social power*. In (Liu Beicheng and Li Shaojun, Trans.). Shanghai: Shanghai People's Publishing House.
- North, Douglass C. (1994). *Structure and change in economic history*. In (Chen Yu, Luo Huaping, et al., Trans.). Shanghai: Shanghai People's Publishing House.
- Olson, Mancur. (1995). *The logic of collective action: Public goods and the theory of groups*. In (Chen Yu, et al., Trans). Shanghai: Shanghai People's Publishing House.
- Polanyi, Karl. (2007). *Great transformation: The political and economic origins of our time*. In (Liu Yang and Feng Gang, Trans). Hangzhou: Zhejiang People's Publishing House.
- Reardon, T, Weatherspoon, D, & Allen, J., et al. (2002). Globalization of supermarkets: Impacts on the international market for fruits and vegetables; Global markets for high value food products. *Agriculture Information Bulletin*. Washington, DC: USDA Economic Research Service.
- Rifkin, Jeremy. (2014). *The zero marginal cost society*. In (CCID Expert Group, Trans.). Beijing: CITIC Press Group.
- Song, Yiqun, & Wang, Yuhai. (2016). Sharing economy: Origin, definition and influence. *Teaching and Research*, (9).
- Smicek, N. (2017). The challenges of platform capitalism: Understanding the logic of a new business model. *Juncture*, (4).
- Sun, Liping. (2009). Jump start economy through restructuring economy. *Sociological Studies*, (2).
- Wallsten, S. (2015, July). *Has Uber forced taxi drivers to step up their game?* Retrieved September 22, 2017, from <http://www.theatlantic.com/business/archive/2015/07/uber-taxi-drivers-complaints-chicago-newyork/397931/>.
- Wang, Xing, & Li, Fang. (2011). History of institution: Rethinking institutional change. *Comparative Economic and Social Systems*, (2).
- Webster, Edward, Lambert, R, & Bezuidenhout, A. (2008). *Grounding globalization: Labour in the age of insecurity*. London: Oxford: Blackwell.
- Wiener, Norbert. (1978). *The human use of human beings: Cybernetics and society*. In (Chen Bu, Tran.). Beijing: The Commercial Press.
- Xi, Jinping. (2017, August 26). *Xi Jinping's remarks at the 2nd World Internet Conference*. Retrieved August 26, 2017, from http://news.xinhuanet.com/politics/2015-12/16/c_1117481089.htm.
- Xiang, Biao. (2012). *Global "body shopping": An Indian labor system in the information technology industry*. Beijing: Peking University Press.
- Zervas, G, Proserpio, D, & Byers, J. W. (2017). *The rise of the sharing economy: Estimating the impact of Airbnb on the hotel industry*. Retrieved August 31, 2017, from <https://wenku.baidu.com/view/c7de5777c77da26925c5b0e4.html>.
- Zhu, Yuke, & Zhang, Yu. (2012). The ethical dilemma and outlet of consumerism in the ecological context. *Consumer Economics*, (3).

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