

TAX CONTROL DEVELOPMENT IN THE CONDITIONS OF ECONOMY DIGITIZATION

Yana S. Matkovskaya^{1*}, Olga S. Dyakonova²

¹Doctor of Economic Sciences, Associate Professor, Leading Researcher, V. A. Trapeznikov Institute of Control Sciences of Russian Academy of Sciences; Chief Researcher, Center of Digital Economy, State University of Management, Moscow, Russia, ²Candidate of Economic Sciences, Associate Professor, Associate Professor of the Department of Accounting, Auditing and Taxation, State University of Management, Moscow, Russia.
Email: ^{1*}[yana.s.matkovskaya@gmail.com](mailto: yana.s.matkovskaya@gmail.com), ²[diakonova_o@mail.ru](mailto: diakonova_o@mail.ru)

Article History: Received on 18th October 2019, Revised on 27th November 2019, Published on 25th December 2019

Abstract

Purpose of the study: Consider the development of tax control in the conditions of digitization of the economy.

Methodology: The following methods were used for conducting the research: dialectics, comparison, contrasting, analysis and forecasting.

Main Findings: Digitization is a way to streamline tax control, which has been confirmed by data as well as by comparison of tax control models used in the leading countries of the world and in Russia. Based on the analysis conducted, the conclusion has been made about digitization and the tax models in use were positively associated.

Applications of this study: Russia has to accelerate its rates of digitization, which requires improving the law, methodological toolkit and at times borrowing advanced tax control methods applied in the foreign countries that rely on high information technologies, uniform methodological approaches, and tools used both by taxpayers and tax authorities.

Novelty/Originality of this study: The paper presents a review of scales and features of digitization of the economy in the world's leading countries, trends of further development are described, and the digital economy level in the world GDP is outlined.

Keywords: Digitization, Economy, Innovations, Taxes, Tax Control.

INTRODUCTION

Digitization of the economy creates new conditions for achieving the economic interests of subjects of all levels. In general, the global economic community cannot progress without accelerating the digital economy development rates, for which improvement of tax legislation and headway of information technologies are essential. Alongside that, the economic development of states depends directly on the use of perfect tax control methods that allow enhancing the tax collection rate.

The interrelation of economy digitization processes and the development of the tax system as a whole, with tax control included, is evident and it currently is not only an object of scientific debate but a serious practical problem, too. As each time span passes, the importance of this problem increases, and so do its theoretical and practical relevance. In terms of practice, the question under study characterizes the necessity of solving problems associated with the exact way the activity of tax service in conditions of digitization of the economy has to be organized at the first stage and in conditions of the digital economy at the subsequent one. It goes without saying that virtual financial assets, including cryptocurrencies the quantity and turnover of which grows steadily, have to become the objects of taxation just like other economic processes. Meanwhile, the digital space is so large-scale and the opportunities for subjects to obtain income while dodging taxes are so vast, with the speed of such opportunities being created and used growing fairly quickly, too. As a result, it is far not all tax services and tax control systems of the countries that can perform the control at the required efficiency. Increasingly more often, there arise cases of higher tax competition.

The existence of practical problems also conditions having to solve the theoretical ones associated with understanding the place of the digital economy within the structure of the entire economy, the way digitization processes develop, and the place and role of the tax system under the digital economy. The theoretical analysis of these phenomena is to give answers to the set questions, with some of them researched in this work.

When studying this problem, it has to be determined as well that it is not only the process of digitization of the economy that sets tasks for the tax system and tax control – but it is the tax system itself, too, that has to set tasks for the digital economy stimulating it to create such information products and services as to enable the former to function efficiently (Draskovic et al., 2017). Moreover, digitization of the tax control system (just like of the entire tax system) has to advance to each subsequent level of digital development at a higher pace than the digital economy itself and the digital processes occurring in the economy.

This is precisely why it is very important to make the principal decision as for whether the digital economy needs an independent, separate taxation system or it should use the toolkit of the tax system in general (and that of tax control in particular) both for the analogue and for the digital economy. This dichotomy relies on joining one of the standpoints – if

the digital economy is independent on its own; the debate is relevant today. Moreover, currently, there already function two alternative approaches to the development of the tax system in the digital economy – the American one and the European one. They are essentially different in many respects, but imperfect both in terms of tax fairness for taxpayers and in terms of efficiency for the fulfilment of the fiscal function of the taxation system. The world is still looking for the optimum line of development for the tax system in general and for organizing tax control in particular. The global community has a long way to go before a highly efficient solution is found, but the state, science and society have to make efforts and deal with this question.

Thus, this topic gains additional relevance owing to the fact that digital processes lead to rendering the tax system development tasks both simpler and more complex. At the same time, they also lead to tax competition: it is the country which uses opportunities of the digital economy for performing tax control functions in the most efficient manner and comes up with an efficient organization of tax control in conditions of digitization that will gain financial and economic, fiscal and budget preferences, including ones at the expense of new taxpayers.

LITERATURE REVIEW

It should be noted that the following scientists made a significant contribution to elaboration of inquiry into tax control and taxation in the contemporary digital economy: [Winner \(2005\)](#) – in his works questions of tax competition in OECD are considered also as affected by digitization of the economy; [Weichenrieder \(2009\)](#) discussed questions of the formation of taxable profit in the economy of European countries. [Sharman \(2008\)](#) wrote research about tax directive in regional deals of the EU, [Schwarz \(2009\)](#) studied the aspects of tax-avoidance strategies of American multinational corporations. As for the formation of the digital economy and the development of tax control in it, these questions are discussed in the works of [Brynjolfsson&Kahin \(2000\)](#), within the context of elaborating an understanding of the digital economy. The formation and development of the digital economy are studied at length in the well-known work of [Brynjolfsson& McAfee \(2016\)](#), "The Second Machine Age", and in the Oxford work by [Peitz&Waldfoegel \(2012\)](#) dedicated to the digital economy.

Among the Russian authors, the contemporary application of taxation in conditions of digitization of the economy is focused on in the works of the following scientists: [A. Tikhonova, N. Melnikova and N. Vishnevskaya\(2019\)](#) consider the development of tax control models; [M. V. Karp, E. L. Gulkova, and M. A. Tupalina\(2019\)](#) discuss the impact of digitization on taxation. [N. G. Morozova\(2019\)](#) views the concept of taxation development in conditions of digitization. [A. I. Savelyev\(2016\)](#) analyzes the development of e-commerce in the leading countries of the world, and [I. A. Strelkova\(2018\)](#) states aspects of taxation in conditions of the e-commerce emergence.

Alongside with these, there are studies and reviews of the leading institutes of the RF, such as the NRU "Higher School of Economics" ([Abdrakhmanova et al., 2018](#)) and All-Russian Academy for Foreign Trade of the Ministry of economic development of the RF ([Aliiev et al., 2018](#)), that deal with inquiry into the digitization level in the world's leading countries and its share in the world GDP.

Reviews by [OECD \(2010, 2014, 2015\)](#) and the [World Bank \(2016\)](#) are of great practical interest because they allow getting background information about the state of affairs with the digitization of the economy in the world's leading countries.

In general, it has to be noted that it has been not enough works dealing with studying tax control in conditions of digitization of the economy so far, although many of the former can already claim the development of a new scientific school.

RESEARCH METHODOLOGICAL FRAMEWORK

The objective of the paper consists in studying the development of tax control in the conditions of economy digitization. The objective worded has determined the necessity of fulfilling a number of tasks, in particular:

- Studying the digital economy development level in the leading countries of the global community and analyzing the share of the digital economy in the world GDP (the general trends and ones for the leading countries);
- Analyzing tax control models applicable in the digital economy of the contemporary world, estimating their competitive advantages for the use in Russia.

The research is of both applied and fundamental nature. On the one hand, it is directed at generating new knowledge and its subsequent practical application, i.e. the study of digitization influence on the economy and feasibility of modernizing the tax control system. On the other hand, the fundamentality of this research is determined by the establishment of interconnections between various phenomena, occurring in the socio-economic continuum and affecting not only fiscal but also production, economic, socio-economic, moral and ethical relations characteristic of modern society and its perspective transformation. The revealed nature of the study determines, among other things, the prospects for further research in relation to the interconnectedness of digital shifts and national and global policymaking in the economic field that should take into account existing limitations concerning the differences in legislative, economic and tax systems of the studied countries. These limitations are also applicable to the present research study.

The following methods were used for conducting the research: dialectics, comparison, contrasting, analysis and forecasting. Data collection methods are based on the cognitive analysis and regular monitoring of the processes described by the authors in this article that are associated with the use of comparative cross-country and intersystem analysis, as well as with the use and interpretation of publicly available data, representing no trade secret.

DIGITIZATION OF THE ECONOMY AND ITS DEVELOPMENT IN THE WORLD'S COUNTRIES

By the digital economy, the sphere of the economy is understood that completely reformats the habitual economic associations and existing business models and rapidly develops within the global community. The transformation of information into digital form pertains to digital technologies. These processes affect companies in Russia, too. Some of them, mainly the advanced companies, apply digital technologies extensively, while others are considering the opportunities for the transition to digital technologies (Matkovskaya, 2019). The digital economy is not only the economy of knowledge but it is also the economy of trust enabling taxpayers to adhere to tax legislation voluntarily with the help of digital technologies (Brynjolfsson&Kahin, 2000; Brynjolfsson& McAfee, 2016; Peitz&Waldfoegel, 2012; OECD, 2010, 2015).

Governments of the world's leading countries work hard on developing the digital economy, for which legislation is being improved, digital infrastructure and the advanced base of knowledge and skills are being rolled out. The leaders in developing the digital sector are Great Britain, the USA, China, Singapore, and the Republic of Korea et al.

In Great Britain, digital technologies are used in transforming services and systems to render them simpler and cheaper. For this, in 2011, the Cabinet of the United Kingdom founded the Government Digital Service that created the Government Transformation Strategy for its work up to the year 2020. In it, paramount importance is given to transforming all the generally available services, which will enable, among other things, tax services to receive all the necessary electronic information.

The USA created its Digital Service in 2014 for rendering digital services and building trust in the government according to the main national priorities, the latter including: migration service upgrade, healthcare, education, taxpayers' data, defense, imports and export system (The World Bank, 2016).

Based on the economic review of these reports on the digitization of the economy by the global community countries, the following analysis can be conducted according to these countries' economies digitization level.

Table 1: International digital economy and society index according to countries: 2016

Country	Digital economy and society index (I-DESI)	Including the sub-indices:				
		Association	Human capital	Use of the Internet	Integration of digital technologies	Digital services state
1	2	3	4	5	6	7
Great Britain	0.66	0.69	0.66	0.61	0.73	0.58
Republic of Korea	0.64	0.81	0.75	0.29	0.47	0.73
Norway	0.63	0.70	0.65	0.45	0.66	0.63
New Zealand	0.63	0.62	0.59	0.44	0.79	0.65
Japan	0.62	0.71	0.66	0.22	0.67	0.71
the USA	0.62	0.66	0.56	0.37	0.68	0.79
China	0.61	0.75	0.61	0.30	0.78	0.49
Australia	0.60	0.59	0.56	0.42	0.75	0.69
Canada	0.59	0.63	0.62	0.42	0.58	0.67
EU-28 countries	0.54	0.61	0.59	0.38	0.55	0.47
Ireland	0.52	0.53	0.61	0.37	0.50	0.55
Russia	0.47	0.50	0.63	0.32	0.43	0.36
China	0.45	0.27	0.76	0.44	0.37	0.35
Turkey	0.41	0.39	0.49	0.35	0.39	0.38

Source: [Abdrakhmanova et al., 2018, p. 25.](#)

According to the data of Table 1, it can be concluded that the digital economy leaders are Great Britain, the USA, China, Singapore, and some other countries. Russia occupies no leading place in this respect, so the country has to pay priority attention to the digitization development questions.

The digital economy is one of the constituent elements of the world GDP which every country is trying to bulk up by means of intensification and upgrade of its production. So all the world's leading countries are working on increasing the percentage of digitization of their economies.

The following diagrams show the achieved digital economy ratio in the world GDP and the dynamics of its planned development (Figure 1). It can be seen from the data of the diagram that the digital economy features an upward trend in the world GDP.

The ratio of the digital economy in the world GDP.

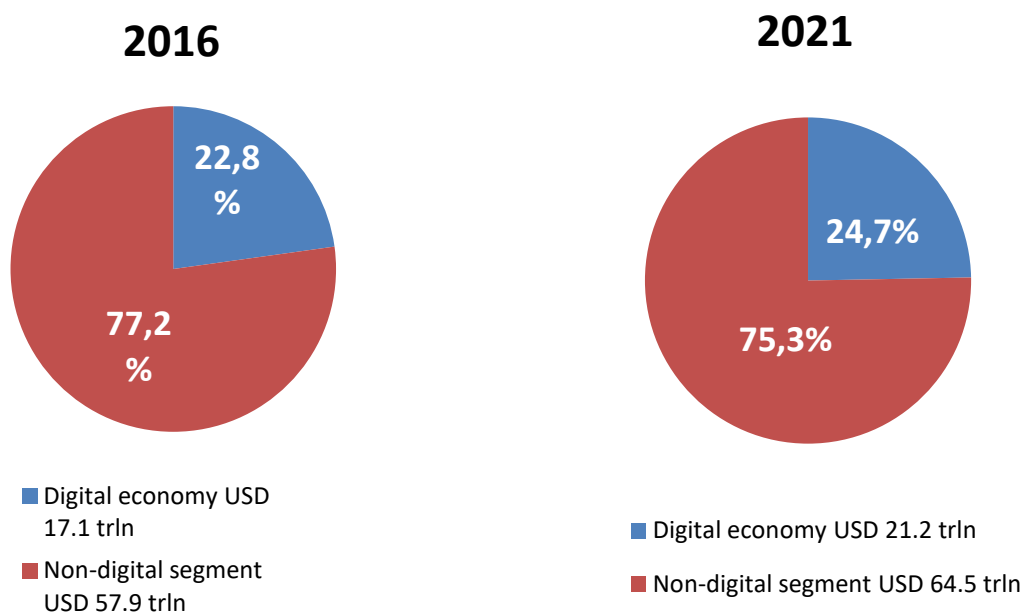
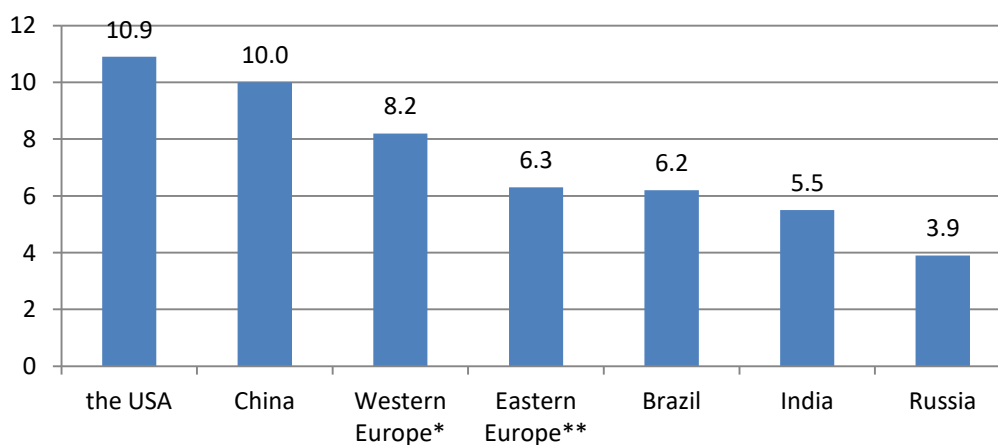


Figure 1: Ratio of the digital economy in the world GDP

Source: [Aliev et al., 2018, p. 3](#)

Share participation of the digital economy of the global community countries in the world GDP is non-uniform and it is shown in the diagram in Figure 2 based on the economic review data.

Share participation in the creation of the digital economy in the world GDP.



Note:

* - Great Britain, Germany, Spain, Italy, France, Sweden;

Figure 2: The digital economy shares in GDP (2016)

Source: [Aliev et al., 2018, p. 4](#)

Based on the analysis of the diagram data shown in Figure 2, it can be concluded that the highest percentage of the digital economy in the world GDP was contributed by the following countries: the USA, China, Great Britain, Germany et al. In Russia, the digital economy share is minor and it requires urgent development.

Digitization and Tax Control

Tax control is directly related to digitization of the economy, so the legislation in these domains is considered simultaneously in all countries, Russia among them; it has adopted the digitization program of up to 2030 setting tasks on the improvement of tax control.

Meanwhile, digitization of the economy which is so necessary for the countries of the global community requires new methodological developments and improvements in tax control because it does not fit into the framework of the obsolescent tax system. Digitization and the use of e-business demand further elaboration of the methodological toolkit and development of tax control methods. The majority of kinds of electronic business cannot be subjected to tax control with the old toolkit and therefore they escape from the legal field of taxpayers, which runs counter to the interests of the state.

In the contemporary conditions, digitization and the development of tax control in the country gain special relevance owing to the saving of the state funds and in order to bridge the gap has formed between Russia and the world's leading countries. So in the contemporary conditions in the processes of digitization and development of tax control models, Russia has to follow the path of adopting the experience of the leading countries in this area and investing in IT ([Matkovskaya, 2014](#)).

In conditions of digitization, tax service workers have to have the motivation compulsorily which is to be the basis for enhancing the quality of their work. The reasons behind the flaws of the work of tax service in conditions of digitization are as follows:

- Lower interest in achieving success;
- Loss of interest in the work;
- Fuzzy requirements on the part of management;
- Personnel turnover, with the most skilled workers quitting.

The following aspects are essential for improving motivation in conditions of digitization in the work of tax service:

- Transparency of the motivation system;
- Fairness of the motivation system;
- Individual opportunities for fulfilment one's own needs.

In conditions of digitization, the transformation of the activity of tax service is observed within which moving away from having the control function only and a change in motivation can be noted, which requires search and new approaches to assessing the efficiency of their work ([Saveliev, 2016](#)).

The conclusion can be drawn from studying literature that digitization and the development of tax control are directly associated. Questions of tax control allowing to ensure budgetary receipts obtained promptly and in full are relevant for the global community as a whole during the transition to the digital economy, so let the available tax control models and results of their activities in various countries (it should be “being” instead of being) be discussed.

Models of Tax Control

Tax control features a steady trend of modifying methodological approaches and to more advanced technologies. Models of tax control are based on a set of various control forms and methods that can be subdivided into three groups:

1. The traditional tax control model;
2. The risk-oriented tax control model;
3. The preventive tax control model – tax monitoring.

The traditional tax control model gets modified in conditions of digitization, like the big business, in fact, consists of independent institutions having sophisticated structure and working in the global financial markets, which enables them to perform strategic tax planning and keeping tax payments at a minimum. So the necessity to drastically change the methodological tax control toolkit is predetermined in conditions of globalization of financial markets and integration of the international economic processes ([Gulkova et al., 2019](#)).

At the beginning of 2016, the World Bank published its report "Digital dividends" noting that in the developing countries, the quantity of jobs making intensive use of information and communication technologies is higher in the public sector than in the private one. According to this report, by the beginning of 2014, 193 states had national websites, with 101 of them having an option for citizens to create online personal accounts, 73 of them – that to submit income tax declarations, and 60 of them – that to register companies. As for the most widespread basic governmental

administrative systems, 190 states have implemented automated financial management, 179 states used such systems for customs formalities, and 159 states used them in tax administration ([The World Bank, 2016](#)).

By the present point, electronic business has emerged and is rapidly developed in the countries of the global community. Studies of economic literature have shown that no united interpretation of the approach to defining the term "electronic commerce" (e-commerce) has been elaborated so far, which renders the choice of tax control methods for it challenging.

According to Srikanth Mangalam, the World Bank expert in questions of the Internet of Things, the problem of flexibility and relevance of the state regulatory framework is the key one for a relevant response to stable and frequent creation of advanced technologies. This is especially important in the sphere of tax control because the state control has to keep on par with the business controlled by it in terms of technologies ([Analytical Center for the Government of the Russian Federation, 2018](#)).

In Russia, one of the revolutionary, innovation stages of using the breakthrough technologies in the digitization of the economy and further elaboration of tax control methods was the development of the new methodological toolkit for controlling VAT declarations – the ACS-VAT.2 and VAT.3 systems based on processing risks analysis ([Strelkova, 2018](#)).

Moreover, both in Europe and in Russia, there is a practice implemented of compelling foreign companies to register for VAT payment purposes in order to ensure the prompt level of tax control.

Since January 2015, in the EU, the location of imposing VAT on electronic services sales have been the jurisdiction of the customer's country. The effects expected from this measure are the reduction of tax competition and the increase of tax revenues for large European jurisdictions.

Currently, it is the USA and China that are leaders of the digital commerce market.

Alongside with that, the development of the Internet trade is certainly coupled with the risk of self-employed individuals' dodging taxes. Maya BacacheBeauvallet defines the Internet as a tax harbor enabling the economic agents to avoid paying taxes, which is due to several reasons. First of all, sales taxes are not charged from online shops either because the sellers are not registered as economic subjects or because they belong to small enterprise ones who are not obliged to declare their economic activity and who are exempt from paying VAT. Next, the risk can be associated with an illegal activity if the sellers cannot declare their sales to the local authorities for this reason. Such drains bring no profit to the governments, and e-commerce can be the cause of lower tax receipts. For instance, in France, less than 1000 electronic shops are subject to VAT while the country counts over 715 000 websites by means of which e-trade can be conducted.

Studies of literature and reports of the foreign scientists allow stating the fact that analytical toolkit was applied in a number of foreign jurisdictions when performing tax audits already at an earlier stage of the historic development, i.e. they used the risk-oriented tax control model.

So, in France, beginning with 1970, every year the tax administration has developed a program of tax audits according to the internal risks criteria which enabled them to identify cases of significant reduction of taxable income, of taxpayers' failures to submit reports, and of submitting declarations of losses for three subsequent years. With regard to this, the auditors were recommended to check the payment of taxes more frequently ([Sidorova&Tikhonova, 2019](#)).

The Russian risk-oriented tax control gives evidence about the annual reduction of the number of control actions as well as about the stable share of effective field audits for all categories of taxpayers in general. The stable dynamics of effective tax audits are also conditioned by the transition of tax service to the risk-oriented field tax control since 2007.

In Russia, the risk-oriented tax control model developed along the lines of passing to the integrated control and analytical audit of the economy segments, namely, the industry-specific projects, which has allowed managing industry-related macro-risks using the new tax control technologies as well as monitoring the transparency of branches of the economy both at the stage of control actions and during the post-control one.

The results of the analytical work of the FTS of Russia in the IT distribution market were as follows:

- A refusal from the "grey" imports and tax-evasion schemes;
- A transparent system of running a business, direct supplies of equipment;
- Signing the charter of business ethics in the sphere of ICT equipment distribution and import;
- Exemption.

The preventive tax control model, or tax monitoring, is developed in Great Britain; it consists in taxpayers being suggested to submit the information about their transactions in the real-time mode, with the initiative of submitting the information remaining with taxpayers and the tax authority having no right to compel them to submit the information. In this case, the taxpayers gain the status of low-risk customers. Other customers are referred to high-risk taxpayers, and for them, the tax control mode of mandatory tax monitoring is applied.

Since 2015, in Russia, the tax control model in the form of tax monitoring has been introduced for large taxpayers. For it, the change in the control toolkit is characteristic, which is a prerequisite for drawing the organizations away from the shadow completely or partially, other things equal. On the part of tax authorities, tax monitoring is a new control level by means of open dialogue and preventive measures.

One of the criteria for taxpayers to pass to tax monitoring is their technical readiness for information interaction based on the model they have opted for: either by granting the tax authority remote access to their internal control systems or by exchanging the information via an authorized electronic documents flow operator (EDF).

When opting for tax monitoring, high requirements for the information technologies are imposed for taxpayers that are set statutorily. The FTS of Russia will grant rights for categorizing this or that taxpayer among the largest ones for the purposes of signing the tax monitoring agreement and simultaneously introducing into the regulatory framework the criteria of ranking organizations as the largest taxpayers set by the order of the FTS of Russia in 2018.

Russia, similarly to Great Britain, can have simultaneous options to apply – that of mandatory tax monitoring without the opportunity to use mutual agreement procedures for big business segment subjects in case of their violating the legislation on taxes and levies, and the partnership model of tax relations subjects' interaction available for good faith market players. The implementation of such an institution will require the elaboration of the uniform technical and methodological approaches to the control environment of the economic subjects with the adaptive total of principles and standards aimed at the establishment and maintenance of an efficient internal control system by both management and employees of organizations.

CONCLUSION, LIMITATION, AND IMPLICATION

Summing up the above, it should be noted that digitization of the economy is an objective process to be observed currently. However, this process needs identification the task of which consists of identifying the place of the digital economy within the contemporary economy and the impact of digitization on the functioning of the economy as a whole, of the economy of individual states and on the tax system. Searching for tax control models applicable for assessment of tax control is a very important problem. The existence of this problem is being relevant, the objective of this work has been to study the nature of the development of tax control in conditions of digitization of the economy. Achieving this objective required fulfilling a number of tasks, in particular, studying the theoretical and practical base of the research which allowed finding out the following aspects: studying the impact of digitization of the economy on the functioning of tax control system is important; a number of scientists have shown their interest in researching into this question, and there exists a real practical problem which needs solving at gnoseological level and requires elaborating consistent actions on selecting the relevant methods of implementation of tax control in the practical sphere. The second task consisted in studying country-specific particularities of the formation and development of the digital economy as well as its development level. It also determined the necessity of studying the digitization development extent of the economy, which exposes two facts: there is a total of countries having the highest digitization development level, and there are ones for which the development of tax control forms is largely urgent. Hence some states create special agencies and institutions resolving issues of digital development (Great Britain, the USA). According to the forecasts available, the digital economy share will grow in various countries, with the growth not promising to be uniform. All this requires the elaboration of methodology and sophistication of tax control, including that in the sphere of tax services work organization. The third task was the research of tax control models in various countries. From the existing tax control models (the traditional one, the risk-oriented one and the preventive tax control model – tax monitoring), each can be applied by different countries simultaneously, with the specific nature of the fiscal "reality" borne in mind.

In Russia, they are introducing innovations, too, for example, recently the tax monitoring control model has been applied; the opportunities are being considered using such a tax control system that is relevant to the economic development extent and quality and to digitization thereof. Anyway, just like other countries, in conditions of digitization of the economy, Russia has its own tax system development problems.

In conclusion, it should be stressed once more that the development of digitization of the economy and the transition to more perfect tax control methods have covered all the world's advanced countries, which involves Russia joining in. Therefore, within the contemporary realia, the findings represented in this study may be implied for Russia's successful economic development; one of the most urgent questions is acceleration of the economy digitization rates and, based on it, large taxpayers' transition to tax monitoring in the nearest prospect: voluntary one for good-faith taxpayers, administrative control measures – for abusive taxpayers, and the industry-wide analytical audits as the system-oriented tax control for all the remaining ones.

ACKNOWLEDGMENTS

The publication was prepared on project No. 3 under donation contract dated March 1, 2019 No. 1154.

REFERENCES

1. Abdrakhmanova, G., Vishnevskiy, K., Volkova, G., Gokhberg, L., et al. (2018). *Indicators of digital economy: statistics digest*. Moscow: National research university "Higher school of economics".

2. Aliev, T., Baeva, M., Bondareva, V., Gushchin, E., Ermohin, I., Ismagilova, O., ...Flegontova, T., (2018). *Digital economy: Russia and the world. Monitoring of relevant events in the domain of international trade № 5*. Moscow: All-Russian Academy of Foreign Trade of the Ministry of economic development of the Russian Federation.
3. Analytical Center for the Government of the Russian Federation (2018). *Seminar of the World Bank and the RF Government Analytical center "The key question of successful implementation of breakthrough technologies is changing the organizational culture and the attitude to change"*. Retrieved from http://knd.ac.gov.ru/news/klyuchevoy-vopros-ushpeshnogo-vnedreniya-proryvnykh-tekhnologiy-izmenenie-kultury-organizatsii-i-otno/?sphrase_id=11392
4. Brynjolfsson, E., & Kahin, L.M.(2000). *Understanding the Digital Economy – Data, Tools, and Research*. Cambridge: MIT Press. <https://doi.org/10.7551/mitpress/6986.001.0001>
5. Brynjolfsson, E., & McAfee, A. (2016). *The Second Machine Age*. New York: W. W. Norton & Company.
6. Draskovic, M., Milica, D., Mladen, I., & Chigisheva, O. (2017). Preference of institutional changes in social and economic development. *Journal of International Studies*, 10(2), 318-328. <https://doi.org/10.14254/2071-8330.2017/10-2/22>
7. Gulkova, E., Karp, M., & Tipalina, M. (2019). Tax challenges of digital economy. *Bulletin of the University*, 4, 89–95. <https://doi.org/10.26425/1816-4277-2019-4-89-95>
8. Matkovskaya, Ya. S. (2019). Financial aspects of innovation development of the contemporary economy: the task is to prevent innovation stagnation. *Regional Economy: Theory and Practice*, 17(1), 169–182. <https://doi.org/10.24891/re.17.1.169>
9. Matkovskaya, Ya. S. (2014). Why is Russia not an innovation country? (Russia's innovation potential: trends and prospects). *National Interests: Priorities and Security*, 10(247), 25–37.
10. Morozova, N. (2019). *Digital economy taxation development concept. Monograph. Justification of the concept of accounting, audit, control, and formation of the long-term social and economic tax strategy*. Moscow: RU-SCIENCE.
11. OECD (2014). *Model Tax Convention on Income and on Capital 2014. Models IBFD*. Paris: OECD publishing. Retrieved from <https://www.oecd.org/tax/treaties/model-tax-convention-on-income-and-on-capital-2015-full-version-9789264239081-en.htm>
12. OECD (2015). *OECD Digital Economy Outlook 2015*. Retrieved from <http://www.oecd.org/Internet/oecd-digital-economy-outlook-2015-9789264232440-en.htm>
13. OECD (2010). *Promoting Transparency and Exchange of Information for Tax Purposes*. Paris: OECD publishing. Retrieved from <http://www.oecd.org/newsroom/44431965.pdf>
14. Peitz, M., & Waldfogel, J. (2012). *The Oxford Handbook of the Digital Economy*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195397840.001.0001>
15. Savelyev, A. (2016). *E-commerce in Russia and abroad: statutory regulation*. Moscow: Statute.
16. Schwarz, P. (2009). Tax-Avoidance Strategies of American Multinationals: The Case of Profit Shifting. *Managerial and Decision Economics*, 30, 539–549. <https://doi.org/10.1002/mde.1471>
17. Sharman, J. C. (2008). Regional Deals and the Global Imperative: The External Dimension of the European Union Savings Tax Directive. *Journal of Common Market Studies*, 46, 1049–1069. <https://doi.org/10.1111/j.1468-5965.2008.00829.x>
18. Sidorova, E., & Tikhonova, A. (2019). Assessment of the fiscal effect of the tax reform options until 2019: the case of Russia. *Economic Annals-XXI*, 164(3–4), 45–48. <https://doi.org/10.21003/ea.V164-10>
19. Strelkova, I. (2018). Digital economy: new opportunities and threats for the development of the world economy. *Economics, Taxes and Law*, 2, 18–26. <https://doi.org/10.26794/1999-849X-2018-11-2-18-26>
20. The World Bank (2016). *World Development Report 2016: Digital Dividends*. Retrieved from <http://documents.worldbank.org/curated/en/961621467994698644/pdf/102724-WDR-WDR2016Overview-ENGLISH-WebResBo-x-394840B-OUO-9.pdf>, <https://doi.org/10.1596/978-1-4648-0671-1>
21. Tikhonova, A., Melnikova, N., & Vishnevskaya, N. (2019). Readiness of Russian regions to digitize the economy. *Economic Annals-XXI*, 174(11–12), 16–21. <https://doi.org/10.21003/ea.V174-03>
22. Weichenrieder, A. (2009). Profit Shifting in the EU: Evidence from Germany. *International Tax and Public Finance*, 16, 281–297. <https://doi.org/10.1007/s10797-008-9068-x>
23. Winner, H. (2005). Has Tax Competition Emerged in OECD Countries? Evidence from Panel Data. *International Tax & Public Finance*, 12, 667–687. <https://doi.org/10.1007/s10797-005-2915-0>