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The sharing economy as an anti-crisis tool for regional development: the experience of Russia and the European Union countries

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Abstract: The purpose of the study is to examine the development factors and management models of the sharing economy in Russia and the EU countries as anti-crisis instruments of territorial development during periods of instability. The article presents the results of a comprehensive analysis of the structure of the sharing economy on a global scale, as well as the regional experience of its manifestation in Russia and the European Union countries. It proved that in the countries of the European Union, the practices of the sharing economy are more widespread due to their desire for responsible consumption and reducing the burden on the ecosystem. However, the lower purchasing power of the population and the search for rational consumption models create prerequisites for the advanced development of the sharing economy in developing countries. The article identifies the built-in mechanisms of the sharing economy that ensure the anti-crisis effect of regional development.

Keywords: sharing economy; Russia; European Union; region; C2C trade; carsharing; carpooling; online freelancing; short-term rental of accommodation facilities.

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1 Introduction

The evolution of the paradigmatic foundations of society, in particular, private property, commodity relations, the nature of consumption, virtualisation and digitalisation, leads to the emergence of new phenomena in the economy. One of these phenomena has become the sharing economy or the economy of shared consumption (Botsman and Rogers, 2010; Lymar, 2018).

Firstly, the nature of personal consumption has been transformed due to a change in the relationship between the value of private property and freedom. The unlimited growth of material needs has been replaced by people's desire to satisfy spiritual and social needs. This cannot but affect a person's desire for freedom and, consequently, a change in the boundaries of private property. In modern society, private property must meet the objectives of granting the right to dispose of the created product and make a profit (Karpunina and Karpunin, 2021).

Secondly, there have been shifts in commodity relations due to the gradual weakening of the role of the value characteristics underlying the exchange and, on the contrary, the strengthening of value (subjective, status, individual), as well as by overcoming the exchange of goods of national frameworks and access to digital platforms (Roshchina, 2005).

Thirdly, the negative consequences of the development of a consumer society, as well as the desire of the population to save money, are becoming increasingly obvious (Prahalad and Ramaswamy, 2010). An important feature of the sharing economy is the ability to reduce transaction costs, which is achieved through hierarchies with ultra-low management costs, networks without companies, markets with aggregators, exchange and reuse. This creates a low base effect and, as a result, the possibility of generating additional income (Auzan, 2019). In conditions when there is a change in patterns of consumer behaviour while reducing the income level of the population in most countries of the world due to the growth of uncertainty factors, joint consumption allows meeting the needs of the population to save money (Karpunina et al., 2021a).

Fourthly, the intensive introduction of digital technologies has made it possible to transfer the processes of purchasing goods and services to digital platforms. This has contributed to increased ease of use, reduced time spent on the operation, simplified the operations themselves, reduced barriers to interaction between buyers and sellers, and the emergence of new consumption models in the online format (Podorova-Anikina et al., 2022; Karpunina et al., 2022a, 2022b).

The sharing of goods and services, exchange and various forms of rent are becoming not only a kind of tool for solving the problem of overconsumption but also a reserve for GDP growth. According to forecasts from expert organisations, the volume of the global economy of shared consumption in 2025 will reach 282.7 billion euros (RBC, 2019). In pre-pandemic 2019, the sharing economy in Europe was characterised by positive dynamics. According to Eurostat, in 2017, 18% of Europeans used the services of the sharing economy, in 2018 – 19%, in 2020 – already 21% (Bolassa, 2020). In countries with mature economies, the formation of the sharing economy occurred at an earlier date, in most countries with developing economies, such areas of activity have just begun to gain strength (Tagarov, 2019; Anokhov, 2018). There are also examples of the extraordinary growth of the sharing economy that goes beyond global trends: in particular, in China, the volume of the economy of shared consumption already ranges from 1.5% to 1.67% of the country's GDP (Daxueconsulting, 2018). This suggests that the development of a sharing economy can be considered a source of growth in the well-being of the population.

The sectoral structure of the sharing economy (rental of things, transport services, rental of premises for work, and so on) in the context of the countries of the world has its specifics (Rinne, 2017; Stanoevska-Slabeva et al., 2017; Codagnone et al., 2016; Bolassa, 2020). At the same time, the perception of this type of economic activity by the governments of the countries is also diverse (Shaikomalova, 2018).

The pandemic has contributed to the development of the sharing economy in most countries and regions, but analysts note a slowdown in its growth (Shmeleva et al., 2020). The reduction in the monetary incomes of citizens of most countries with the advent of the pandemic and the forced restriction of movement not only reduced the effective demand of the population but also changed consumer behaviour patterns (CSR, 2020). Starting in 2020, it is possible to observe a change in the consumption structure towards an increase in public spending on essential goods, including personal protective equipment and medicines, a reduction in consumption in the segment of large purchases, and the desire of the population to save money due to the uncertainty of the future. The lean consumption model has come to the fore in organisations (Karpunina and Karpunin, 2021).

The business model underlying the sharing economy is the one that most closely follows the principles of sustainable consumption. Its main advantages from this perspective are efficient acquisition of goods and services, exchange, reuse at favourable price conditions, elimination of liability, reduction of costs associated with private property ownership, and avoidance of costs associated with excessive consumption (Shmeleva et al., 2020).

From these positions, in conditions of uncertainty, the development of the sharing economy has good prospects as a tool for optimising costs and freeing up resources of the economic system.

In particular, the Russian regions in the pre-pandemic period demonstrated such successful practices that can be adapted in other countries, for example, in the states of the European Union, where the development of the sharing economy is represented more in urban agglomerations than in the regions.

Thus, the purpose of the study is to examine the development factors and management models of the sharing economy in Russia and the EU countries as anti-crisis instruments of territorial development during periods of instability.

Objectives of the study: to study the sectoral structure of the sharing economy on a global scale, taking into account the features of its development in dynamics; to identify differences in the development of sectors of the sharing economy in Russia and countries of the European Union; to form recommendations on the application of successful practices of using services of the sharing economy as drivers of regional development in a period of instability.

2 Literature review

The conceptual provisions concerning the principles of the organisation of the sharing economy and the main mechanisms of its functioning are presented in the works of Botsman and Rogers (2010), Sundararajan (2014, 2016), Dillahun and Malone (2015), Frenken et al. (2015), Schor et al. (2014), Belk (2014), Plyasova et al. (2022) and Karpunina and Karpunin (2021).

In particular, Botsman and Rogers (2010) argue that the mechanisms of the sharing economy provide consumers with economic and social benefits based on the use of additional resources. The same point of view is shared by Dillahun and Malone (2015) and Frenken et al. (2015), emphasising that the opportunity to increase consumer income is created by using other people's idle capacities. Steuer (2009) and Heinrichs (2013) note the necessary condition for the implementation of the model of shared consumption: in the process of sharing goods and services, communities with strong ties are formed. Currently, shared consumption services are based on digital platform solutions (Sundararajan, 2014).

Researchers highlight the ability of the sharing economy to reduce the negative consequences of the development of a consumer society (Sundararajan, 2016). An alternative point of view is expressed by Shore et al. (2014) and Belk (2014), arguing that the sharing economy is based solely on motives aimed at obtaining economic benefits, and Lessig (2008) adds that social motivations are also present in it.

However, researchers agree that the implementation of models of the sharing economy brings both economic and social benefits and, in some cases, can become an anti-crisis development tool (Plyasova et al., 2022; Karpunina and Karpunin, 2021).

In the pre-pandemic period, countries were ranked according to the level of development of the sharing economy. In particular, Iceland, Turks and Caicos Islands, and Malta took the first place in the world in 2018 (Timbro, 2017). However, its development in different countries and regions remained uneven due to the existence of various restrictions. For example, Gusev et al. (2021), Bychkova et al. (2020), and Filimonova et al. (2016) indicate a low level of development of digital infrastructure in the regions. Another reason is the concentration of consumer demand in megacities (RAEC, 2019). Of course, a key role is assigned to the system of state regulation, which can stimulate or hinder the development of this type of activity (Dostmohammad and Long, 2015).

The COVID-19 pandemic has reduced economic activity in many sectors of the economy and countries, becoming a factor in the temporary reduction of this market segment (Shmeleva et al., 2020). However, the sharing economy has managed to recover more efficiently. This is evidenced by data from the Consumer Choice Center, indicating the high adaptability of the sharing economy and the ability to change following external challenges (Consumerchoicecenter, 2022).

3 Research methodology

- *Hypothesis 1.* In the developed countries of the European Union, the practices of the sharing economy are more widespread due to their desire for responsible consumption and reducing the burden on the ecosystem. However, the lower purchasing power of the population and the search for more rational consumption models create prerequisites for the advanced development of sharing services in Russia and other emerging economies.
- *Hypothesis 2.* The economy of shared consumption can become an anti-crisis tool for regional development in a period of instability since built-in mechanisms ensure cost savings and thrift of consumption.
- *Hypothesis 3.* The pandemic has created the preconditions for the establishment of the concept of responsible consumption. The model of the sharing economy is most consistent with the principles of consumption and ensuring sustainable development.

Research methods:

- 1 The analysis of the development structure of the sharing economy was carried out using the methods of collecting and analysing statistical information from open sources, processing and systematisation.
- 2 The identification of regional dynamics of the development of sectors of the sharing economy was carried out by the authors based on the application of methods of economic and statistical analysis, graphical method and method of tabular presentation of information.
- 3 The assessment of the prospects for the development of the sharing economy in various regions of the world and the justification of measures to ensure them were based on a systems approach, the method of induction and deduction, and the logical method.

4 Results and discussion

4.1 *The main patterns of the development of the sharing economy in the world in the pre-pandemic period*

Several factors form stable prerequisites for the development of the sharing economy, including the spread of the internet, the expansion of the potential of digital technologies, generational change, as well as increased uncertainty and turbulence. Not only do owners underutilise their assets, they also seek to give them away for temporary use. The intensive development of digital platforms creates conditions for the implementation of the interests of owners and their online interaction with buyers. In addition, intensive digitalisation and increased information openness have become the reasons for establishing greater trust between economic agents based on reviews and ratings. All this contributed to the emergence of a new trend of collective use of goods and services to obtain greater benefits and convenience from temporary access to the product.

The model of the economy of shared consumption is based on the effect of a low base, which encourages individuals and entrepreneurs to launch projects in such areas as food sharing, the exchange of clothes and toys, shared housing and travel, providing them with additional income.

Another trend of the current stage of socio-economic development is the desire for rational use of resources and responsible consumption, which is manifested in the emergence of new global trends such as smart cities, intelligent transport infrastructure, smart housing systems, etc. which can be implemented using shared consumption services. Also, the services of the sharing economy meet the objectives of reducing the ecological footprint by reducing emissions: for example, travel based on housing exchange reduces emissions by 66% compared to hotel accommodation, and the sharing of bicycles and scooters in Moscow during 2018 reduced carbon monoxide emissions by 40 tons (RBC, 2019).

The implementation of the sharing economy model in different country conditions has specific features.

On the one hand, it has features that can make it most applicable in developed countries. For example, a more developed digital infrastructure created in developed countries creates prerequisites for the widespread use of digital sharing services and for levelling territorial disparities due to wider access of users to the internet. At the same time, it is the developed countries that are taking the most active steps towards responsibly expanding consumption practices and reducing the environmental burden, which correlates with the key principles of the sharing economy model (Karpunina and Karpunin, 2021).

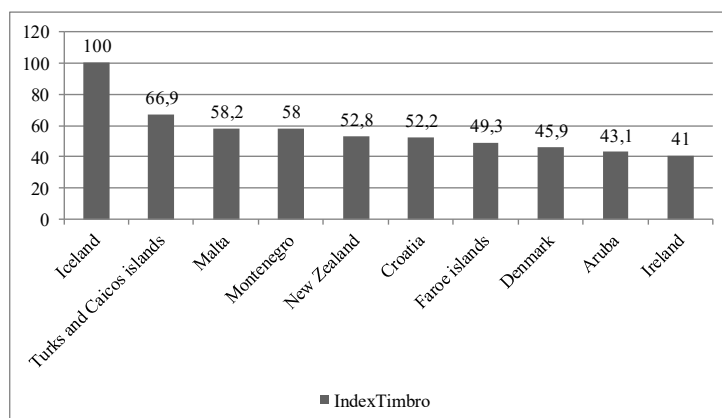
On the other hand, developing countries have more reasons to actively develop sharing economy services. This is explained by a lower standard and quality of life, moderate incomes and the population's expressed need to save money. In developing countries, the quality of digital infrastructure is also lower in terms of providing broadband internet access to the population, but mobile internet access and the number of active consumers of digital services are outpacing many developed countries in terms of growth rates (Bychkova et al., 2020).

This situation is also developing in terms of providing special devices with access to the internet: in developing countries, it is traditionally lower than in developed countries with a higher level of well-being of the population. However, the use of mobile phones and laptop computers solves the problem in many ways. For example, in 2019 in Russia, only 39.7% of households in urban areas and 27.7% in rural areas used a desktop computer to access the internet, but 66% of the population used other mobile devices (mobile phones or smartphones) (Gks, 2020).

The leaders in the ranking of countries according to the global sharing economy index in 2016 are Iceland, the Turks and Caicos Islands, and Malta. The top ten of the European Union countries, except Malta, also included Croatia, Denmark, and Ireland. Russia was ranked 105th with an index of 1.2 (Figure 1).

The Global Index of the Sharing Economy in 2016 also highlights the fact that developing countries occupy the top positions of the rating along with European leaders. This once again confirms the desire of both developed and developing countries to use the sharing economy model to solve their problems – the search for more rational consumption models.

Figure 1 The ranking of the countries according to the global index of the sharing economy, 2016



Source: Compiled by the authors according to Timbro (2017)

4.2 Development trends of the sharing economy in the European Union countries

The rapid growth of the co-consumption economy has been observed in the European Union since 2013. In 2015, the turnover of co-consumption operations was estimated at 28 billion euros (Vaughan and Daverio, 2019).

In 2014, revenues from the sharing economy in the UK were estimated at 500 million pounds, and by 2025, according to PwC experts, they could reach 9 billion pounds (Vaughan and Hawksworth, 2014).

The value of the sharing economy in the European Union was US\$26.5 billion in 2016 (0.17% of the total GDP of the countries) (Europa, 2020). The sharing economy sectors are most developed in France (25% of the total sharing economy in the EU28), the UK (17%), Poland (10%) and Spain (10%). 80% of the total income of the EU sharing economy comes from seven European countries (in addition to the above, this group includes Germany, Italy and Denmark).

By 2016, 17% of European residents participated in transactions on digital platforms of the sharing economy, by 2018, their share had increased to 23%, and that is, the growth in 2016-2018 amounted to 35.3% (European Commission, 2018). In the countries of the European Union, the most active users of the services of the sharing economy are 27% – the population of the age group from 25 to 39 years; 26% – self-employed citizens; 25% – employees.

According to experts, the annual growth potential of the sharing economy in Europe exceeds 25%, and in some sectors, it may reach 63% by 2025 (Goudin, 2016).

According to the French Government, in 2016, the turnover of the economy of shared consumption in the country exceeded 2.5 billion dollars, and 15,000 enterprises (including self-employed) participated in projects of the economy of shared consumption, which employed 13,000 permanent jobs. This amounted to approximately 0.1% of French GDP, which involved 0.5% of French companies and 0.05% of the French workforce (Barbezieux and Herody, 2016).

The level of development of the sharing economy in European countries is determined by existing cultural characteristics, in particular, the services of the sharing economy are actively used in France and Ireland, while residents of Portugal and Finland are less inclined to share transactions (Munkøe, 2017).

The areas of the most widespread sharing economy in European countries are transport, travel, finance, recruitment, video and music streaming (PwC, 2015).

The volume of the carsharing market in the European Union in the period 2016–2018 has more than doubled, and the number of users has reached 11.5 million people (Analytical Center under the Government of the Russian Federation, 2019).

Many European countries have begun to limit the sphere of short-term rental housing due to the intensive development of tourism, because of this; its growth potential is decreasing. Thus, in some German cities, a ban has been imposed on renting out more than half of private property. In some French cities, a general rental period has been set for a year, for example, in some areas of Paris, for more than 120 days during a calendar year (Mastercard, 2017).

4.3 The key trends in the development of the sharing economy in Russia

Despite the comparative lag between Russia and the European Union countries in terms of the volume of the sharing economy, its development in Russian conditions is characterised by pronounced growing dynamics. Thus, in the pre-pandemic period of 2017–2019, the growth amounted to 96.3%, and in value, terms reached 8,436.9 million US dollars (RAEC, 2019). Russia's lag in the global space and the trend of catching up development is explained, first of all, by the later timing of entry into the market of Russian sharing startups and, accordingly, the belated timing of the creation of technical and organisational conditions for their development (Plyasova et al., 2022; Karpunina et al., 2021b).

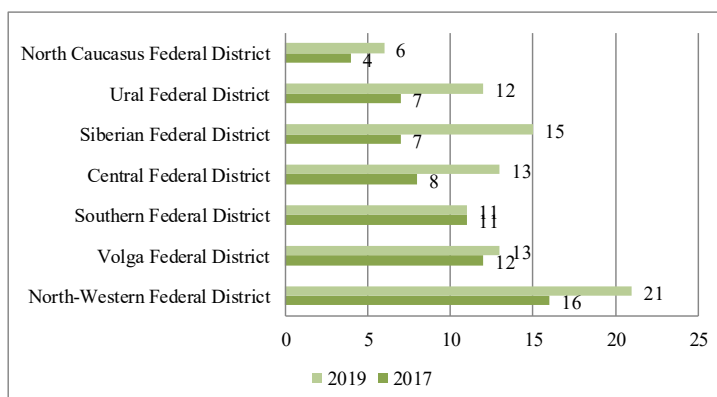
Geographically, the services of the sharing economy in Russia are primarily represented in megacities. The factors determining the specifics of the territorial distribution of services are the high concentration of the population in the capital and several large cities of the country, restrictions caused by the development of transport infrastructure and interregional logistics, differentiation of public access to the internet in remote areas from the country (Bychkova et al., 2020; Galeeva and Ishtiryakova, 2020; RAEC, 2018).

The sectoral structure of the sharing economy in Russia also has distinctive specifics. The largest volume of transactions (72%) is carried out in the C2C sales sector of things, P2P freelancer services account for 19% of the market, carsharing and carpooling services account for 2.5% of the market, short-term rental services for P2P housing account for 2% (RAEC, 2018).

In the pre-pandemic 2019, the Russian C2C-trade sector grew by 53% and reached 6227.7 million US dollars. In the period 2017–2019, there was a noticeable trend of moving services to the regions (an increase of 12%) and a decrease in the share of participation of megacities (Data Insight, 2019) (Figure 2).

Transport infrastructure has begun to develop in Russia. This made it possible to launch inter-regional delivery services. This has become a factor in the growth of transactions in the C2C trading sector. For example, the launch of delivery on the Avito digital platform in 2018 provoked an increase in long-distance transactions in the total volume of transactions (from 32% to 47%).

Figure 2 Regional specifics of the development of the C2C-trade sector in Russia, %, 2017–2019 (see online version for colours)



Source: Compiled by the authors according to Data Insight (2019)

The volume of transactions in the freelance P2P services sector in 2019 amounted to 1,534.9 million US dollars, and the number of people employed in this sector was 2.5 million. In 2018–2019, the volume of this sector increased by 43% compared to the previous year. There is also a regional specificity in this sector. This applies to the placement of customers for online services of freelancers; most of them are located in megacities, for example, in Moscow (35%), St. Petersburg (11%), and the Moscow region (8%). At the same time, the location of freelancers is differentiated by regions of the country (in the Stavropol Territory – 27%, in the Omsk region – 23%, in the Chelyabinsk region – 21%, in the Novosibirsk region – 20%, in the Republic of Tatarstan – 20%). This is explained by more attractive living conditions in the regions in terms of the ratio of financial costs, non-attachment to the place of work, and free work schedule (TalentTech, HSE and FL.ru, 2020; HeadHunter, 2020).

In pre-pandemic 2019, the annual growth of the carsharing sector in Russia amounted to 58%. However, there is also a territorial unevenness. Once again, the market leaders are Moscow and the Moscow Region (84.59% of all trips), St. Petersburg and the Leningrad Region (8.35% of all trips). The positive dynamics of the development of the carsharing sector in 2018–2019 were observed only in some regions: Krasnodar Territory (0.98%), Samara Region (0.91%), the Republic of Bashkortostan (0.78%), Nizhny Novgorod Region (0.72%) (Sberbank, 2019).

In 2017–2019, the volume of transactions in the Russian carpooling sector increased by 119.8%, primarily due to the intensive development of BlaBlaCar, BeepCar (Mail.ru Group), ‘Yandex’ (passenger traffic amounted to 16 million people). The regional specifics of the development of this sector are manifested in the expansion of carpooling services to the regions of Russia from Moscow, the Moscow region and St. Petersburg to the Nizhny Novgorod Region, Sverdlovsk Region, Chelyabinsk Region, Krasnoyarsk Territory, Rostov region.

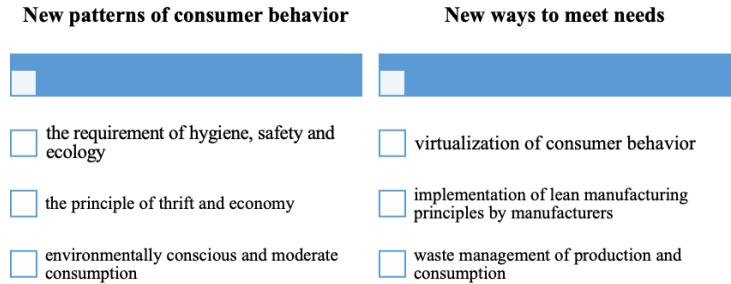
In 2017–2019, the short-term rental sector in Russia also grew dynamically (an increase of 169%). First of all, the development of domestic tourism contributed to this. Short-term rentals have become very attractive to consumers for several reasons. Firstly, it allows you to save on rent and meals. Secondly, in this case, the confidentiality of user

information is ensured. Thirdly, such a placement format creates a great interest among consumers in studying local features through direct communication with homeowners. In terms of territories, this sector is also characterised by relative unevenness: 25% of facilities are located in Moscow, 32% in St. Petersburg, and 43% of facilities in other regions.

4.4 The pandemic and its impact on the development of the sharing economy: general trends

During the pandemic, many needs of the population were transformed, as well as ways to meet them. New trends were laid out, which were developed in the post-epidemic period (Figure 3).

Figure 3 New trends in consumer behaviour during the pandemic (see online version for colours)



Source: Compiled by the authors

Firstly, consumers have become more attentive in terms of compliance with hygiene, safety and environmental requirements. Consumers began to choose products from manufacturers who are attentive to hygiene standards, including the availability of sanitizers, the use of masks and gloves, equipment with air purifiers, etc. (Retail.ru, 2021).

Secondly, the priority principles of consumption have become thrift and foresight, that is, attentiveness in making decisions about buying goods and the desire to save money to maintain well-being due to uncertainty in the future.

Thirdly, concern for personal health has led to the formation of a new pattern – environmentally conscious and moderate consumption. It was the result of an increase in the share of food products in the total consumption structure of the population during the pandemic, as well as a shift in consumer needs towards maintaining their health and improving their quality of life.

This has led to the consolidation of new consumption patterns, including due to the simultaneous intensive development of technologies. The pandemic has become a factor in the intensification of the development of the online sales sector. The release of sales in the online format occurred due to the forced isolation of the house, as well as changes in consumer demand. For example, it has grown in the context of certain product groups, and the frequency of purchases has increased. In many cases, the contents of the consumer basket have changed due to a decrease in the effective demand of the population (Data Insight, 2020). During the pandemic, the trend towards the use of a ‘subscription model’ has intensified, which applies to both intangible and tangible

objects. For example, by subscription, you can access both entertainment and educational platforms like Netflix or SmartReading, as well as a car or residential facility.

During the pandemic, there was a global transition to a distributed business model. According to Gartner, a third of organisations during the pandemic abandoned permanent employees in favour of freelance specialists (freelancers, consultants engaged for a certain time to implement specific tasks). The general forced transition to a remote work format against the background of declining socio-economic stability provoked an increased trend towards employee sharing. At the same time, there was a shortage of staff in the sectors of the economy related to e-commerce and delivery, including food and ready meals, as services could not cope with the dynamically growing demand. As a result, temporary jobs appeared in many companies. Thus, the pandemic has given a new scale to the trend of staff sharing – the recruitment of temporary staff during peak periods.

The application of a distributed labour organisation model and the transfer of employees to remote work have led to a revision of approaches to the use of office space. For example, McKinsey predicts that the number of working hours that employees spend in offices will decrease by 12 in the post-retirement period (RBC, 2020b).

4.5 The economy of shared consumption as an anti-crisis tool: the case of Russia

In the pandemic 2020, the volume of the Russian P2P freelancing market grew by 31%. Users began to try themselves at performing virtual tasks, and the self-isolation mode provoked an increase in demand and supply for courier services.

In March 2020, a law was passed making it possible to apply a tax on professional income ('tax on the self-employed') to all regions of the Russian Federation. By October 2020, the population of all 85 regions of the country began to apply this special tax regime. In the autumn of 2020, the number of registered self-employed exceeded 1 million people, among whom the share of participants in the sharing economy is estimated at 7%–10%. Thus, this instrument of the sharing economy during the pandemic, when a record increase in unemployment was recorded, stimulated employment and provided additional income to the population.

The introduction of COVID restrictions has led to changes in the work of enterprises in the carsharing sector in the regions of Russia. For example, in the period April-May 2020, the traffic load was only 60%–70% compared to the period of 2019. At the same time, in June 2020, the recovery of consumer demand became noticeable. Nevertheless, changes in the landscape of the carsharing market in Russia continue: both the composition of market participants and the cost and conditions of service provision are changing.

The severe contraction of domestic tourism and the introduction of restrictions on movement caused a reduction in the short-term rental sector of accommodation facilities. In 2020, the occupancy rate decreased to 54%–58% (RBC, 2020a). After the quarantine measures were lifted, guest services began to adapt to the new conditions, primarily in terms of ensuring their safety of stay. The overall impact of the pandemic on the well-being of the population turned out to be negative. On the contrary, the development of the sharing economy has become more attractive to consumers in terms of cost

savings. Thus, the optimal ratio of price, quality and safety in the short-term rental sector highlighted its advantages over hotel accommodation.

Another new trend in the sharing economy emerged during the pandemic. The formation of the habit of door-to-door delivery has made it possible to expand the geography of involvement in the sharing economy and almost simultaneously in megacities, generating a high level of demand and supply in the regions of the country. The population has entered into constant close contact with entrepreneurs who work for Avito. During this period, all conditions (transport infrastructure, electronic services, and personnel) were formed so that consumers could receive orders from other regions (Fremstad et al., 2018).

The pandemic contributed to the transformation of a person's worldview and the revision of his values. This, in turn, led to noticeable changes in his consumer preferences towards increased responsible consumption.

The issues of maintaining health, family values and personal well-being came to the fore. Thus, new aspects of human-environmental interaction have emerged. The Russian population began to implement programs to level out excessive consumption, reuse practices, make a choice in favour of goods from recycled raw materials, and pay increased attention to waste sorting.

Another useful habit of the population during the pandemic was the use of eco-products in their daily diet, which indicates an increase in consumer attention to the naturalness and usefulness of the products themselves, as well as to the methods used to produce products and the presence of the so-called 'ecological footprint' (Sildeir, 2022). For example, surveys have revealed that 67% of the Russian population has become more careful about food, reduced food waste, minimised the use of packaging or resorted to its reuse. People prefer products that have undergone minimal processing and exclude chemical additives.

During the pandemic, manufacturers also began to respond to changes in consumer behaviour and adapt production lines and sales services to changed conditions, for example, through the digitalisation of means of delivery and promotion of goods and services, take measures to minimise production and consumption waste and look for alternative ways to recycle them (PPCworld, 2020).

Of course, the success of the launched services of the sharing economy was facilitated by the formation of an online environment with a high level of trust. A global survey of respondents from 58 countries, 'Trust in Advertising Survey', showed that the vast majority trust the recommendations and advice of relatives and friends (84%). But a significant proportion also tend to trust the opinions of unfamiliar consumers posted on the internet (68%) (Nielsen, 2013; Batova and Tochitskaya, 2020). These claims are supported by another study, 'Entering the Trust Age'. A survey of BlaBlaCar users showed that 88% of users trust strangers, as well as their family members if they have a full profile of personal information (Mazzella, 2016).

I. Pais and G. Provazi proved the importance of social factors in the development of the model of shared consumption and linked its rapid growth with the need to fill the social vacuum caused by the failures of the market and the state. This is ensured through the development of new joint forms of relationships that go beyond obtaining only economic benefits, contributing to the strengthening of social relations (Pais and Provazi, 2015). The model of shared consumption, which was originally based on social interaction, evolved. Now, it has absorbed the commercial sector, where services are important to save costs and minimise communication.

The sharing economy is becoming a source for the emergence of previously monetised markets for goods and services. In addition, the development of sectors of the economy of shared consumption contributes to increasing the efficiency of resource use and minimising waste (French, 2015).

The expansion of the sphere of joint consumption stimulates qualitative change and development of traditional industries, which, to ensure competitiveness, are forced to become similar to sharing platforms.

Thus, those sectors of the sharing economy in Russia that grew during the pandemic have the potential for further growth at the stage of post-pandemic recovery.

4.6 Proposals for the development of sectors of the sharing economy

Firstly, the development of the sharing economy in both developed and developing countries requires the improvement of technological infrastructure in terms of providing access to the internet and maintaining high network bandwidth.

Secondly, due to the specifics of the participants in the rank economy that form the supply of services (as a rule, they are independent contractors), digital services cannot guarantee a certain quality of services. It is more profitable for the contractor to provide the service, reducing costs and thereby increasing profits. However, understanding the mechanism of building consumer trust and using it for the benefit of long-term development pushes digital platforms of the sharing economy to introduce their security guarantees (for example, identity verification when registering on the platform based on document reconciliation) (Cohen and Sundararajan, 2015; Dostmohammad and Long, 2015). Thus, the quality of services is fully provided by sellers, leaving the state outside the influence. However, institutional measures on the part of the state are required, which, as well as in the direction of traditional types of services, will maintain their quality.

Thirdly, for all participants in the sharing economy, an important component of high-quality interaction is digital literacy, which provides a high level of security in the implementation of transactions (Karpunina et al., 2021a).

Fourthly, measures are required to ensure uniformity in the regulation of digital transactions to prevent competition restrictions and ensure the development of digital services in the sharing economy. In other words, institutional certainty is needed, for example, in terms of access to user data, their transactions and further use of this data, as well as in terms of tax regulations for new models of relations between suppliers and consumers of services, stimulating innovation and job creation in the sectors of the sharing economy. In 2017, guidelines and frameworks for decision-making and policy development in the field of the sharing economy were developed to address key issues related to the social, environmental and economic consequences of its development and the use of opportunities provided – IWA-27:2017, and steps were taken towards the development of international standards in the field of functioning and management of sharing platforms (ISO/TC 324) (Naden, 2019).

Fifthly, the information security of transaction participants is important. Therefore, measures are required to mitigate cyber risks in the digital environment, which also relates to the sphere of state intervention and the development of the institutional framework for regulating the internet.

Sixthly, there is currently no unified procedure for collecting statistical information on the functioning of the sectors of the sharing economy, and estimates are made based on fragmentary research and transaction analysis. The limited statistical information makes it impossible to predict the long-term development of the sharing economy and promptly respond to emerging threats.

5 Conclusions

The article provides a comparative analysis of the development of the sharing economy in Russia and the countries of the European Union. The results highlighted the presence of signs of catching up with Russia's development in comparison with developed countries. The authors have identified the reasons for Russia's lag, which consist of the late launch of sharing services and the pronounced regional differentiation of their placement.

The authors have identified the sectoral and regional specifics of the sharing economy in Russia and the countries of the European Union, as well as the factors determining the nature of its development.

The article examines the features of the changes that occurred in the sectors of the sharing economy during the pandemic. The author's conclusions are related to the justification of the sharing economy as an anti-crisis tool that proves its effectiveness during periods of instability. The change in patterns of consumer behaviour during the pandemic and the corresponding transformation of consumer demand, creating prerequisites for more intensive post-market development of the sectors of the sharing economy, are revealed.

Measures are proposed to promote the development of the sectors of the sharing economy in Russia to overcome the country's existing lag behind the developed countries of the European Union. It is substantiated that the proposed measures should be implemented in the direction of creating institutional conditions, improving digital infrastructure, taking into account the requirements of improving information security, as well as creating an information environment with a high level of trust between transaction participants.

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