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ECONOMIC FEATURES OF PUBLIC-PRIVATE PARTNERSHIP DEVELOPMENT: GLOBAL TRENDS AND DOMESTIC EXPERIENCE OF THE PRE-WAR PERIOD

ABSTRACT

In the conditions of globalization, the development of the knowledge economy, and the digitalization of all spheres of activity, the most effective form of cooperation between the state and business entities - business and private individuals in the field of education and science, and the way of financing educational and scientific projects is the public-private partnership (PPP).

The development and implementation of effective mechanisms for the interaction of the state, science, and business on the basis of PPP, which would correspond to modern conditions, the search for effective forms and tools for financing PPP projects is an urgent task today.

The analysis carried out in the article made it possible to single out 5 main trends in the development of PPPs (quantitative growth of PPPs in the world and in the EU; diversification of the PPP market by countries and sectors of the economy; infrastructural orientation of PPPs; state support of a certain type of PPPs either in a certain industry or in a certain direction; development PPP in the innovative sphere), which made it possible to reach a conclusion in the process of generalization about the areas in which PPP was concentrated in Ukraine. On the basis of the statistical data, the article identifies the main areas of concentration of PPP projects in Ukraine in the pre-war period.

Considering the multi-component nature of PPP goals, the scientific work summarizes and details the scenarios of the activation of PPP relations in Ukraine (budgetary and financial, resource, innovation, and investment).

Keywords: public-private partnership, PPP development trends, PPP projects, PPP budget and financial scenario, PPP investment scenario

JEL Classification: F29, F36, F41, H70, H73

INTRODUCTION

The importance of PPPs is largely due to the processes of diversification and complication of state management tools and mechanisms, as well as insufficient financial resources of the budgets of cities and united territorial communities, while public needs for infrastructure and public services tend to grow. This determines the search and implementation of new forms of cooperation between public administration bodies and private business entities, namely PPP mechanisms.

The National Institute of Strategic Studies in an analytical note of 2019 [27], which is based not only on types of economic activity but also on socio-economic problems, identified as priority directions for the use of the PPP mechanism in Ukraine:

- construction of new and reconstruction of old roads under concession conditions, since more than 90% of domestic roads need repair, and for the development of the economy, it is necessary to build more than 4.5 thousand km of new roads worth more than UAH 200 billion, which exceeds the state budget;

- development and modernization of facilities in the field of housing and communal services (including the introduction of new energy-saving and cleaning technologies, increasing the energy efficiency of buildings, improving the quality of drinking water);
- geological exploration of deposits and extraction of minerals (shale or shelf natural gas), which will reduce the dependence of the national economy on energy imports;
- implementation of joint projects in the humanitarian sphere (education, science, ecological tourism, recreation, protection of monuments of cultural and natural heritage, construction of recreation areas);
- updating the material and technical base of elementary, secondary and higher education institutions;
- repair and restoration of objects of cultural and historical heritage;
- development of nature reserves, landscape natural parks, combined with the tourism business of private investors;
- popularization and implementation of projects related to maintaining a healthy lifestyle, conducting large-scale sports events, forming environmental awareness (including the formation of a culture of resource conservation and rational waste management in the population (sorting, prevention and liquidation of spontaneous landfills).

LITERATURE REVIEW

The scientific works of many domestic and foreign researchers are devoted to the study of the problems of implementation of PPP projects.

The theoretical basis of the origin and functioning of PPP was formed and developed in their works by well-known scientists in the field of economics and management J.M. Keynes, F. List, A. Marshall, J. Mill, F. Knight, D. North, W. Oiken, D. Ricardo, P. Samuelson, A. Smith, G. Hodzhi and others [1].

The work of domestic and foreign scientists: A. Akintoi, J. Allan, V. Varnavskiy, A. Hrytsenko, D. Grimsi, M. Gerrard, A. Zeldner [2] is devoted to the peculiarities of PPP, the methodological basis of its formation and development.

The methodology, theory, mechanisms of PPP development were analyzed in detail by scientists Brailovsky I.A. [3], Melnyk A.F., Pidgaets S.V. [4]. It was they who systematized the main PPP projects in the historical context and singled out common and distinctive features of their implementation.

Scientists Kruglov V. [5], Vynnytskyi B., Lendyel M., Onyshchuk B., Segvari P. [6], Simak S.V. [7], Olentsevich N.V., Kovaleva O.V. [8] studied in detail the mechanisms of state regulation of PPP development in Ukraine, as well as its institutional development, experience and prospects for the implementation of public-private partnerships in Ukraine and abroad.

Kvitka S.A. [9], Tyshchenko V.F., Ostapenko V.M. [10] evaluated, in their works, project financing as a form of public-private partnership through the prism of interaction between government and business.

AIMS AND OBJECTIVES

The purpose of the article is to highlight the main trends in the development of PPPs in the world and in Ukraine in order to develop proposals for intensifying the implementation of PPP projects in the post-war period. To achieve the goal, the following tasks are solved in the article:

- the main trends of PPP development in the world economy are substantiated;
- the main areas of concentration of PPP projects in Ukraine in the pre-war period are determined;
- scenarios for the activation of PPP relations in Ukraine are proposed.

METHODS

In order to fulfill the defined tasks and achieve the set goal, the basic provisions of the theories of finance and innovative activity, strategic management, as well as management theory are applied in the article. The following general scientific methods were used during the research: theoretical generalization and systematization - to identify trends in PPP development; comparison - when studying existing PPP projects in the world and in Ukraine; graphical interpretation - when analyzing the state of implementation of PPP agreements.

RESULTS

The high effectiveness of PPPs as a form of interaction between the state, business and society is confirmed by world experience and world trends in the development of PPPs. In order to establish qualitative and quantitative changes, regional and branch specifics of the PPP in order to identify the problems of its development, we will systematize the main trends of its functioning in the world and in Ukraine according to the signs of the number, structure of agreements, volume of investments, economic activity, geographical location.

In our opinion, the history of PPP development can be presented in the form of such periodization of stages (Table 1).

Table 1. Historical stages of PPP development. (Source: formed according to [7])

Stage	Period	Characteristics of the stage
I	1256 – (the date of the first known concession in Spain) - until 1761	The stage of non-institutional application of PPPs (in the form of a concession), not provided for by special legislation acts
II	1761 (the date of adoption of the relevant Royal Decree in Spain, although in other European countries, the countdown should be started from the beginning of the 19th century) - 1960s of the 20th century.	The stage of legislatively ensured fragmentary application of PPPs (mainly in the form of a concession, but also and in the form of public works)
III	1960s - 1990s	The stage of intensive growth of interest in PPP mechanisms and specific projects in Europe and other regions of the world, mass adoption of PPP laws
IV	the beginning of the 2000s - our time	The stage of significant structural and functional polymorphization of models and the complication of PPP relations

The first trend is the quantitative growth of PPPs in the world and in the EU (the number of projects and the total amount of investments in them). It should be noted that at the end of the 20th century, PPPs have spread significantly throughout the world, and research by the World Bank has proven that the fastest developing countries used the PPP mechanism most actively. The leaders were India, Brazil, Mexico, and China [3].

Traditionally, PPPs have been actively used in the EU countries: during 1990-2013, they implemented almost 1,700 PPP projects, the value of involved investments amounted to more than 318 billion euros. Of these, almost two-thirds of investments were made by Great Britain (according to data from 1990-2011), but in 2011, France took first place, which accounted for 62% of the volume of PPP investments in the EU. Quantitatively, DPP showed a different picture: the second place of Spain (10%) and 2-5% of DPP France, Germany, Italy and Portugal each [3, 5].

The second trend of PPP development is the diversification of the PPP market by countries and sectors of the economy [3-8]. In the EU, this process has been noticeable since 2006: Great Britain still retains the largest PPP market in the EU, although its share continues to decrease. The financial crisis corrected the trend: PPP decreased in most countries and sectors, but during 2010-2011 there was a revival and the indicators of 2002-2004 were restored [3, p. 112]. The PPP in the USA has diversified significantly, choosing, along with the traditionally attractive modernization of the infrastructure and the development of the transport system, as its new areas of water resource use, the disposal of household waste [3, 5, 11]. Diversification of PPPs in the USA also touched on the international aspect, that is, the use of the PPP mechanism to solve socio-economic problems of other countries. In particular, the development of the medical system in Africa [3, p.115].

The third trend of PPP development – the infrastructural orientation of PPPs – is a widespread trend in the world, when states implement socially important projects with the help of PPPs, increasing the number and quality of infrastructure services. In particular, the infrastructural orientation is characteristic of the USA, Canada, Australia and Asian countries. Moreover, the latter are dominated by the social focus of infrastructure projects [3, p. 116-117].

The situation is somewhat different in developing countries and countries with transition economies. According to the World Bank, about 2.7 thousand PPP projects have been implemented in these countries since the 1990s [12]. During 2010-2020, in developing countries, the largest number of PPP projects were implemented in the fields of electricity, road construction, modernization of water supply and drainage (Table 2). As we can see, the investments and interests of private investors and states were focused on the field of electric power, construction of highways and operation of airports.

Table 2. Sectoral PPP priorities in developing countries, 2010-2020. (Source: based on [12])

Sector of the economy	The number of transactions (projects) of PPP		The amount of the investments	
	units	%	billions of hryvnias	%
1. Electric power industry	2096	66.2	468.626	56.0
2. Automobile roads	450	14.2	182.585	21.8
3. Water supply and drainage	318	10.1	29.250	3.5
4. Ports (sea, river)	140	4.4	35.868	4.3
5. Gas production	82	2.6	30.624	3.7
6. Airports	53	1.7	75.778	9.0
7. Information and communication technologies	28	0.8	14.479	1.7
In total	3167	100,0	837,210	100,0

At the same time, the number of PPP agreements (projects) does not always correlate with the amount of investment in them. This is demonstrated by both their structure (Table 1) and the comparative dynamics of PPP infrastructure projects for 2010-2020 in 132 low- and middle-income countries [12], which is shown in Figure 1.

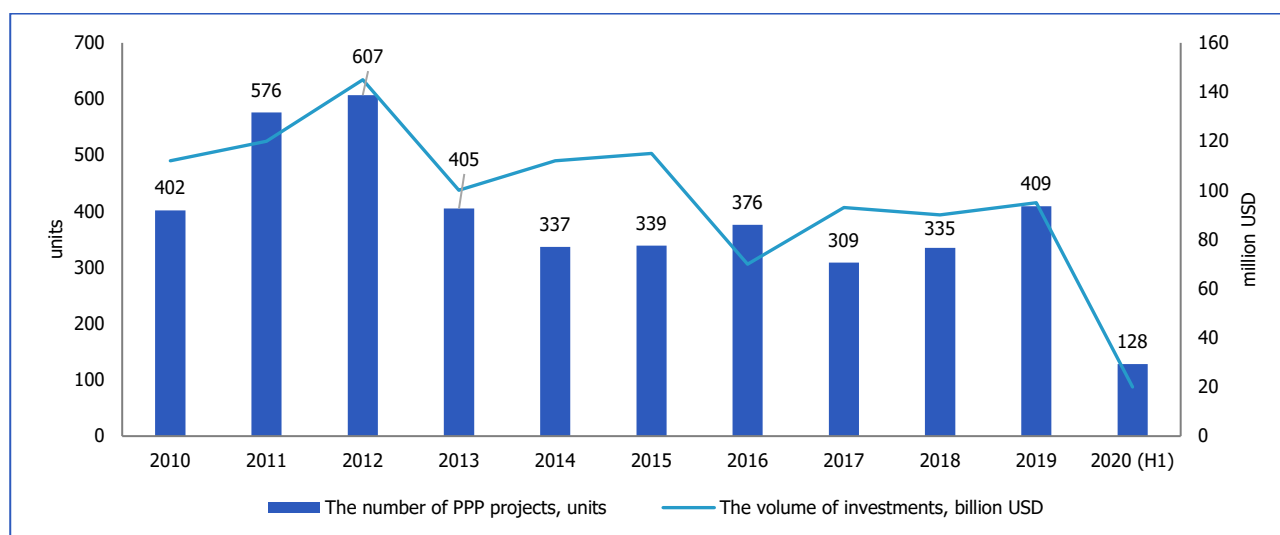


Figure 1. Comparative dynamics of PPP infrastructural projects for 2010-2020 by characteristics: number, volume of investments. Note: * 2020 - data are given for the first quarter of 2020 (Source: based on [11], taking into account the approach of [5, p. 92])

In particular, we can see that digital PPP projects with investment in information and communication technologies, making up only 0.8% of the total number of PPP deals (projects), bring 1.7% of investments to the relevant field.

That is, the investment capacity of PPPs on an innovative and informational basis, calculated for PPPs in the field of "information and communication technologies", is 2.1. It is significantly higher than water supply and drainage (0.35), energy (0.85) and gas production (0.97). It is significantly higher than the PPP investment return in sea and river ports (1.43) and in highways (1.53). Only the PPP investment capacity for airports is much higher than it (5.29).

According to the World Bank [12], during 1990-2018, 7,205 PPP agreements were concluded in developing countries and their projects were implemented in the amount of 1,788 billion dollars. the USA in the fields of transport, housing and communal services, electricity. According to the data of the European Investment Bank, in 2006-2017, the majority of projects were localized in the social sphere (Table 3).

Table 3. Sectoral priorities of PPPs in EU countries, 2006-2020. (Source: built on the basis of [12] taking into account the approach of [5, p. 91])

Sector of the economy	The number of transactions (projects) PPP		The amount of investments	
	units	%	billion EUR	%
1. Education	281	27,7	24,245	11,9
2. Transport	229	22,6	114,567	56,0
3. Healthcare	204	20,1	32,677	16,0
4. Public order and security	77	7,6	6,898	3,4
5. Environment	78	7,7	13,324	6,5
6. Residential and public services	61	6,0	5,678	2,9
7. Recreation and culture	56	5,5	3,597	1,7
8. Public services	29	2,8	3,328	1,6
In total	1015	100,0	204,314	100,0

From Table 3 we can see that PPP projects bring a different amount of investment to the respective sphere, as they have different investment capacities (indicated by its decrease): PPP in transport has an investment capacity of 2.5; PPP on health care and PPP on environmental regulation - 0.8; PPP on public services - 0.6; PPP on housing and public services - 0.5; PPP on education - 0.43; PPP on public order and security - 0.4; PPP on recreation and culture - 0.3. As you can see, transport is still the most investment intensive. From the state's point of view, the growth of investments is a positive trend that allows it to revive economic development, and from the point of view of a private partner, an increase in investment volumes is not always positive, as it must be evaluated according to the criterion of payback and profitability.

The fourth trend in the development of PPPs is state support for a certain type of PPP or in a certain industry or in a certain direction. During the selection and preparation of PPP and/or public-private partnership (PPP) projects, state administration bodies promote certain sectors of the economy for which PPP and PPP are recognized by the state as expedient or socially important, and by world experience as more successful (Table 4).

Table 4. Priority directions of PPP in some countries of the world. Note: "..." - no data for analysis. (Source: systematized on the basis of data [9, 10, 13])

Priority areas of PPP (by source)	Country							
	United Kingdom	Canada	Greece	Ireland	Australia	Netherlands	Spain	USA
1. Infrastructure objects (schools, hospitals, prisons)	+	+ healthcare	...	...	...	+	...	+
2. Defense objects	+	...	...	...	...	...	...	...
3. Automobile roads	+	...	+	+	...	+	+(paid)	+
4. Energetics	...	+	...	...	...	...	...	...
5. Transport	...	+	+ airports	+ urban transport systems	+	...	...	+
6. Environmental protection, water resources	+ treatment plants	+	...	...	...	...	...	+ environmental protection activities
7. Water supply and drainage	...	+	...	...	...	...	...	+
8. Recreational facilities	...	+	...	...	...	...	...	...
9. Information technologies and digitization	...	+	...	...	...	...	...	+
10. Healthcare and education	...	+	...	...	...	+	...	+
11. Life support systems	...	...	...	...	+ of cities	+ of cities	+ of cities	...
12. Public housing sector	...	...	...	...	...	+	...	+

According to the National Council on PPPs in the USA, out of 65 basic types of activities of municipal authorities (water supply, sewage, garbage collection, school education, operation of parking lots) in each settlement

commercial firms on average perform 23 types of activities [8, p. 139].

Unfortunately, given in the table. 3 data are incomplete, so they do not fully reveal the use of PPPs. However, they demonstrate that the priority directions of PPP and PPP in different countries of the world can be divided into two groups:

- those that are industries or spheres that acquire significant innovative changes. These are, in particular, information technologies capable of providing the private sector with quick profits, replication of results and smart innovations (innovations based on smart technologies);
- those that are industries or spheres that acquire slow innovative changes, but need modernization or restructuring. These are: infrastructure objects, health care and education, life support systems, energy, transport systems, etc., capable of providing long-term profits to the private sector, which depend on the degree of previous or concomitant restructuring of the PPP object.

The fifth trend in the development of PPPs is the development of PPPs in the innovative sphere, especially in the field of education, but this is only a small part of the potential of PPPs. This is confirmed by the experience of the United States: the largest example of PPP in the direction of stimulating private-sector research projects on technological innovations [10] is the state program for supporting small enterprises with great production potential in the early stages of the innovation process (Small Business Innovation Research Program, SBIR), which operates with 1982

The trends and pace of development of PPPs in Ukraine are somewhat different from those of the world in terms of number, the volume of investment, the structure of deals, economic activity and geographical location.

Firstly, the history of PPP development in Ukraine began much later than in the world. Secondly, for the first 20 years, Ukraine still had neither a business sector capable of generating private partners, nor the appropriate legislation, nor regulatory mechanism, nor a PPP policy. That is why, during the first 20 years, the process of formation of both the business sector and the PPP took place. During this period (1990-2012), a total of only 58 PPP projects were started (Figure 2), of which 2 projects were discontinued. Over the next 5 years, the number of PPPs increased and reached, according to the World Bank [11, 19, 20, 21], in 1992-2017, there were 74 implemented projects in the following fields: energy (46), communications (14), transport (2).

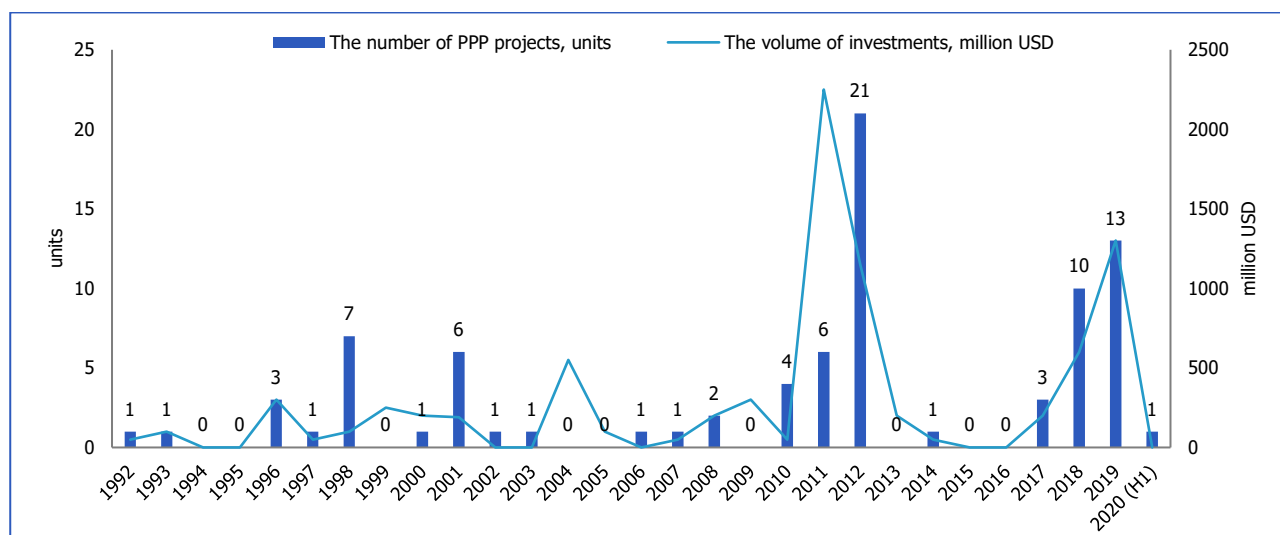


Figure 2. Dynamics of PPP projects in Ukraine, 1992-2020. Note: * 2020 – data are given for the first quarter of 2020 (Source: compiled on the basis of [14-16])

It should be noted that statistical data on the dynamics of the number of PPP projects in Ukraine, published by the World Bank, and data from domestic statistics on "PPP-based contracts" do not coincide due to the fragmentation of the project registration system in Ukraine" [17, p. 12], which significantly complicates the analysis and determination of the real number of signed PPP contracts and concession contracts. Using a different methodological approach to accounting for the partnership between the state and business (the number of concluded PPP agreements), the domestic data exaggerate the world data several times, as can be seen from the comparison of official data (Figure 2 and Figure 3).

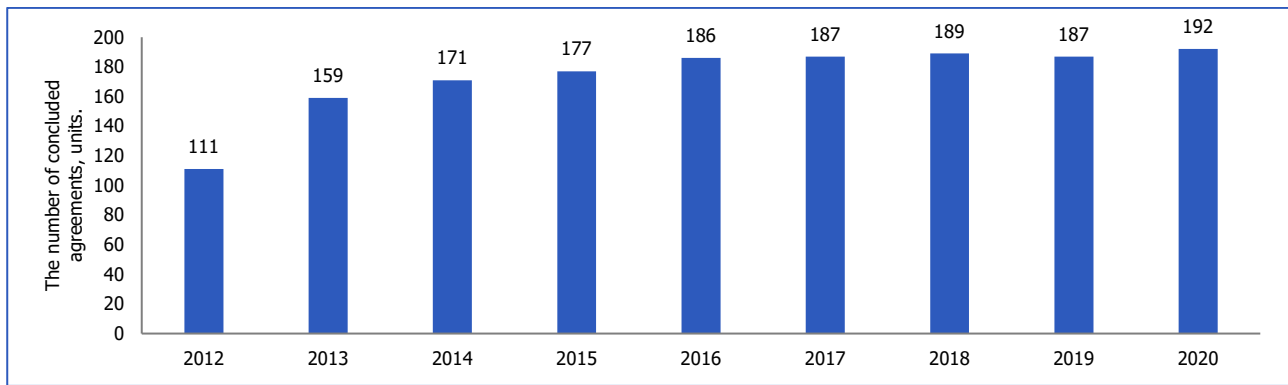


Figure 3. Dynamics of PPP agreements in Ukraine, 1992-2020. (Source: compiled on the basis of [15, 16])

An important characteristic of the development of PPPs in Ukraine is the completion of their projects. Not all concluded PPP agreements (projects) are initiated and not all are completed (Figure 4).

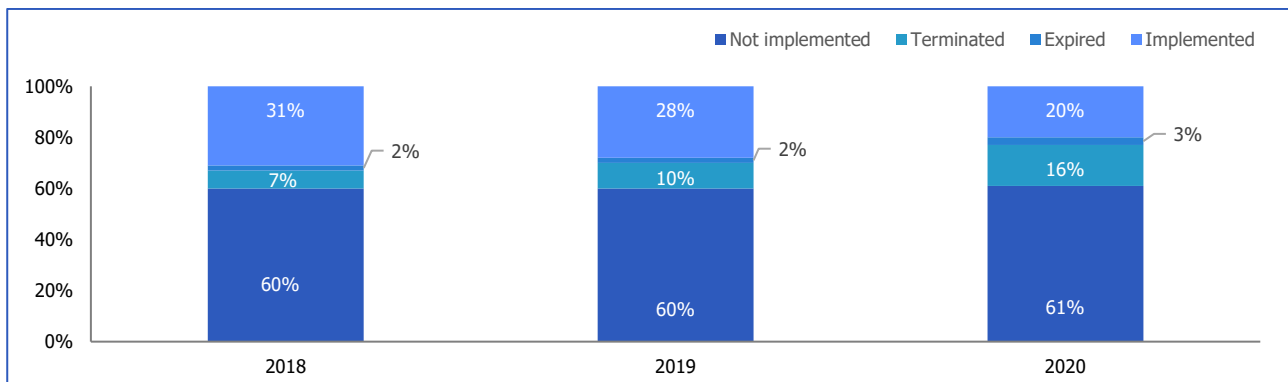


Figure 4. The structure of PPP agreements (projects) in Ukraine by "completion" as of January 1, 2020. (Source: compiled on the basis of [15, 16])

In Ukraine, according to the data of the central and local executive authorities in Ukraine, as of January 1, 2020, 187 contracts were concluded on the basis of PPP, of which 52 contracts are being implemented (34 - concessions, 16 - on joint activities, 2 others). At the same time, 135 contracts are not implemented, as 4 of them have expired, 18 have been terminated, and 113 have not been implemented) [18]. That is, 61.0% of concluded PPP agreements are not implemented, remaining only a declaration of intent (1% terminated and 60.4% of those not implemented).

Examples of unsuccessful PPP projects are the concession project for the construction and operation of the "Lviv-Krakowets" public highway of state importance. It was concluded on December 23, 1999 with the concern "Transmagistral", but it was not started due to insufficient state funding, lack of own resources of the concessionaire and unavailability of loans. In 2015, a repeated concession tender was announced, but the applications of both applicants (Ukrainian consortium "Concessional Transport Main Lines" and French Bouygues) were rejected, as they were unable to provide financing for the construction of the concession facility either at their own expense or account of funds raised. Currently, for the third time, the Ministry of Infrastructure of Ukraine has developed the M-10 "Lviv - Krakowets" concession road project with the support of the World Bank, which is planned to be paid and is part of the second stage of the GO Highway project (transnational transport corridor), which provides for an autobahn from Krakow to Odesa.

The main reasons for the failure of this PPP project are as follows:

- the preliminary examination and evaluation of the concession object is usually done by foreign companies with a high level of international reputation, which are chosen by the grantor (EBRD, IBRD). However, their methodology of assessment and preliminary design of the concession object is harmonious for the economic and legal system of developed countries, but does not take into account the specifics of the transitional economy with its imperfect legal system;

- secondly, one of the indicators for evaluating the suitability of an infrastructure object to become an object of a concession is the degree of its potential loading. But all the objects offered by the Ukrainian state for concession have a bad value according to this indicator. This results in a significant payback period of the private partner's investment: the possible payback period exceeds the traditional 25-30 years, sometimes reaching 50 years. Such a payback period makes the concession impossible due to economic impracticality on the part of the investor's private partner.

The geographic location of PPP projects (agreements) in Ukraine demonstrates the leadership of two regions (Figure 5) as of January 1, 2020 - Mykolaiv (15 PPP projects) and Kyiv (10 PPP projects).

The second group consists of Odesa and Donetsk (5 PPP projects each), Lviv, Zakarpattia, Zaporizhzhya (4 PPP projects each) regions. The outsider of the list is the Dnipropetrovsk region, which has not concluded a single PPP agreement in the last 2 years (2019-2020).

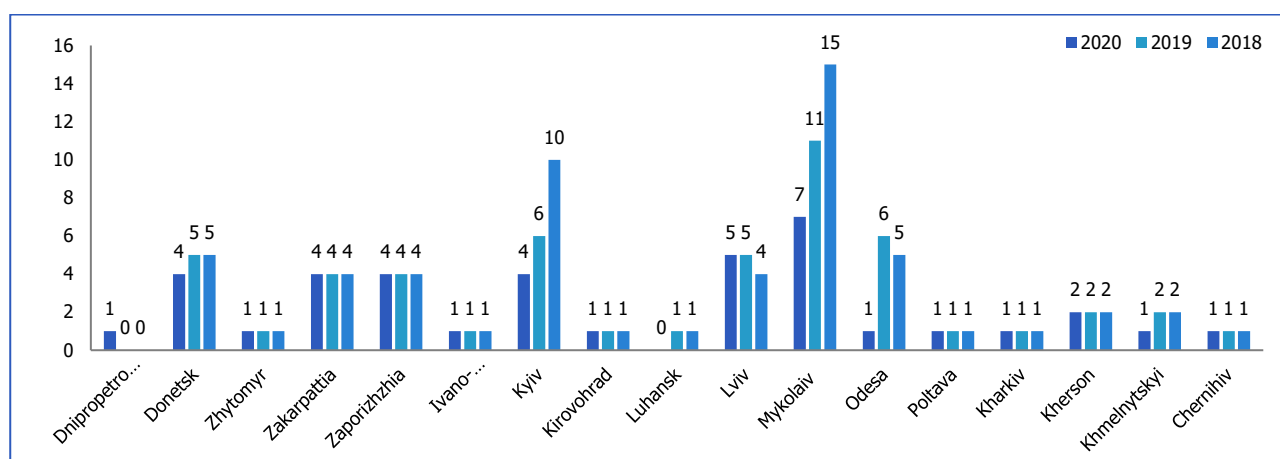


Figure 5. The geographical location of PPPs in Ukraine as of January 1, 2021. (Source: based on [16])

Each region has specifics and equal prerequisites for PPP development. In particular, in the Kharkiv region, PPP projects on the construction of preschool institutions are relevant [19, p. 4.16], in Odesa and Mykolaiv - seaports.

It should be noted that in Ukraine, whose economy is more raw-based, PPP projects focus more on the extraction, processing and transportation of raw materials. The exception is energy service contracts (ESCO-contracts), which relate to the field of utilities operation in terms of the use of energy resources. But this is rather a consequence not of the consistent development of the PPP legislative and regulatory framework, but of the direct transfer of the international law on ESCO contracts to the legal field of Ukraine.

Comparing these directions with the existing distribution of PPP agreements (projects) by types of economic activity, it should be noted that certain gaps in the sectoral development of PPPs. Several attempts were made to eliminate them in the 7 editions of the Law of Ukraine on PPPs (3 editions - 2012, after the 1st edition - in 2015, 2017, 2019 and 2020).

The list of PPP areas has significantly expanded in the 12 years since the adoption of the Law on PPPs (from 2010 to the present), which, on the one hand, indicates the inability of the state to solve the problems of the development of these areas, and on the other hand, the search for new ways and resources for them solution based on partnership with business.

PPP in Ukraine in 2018-2020 was concentrated in the following areas: water collection, purification and distribution (33-40%), production, supply, transportation and distribution of natural gas (15-21%), infrastructure (8-11%). production, distribution and supply of electricity (6-8%). PPP in the field of tourism, rest, and recreation is growing rapidly. culture and sports (from 2% to 13%).

PPP projects based on the models of new projects and property alienation have become the most widespread, as they are one of the easiest mechanisms for obtaining control over a property object.

It should be noted that the global trend of the evolution of various forms of PPPs and the development of new forms that go beyond the usual structuring is also observed in Ukraine. In particular, the ESCO contracts mentioned above are a promising form of PPP, as they:

- firstly, they ensure the involvement of small and medium-sized businesses in the PPP mechanism due to the low barrier to entry into the PPP;
- secondly, the effective part of these projects has a social orientation, as it is implemented on the basis of communal and municipal property and is aimed at ensuring guaranteed energy consumption standards by these facilities;
- thirdly, the ESCO formula itself determines the level of innovative results to be achieved by the private PPP partner. For example, the replacement of the heating system or the reconstruction of the boiler house, which leads to a certain effect from the use of energy resources due to the increase in the efficiency of the equipment, is based on the mandatory application of innovative technologies;
- fourthly, PPP projects from ESCO contracts contain an environmental component, since the conditions of this form of PPP include requirements for reducing greenhouse gas emissions, etc. The uniqueness of PPP projects with ESCO contracts lies not only in combining the interests of the state and a private partner in solving a common technical and economic problem. The main principle of ESCO is a completely new legal structure of PPP partner relations, which determines the direct dependence of the private partner's profit on the degree of achievement of control results in terms of quantity and quality, as well as his direct motivation to achieve these results.

The key changes and trends in the regulation of PPP development in 2020 had positive dynamics and results [18, 20, 21].

The first trend and results are the updated legislative framework for PPPs and concessions. Considering the importance of PPPs for the economy of Ukraine, back in 2013, the government adopted the "Concept for the Development of Public-Private Partnerships in Ukraine for 2013-2018", aimed at intensifying the implementation of projects through PPPs.

Further changes in 2014-2020 consisted in the transition from a state-regulated economy to an economy built on the principles of market management, close to liberal economic theories, in particular, the theory of a socially oriented market economy. As a result, a huge number of public administration tasks were gradually revised. Therefore, the results of scientific and analytical research are subject to critical rethinking. As a result of updating the legislation on PPPs together with the first concession tenders in October 2019, a number of obstacles to the development of PPPs in Ukraine were removed, and state management was provided with a regulated procedure for conducting tenders and analyzing the effectiveness of PPP projects.

The second trend and results are open external proposals regarding the initiation of national or regional PPP projects by potential partners. The idea of open proposals is that a potential partner as an investor finds a certain state asset, develops a project for this PPP object together with its technical and economic rationale and presents it to the relevant state partner.

The expected result of the opening of the proposal for domestic and foreign private investors is the development of: a) ports and terminals (in turn the seaports of Izmail, Berdyansk); b) airports; c) roads; d) communal infrastructure (water supply and waste treatment); e) social infrastructure (hospitals, schools, sports facilities and cultural heritage). Achieving results will be complicated by the absence of: firstly, detailed procedures for submitting such proposals; secondly, the criteria for evaluating proposals; thirdly, the official list of projects for which the state expects private initiatives.

The third trend and results are the complexity of open concession projects. It is, first of all, a pilot project that contains several concession projects for the seaport of Chornomorsk: a) project 1: the object is the railway and ferry complex of the Black Sea Ferry Terminal; funding - state; b) project 2: object – financing and operation of the Black Sea Container Terminal; financing - EBRD and IFC, which help the Ministry of Infrastructure of Ukraine to identify a private partner.

The expected result is the systematic development of the port infrastructure.

The fourth trend and results are the PPPs of roads. Changes in the legislation in the part of toll roads (it is about the mechanism of availability of payments to a private partner) due to the introduction of changes dated 29.08.2020 to the Resolution of the Cabinet of Ministers of Ukraine "On approval of the Procedure for the allocation of funds of the state road fund" No. 1085 of 20.12.2017 and the adoption of new PPP programs in the road industry [21], which are implemented in cooperation with the International Finance Corporation, the Global Infrastructure Fund, and the World Bank jointly by the Ministry of Infrastructure of Ukraine, the State Highway Agency of Ukraine, and the SPILNO PPP Development Project Office.

The expected result is the acceleration of the development of the automobile infrastructure and the optimization of budgetary investments.

The fifth trend is the development of institutional support for PPPs. It is about the creation of two important institutions:

- Project office for the development of public-private partnership (2016) with the support of the "Western NIS Enterprise Fund" ("WNISEF") (USA) under the Ministry of Infrastructure of Ukraine;
- The Agency for Public-Private Partnership Support (2019), which identifies PPP projects, helps make their technical and economic justification, engages local and international consultants. It carries out educational and educational activities that increase the institutional capacity of state authorities and local self-government in the field of PPP.

The above-mentioned trends have caused key changes, which consist in the significant improvement of: the PPP regulatory base; prerequisites for meeting significant modern infrastructure needs of Ukraine, which will continue to grow; confidence of private investors in the Ukrainian state as a PPP partner.

Today, there are certain economic, organizational, political, ideological and technological objective and subjective problems that are an obstacle to the activation of the PPP mechanism in Ukraine. It is expedient to include the following:

- political crises and instability;
- unattractiveness of the investment climate;
- gaps in tax legislation, budget support and guaranteeing state obligations in relation to PPPs;
- low level of trust of business and society in power structures and their management;
- the low quality of the latter in terms of investment planning, conduct of tenders for PPP projects, evaluation of their effectiveness and efficiency;
- lack of PPP "success stories", which do not yet include pilot large PPP projects from ports in 2020. yet, since not enough time has passed; high cost of the preparatory stage of PPP design due to significant costs for technical and economic substantiation, consulting services of lawyers and auditors;
- the duration of the terms of implementation of PPP projects, tender procedures and conclusion of the contract);
- a significant number of unforeseen risks that cannot be taken into account in the PPP contract; imperfection of the institutional basis of the PPP, etc.
- imperfect regulatory policy (taxation, tariffs, permit system, lack of transparency, etc.);
- lack of appropriate institutional infrastructure (preparation, selection, monitoring of implementation of PPP projects);
- imperfect state support system, underdevelopment of PPP mechanisms;
- imperfect legal and methodological support for the selection and implementation of PPP projects.

Two central problems can be added to the above PPP problems:

- fairness of assessment of the private partner's contribution;
- mentality of state management.

There are also a number of regulatory sectoral challenges. In particular, in the field of road construction and road infrastructure, there is a ban on the operation of toll roads in the absence of alternative free routes. This causes the need for sectoral state regulation, the goal of which should be not only the elimination of regulatory and legal obstacles, but also the justification of the feasibility of developing a state policy to reduce the anti-social effect of PPPs.

Therefore, the analysis of PPP development proved the presence of its qualitative and quantitative changes, Ukraine's lagging behind in this process, despite the similarity of the main trends.

In Ukraine, an effective normative legal field in the form of laws, normative legal acts and resolutions regulating the implementation of PPP projects requires separate consideration. The main laws regulating PPP relations are the Laws of Ukraine "On Management of State-Owned Objects", "On Agreements on Product Distribution", "On Concessions", "On Financial Leasing", and "On Public-Private Partnership".

Also, in Ukraine, there are no guarantees of extending the implementation of budgetary programs for the medium and long term, which makes it impossible to provide budgetary support for the entire period of implementation of the PPP project in accordance with the conditions stipulated in the contract. There is also no methodology for providing state support for PPPs. Approaches to the provision of state guarantees for the implementation of local PPP projects do not correspond to the PPP ideology [22].

DISCUSSION

According to researchers [22, p. 117-118; 23, p. 340-343], that should be supported, and taking into account the PPP trends identified above, the main directions of PPP development in the countries of the world should be considered:

- a gradual change in the focus of the PPP from the traditional mono-direction on the transport sphere to a comprehensive solution to the socio-economic problems of society through the construction of public buildings and their equipment (schools, hospitals, etc.) and the regulation of the environment (water supply and sewage systems, the fight against the depletion of resources, etc.), assistance large infrastructural projects of social orientation (health care, education, ecology);
- at the same time, the infrastructure maintains the status of the leading sphere of PPP development, first of all, transport;
- national, regional and sectoral diversification of PPPs, which refers to a): intensification of PPP activities in general against the background of its national instability in individual countries; b) increasing differences in PPP growth rates in different countries; c) globalization of the PPP market (development of international PPP projects);
- increase of the role of the state (state structures of various levels) and public institutions in PPP relations, which helps to stabilize the position of PPP, in particular, credit stability;
- the evolution of various forms of PPPs and the birth of new forms that go beyond the usual structuring. In particular, ESCO contracts.

CONCLUSIONS

In the context of the implementation of the reform of power decentralization in Ukraine, strategic directions have been defined that can be reflected in program documents aimed at supporting and developing PPPs. Thus, the first direction consists in the development of effective mechanisms for the implementation of PPP projects based on the improvement of regulatory and legal support.

The second direction involves intensifying the state's efforts on PPP financial mechanisms and the implementation of organizational and administrative measures.

The third direction is a focus on innovative measures that involve a small amount of funding but can be a motivating factor for the involvement of small business entities in interaction.

The fourth direction - the priority belongs to innovative directions, the use of investment tools, orientation to the implementation of infrastructure projects with the involvement of small and medium-sized enterprises in this process.

Given the multi-component nature of PPP goals, the scenarios for the activation of PPP relations in the context of decentralization may be as follows:

- budgetary and financial, which is based on the idea of priority development of those sectors of the economy, which in the near future will ensure a significant increase in the level of budgetary self-sufficiency;
- resource-based, which focuses on the maximum use of the natural possibilities of a specific territory belonging to the local community (soil, natural-climatic, recreational resources);
- investment, aimed at increasing investment attractiveness for the broad involvement of both domestic and foreign investors with the aim of modernizing the production potential;
- innovative, which implies significant changes in the mechanisms and structure of economic growth, and its main source should be the results of using the achievements of scientific and technological progress.

In this context, the determination of regulatory priorities will ensure the implementation of the most effective PPP projects.

REFERENCES

1. Kuznyetsova, A., & Maslov, V. (2021). Methodical Principles of Analysis of the Concept of "Organizational and Economic Mechanism of Public-Private Partnership". *Herald of Economics*, 3(3), 137–146.
<https://doi.org/10.35774/visnyk2021.03.137>.
2. Maslov, V. (2021). Heneza rozvytku derzhavno-privatnoho partnerstva. *Finansovyi prostir*, 1(14).

- 18-25.
[https://doi.org/10.18371/fp.1\(41\).2021.182628](https://doi.org/10.18371/fp.1(41).2021.182628)
3. Brailovskyi, I. A. (2015). Derzhavno-privatne partnerstvo: metodolohiia, teoriia, mekhanizmy rozvytku: dys. d-ra ekon. nauk: 08.00.01. Kharkiv, 462 s.
4. Melnyk, A.F., and Pidhaiets, S.V. (2017). Derzhavno-privatne partnerstvo v systemi instytutiv natsionalnoi ekonomiky: mekhanizmy rozvytku : Monohrafiia. Ternopil : TNEU, 279 p.
5. Kruhlov, V.V. (2020). Mekhanizmy derzhavnoho rehuliuвання rozvytku derzhavno-privatnoho partnerstva v Ukraini: dys. d-ra nauk z derzh. upr: 25.00.02. Kharkiv, 479 p.
6. Vynnytskyi, B., Lendel, M., Onyshchuk, B., and Sehvari, P. (2008). Dosvid ta perspektyvy vprovadzhennia derzhavno-privatnykh partnerstv v Ukraini ta za kordonom. K.: K.I.S., 146 p.
7. Simak, S.V. (2015). Instytutsiinyi rozvytok publichno-privatnoho partnerstva: dosvid krain svitu. Visnyk Akademii mytnoi sluzhby Ukrainy. Seriia: Derzhavne upravlinnia. Dnipropetrovsk: Vyd-vo Akademii mytnoi sluzhby Ukrainy, 2015. Vol. 2 (13). pp. 103-112.
8. Olentsevych, N.V., and Kovalova, O.V. (2014). Derzhavno-privatne partnerstvo u rozvynenykh krainakh svitu: dosvid dlia Ukrainy. Ekonomichnyi analiz. 2014. № 1, T. 15. p. 134-143.
[http://doi.org/10.36030/2310-2837-3\(98\)-2020-49-58](http://doi.org/10.36030/2310-2837-3(98)-2020-49-58)
9. Kvitka, S.A. (2015). Publichno-privatne partnerstvo yak diievyi mekhanizm vzaiemodii vlady ta biznesu. Aspekty publichnoho upravlinnia. Vol. 7-8. pp. 47-56.
10. Tyshchenko, V.F., and Ostapenko, V.M. (2013). Proiektne finansuvannia yak forma publichno-privatnoho partnerstva. Visnyk Universytetu bankivskoi spravy Natsionalnoho banku Ukrainy. Vol 1. pp. 141-144.
11. Pro priorytetni napriamy rozvytku nauky i tekhniky : Zakon Ukrainy vid 11.07.2001 № 2623-III. Ofitsiinyi vebportal parlamentu Ukrainy : veb-sait. URL: <https://zakon.rada.gov.ua/laws/show/2623-14>.
12. PPI Project Database. The World Bank Group : veb-sait. URL: <http://ppi.worldbank.org>.
13. Koroliuk, T. (7.12.2016). Yevropeyskyi dosvid publichno-privatnoho partnerstva ta osoblyvosti yoho rozvytku v Ukraini. Finansove zabezpechennia innovatsiinykh proiektiv maloho ta serednoho biznesu: hlobalni vyklyky ta ukrainski realii : Materialy I Mizhnar. nauk.-prakt. konf., Ukraina, m. Kyiv. pp. 70-73. URL: <http://ir.kneu.edu.ua/bitstream/2010/20808/1/70-73.pdf>.
14. Review of the Public-private partnerships. The World Bank Group. URL: http://ppi.worldbank.org/explore/ppi_exploreCountry.aspx.
15. Realizatsiia proiektiv derzhavno-privatnoho partnerstva v Ukraini. Ministerstvo infrastruktury Ukrainy. (2017). URL: https://mtu.gov.ua/files/Posibnyk_Realizatsiia_DPP_v_Ukraini.pdf.
16. Stan zdiisnennia DPP v Ukraini. Ministerstvo ekonomichnoho rozvytku i torhivli Ukrainy. URL: <http://www.me.gov.ua/Documents/Detail?lang=ukUA&id=62a9b6fb-27ff-462a-b351-eeeadfb26b6f&title=StanZdiisnenniaDppVUkraini>.
17. Kruhlov, V.V. (2018). Derzhavne rehuliuвання rozvytku derzhavno-privatnoho partnerstva v Ukraini. Publichne upravlinnia i administruvannia v Ukraini., Vol 5., pp. 53-56.
18. State of implementation of public-private partnership in Ukraine. Ministerstvo ekonomichnoho rozvytku i torhivli Ukrainy. URL: <http://www.me.gov.ua/Documents/Detail?lang=ukUA&id=9fc90c5e-2f7b-44b2-8bf1-1ffb7ee1be26&title=StanZdiisnenniaDppVUkraini>.
19. Pakulin S.L., Tsypkin Yu.A., and Pakulina A.A. (2017). Rozvytok derzhavno-privatnoho partnerstva v rehioni v umovakh upovilnennia tempiv hlobalizatsii ekonomiky. Traektoria nauky. Vol 1, T. 3. pp. 4.9-4.23.
20. Nova dynamika v infrastruktturnykh proiektakh derzhavno-privatnoho partnerstva ta privatyzatsii v Ukraini. Yurydychna firma «SayenkoKharenko». (2020). URL: <https://sk.ua/uk/news-uk/nova-dynamika-v-infrastruktturnykh-pro>.
21. Prohrama derzhavno-privatnoho partnerstva u dorozhnii haluzi. URL: <https://roadppp.in.ua>.
22. Vinnyk, O.M. (2010). Upravlinnia derzhavno-privatnym partnerstvom pry vykorystanni yoho aktsionernoi formy. Visnyk Akademii pravovykh nauk Ukrainy. Vol 2., pp. 112-120.
23. Kuznyetsova, A., Klipkova, O., & Maslov, V. (2022). Methodology for Evaluating the Efficiency of Public-Private Partnership Projects. *Financial and Credit Activity Problems of Theory and Practice*, 4(41), 339–349.
<https://doi.org/10.18371/fcaptop.v6i41.251466>

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ЕКОНОМІЧНІ ОСОБЛИВОСТІ РОЗВИТКУ ДЕРЖАВНО-ПРИВАТНОГО ПАРТНЕРСТВА: СВІТОВІ ТРЕНДИ ТА ВІТЧИЗНЯНИЙ ДОСВІД ДОВОЄННОГО ПЕРІОДУ

В умовах глобалізації, розвитку економіки знань і цифровізації усіх сфер діяльності найефективнішою формою співпраці держави та суб'єктів господарювання – бізнесу і приватних осіб у сфері освіти і науки, та способом фінансування освітньо-наукових проєктів є державно-приватне партнерство (ДПП).

Розроблення і реалізація результативних механізмів взаємодії держави, науки та бізнесу на засадах ДПП, які б відповідали сучасним умовам, пошук ефективних форм та інструментів фінансування проєктів ДПП є актуальним завданням сьогодення.

Проведений у статті аналіз дозволив виокремити п'ять основних трендів розвитку ДПП (кількісне зростання ДПП у світі та ЄС; диверсифікація ринку ДПП за країнами та секторами економіки; інфраструктурна спрямованість ДПП; державна підтримка певного типу ДПП у певній галузі, або у певному напрямі; розвиток ДПП в інноваційній сфері), що дало можливість в процесі узагальнення дійти висновку щодо сфер, в яких концентрувалося ДПП в Україні. На підставі статистичних даних у статті визначено головні галузі концентрації проєктів ДПП в Україні в довоєнний період.

Зважаючи на багатокомпонентність цілей ДПП, у науковій праці узагальнено та деталізовано сценарії активізації відносин ДПП в Україні (бюджетно-фінансовий, ресурсний, інноваційний та інвестиційний).

Ключові слова: державно-приватне партнерство, тренди розвитку ДПП, проєкти ДПП, бюджетно-фінансовий сценарій ДПП, інвестиційний сценарій ДПП

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