Key areas of modern research of the joint consumption economy

Elena Platonova1,*, Olga Fedotova2, and Vladimir Latun3

1Moscow Pedagogical State University, 119571, Institute of Social Studies and Humanities, Moscow, Russian
2Don State Technical University, 344003, Rostov on Don, Russian Federation
3Southern Federal University, 344000, Institute of Earth Sciences, Rostov on Don, Russian Federation

Abstract. That paper is motivated by the fact that the development of a joint consumption economy is one of the most significant trends in the modern economy. The object of the study is an array of publications indexed in Scopus and devoted to the analysis of the patterns of development a joint consumption economy (sharing economy) for the period from 2000 to 2019. The study shows a dynamic growth of the number of the publications describing the impact of new digital technologies and digital on-line technological platforms based on the Internet on fundamental changes in the field of individual consumption of households. The analysis of the content of publications of Russian and foreign authors indexed in Scopus database and Russian national bibliographic database (2000-2019) allowed the authors to identify at least the six key areas of modern research of a joint consumption economy. The paper considers each of the six key areas of a joint consumption economy. Authors has predicted the emergence of new areas of research of a joint consumption economy as new trends emerge in the field of individual consumption of modern households in the context of the constant progress of digital technologies.

1 Introduction

In recent decades, one of the most discussed concepts among economists is the concept of the digital economy. Thanks to new digital technologies and the digital on-line technological platforms based on the Internet (hereinafter - DOTP) have emerged that provide services for households. Thanks to new digital technologies, digital on-line technology platforms based on the Internet (hereinafter - DOTP) have been set up in order to provide new type of service to households. The widespread use of DOTP has led to appear of a significant and constantly growing segment of the economy serving individual consumption on the principles of the direct interaction between households (C2C).

In the publications of economists, the first systemic studies of changes under the influence of the introduction DOTP on the field of household consumption date back to the early 2000s [1, 2]. According to Scopus database from 2000 to 2019 there has been an
increase in the number of publications on new trends in individual household consumption using the C2C.

Researchers use the different terms to identify data on new trends and to capture the fact that a new segment of the economy was emerging [3]. Some authors use the term of "joint consumption". As our research has shown, from 2000 to 2019, there has been an increase in the number of publications in which authors use the term of “joint consumption” or a combination of these terms in the title of the articles and keywords (Fig 1).

![Fig.1](https://scopus.com/ /term/analyzer.uri?sid)

The second most common term used by the authors to denote the trends being investigated is the term of “sharing economy”. Figure 2 shows the growth of researchers' interest in new phenomena in the field of household consumption and an increase in the number of publications indexed in the Scopus database during the period 2000-2019.

![Fig.2](https://scopus.com/ /term/analyzer.uri?sid)
According to the Scopus database the use of the term of “sharing collaboration economy” in publications is not so popular among researchers (Fig. 3). From the analysis of publications indexed in the scientometric database Skorus, it follows that the authors describe new trends in household consumption in different terms. In that study without going into a deep discussion about the advantages and the differences of the first or second terms used by the authors, we use the term of “joint consumption economy”.

**Fig. 3.** The frequency of the authors' use of the term of “sharing collaborative economy” in publications indexed in the Scopus database between 2000 and 2019 (sampling by words “sharing collaborative economy”) Source: https://scopus.com/term/analyzer.uri?sid

The most active in the study of new trends in the field of the personal consumption of households are Chinese, American and British authors, whose publications make up the majority of all publications paced in the Scopus database (Fig.4). This is due to the significant level of the penetration of the digital technologies into the individual household consumption in these countries.

**Fig. 4.** The frequency of the authors' use of the term of “joint consumption” in publications by authors from different countries indexed in the Scopus database between 2000 and 2019 (sampling by words “joint consumption”) Source: https://scopus.com/term/analyzer.uri?sid
In Russian publications, the study of new trends in the service provided for the local household began in the first decade of the 21st century. Most of the authors of publications were analyzed the experience of the development of specific manifestations of these trends in Western economies [4, 5]. Currently, with the rapid development of digital technologies, the popularity of specific DOTPs among Russian households is growing fast as well. That means setting up of a joint consumption economy in Russia. First of all, such areas as car sharing, flat-sharing, the transfer of clothes, furniture and childcare items (wheelchairs, children's furniture) that are not used by households are developing. Among the main advantages of using DOTP are the rapidity of the relationship between household demand and household supply, as well as the cheapness and availability of using the services of digital platform operators.

Despite the use of different terms by authors in publications, most of the researchers highlight the common features of the characteristics of new trends in the provision of new services for organizing individual consumption of modern households [6, 7]. These features reflect the growing influence of DOTP on the field of individual consumption of households in developed economies.

Of scientific interest is the question of which the key areas can be identified in modern research of the joint consumption economy. Finding an answer to this question is the purpose of the study in that article.

2 The methods of the study and data source

Research methods are included content analysis, generalization, graphic methods, comparison, and interpretation. Main data source was the information on publications posted by authors in the Scopus database between 2000 and 2019. In addition, the study used data from the Russian national bibliographic database (Russian Science Citation Index - RSCI).

3 Results and discussion

The result of the study is the identification of the key areas of research by Russian and foreign authors of a joint consumption economy as follows:

First, a research of the impact of Industry 4.0 technologies on the development of services for individual consumption of modern households.

Second, a research of new business models that appear due to the development of a joint consumption economy and bring the significant income to developers of digital platforms as a relatively young business.

Third, a study of changes in household preferences in favor of choosing temporary use of things and refusal to acquire them in ownership.

Fourth, a research of the influence of the "consumer society" on the environment and the possibility of reducing the anthropogenic impact of the modern economy through the secondary use of things thanks to development of a joint consumption economy.

Fifth, a research of government regulation of the relations between households in a joint consumption economy.

Sixth, a research of the impact of the development of a joint consumption economy on the rate of development of the regional economy in various countries and changes in the structure of employment.
The first research direction is the most studied by economists [8, 9, 10]. The authors are actively investigating the emergence of innovative technologies and new types of DOTP, which linked the solvent demand from millions of consumers with the supply of owners of unused consumer goods or demanded services on a national and global scale [11].

In addition to DOTP that provide car sharing, bicycle sharing and flat sharing service’s on the market the new DOTP are being developed on the basis of which the needs for minor repairs, social assistance for households and private transportation are satisfied. Such popular services as Yandex.taxi (2011), Youdo (2012), Profi.gi (2014), Yula (2016), and Uslugi.Yandex (2018) have appeared in Russia. The growing popularity of these services among households is evidenced by the growth of income of operators of DOTP. So, in 2019, Yandex, the largest operators of DOTP has received 71% more revenue from sales of service of Yandex.Taxi compared to 2018 [12].

Currently, the development of business models that ensure the development of a joint consumption economy is on the way to penetration into the field of financial and credit services. Due to the restrictions, that banking and other financial institutions impose on innovative borrowers, business models for joint financing of innovative projects by households are rapidly developing that are characterized by the significant risks and uncertainties.

Since 2008, according to the Scopus database the authors have been investigating the financial models of crowdsource based on DOTP. Moreover, the largest number of publications on this subject has been since 2015 (Fig.5).

![Figure 5](https://scopus.com/term/analyzer.uri?sid)

Fig.5. The frequency of the authors' use of the term of “crowdsource” in publications by authors from different countries indexed in the Scopus database between 2000 and 2019 (sampling by words “crowdsource”) Source: https://scopus.com/term/analyzer.uri?sid

These data correlate with the data of the RSCI database. The authors of the publications indexed in both database reflect the fact of the rapid development of DOTP that gives an opportunity for the private investors to invest to the innovative projects and the borrowers to accumulate the significant funds to implement their innovative ideas [13-15].

DOTP has allowed millions of people to receive the economic benefits not from the ownership of the expensive consumer goods but from the temporary usage such type of the things within a limited family budget. The authors of the publications note a downward trend in sales of new expensive items and an increase in demand for their temporary use due to the development of the service provided by operators of DOTP [16].
The consumer society is characterized by an increase in the production of the consumer goods that requires the huge amount of resources including non-reproducible ones. Thanks to DOTP the households have possibility to reuse commodities resulting in a reduction in the resources needed to meet individual needs. The development of a joint consumption economy overcomes the waste of the consumption society and contributes to resource savings [17, 18].

The development of a joint consumption economy has the effect of increasing the role of interpersonal and social transactions among household members. In order to mitigate the risks of the fraud and the deception of the consumers the economic aspects of these transactions should be subject of government regulation. In the same time by raising the legal issues of the government regulation of that type of social relations the authors simultaneously warn against excessive interference of the public authorities in voluntary relationships between households [19, 20].

The authors of publications indexed in the Scopus database discuss the issue of the controversial influence of a joint consumption economy on job creation and the development of small and medium-sized businesses in the regional economy in various countries. On the one hand, the constant need to set up new DOTP conducts to the development of small innovative enterprises and increases the level of employment among talented programmers. On the other hand, Jeremy Green has shown a negative impact of carsharing on the auto industry [21]. According to author, carsharing generates a tendency to reduce the need for new cars and, as a result, the elimination of job in regions where the automotive industry held a leading position.

4 Conclusion

Our study showed a significant increase in publications indexed in Scopus database, starting in 2011, regardless of the terms were used by the authors to describe the new trends in the field of personal consumption of households. The authors use both the term of “joint consumption economy” and the term of “sharing economy” roughly equally. In the publications indexed in Scopus database, several key areas of research can be identified that reflect the increasing influence of the joint consumption economy on the development of the modern economy. During the period of setting up a joint consumption economy, the authors have focused on the role of digitalization and the development of DOTP.

In recent years, the authors are expanding the range of studies of a joint consumption economy. In the publications, the authors consider the environmental, social, legal and other aspects of a joint consumption economy as a sustainable segment of the modern economy. Based on the trends outlined in our study, it can be argued with certainty that with the development of a joint consumption economy new areas of study of this economic and social phenomenon will be identified.

The study was carried out with the financial support of the Russian Foundation for Basic Research within the framework of scientific project No. 20-010-00180 "a".

References

1. P. A. Albinsson, Y. Perera, Journal of Consumer Behaviour, 11(4), 303-315 (2012)
2. E. Platonova, Financial economy, 1, 641-646 (2019)
3. T. Ignatova, E. Platonova, A. Pavlyukova, G. Sroslak, Advances in Economics, Business and Management Research Proceedings, 139 (2020)
4. E. Avdokushin, L. Belova, Issue of New Economy, 2(46), 4-14(2018)
5. E. S. Sadovaya, World Economy and International Relations, 62(12), 35-45 (2018)
6. J. B. Chor, Connor J. Fitzmaurice, Handbook of Research on Sustainable Consumption, 410-425 (2014)
7. F. Bardhi, G. Eckhardt, Journal of Consumer Research, 39(4), 881-898(2012)
8. M. K. Peter, M. D. Vecchia, Studies in Systems, Decision and Control, 294, 251-265 (2021)
9. F. X. de Vaujany, A. Leclercq-Vandelannoitte, R. Holt, Journal of Management Inquiry, 29(4), 450-467 (2020)
10. L. Richardson, Geoforum, 67, 121-129(2015)
11. S.-K. Kim. Mathematics, 7(11), 1005 (2019) doi:10.3390/math7111005
12. Yandex announces financial results for the IV quarter of 2019 and 2019. URL: https://yandex.ru / company / press_releases / 2020 / 2020-02-14/ (Last accessed 15.07.2020)
13. H. J. Ye, A. Kankanhalli, Information and Management, 52(1), 98-110 (2015)
14. F. L. Almeida, A. J. Kennedy, Brook Lin, Irina Nowak, International Journal of Innovation Science, 11(3), 471-488 (2019)
15. S. R. Chakravarthy, A. Dudin, Journal of the operational research society, 68(3), 221-236 (2017) doi.org/10.1057/s41274-016-0099-x
16. L. L. Price, R. W. Belk, Journal of the Association for Consumer Research, 1(2), 193-197 (2016)
17. A. Kriston, T. Szabó, G. Inzelt, International Journal of Hydrogen Energy, 35(23), 12697-12708 (2010)
18. H. Heinrichs, GAIA, 22(4), 228-231 (2013)
19. T. A. Weber, Journal of Management Information Systems, 31(3), 35-71 (2014)
20. B. S. Weber, Transportation Research Part A: Policy and Practice, 130, 496-506 (2019)
21. J. Green, Automotive Industries AI, 194(12) (2014)