Strategy for the Development of Public-Private Partnership in the Context of Global Changes

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Abstract. In modern science and practice, public-private partnership is the interaction of the public and private sectors: in a broader sense, any cooperation in various spheres of public life, supporting society with entrepreneurship and strengthening its social role. The intensification of the process of public-private partnership development is due to the steady growth of demand for public services and increased attention of a wide range of people to optimise their provision. Today, public-private partnership has become an important tool for attracting investment to create a modern public service infrastructure. The purpose of this study is to examine possible strategies for the development of public-private partnerships in the context of decentralisation. The methodological basis of the presented research is a combination of theoretical methods: information synthesis and analysis, classification, systematisation. In addition, an analysis of the scientific literature on the research subject was conducted during the study. In particular, articles on public-private partnerships were analysed. As a result of the study, the general trend towards decentralisation of power and reform of local self-government was established, which means transferring more powers to local state structures, where the state, represented by a territorial community, becomes one of the main subjects. It is proved that partnerships between local communities and business structures, including foreign ones, considerably expand the competence of local authorities, in particular, attract investment in the development of urban infrastructure. Based on the analysis of European experience and considering the specific features of Ukrainian legislation, the most acceptable forms of cooperation between the state and companies were identified: private partnership investment agreements, asset management agreements, leases, concessions, and joint venture agreements. The practical value of the study is that the highlighted results will be useful for public and private sector managers.

Keywords: concession, partnership, project, local government, territorial community
INTRODUCTION

In modern science and practice, public-private partnership (PPP) is considered the interaction of the public and private sectors: in a broader sense, any cooperation in various spheres of public life, supporting society with entrepreneurship and strengthening its social role. In a narrower sense, PPP is a partnership in the implementation of socially important investment projects [1]. Today, the PPP is a recognised and proven comprehensive mechanism of society that combines the efforts of the state (state and local authorities) and private organisations to optimise the creation and use of infrastructure and the provision of public services. Among the many interpretations of public-private partnerships, one of the most successful is the definition of the UN Economic Commission for Europe. According to UN Commission, PPP is an innovative long-term contract for the development of infrastructure and public services, funded and motivated by the private sector which is generally owned by the state [2]. Notably, today various versions of the English term “public-private partnership (PPP)” are used. In Ukraine, as in most post-Soviet countries, the term public-private partnership is used mainly in the field of regulation and research. The term is even used in official translations of international documents, such as the Ukrainian version of the Green Paper on public-private partnerships and Community law on public contracts and concessions, prepared by the European Commission in 2004. The Commonwealth of Independent States Model law also uses the term “public-private partnership”. Legislation and research also use phrases such as “public-private partnership”, “interaction between the state and business” [3], etc.

The study of the experience of public-private partnership shows that its development is an objective process that has certain traditions in many countries, however, it intensified only recently because of the growing demand for public services and increased attention to optimising service provision, due to the budget deficit. In recent decades, PPPs have become an important form of infrastructure projects. World practice generally confirms the success of PPP as a tool for attracting investment to create a modern infrastructure of public services. Moreover, the relationship between the development level of the country and the degree of PPP implementation can be observed [4]. The dynamics of public-private partnership projects in the world has a steady upward trend. Various studies consider the possibility of implementing such projects in certain areas and certain groups of countries. The World Bank’s Public-Private Partnership Legal Resource Centre project mainly covers 139 countries divided into six regions: Latin America and the Caribbean; Europe and Central Asia; East Asia and the Pacific; South Asia; the Middle East and North Africa; Sub-Saharan Africa [5]. Public-private partnership is an extremely complex phenomenon that covers not only economic but also social and state-administrative relations. The fastest spread of PPP occurs in developed countries, where there are strong guarantees of property rights, the state does not interfere in business without excessive force, and investors are confident in the stability of the economy and legislation. Regulated risk distribution is also vital [6]. The search for new approaches to creating an effective system for regulating public-private partnership in Ukraine is driven by the need to ensure economic growth, including with the reform of the existing economic model, which is characterised by insufficient foreign investment, low participation in the global value chain, and market imbalance. The purpose of this study is to examine possible strategies for the development of public-private partnerships in the context of decentralisation.

MATERIALS AND METHODS

The methodological basis of the presented research is a combination of theoretical methods. In the course of the research, the following methods were used: information synthesis and analysis, classification, systematisation. In addition, in the course of the study, the scientific literature on the research subject was analysed. In particular, articles on public-private partnership. In the context of this study, the scientific literature on the research subject was analysed. Methods of analysis and synthesis are used in modern natural sciences, humanities, and social sciences. These methods are characterised by special applications and modifications depending on their application for each specific industry. Analysis and synthesis are universal, oppositely focused ways of understanding an object, concept, or phenomenon. They are used in theoretical research and in practice, especially in experimental activities. The analysis allows obtaining knowledge about individual elements of the subject in various aspects of its existence. Synthesis shapes an idea of the structure and properties of the system and creates a relationship between its main characteristics. These methods were used to define “public-private partnership”. The characteristics of public-private partnerships were considered and analysed using analysis and synthesis methods. Induction is a method of cognition that is based on a formal logical conclusion that allows drawing a general conclusion based on individual facts. In other words, it is the shift of thinking from individual to general. Thus, the main characteristics of a public-private partnership were determined using the induction method.

Classification is a method of combining classification elements into classification groups. There are two main classification methods: hierarchical and faceted. Hierarchical classification method. This method is characterised by the fact that the initial set of information objects is gradually divided into groups (classes) of the first level of division, then into groups of the next level, etc. Systematisation is the process of combining various knowledge about objects (phenomena) of objective
real into one scientific system that determines their
unity. Systematisation is a reflection of the material unity
of the world, and it studies the main connections between
these objects (phenomena). It is based on the classifica-
tion, analysis, and synthesis of the main properties of
a particular objective system. It is performed in the form
of corresponding logical systems – theories, hypotheses,
etc. A necessary condition for systematisation is the pro-
motion of the main idea, which can lead knowledge to
logical unity. The starting point of the systematisation
process is the adoption of certain principles that formu-
late the main idea. Systematisation is always one-sided
since logical systems cannot comprehensively reflect
the laws of objective systems. The dialectical discrepancy
between the science being focused on a comprehensive
systematisation of knowledge and the impossibility of
its implementation is solved by improving human re-
ality cognition. At the final stage of the study, scientific
literature, in particular scientific articles, was analysed.
The studies of Ukrainian and international researchers
were reviewed. In analysing the studies, certain conclu-
sions were drawn, which are presented in the final part
of the study.

RESULTS AND DISCUSSION
In recent years, the issue of public-private partnership
and its role in modernising the economy of industrial
regions have become very relevant. The introduction of
PPP is primarily related to the need to attract a consid-
erable amount of investment to finance and improve
the effectiveness of socially important projects at the
regional level. Abroad, public-private partnerships are
considered an alternative to privatisation, as such part-
tnerships allow public authorities to receive funding
from the private sector without losing control of public
facilities. Most of the public-private partnership proj-
ects implemented in these countries are infrastructure
projects, the privatisation of which in many countries is
considered inappropriate for strategic reasons to prevent
socio-economic discrimination or for other reasons. At
the international level, the public-private partnership
has not been systematically interpreted. As for the Eu-
ropean Union (EU), the term “PPP” is not defined at the
community level. The European Commission, the EU’s
highest executive body, uses a relatively general inter-
pretation of public-private partnership [7]. Systemati-
sation and generalisation of existing approaches to the
interpretation of public-private partnership allows noting
that this term should be considered as a technology of
public-private interaction to effectively attract and use
financial resources and business opportunities in con-
ditions of limited investment resources. Figure 1 shows
the main specific features of public-private partnership
as an economic category [2].

Figure 1. Key features of public-private partnership

Source: compiled by the authors

The development of legislation on public-private
partnership, or rather its forms, should be divided into
four stages [8]:

- stage 1 – The Law of Ukraine “On Concessions” and
related draft laws;
Partnership” and numerous resolutions of the Cabinet of Ministers of Ukraine, orders of the Ministry of economic development and trade of Ukraine;

– stage 4 – draft law of Ukraine “On Concessions” (on public-private partnership) [9].

During 2015-2021, researchers report positive trends in the development of public-private partnership in Ukraine. Figure 2 shows the number of projects in the public-private sector for 2015-2021.

Notably, public-private partnership projects are mainly implemented in the field of public utilities, such as water collection, purification, and distribution and services in the field of collection/use and disposal of household waste [10]. The variety of PPP forms provides an opportunity for the widespread use of private capital to solve many problems of local self-government in the production of public goods and services.

![Figure 2. Public-private partnership for 2015-2021](image)

Source: compiled by the authors

PPPs are used in many areas of economic activity considering their specific characteristics: exploration and production of mineral deposits, with the exception of those carried out in accordance with the provisions of production sharing agreements; production, transportation, and supply of thermal energy, distribution and supply of natural gas; construction and/or operation of highways, railways, railway bridges, overpasses, tunnels, underground passages, seaports, river ports and their infrastructure; mechanical engineering; collection, purification, and distribution of water; health; tourism, recreation, leisure, culture, and sports; ensuring the functioning of irrigation and drainage systems; waste management, except for production, distribution, and supply of electricity; property management; provision of social services, administration of a social institution; production and implementation of energy-saving technologies, construction and major repairs of residential buildings completely or partially destroyed as a result of military operations on the territory of the anti-terrorist operations; installation of modular buildings and construction of temporary housing for internally displaced persons; provision of educational and medical services; management of architectural monuments and cultural heritage [11].

Therefore, based on the above, it should be specified that the system of public-private partnership is one of the components of the transformation of economic relations, which improves the infrastructure of the region. Joint work of public authorities and economic entities reduces potential risks when implementing new projects that can improve the region's infrastructure. Public-private partnership is primarily a mutually beneficial economic relationship that is based on long-term projects, minimises costs, increases resource efficiency, and allows getting positive results from the implementation of a new project. The social component of public-private partnership is reflected in the development of regional infrastructure with the involvement of the public in the development of projects. The main role of the community: to motivate local authorities; to determine the socio-economic and socio-political conditions of the project during the implementation of the public-private partnership mechanism; the community acts as the final consumer of public-private partnership projects [12].

The mechanism of public-private partnership is based on the extra-budgetary investments in various types of infrastructure and objects of production and non-production. The main role of public authorities is to: develop infrastructure and ensure sustainable development of socio-economic relations (orientation of public authorities and the private sector to the needs of territorial communities). The joint work of the public and private sectors creates opportunities for the parties to reap the benefits of innovative development and to
participate in globalisation and integration. In modern conditions, public-private partnership is at an early stage of its development in Ukraine, the main obstacles are institutional (existing political instability in Ukraine, constant changes in the legislative framework regulating business, low coordination of state bodies, short-term planning budget, lack of experience, management skills, and development of intellectual property relations) and legal barriers (lack of standard documents, imperfect concession legislation) [13]. The main obstacles to the development of public-private partnership in Ukraine are presented in Figure 3.

**Figure 3.** Negative factors affecting the development of public-private partnership in Ukraine

*Source: compiled by the authors*

Considering all the above, it is possible to set the main goals of public-private partnership, which the Ukrainian state should be aimed at. The main goals of public-private partnership are:

- improving the legislative framework of Ukraine;
- developing common concepts;
- establishment of regional centres;
- information support from the state;
- educational support from the state;
- scientific and expert support from the state.

The introduction of a mechanism for implementing forms of public-private partnership requires the introduction of organisational, managerial, economic, sectoral, and informational measures that will considerably contribute to the development of the public-private partnership [14]. The basis of organisational and managerial measures is the following: the creation of financial institutions for the development of public-private partnership for the purpose of investing and guaranteeing private investment; the establishment of non-financial institutions for the development of Public-Private Partnership; the development of the management system; advanced training of civil servants; the introduction of the issue of public-private partnership in academic training programmes for public administration and local self-government bodies; the organisation of training, seminars, round-table conferences that could cover the issues of public-private partnership [15]. Important economic measures include reimbursement of the cost of the project, construction, modernisation, participation in tenders; introduction of state credit mechanisms and insurance of imports of investment equipment; provision of state guarantees for loans; compensation for losses caused by currency fluctuations; use of modern market financing tools (securities); reduction of tax rates, exemption from taxes and fees, deferral of certain taxes and fees, etc.; provision of subsidies [13]. The industry activities include the implementation of PPP pilot projects, considering the specific features of the industry; the establishment of a programme for the PPP development in various economic sectors; the formulation of a package of methodological documents for the PPP implementation in various sectors of the economy; the development of legislative provisions for the PPP promotion and support; the introduction of mixed forms of ownership in certain sectors, cooperation between public and private companies [11].

The basis of information activity is: popularising the positive practice of public-private partnership in society; creating programmes in educational institutions to train qualified civil servants in the field of public-private partnership; conducting an information campaign among business representatives, informing about the advantages of such partnership and creating an image of the state as a bona fide partner; implementing an information strategy, distributing brochures, attracting partners to conferences, round tables, seminars, short-term courses that could highlight issues of public-private
partnership; adapting international experience of successfully implemented projects [8]. A large number of Ukrainian and international researchers have studied the issues of public-private partnership in Ukraine and the world. Hereinafter some of the works that cover the issue of public-private partnership are considered.

Ireland was late with the public-private partnership since it was only introduced in 1998. Prior to the credit crunch, Ireland followed the British model of public-private partnerships in transport, education, housing/urban renewal, and water/sewerage. Public-private partnerships were recently blocked during the credit crunch and recently renewed due to a scheme to stimulate internal infrastructure. This article considers Ireland as a junior participant in public-private partnerships and the relationship between adoption models and sustainability characteristics of Irish public-private partnerships. The article uses an analysis of documents and previous interviews to examine the reasons for Ireland’s interest in public-private partnerships, which cannot be explained solely by economic considerations. It is appropriate to consider three explanations: voluntary adoption – when the British model has been continuously monitored by an internal modernisation plan; forced adoption, when public-private partnership policies are imposed on public sector organisations; and institutional isomorphism, where institution building and changes in public-private partnerships are encouraged to help public sector organisations gain institutional legitimacy. The authors found evidence for all three models: forced adoption has become increasingly relevant in recent years, which may negatively affect sustainability if incentives for voluntary adoption and institutional capacity-building are not strengthened; forced adoption, where public-private partnership policies are imposed on public sector organisations; institutional isomorphism, where institutional development and changes in public-private partnerships are encouraged to help public sector organisations gain institutional legitimacy [16].

Public-private infrastructure partnerships based on private financing are popular around the world, including renewed interest in the United States, but their effectiveness remains controversial. This article examines the meaning of PPP and its success, outlines multiple interpretations of both. The study proposes a new conceptual model of the PPP phenomenon, which includes five levels of meaning: project, implementation method, policy, management tool, and cultural context. There are many criteria by which the success of PPP can be estimated. They are as focused on policy and management as they are on the more conventional goals of utilitarian policy related to project implementation or value for money. The authors note that the government pursues dozens of different goals, given the mixed international results in terms of price and quality to date [17]. The following study under review complements the development of public-private partnership infrastructure projects, which are a fast-growing way to provide infrastructure services. PPP infrastructure projects generally have a long-life cycle, but the changes that such a project undergoes at all stages of its life cycle are understudied. This article contributes to project research as it examines the changes that the PPP infrastructure project undergoes during its life cycle and suggests how these changes can be managed. The study is based on a detailed study of road transport PPP in California over a twenty-year period. The study under consideration shows that the development phases of PPP are characterised by dramatic changes in the composition of stakeholder networks and the use of institutional logic. First, using social media analysis, the authors map the network of stakeholders in the case of PPP and demonstrate how the network of stakeholder’s changes in four stages. Second, the authors identify how different stakeholders use formal and informal institutional logic in their interactions and demonstrate that the dominant institutional logic used in PPP changes from informal to formal over the course of the PPP life cycle. The authors also demonstrate how this change in the dominant institutional logic of PPP corresponds to dynamism in the stakeholder network [18].

Uncertainty about construction costs and operating income are the two main risks in public-private partnership projects in the transport sector. This uncertainty puts projects at risk of not meeting the annual debt repayment obligations. When a project generates insufficient cash flow to service debt in a given year, it generally has to use short-term financing by borrowing short-term loans [19; 20]. With revenue-related risk-sharing mechanisms, supported projects can eliminate unexpected interest payments. The considered article has a twofold purpose: first, to estimate the cost of refinancing PPP motorway projects caused by a lack of funds; second, to critically examine the cost of the conditional financial support option and compare it with the cost of the minimum income guarantee option to save refinancing costs for debt repayment. An integrated real options valuation model is created, which uses the utility method to determine the cost of technical project risk (for example, excess construction costs) and the risk-free pricing method to evaluate market risk (for example, future traffic). The proposed model has good tolerability for including various risk factors, regardless of technical or market risks, random variables, or processes [21-24]. The proposed model helps stakeholders better understand and measure the burden of securing annual debt repayment in an uncertain cash flow environment [25].

Contractual and relational practices are defined as actions performed and reproduced due to the dual position of actors: at the partnership level and at the parent organisation level. In the PPP, complementarity and contradictions between public, bureaucratic logic and private, market logic determines the structural
requirements for actors. Unpredictable and innovative management methods arise from the reflexive ability of actors to balance different requirements. This structure allows studying the complex interaction of relationships and contractual relations, illustrated by the example of the Dutch PPP [26]. The use of public-private partnerships (PPPs) has been steadily increasing in the United States since the early 1990s. Considerable differences in cost and schedules were observed in infrastructure design and construction projects. Thus, the purpose of this article is to quantify the cost and schedule of recently completed PPP projects in the US transportation sector and compare them with their non-PPP counterparts. The authors C. Benítez-Ávila, A. Hartmann, G. Dewulf [26] collected and validated data from professional datasets, publicly available websites, and structured interviews with key project participants. The article presents the results of 25 completed PPP transport projects. All projects in the dataset were completed between 1995 and 2013; the project cost ranged from 18 billion to 2.1 billion and amounted to about 14 billion. According to the analysis, the average cost growth was 3.22% and the average schedule growth was 1.2%; compared to the conventional “design-proposal-assembly” offer, these results show excellent performance. This article covers the effectiveness of PPP projects in the US transportation sector and compares the results with previous studies on the international PPP market [27].

Based on the regional transit case study in Denver, Colorado, this article describes and explains the emergence of global public-private infrastructure partnerships as a new extraterritorial mechanism for financing and implementing transport infrastructure projects in the major metropolitan areas of the USA. Unlike conventional public-private partnerships with local financing, the PPP includes a global (i.e., extraterritorial) consortium of construction firms and private sector investors, which enters into a long-term contract with a regional public agency to finance, operate, maintain, and supply strategic investments in transport infrastructure. In 2004, voters in the Denver region approved a $4.7 billion sales tax increase to fund the FasTracks programme of the Denver Regional Transportation District. 122-mile length of light and suburban railways along six corridors. Due to a lack of regional funding, the Denver Regional Transportation District subsequently signed a contract with the public-private partnership organisation. This contract prescribed the Eagle P3 project funding and subsequent granting to the Airport in Denver. The authors foresee a great research potential in the studies of PPP contractual agreements, provided they consider local control over infrastructure assets and the integrity of supporting regional joint management agreements [28].

CONCLUSIONS

The general trend towards decentralisation of power and reform of local self-government means the transfer of more powers to local state structures, where the state represented by the territorial community becomes one of the main subjects. It is proved that partnerships between local communities and business structures, including foreign ones, considerably expand the competence of local authorities, in particular, attract investment in the development of urban infrastructure. A public-private partnership is a set of property, financial-economic, organisational-managerial, and legal relations between the state and a private partner in models of financing, ownership, and management relations. In the course of the research, the experience of world science in approaches to defining the public-private partnership was summarised. Researchers are studying key approaches to defining public-private partnerships with international financial organisations and development institutions. The main characteristics of PPP as an economic category are covered based on analysis, systematisation, and generalisation of existing approaches of world science to its interpretation. It was discovered that a public-private partnership operates based on a “division of property” through a voluntary exchange of powers.

The state performs a partial transfer of property rights (the right to receive, the right to administer, the right to control the use of property, the right to change the value of the contract’s capital, and the right to transfer certain property rights to others). The organisation of property relations within the framework of the PPP is primarily focused on achieving a synergistic effect from the cooperation of specific potentials of private and state property. It is proved that with a considerable delay in the introduction of public-private partnerships in the world, this practice has now gained experience in public-private partnerships in various sectors and fields of activity. The experience of public-private partnership in the world confirms the successful practice of introducing contractual and institutional forms of partnership between the state and the private sector in various sectors of the economy. The considerable development of public-private partnership in Western countries is due to historical features. Based on the analysis of European experience and considering the specific features of Ukrainian legislation, the most acceptable forms of cooperation between the state and companies were identified: private partnership investment agreements, asset management agreements, leases, concessions, and joint venture agreements.
REFERENCES


Анотація. У сучасній науці та практиці державно-приватне партнерство розуміється як взаємодія державного та приватного секторів: у більш широкому сенсі як будь-яка співпраця у різних сферах суспільного життя, підтримка суспільства підприємництвом та посилення його соціальної ролі. Активація процесу розвитку державно-приватного партнерства зумовлена стійким зростанням попиту на державні послуги та підвищеною увагою широкого кола людей до оптимізації їх надання. На сьогодні державно-приватне партнерство стало важливим інструментом залучення інвестицій для створення сучасної інфраструктури державних послуг. Метою представленого дослідження є вивчення можливих стратегій розвитку публічно-приватного партнерства в умовах децентралізації. Методологічною базою дослідження є поєднання теоретичних методів наукового пізнання: метод синтезу та аналізу інформації, метод класифікації, метод систематизації. Також у процесі дослідження було проведено аналіз наукової літератури з тематики дослідження. Зокрема, було проаналізовано наукові статті з тематики публічно-приватного партнерства. У результаті дослідження була визначена загальна тенденція до децентралізації влади та реформування місцевого самоврядування, що означає передачу дедалі більше повноважень місцевим державним структурам, де держава в особі територіальної громади стає одним із головних суб’єктів. Доведено, що партнерські відносини між місцевими громадами та бізнес-структурами, у тому числі іноземними, значно розширюють компетенцію місцевих органів влади, зокрема, залучають інвестиції у розвиток міської інфраструктури. На основі аналізу європейського досвіду та врахування особливостей українського законодавства були визначені найбільш прийнятні форми співпраці між державою та компаніями: інвестиційні договори приватного партнерства, договір управління активами, договір оренди, концесії та договір про спільне підприємство. Практична цінність представленого дослідження полягає у тому, що висвітлені результати будуть корисними для управлінців державного та приватного сектору.

Ключові слова: концесія, партнерські відносини, проєкт, місцеве самоврядування, територіальна громада