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# The use of the mechanism of public-private partnership in the investment processes management in the context of digitalization

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## Abstract

The study substantiates the principles of using the mechanism of public-private partnership in the management of investment processes in the context of digitalization. It is determined that digitalization gives an opportunity to reconsider the principles of modern concepts of management decisions and views on various economic processes and relations in society, to get a faster and optimal attraction of financial resources. Obstacles to the use of the mechanism of public-private partnership in the management of investment processes in the context of macro-level digitalization, which are in the plane of institutional management of public-private partnership. Macro-level barriers that arise on the part of private partners in attracting investment resources through the use of public-private partnerships in the context of digitalization have been identified. The directions of elimination of obstacles of macro- and microlevels are offered. The list of conditions that must be taken into account when attracting investment resources in terms of public-private partnership in the context of digitalization is substantiated.

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**Keywords:** investment resources; management; public-private partnership; mechanism of attraction; digitalization.

## El uso del mecanismo de colaboración público-privada en la gestión de procesos de inversión en el contexto de la digitalización

### Resumen

El estudio fundamenta los principios de la utilización del mecanismo de asociación público-privada en la gestión de los procesos de inversión en el contexto de la digitalización. Se determina que la digitalización brinda la oportunidad de reconsiderar los principios de los conceptos modernos de decisiones de gestión y visiones sobre diversos procesos económicos y relaciones en la sociedad, para obtener una atracción más rápida y óptima de los recursos financieros. Obstáculos al uso del mecanismo de asociación público-privada en la gestión de procesos de inversión en el contexto de la digitalización a nivel macro, que se encuentran en el plano de la gestión institucional de la asociación público-privada. Se han identificado barreras a nivel macro que surgen por parte de los socios privados para atraer recursos de inversión mediante el uso de asociaciones público-privadas en el contexto de la digitalización. Se ofrecen las direcciones de eliminación de obstáculos de macro y micro niveles. Se fundamenta la lista de condiciones que deben tenerse en cuenta a la hora de atraer recursos de inversión en términos de asociación público-privada en el contexto de la digitalización.

**Palabras clave:** recursos de inversión, gestión, asociación público-privada, mecanismo de atracción, digitalización.

### Introduction

The development of economic systems, the achievement of stable rates and stability of economic growth can be achieved by investing in various spheres of social development. Global trends in economic systems prove the importance and necessity of digitalization of all spheres of economic activity. It is digitalization that makes it possible to improve, accelerate, and intensify diverse processes, including attracting investment resources using the mechanism of public-private partnership. Digitization makes it possible to reconsider the principles of modern concepts of decision-making and views on various economic processes and relations in society, to obtain faster and optimal financing.

Investment resources are no exception. The development of the digital economy has many different tasks, including accelerating economic growth and attracting investment resources. Today, it is impossible to imagine the further development of investment relations and partnerships between the private and public sectors without digitalization.

The main purpose of this study is to substantiate the principles of using the mechanism of public-private partnership in the management of investment processes in the context of digitalization. To achieve this goal, the following tasks were performed: macro-level obstacles in the area of institutional management of public-private partnership, as well as macro-level obstacles that arise from private partners in attracting investment resources through public-private partnership in the context of digitalization; directions of elimination of obstacles at macro- and micro-levels in the conditions of digitalization are offered; the list of conditions that must be taken into account when attracting investment resources in terms of public-private partnership in the context of digitalization is substantiated.

## 1. Literature Review

The study of the peculiarities of the use of the mechanism of public-private partnership in the management of investment processes is an extremely relevant and topical issue. Many scientific publications of prominent scientists are devoted to these issues and their role in regional development in the conditions of digitalization, among which it should be noted: Abramova (2021); Adebayo (2021); Ahmad (2020); Akinsola (2021); Albalate (2020); Arefieva (2021); Armand (2020); Belyaev (2020); Chen (2021); Chunling (2021); Cosmulese (2019); Dergaliuk (2021); Djakona (2020); Dubyna (2017); Fedyshyn (2019); Fleta-Asín (2021); Gasilov (2017); Grigoraş-Ichim (2018); Khan (2020); Khanin (2021); Kholiavko (2021); Khudolei (2021); Kovalenko (2021); Kychko (2021); Mashnenkov (2021); Popelo (2017); Qin (2021); Raza (2021); Samiilenko (2021); Samoilovych (2021); Sergei (2020); Shahbaz (2020); Shkarlet (2018); Silaghi (2021); Sresakoolchai (2020); Tarasenko (2017); Tulchynckiy (2021); Tulchynska (2021); Van Song (2021); Zhuk (2018) and others.

In the article (Sergei *et al.*, 2020), scientists propose to use the benefits of public-private partnership, its application, considering regional specifics on the example of the rail freight market as a meso-level institution. The authors have developed models of legal regulation of investments in transport projects, which will contribute to the spatial expansion of markets by obtaining a systemic economic and legal effect. The aim of the article (Gasilov *et al.*, 2017) is to develop approaches to risk management of public-private partnership projects. The authors proved that the greatest risks arise at the stage of investing projects.

Due to the classification of risks at the stage of investing in public-private partnership projects, effective methods of leveling the negative consequences of risk manifestations are proposed. The authors' research (Chunling *et al.*, 2021) shows a significant positive relationship between public-private investment in energy and the environmental footprint in the long and short term. The authors argue that increased public-private investment in energy affects Pakistan's environmental sustainability.

Researchers (Chen, 2021) have shown that public-private partnerships are an important policy tool that promotes sustainable economic development. According to the analysis, the authors note that there is a good trend of improvement, reflecting the economic sustainability of investment in infrastructure, and public-private partnerships have played an important role in these processes. The scientists' article (Fleta-Asín *et al.*, 2021) is based on a study of the determinants of private investment participation in public-private partnership projects in renewable energy sources. According to the authors, it can be argued that public-private partnerships, which are smaller and younger, show a greater degree of participation of private investors. In such circumstances, the private partner assumes more responsibility, and the main source of income - from payments to electricity consumers.

The authors (Raza *et al.*, 2021) examine the causal relationship between public-private partnership investments in the energy sector in individual developing countries. Scientists use nonparametric causal relationships in quantiles and methods of linear causal relationships. The authors of the article conclude that public-private partnership investments in non-renewable energy sources in some countries contribute to carbon emissions and worsen the environment. In the study (Adebayo *et al.*, 2021), the authors analyze the causal links to identify the impact of public-private investment in energy, renewable energy consumption, technological innovation. According to the study, the authors recommend encouraging the consumption of renewable energy, paying more attention to technological innovation.

The basis of the study (Van Song *et al.*, 2021) is to determine the role of public-private partnership investment and environmental innovation. The authors argue that, according to long-term assessments, GDP and PPIs are causing greater environmental depletion in terms of CO<sub>2</sub> emissions and haze pollution. The authors argue that short-term estimates of past carbon emissions have a significant positive relationship with their current values. The authors' research (Akinsola *et al.*, 2021) evaluates the impact of public-private partnerships in energy and financial development on the environmental situation in Brazil.

The authors study the role of renewable energy and economic growth. Scientists recommend the creation of a forum that will promote the

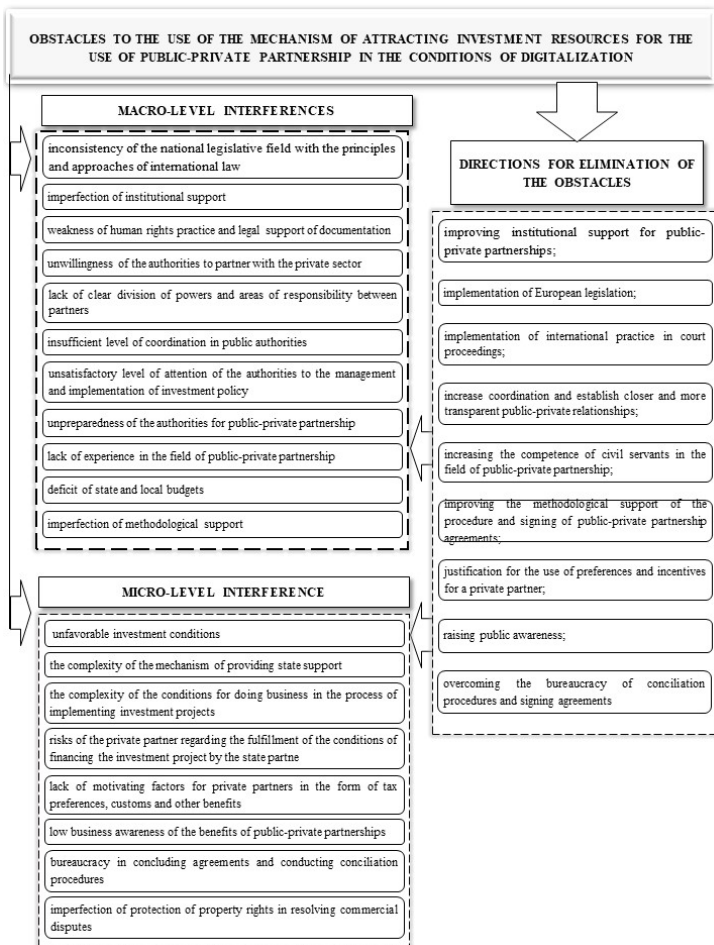
development of public-private partnerships and promote cooperation with new initiatives based on environmental technological innovations. The authors of the article (Belyaev *et al.*, 2020) study the current state and features of the development of public-private partnership in the regions. In the study, scientists analyzed the main financial and investment statistical indicators of the formation and functioning of public-private partnership. The authors of the article propose to rank the regions, including not only the level and scope of public-private partnership, but also the volume of real innovation projects and indicators of innovative development of the region.

## 2. Results

If we assess more thoroughly such a model of budget allocations in the management of investment processes in the context of digitalization, as a public-private partnership, we can identify certain obstacles to the spread of this model of investment. Thus, the macro-level obstacles that lie in the plane of institutional governance, ie on the part of the state, are the following (Fig. 1):

- Imperfection of institutional support, which is manifested in the underdevelopment of the legislative field for the dissemination of the model of public-private partnership.
- Inconsistency of the national legislative field with the principles and approaches of international law.
- Weakness of human rights practice and legal support of documentation on public-private partnership investment project agreements.
- Unwillingness of the authorities to partner with the private sector and implement investment projects.
- Lack of clear division of powers and areas of responsibility between public authorities and the private partner.
- Insufficient level of coordination in public authorities in coordinating investment projects of public-private partnership.
- Unsatisfactory level of attention of the authorities to the management and implementation of investment policy, including at the level of local governments in the field of public-private partnership.
- Unpreparedness of the authorities and low level of competence of civil servants in the field of public-private partnership.
- Lack of experience in the field of public-private partnership.

- Deficit of state and local budgets, which complicates and slows down the attraction of investment resources in projects using the model of public-private partnership.
- Imperfection of methodological support of procedures for approval of investment projects with the participation of public-private partnership.



**Fig. 1. Obstacles to the use of the mechanism of attracting investment resources through the use of public-private partnership in the context of digitalization and directions for their elimination.**

Source: developed by the authors.

Micro-level barriers that lie in the plane of partnerships on the part of private partners are:

- Unfavorable investment conditions caused by global, political and other conditions of economic development, which lead to a decrease in investment activity of private partners.
- The complexity of the mechanism of providing state support for investment projects.
- Complexity of business conditions in the process of investment projects, as there are no guarantees of timely obtaining permits and necessary approvals from local governments or executive authorities to implement the investment project in terms of public-private partnership. Most often, delays occur on the permits of land use, which participates in the investment project.
- Risks of the private partner regarding the fulfillment of the conditions of financing of the investment project by the state partner, which is connected with the time intervals of approval of the budget planning and possible non-fulfillment of obligations.
- Lack of motivating factors for private partners in the form of tax preferences, customs and other benefits when concluding investment projects with the participation of public-private partnership.
- Low awareness of business about the benefits of attracting investment projects using public-private partnerships.
- Bureaucracy in concluding agreements and conducting conciliation procedures, as well as the possibility of corruption schemes;
- Imperfection of protection of property rights in resolving commercial disputes and litigation of other claims.

With the development of digitalization of the economy, most of the obstacles at both the micro and macro levels can be removed. Directions for eliminating obstacles at the macro and micro levels in terms of digitization can be:

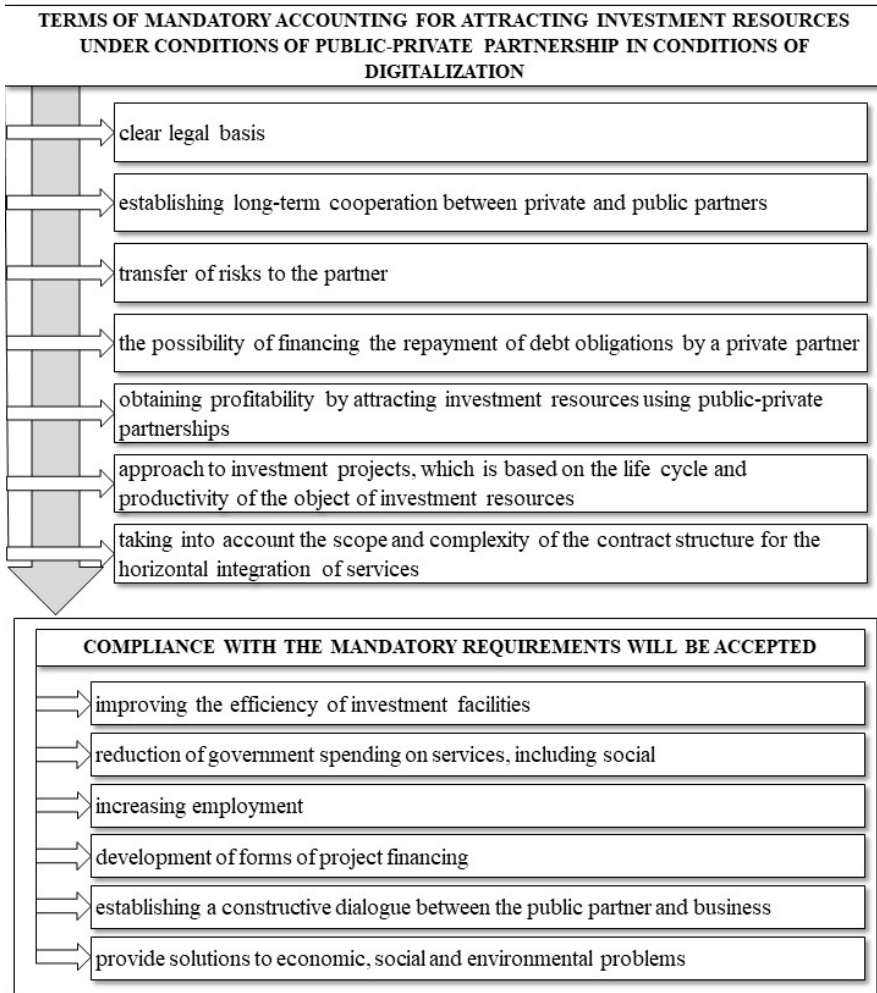
- Improvement of institutional support for the implementation of public-private partnership.
- Implementation of European legislation, which would strengthen the legislative support of investment processes with the participation of public-private partnership.
- Implementation of international practice on court proceedings on public-private partnership investment projects.
- Increasing coordination and establishing closer and transparent



relations between the public and private sectors.

- Increasing the competence of civil servants in the field of public-private partnership.
- Improvement of methodological support of the procedure and signing of public-private partnership agreements.
- Justification for the use of preferences and incentives for the private partner in the direction of intensifying investment activity within the public-private partnership.
- Raising public awareness of the opportunities and benefits of attracting investment resources through public-private partnerships in social, economic and environmental spheres of social development.
- Overcoming the bureaucracy of conducting conciliation procedures and signing agreements.

Involvement of the mechanism of attraction of investment resources under the conditions of use of public-private partnership provides certain tools of distribution of risks of the investment project and duties between public and private partners. Attracting investment resources on the basis of public-private partnership makes it possible to transfer the management of public facilities to a private partner. At the same time, there are certain conditions that must be taken into account when attracting investment resources in terms of public-private partnership in terms of digitalization (Fig. 2).



**Fig. 2. Mandatory conditions that must be considered when attracting investment resources in terms of public-private partnership in terms of digitalization.**

Source: developed by the authors.

These prerequisites include:

Firstly, the legal basis is a clear legal basis. For the implementation of investment projects with the participation of public-private partnership, a

very important factor in the approval and conclusion of agreements is the clarity of the legal basis of such contracts. Prior to the conclusion of public-private partnership agreements, it is important to carefully study the legal framework before preparing the documentation for the investment project. This further makes it possible to avoid legal problems when signing a contract and implementing an investment project with the involvement of public-private partnership.

Secondly, establishing long-term cooperation. The key condition under which public-private partnership investment projects are possible is long-term cooperation between private and public partners. Establishing cooperation makes it possible to achieve the maximum effect of attracting investment resources and get the maximum value for money. In cases where the investment project is long-term, which is a characteristic feature of public-private partnership, sometimes there may be situations that lead to change. Fruitful coordinated interaction between partners is a mandatory and necessary condition for such cooperation.

Thirdly, the transfer of risks. One of the important positive differences of public-private partnership investment is the possibility of transferring part of the risks to another partner. Most of the risks are borne by the party that is in the best position to assess and counteract it, as well as to respond quickly to the consequences of its occurrence and action. One of the requirements for the approval of public-private partnership agreements is the ability of one of the parties to which the risks are transferred to control the possibility of their occurrence and be responsible for their consequences.

Fourthly, the ability of a private partner to finance the repayment of debt. When using investment resources on the basis of public-private partnership and the risks assumed, the private partner expects a corresponding return in the form of return of invested investment resources with the appropriate interest. Under the conditions of attracting investment resources on the basis of public-private partnership, usually about half of the costs of fixed assets under the investment project) is financed by the equity of the private partner and borrowed investment resources. Usually the percentage of financing costs depends on the level of risk, guarantees and many other factors. Debt collateral to a private partner can also be provided by an international financial organization, as well as through the debt instruments market.

But usually any lender conducts a comprehensive legal and financial evaluation of each component of the investment project to check the ability of the investment project to bring the appropriate profit that will allow to repay debts. If there is a significant risk of insufficient profits from a public-private partnership investment project to cover costs and to obtain the appropriate profitability of the project, it is necessary to support the public partner to repay the debt obligations of the private partner;

Fifthly, obtaining profitability by attracting investment resources through public-private partnerships. As you know, the main purpose of investing is to make a profit. At the same time, various mechanisms can be used to ensure the receipt of investment income. For example, due to the collection of profits over a long period, it may be in the form of fares, ticket sales, advertising, etc., depending on the object and form of the investment project. Also, the income from the investment project can be obtained as a result of payments for operational readiness.

Also, income for a private partner can be supplemented by government funding and other various forms of government support, such as subsidies, subsidies, or tax and customs benefits. Both methods of obtaining a return on an investment project can be used. It should be noted that a possible decision to ensure the income of a private partner in attracting investment resources through public-private partnership can be a political decision and has a significant impact on the financial structure of the investment project and, consequently, its viability in general;

Sixthly, the approach to investment projects, which is based on the life cycle and productivity of the object of investment resources. In contrast to the model of public allocations on the basis of public procurement in the implementation of investment projects in terms of attracting investment resources on the basis of public-private partnership in terms of digitalization, the results of the investment project are defined as some initial value.

That is, the main conditions under such an investment model are not technical parameters, but indicators of productivity of the object of investment resources. This allows you to use the innovative potential of the private partner, his creativity in work and decision-making, management and financing experience by choosing the provider of services, works or products that would offer the best life cycle value for the cost of attracting investment resources digitization.

Seventhly, taking into account the scope and complexity of the contract structure for the horizontal integration of services. Attracting investment resources on the basis of public-private partnership in the context of digitalization can be structured both vertically and horizontally. The ability to attract investment resources using the mechanism of public-private partnership in the context of digitalization makes it possible to ensure full horizontal integration of services of one of the parties from initial design to financing and provision of services such as final operation of the investment object and its maintenance.

Horizontal integration of services allows optimizing the incentive, which is based on the achievement of certain technical indicators for the effective transfer of risk to the private party. And also to coordinate such activities by private companies at a lower price than the price offered by the

public partner. Private partners are better prepared to respond to economic challenges and risks. However, such integration and provision of services complicates the implementation of the investment project in terms of attracting investment resources on the basis of public-private partnership in the context of digitalization.

### **Conclusion**

These conditions, which must be taken into account when attracting investment resources in a public-private partnership in the context of digitalization, help reduce the risk of attracting investment resources. Such prerequisites include: a clear legal basis; establishing long-term cooperation between private and public partners; transfer of risks to the partner; the possibility of financing the repayment of debt obligations by a private partner; obtaining profitability by attracting investment resources using public-private partnerships; approach to investment projects, which is based on the life cycle and productivity of the object of investment resources; taking into account the scope and complexity of the contract structure for horizontal integration of services.

The scientific novelty of the above study is to substantiate the principles of public-private partnership in the management of investment processes in the context of digitalization, which provides ways to eliminate obstacles to the use of public-private partnership at the macro and micro levels in digitalization and compliance with basic conditions when attracting investment resources in terms of public-private partnership in terms of digitalization.

The above will increase the efficiency of investment facilities, reduce government spending on services, including socially necessary, increase employment, develop forms of project financing, establish a constructive dialogue between the public partner and business, and ensure the solution of economic, social and environmental issues.

Further research requires issues of increasing the interest of public and private partnerships and intensification of investment processes in the context of digitalization.

### **Bibliographic References**

ABRAMOVA, Alla; SHAPOSHNYKOV, Kostiantyn; ZHAVORONOK, Artur; LIUTIKOV, Pavlo; SKVIRSKYI, Illia; LUKASHEV, Oleksandr. 2021. "Ecosystem of VAT Administration in E-Commerce: Case of the Eastern

- Europe Countries” In: *Estudios de economía aplicada*. Vol. 39, No. 5, pp. 02-15.
- ADEBAYO, Tomiwa Sunday; GENÇ, Sema Yilmaz; CASTANHO, Rui Alexandre; KIRIKKALELI, Dervis. 2021. “Do public–private partnership investment in energy and technological innovation matter for environmental sustainability in the east Asia and pacific region? An application of a frequency domain causality test” In: *Sustainability*. Vol. 13, No. 62, Art. 3039.
- AHMAD, Mahmood; RAZA, Muhammad Yousaf. 2020. “The role of public-private partnerships investment in energy and technological innovations in driving climate change: evidence from Brazil” In: *Environmental Science and Pollution Research*. Vol. 27, No.24, pp. 01-16.
- AKINSOLA, Gbenga Daniel; AWOSUSI, Abraham Ayobamiji; KIRIKKALELI, Dervis; UMARBEYLI, Sukru; ADESHOLA, Ibrahim; ADEBAYO, Tomiwa Sunday. 2021. “Ecological footprint, public-private partnership investment in energy, and financial development in Brazil: a gradual shift causality approach” In: *Environmental Science and Pollution Research*. Available online: <https://doi.org/10.1007/s11356-021-15791-5>. Date of consultation: 15/10/2021.
- ALBALATE, Daniel; BEL, Germà; GEDDES, Richard. 2020. “Does Public-Private-Partnership enable laws to increase private investment in transportation infrastructure?” In: *Journal of Law and Economics*. Vol. 63, No. 1, pp. 43-70.
- AREFIEVA, Olena; TULCHYNSKA, Svitlana; POPELO, Olha; AREFIEV, Serhii; TKACHENKO, Tetiana. 2021. “The Economic Security System in the Conditions of the Powers Transformation” In: *IJCSNS International Journal of Computer Science and Network Security*. Vol. 21, No. 7, pp. 35-42.
- ARMAND, Jasmine. 2020. “Establishing economic independence in Haiti through public-private partnerships and foreign direct investments” In: *Northwestern Journal of International Law and Business*. Vol. 40, No. 3, pp. 363-390.
- BELYAEV, Y.M; OGANESYAN, T.L; ARYTYUNOVA, A.E. 2020. “Mechanisms of public-private partnership and ensuring innovation and investment activities in the region” In: *IOP Conference Series: Earth and Environmental Science*. Vol. 650 (12021), Art. 012035.
- CHEN, Bingyao. 2021. “Public–private partnership infrastructure investment and sustainable economic development: An empirical study based on

- efficiency evaluation and spatial spillover in China” In: Sustainability. Vol. 13, Vol. 15, Art. 8146.
- CHUNLING, Li; MEMON, Javed Ahmed; THANH, Tiep Le; ALI, Minhaj; KIRIKKALELI, Dervis. 2021. “The impact of public-private partnership investment in energy and technological innovation on ecological footprint: The case of Pakistan” In: Sustainability. Vol. 13, No. 18, Art. 10085.
- COSMULESE, Cristina Gabriela; GROSU, Veronica; HLACIUC, Elena; ZHAVORONOK, Artur. 2019. “The Influences of the Digital Revolution on the Educational System of the EU Countries” In: Marketing and Management of Innovations. Vol. 3, pp. 242-254.
- DERGALIUK, Marta; KHANIN, Semen; POPELO, Olha; TULCHYNSKA, Svitlana; PAKHOTA, Nataliia. 2021. “Intensification of the development of regional economic systems in the conditions of the creative economy formation” In: Laplage em Revista (International). Vol. 7, No. 3, pp. 80-88.
- DERHALIUK, Marta; POPELO, Olha; TULCHYNSKA, Svitlana; MASHNENKOV, Kostyantyn; BEREZOVSKYI, Danylo. 2021. “State policy of the potential-forming space transformation in the context of the regional development intensification” In: CUESTIONES POLÍTICAS. Vol. 39, No. 70, pp. 80-93.
- FEDYSHYN, Maiia; ABRAMOVA, Alla; ZHAVORONOK, Artur; MARYCH, Maksym. 2019. “Management of competitiveness of the banking services” In: Financial and credit activity: problems of theory and practice. Vol. 1, No. 28, pp. 64-74.
- FLETA-ASÍN, Jorge; MUÑOZ, Fernando. 2021. “Renewable energy public-private partnerships in developing countries: Determinants of private investment” In: Sustainable Development. Vol. 29, No. 4, pp. 653-670.
- GASILOV, V.V.; OFIN, V.P.; PROVOTOROV, L.A. 2017. “Risk management investment stage in projects of public-private partnership” In: Izvestiya Vysshikh Uchebnykh Zavedenii, Seriiia Teknologiiia Tekstilnoi Promyshlennosti. Vol. 367, No. 1, pp. 48-52.
- GRIGORAȘ-ICHIM, Claudia-Elena; COSMULESE, Cristina Gabriela; SAVCHUK, Dmytro; ZHAVORONOK, Artur. 2018. “Shaping the perception and vision of economic operators from the Romania – Ukraine – Moldova border area on interim financial reporting” In: Economic Annals-XXI. Vol. 173, No. 9-10, pp. 60-67.

- KHAN, Zeeshan; ALI, Muhsin; KIRIKKALELI, Dervis; WAHAB, Salman; JIAO, Zhilun. 2020. "The impact of technological innovation and public-private partnership investment on sustainable environment in China: Consumption-based carbon emissions analysis" In: Sustainable Development. Vol. 28, No. 5, pp. 1317-1330.
- KHANIN, Semen; AREFIEVA, Olena; DERGALIUK, Marta; POPELO, Olha; TULCHYNSKA, Svitlana. 2021. "Concepts of the activation of intellectual and innovative determinants for the development in order to intensify the introduction of the regional economic systemsn" In: Laplage em Revista (International). Vol. 7, No. Extra E, pp. 234-244.
- KHOLIIVKO, Nataliia; DJAKONA, Antonina; DUBYNA, Maksym; ZHAVORONOK, Artur; LAVROV, Ruslan. 2020. "The higher education adaptability to the digital economy" In: Bulletin of the National Academy of Sciences of the Republic of Kazakhstan. Vol. 4, No. 386, pp. 294-306.
- KHOLIIVKO, Nataliia; POPELO, Olha; DUBYNA, Maksym; PANCHENKO, Olena; TARASENKO, Artem; KOZLIANCHENKO, Olena. 2021. "Criteria for the description of the financial behavior model of households in the digitalization conditions" In: Laplage em Revista (International). Vol. 7, No. 3B, pp. 57-67.
- KYCHKO, Iryna; SAMIILENKO, Halyna; KHUDOLEI, Veronika; BONDAR, Nataliia; KRAVCHYK, Yurii. 2021. "Risks of Digital Transformations of labour relations and the labour market" In: Laplage em Revista (International). Vol. 7, No. Extra E, pp. 650-660.
- POPELO, Olha. 2017. "Methodological approaches to modernization processes of the productive forces in the conditions of Eurointegration" In: Scientific Bulletin of Polissia. Vol. 1, No. 1(9), pp. 218-224.
- POPELO, Olha; TULCHYNSKA, Svitlana; TULCHYNCKIY, Rostislav; KHANIN, Semen; HRECHKO, Alla. 2021. "Modeling and forecasting of the integrated index of innovation activity of regions" In: Management Theory and Studies for Rural Business and Infrastructure Development. Vol. 43, No. 2, pp. 307-315.
- PRAVKIN, Sergei; SMIRNOVA, Vera; SHAGIEVA, Rosalina; ARKHIPOV, Igor; EROFEEVA, Diana. 2020. "Meso-level investment management in transport projects with the application of the public-private partnership mechanism" In: E3S Web of Conferences. Vol. 208, Art. 06019.
- QIN, Shikun; LUO, Weijie; WANG, Yaling. 2021. "Policy uncertainty and the company-level investment: evidence from public-private partnership market in China" In: Applied Economics Letters. Available online. In:



<https://doi.org/10.1080/13504851.2021.1883524>. Date of consultation: 15/10/2021.

- RAZA, Syed Ali; SHAH, Syed Hasanat; YOUSUFI, Sara Qamar. 2021. "The impact of public-private partnerships. Investment in Energy on carbon emissions: evidence from nonparametric causality-in-quantiles" In: *Environmental Science and Pollution Research*. Vol. 28, No. 18, pp. 23182-23192.
- SAMIILENKO, Halyna; POPELO, Olha; KHUDOLEI, Veronika; MASHNENKOV, Kostyantyn; DERKACHENKO, Yuliia. 2021. "Transformational processes of clustering in digital economy" In: *Laplace em Revista (International)*. Vol. 7, No. Extra C, pp. 691-702.
- SAMOILOVYCH, Anastasia; GARAFONOVA, Olga; POPELO, Olha; MARHASOVA, Viktoriya; LAZARENKO, Yuliia. 2021. "World experience and ukrainian realities of digital transformation of regions in the context of the information economy development" In: *Financial and credit activity: problems of theory and practice*. Vol. 3, No. 38, pp. 316-325.
- SHAHBAZ, Muhammad; RAGHUTLA, Chandrashekar; SONG, Malin; ZAMEER, Hashim; JIAO, Zhilun. 2020. "Public-private partnerships investment in energy as new determinant of CO2 emissions: The role of technological innovations in China" In: *Energy Economics*. Vol. 86, Art. 104664.
- SHKARLET, Serhii; DUBYNA, Maksym. 2017. "Submission of mention of the category "financial trust"" In: *Scientific bulletin of Polissia*. Vol. 4 (12), No. 2, pp. 45-52.
- SHKARLET, Serhii; DUBYNA, Maksym; TARASENKO, Artem. 2017. "Basic descriptors of the information economy development" In: *Scientific bulletin of Polissia*. Vol. 3, No.11, Is. 1, pp. 8-15.
- SHKARLET, Serhii; PROKOPENKO, Valeriia; DUBYNA, Maksym. 2018. "Directions of development of the financial services market of Ukraine" In: *Baltic Journal of Economic Studies*. Vol. 4, No. 5, pp. 412-420.
- SILAGHI, Florina; SARKAR, Sudipto. 2021. "Agency problems in public-private partnerships investment projects" In: *European Journal of Operational Research*. Vol. 290, No. 3, pp. 1174-11911.
- SRESAKOOLCHAI, Jessada; KAEWUNRUEN, Sakdirat. 2020. "Comparative studies into public private partnership and traditional investment approaches on the high-speed rail project linking 3 airports in Thailand" In: *Transportation Research Interdisciplinary Perspectives*. Vol. 5, Art. 100116.

- TULCHYNSKA, Svitlana; POPELO, Olha; DERGALIUK, Bogdan; KHANIN, Semen; SHEVCHUK, Nataliia. 2021. "Strategic assessment of the ecological condition of the regions in the context of innovative development" In: *Laplace em Revista (International)*. Vol. 7, No. Extra D, pp. 315-322.
- TULCHYNSKA, Svitlana; POPELO, Olha; KOVALENKO, Nataliia; MAKALIUK, Iryna; TUR, Olena. 2021. "Introduction of the organizational and economic mechanism of the activation of intellectual and innovative determinants of the regional economic development" In: *Laplace em Revista (International)*. Vol. 7, No. 3A, pp. 92-102.
- VAN SONG, Nguyen; TIEP, Nguyen Cong; VAN TIEN, Dinh; VAN HA, Thai; PHUONG, Nguyen Thi Minh; MAI, Tran Thi Hoang. 2021. "The role of public-private partnership investment and eco-innovation in environmental abatement in USA: evidence from quantile ARDL approach" In: *Environmental Science and Pollution Research*, pp. 1-12.



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