

Goran Amović

Agency for services „CONSECO“,
East Sarajevo,
Bosnia and Herzegovina
✉ g_amovic@yahoo.com

RESEARCH OF CONDITIONS FOR DEVELOPMENT OF PUBLIC-PRIVATE PARTNERSHIP CONCEPT

ИСТРАЖИВАЊЕ УСЛОВА ЗА РАЗВОЈ КОНЦЕПТА ЈАВНО-ПРИВАТНОГ ПАРТНЕРСТВА

Summary: *Public-Private Partnership (PPP) is a contractual relationship that integrates resources of the public and private sectors in the function of more efficient building public services. Over time, national governments have accepted, developed and organized Public-Private Partnerships in various ways, by respecting its historical and cultural context, the legal framework and the economic environment. The goal in this paper is to identify key factors that may have an impact on the development of public-private partnerships. In this paper, along with the presentation of previous research, we will demonstrate the development of the concept of Public-Private Partnership in countries with different political, social and economic regulations.*

Keywords: *public-private partnership, public sector, financing, infrastructure, development.*

JEL classification: *L32, P48*

Резиме: *Јавно-приватно партнерство (ЈПП) је уговорни однос који интегрише ресурсе јавног и приватног сектора у функцији ефикасније изградње јавне услуге. Националне владе су током времена на различите начине прихватале, развијале и организовале јавно-приватна партнерства, уважавајући свој историјски и културолошки контекст, правни оквир и економски амбијент. Циљ у овом раду је да идентификује кључне факторе који могу имати утицаја на развој јавно-приватног партнерства. У овом раду ћемо, уз преглед претходних истраживања, приказати развој концепта јавно-приватног партнерства у земљама са различитим политичким, друштвеним и економским уређењем.*

Кључне ријечи: *јавно приватно партнерство, јавни сектор, финансирање, инфраструктура, развој.*

JEL класификација: *L32, P48*

1. INTRODUCTION

Public-Private Partnership (PPP) is a long-term contractual agreement between the public and the private sector in building public infrastructure and services, using the resources and expertise of the private sector.

Public-Private Partnership has a great deal of interpretation. The World Bank defines PPP as a “long-term contract between a private party and a government entity for providing a public asset or service, under which the private party bears a significant risk and management responsibility, and where payments received are linked to performance”. The Organization for Economic Co-operation and Development (OECD 2012) defines PPP as a type of contract where a private investor provides the services and infrastructure normally provided by the public sector. According to Ostřížek et al. (2007), “PPP is a contractual partnership between the public and private sectors that leads to the delivery of public infrastructure and services, using the capabilities of both partners with the most appropriate allocation of resources, responsibilities, risks and associated revenues”.

PPP can be organized in many ways and established in various economic and non-economic activities. According to the Green Paper on Public-Private Partnerships and

Community Law on Public Contracts and Concessions (European Commission Communication COM 327 Final 2004) the two basic forms and modalities of Public-Private Partnership can be distinguished:

- Contractual PPP, where partnership between the public and the private sector is based exclusively on the contractual relationship,
- Institutionalized PPP, where partnership between the public and private sector is realized through the establishment of a joint venture.

The contractual PPP can be implemented in multiple ways using different Public-Private Partnership models that can include creation, design, financing, performance, renewal, use of goods and/or provision of services. The common feature of the contractual form of PPP is long-term contractual cooperation (e.g. 25 to 30 years) between representatives of public sector and a private partner where funding dominantly relies on the private sector. This form of contractual PPP defines the integration of all stages of the project during the duration of the contract (design, financing, construction, maintenance, use and eventual demolition and removal) with the division of investments and responsibilities.

The institutionalized form of PPP involves the establishment of a joint company from public and private sector for the purpose of realizing a particular public project or providing public services. Shares, responsibilities, mutual obligations, risk allocation and the management of such an institution are defined by the Articles of Association. The institutionalized form of PPP can be realized by establishing a new institution or by taking over the shares and control in an existing public institution by a private partner. Institutionalized forms of PPP are mainly applied in the provision of public services that are of great importance for public sector, which means that this sector has to maintain a part of the control and supervision over the provision of services (e.g. traffic, water supply, etc.).

2. TERM AND MODELS OF PUBLIC-PRIVATE PARTNERSHIP

Public-Private Partnership (PPP) is a contractual relationship signed by public sector institutions and private partners. The key benefits of this partnership are the development of an innovative financing method, while achieving a faster realization of investments - construction, lower costs, optimal risk allocation, more efficient and effective management, better public services, etc.

Depending on the degree of involvement of the public and private sector in design, construction, financing, maintenance and management, it is possible to distinguish several basic models of Public-Private Partnership.

The traditional BOT (Build-Operate-Transfer) model is characterized by the fact that in this contract, the private party assumes responsibility for building (B) and operating (O) assets. This model aims at motivating a private partner for responsible cost management at an early stage of construction, while retaining the quality of the construction, in order to ensure optimum maintenance costs during the facility's utilization phase. In the BOT contract, capital investments are carried out by a private party, while the public sector is in charge of financing the project, which retains the financial risk. After the end of the contract, ownership of the property is transferred (T) to the public sector, under the conditions defined by the contract, with the possibility of extending the contract.

In the Design-Build-Finance-Operate model (DBFO), the private sector (usually a consortium of companies) is in charge of all phases of the project in providing public services. This PPP contract includes project design (D), construction (B), finance (F), and operation (O).

The most common other models are:

- Operation, Maintenance (OM);
- Build, Own, Operate (BOO);
- Build, Own, Operate, Transfer (BOOT);
- Buy, Build, Operate (BBO).

The advantages of the cooperation between the public and the private sector are multiple, and the application of an appropriate PPP model can provide faster infrastructure construction, less overall costs, better risk allocation, better service delivery, more efficient management, higher value for money, etc.

3. PPP RISK ANALYSIS AND THE PRESENTED VALUE FOR MONEY – VfM

One of the basic characteristics of PPP is the concept of risk sharing which implies that the largest degree of risk is being borne by the project partner that at the same time has the largest share on the project's management (Bovaird 2004). Each PPP project has its specific risks. According to Moralles et al. (2009): "risk = consequence x probability of occurrence". The key to a successful PPP project is to find a balance in risk sharing between the public and private partners in relation to the Value for Money (VfM). Grimsey and Lewis (2004) indicate that an optimal risk allocation is aimed at minimizing the chances for risk occurrence and the consequences that risks can potentially produce. Akintoye et al. (2003) state that risk transfer is one of the ways to achieve VfM, but based on the optimal (not total) risk transfer. As a general rule, it can be expected that VfM will initially increase in the event that the risk is transferred to the private sector until an optimal point is reached at which all risks are assigned to the partner best able to handle the risk.

According to Barutha (2016), the obtained Value for Money is directly dependent on the price of the bid and the value of the transferred risk, and can be represented by the following equation:

$$\text{Public sector VfM}_{(\max)} = \text{bid price}_{(\text{opt})} + \text{value of transferred risk}_{(\text{opt})}$$

The higher the demands of public sector for a private partner to take more risks, the higher the price of the bid, but the overall exposure to the risk of the public partner will be reduced. The maximum VfM will be achieved where the risk distribution is balanced between the two entities that can best manage the risk and provide the best VfM of the project.

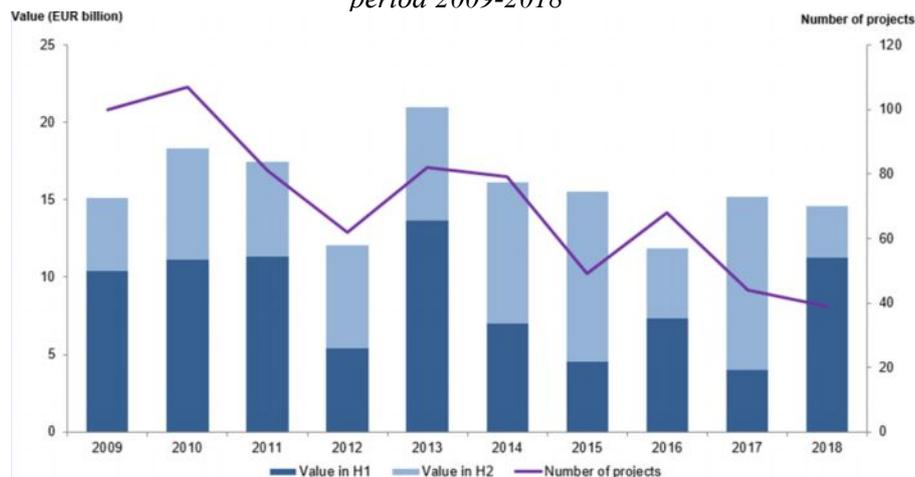
Value for Money - VfM is used as a criterion that combines quantitative and qualitative analyses in order to determine how the project is financed, or choose a model that will provide the highest value in relation to the money invested. The purpose of VfM analysis is to inform the public sector about whether the proposed projects will be realized as a PPP or as other, more traditional, form of public procurement.

4. PPP MARKET

According to the European PPP Expertise Centre (EPEC 2019), the value of PPP transactions in 2018 on the European market amounted to EUR 14.6 billion, a decrease of 4% compared to 2017 and EUR 15.2 billion.

The most active markets in 2018 were in Turkey (by value) and France (by number of projects). Ten countries finished at least one PPP project. The transport sector was the largest market in terms of value, while the education recorded the highest number of projects (EPEC 2019).

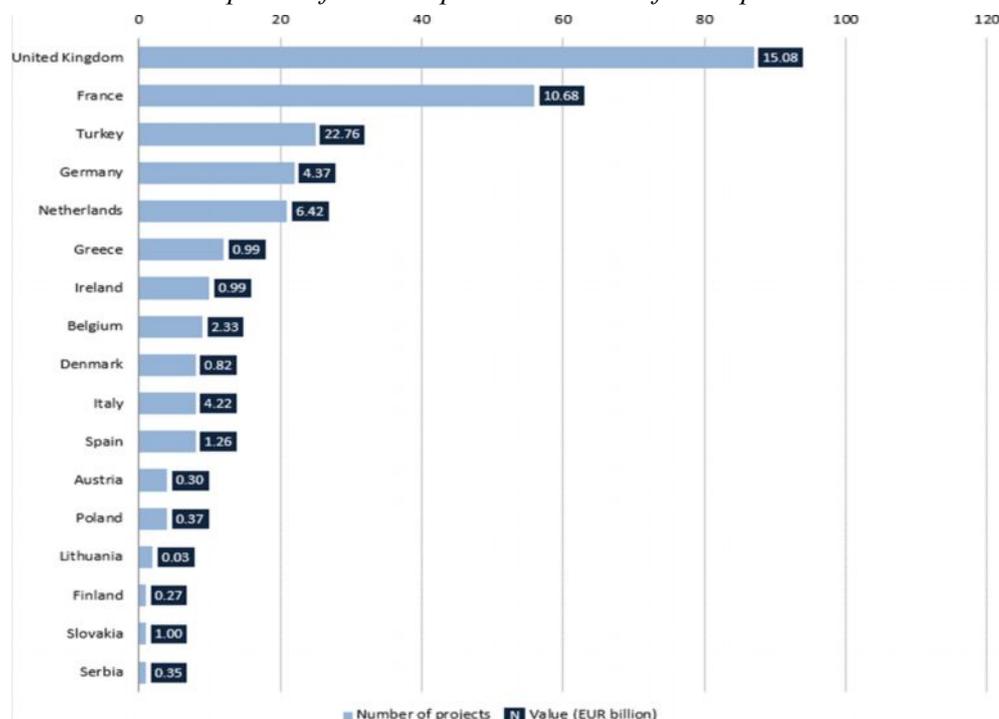
Table 1 Ten-year review of the European PPP market sorted by value and number of projects in the period 2009-2018



Source: EPEC 2019

The leading position in the field of public and private sector cooperation in financing public investments over the past five years has been maintained by the United Kingdom, with more than 80 PPP transactions and investments of over EUR 15 billion. The most active markets in 2014-2018 were France with almost 60 PPP projects and EUR 11 billion of investments, and Turkey with twenty capital PPP projects and investments of over EUR 22 billion (EPEC 2019). At the bottom of this list are Slovakia with one billion, Serbia with 350 million and Finland with 270 million Euros of investments from officially implemented Public-Private Partnership projects (EPEC 2019).

Table 2 Development of the European PPP market for the period 2014-2018



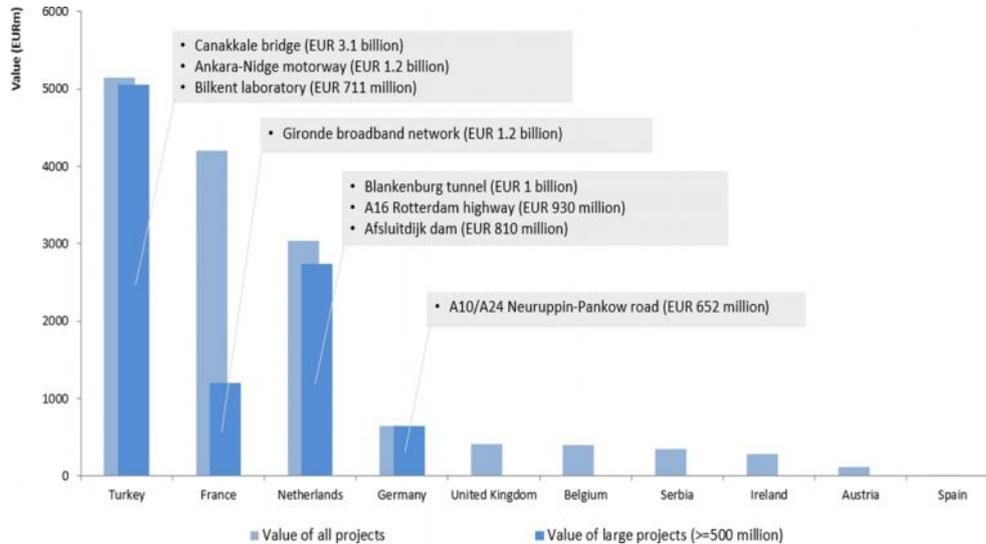
Source: EPEC 2019

The largest PPP transactions in 2018 (EPEC 2019):

- Canakkale Bridge - (EUR 3.1 billion) in Turkey;
- Ankara-Nigde Highway - (EUR 1.2 billion) in Turkey;

- Gironde Broadband Network - (EUR 1.2 billion) in France;
- Blankenburg Tunnel - (EUR 1 billion) in the Netherlands;
- Rotterdam A16 Highway - (EUR 930 million) in the Netherlands;
- Afsluitdijk Dam - (EUR 810 million) in the Netherlands;
- Bilkent Laboratory - (EUR 711 million) in Turkey; and
- Neuruppin-Pankov A10/A24 Motorway - (EUR 652 million) in Germany.

Table 3 The largest PPP projects (500 million Euros or more) during 2018



Source: EPEC 2019

5. KEY FACTORS FOR DEVELOPMENT OF PPP CONCEPT

In the last two decades, the public-private partnership (PPP) concept is becoming of higher importance. Depending on the social, political, economic, and legal framework of each country, national governments responded differently to PPP phenomenon. Market-oriented economies of western countries over the time developed the extensive partnership programs and began widespread development of PPP, while others were skeptic since the beginning (Verhoest et al. 2013). In context of globally widespread concept of new public management, policy and institutional development of PPP depends on political commitment (Flinders 2004), fiscal conditions (McQuaid and Scherrer 2010), and support of legal framework (Tvarnø 2006).

Within the research regarding the development of the Public-Private Partnership concept, we examined the academic literature of various authors, which, from the theoretical and practical aspect, identifies the conditions for development of PPP concept across different countries.

5.1. Three key aspects of PPP implementation according to OECD

In the period 2007-2008, the Organization for Economic Co-operation and Development (OECD), through a questionnaire checklist, identified key indicators, which converted the qualitative data on the experiences and performance of countries in the implementation and management of PPP into a measurable indicator (OECD 2010). PPP indicators compared the experiences of countries of varying degrees of development in relation to what is considered to be best practice based on theory or documented experience.

This research has analysed three key aspects of Public-Private Partnership: a) Institutional decision-making framework; b) Minimizing PPP costs; c) Securing value for money.

The institutional decision-making framework is an aspect that explores how the public sector decision is made regarding the finance of a public project through PPP. Mahalingam et al. (2011) were emphasizing the importance of the administrative aspect of PPP and the role of partnership units (so-called PPP supporting units) as the indicators of national and institutional support to PPP. The framework of institutional decision-making is focused on the following elements:

- Is there an independent agency or consulting company that gives guidance on the desirability of implementing infrastructure projects through PPP?
- Whether the cost estimate and benefits of PPP in relation to traditional procurement is carried out?
- Whether long-term fiscal implications of PPP are accounted for as potential liabilities in government accounts?
- Whether PPP performance is evaluated ex post, i.e. Comparing PPP outcomes with pre-set economic policy goals, including financial goals?

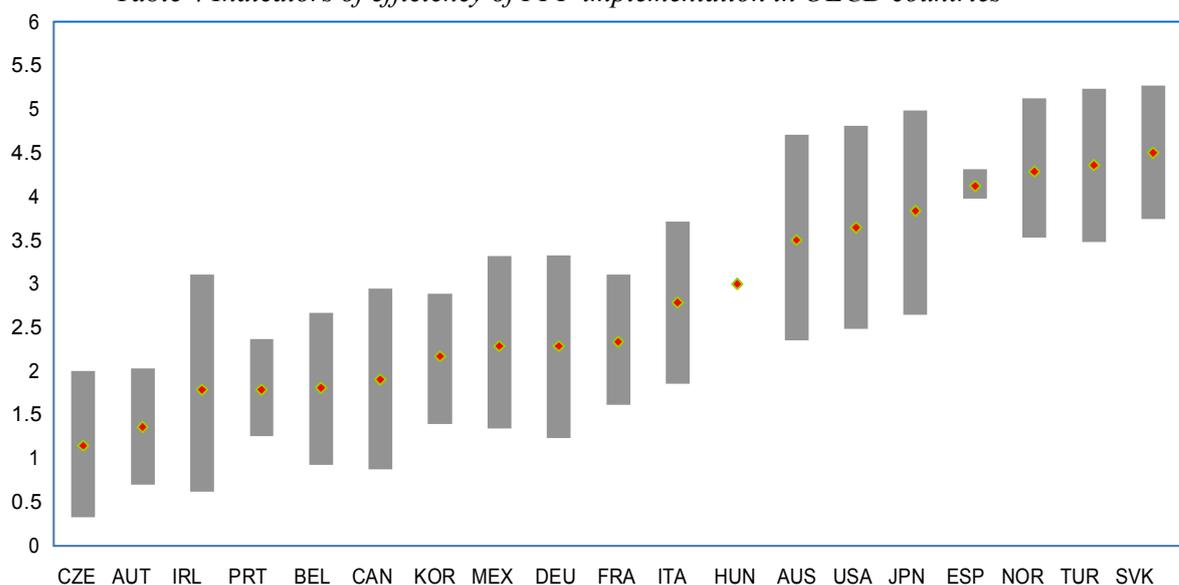
Minimizing PPP costs is an aspect that explores whether PPP public investment is more expensive than traditional procurement. This indicator focuses on reducing transaction costs and preventing delays and overrunning costs by:

- Defining the minimum value of the infrastructure project delivered through PPP;
- Allowing the connection of the PPP contract to meet the minimum requirements;
- Obtaining permits and planning approvals prior to the call for tender.

Securing the value for money is an aspect that focuses on the clauses of the contract which defines:

- Output of the project, not relying solely on the specifications of the input data;
- Minimum income from sales and profit shares;
- Limitations on the amount of debt that the private partner can sustain (allow, handle);
- Mechanisms to define the price at which the government will acquire the asset at the end of the contract;
- The conditions under which a contract can be considered before the deadline for negotiation;
- Arbitration mechanisms.

Table 4 Indicators of efficiency of PPP implementation in OECD countries



Source: OECD 2010

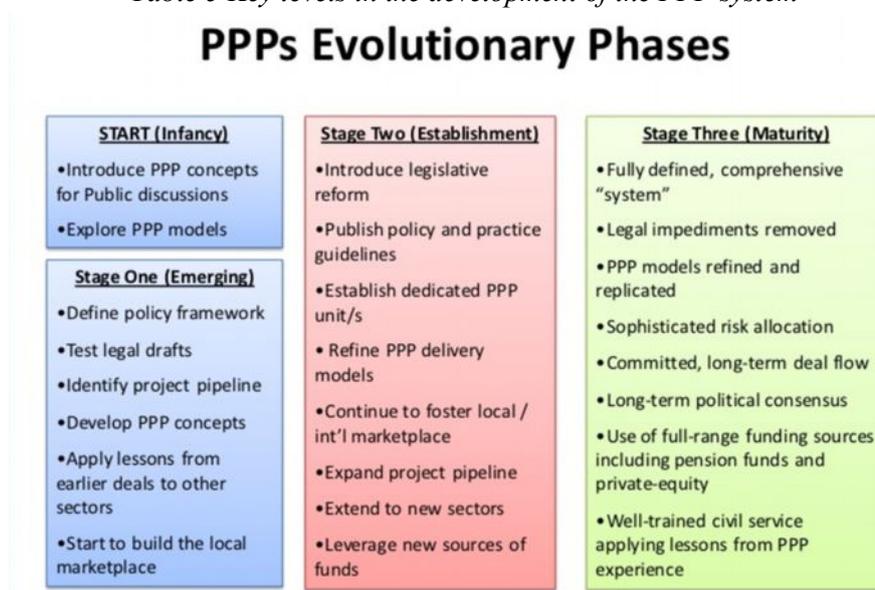
„The analysis of OECD countries experiences in PPPs and concessions management reveals that there is a wide discrepancy of practices across the different policy areas, suggesting that there is scope for improving PPP performance and gain expertise by considering other countries experiences“ (OECD 2010).

As the most desirable destinations for the implementation of Public-Private Partnerships have been identified Czech Republic, Austria, Portugal, Belgium, Ireland and Canada.

5.2. Three levels of development of the PPP system according to Deloitte

A study conducted by Deloitte in 2006 identifies three key steps (levels) in developing a Public-Private Partnership system. Each of those levels contain specific activities whose application will provide optimal conditions for the development and application of PPP.

Table 5 Key levels in the development of the PPP system



Source: Deloitte 2006

The first level of development of the PPP system assumes that the necessary experience has been gained in the implementation of a small number of simple PPP projects, and that the system can be improved and more seriously engaged in market development. In the second level of the PPP development, the activities of the system are focused on:

- Establishing a central PPP unit or project management agency (knowledge centre);
- Launching the development of new models;
- Expanding and strengthening PPP market;
- Using new sources of funds for capital markets;
- Improving quality and service technology;
- Streamlining profit from PPP to multipurpose projects and different sectors.

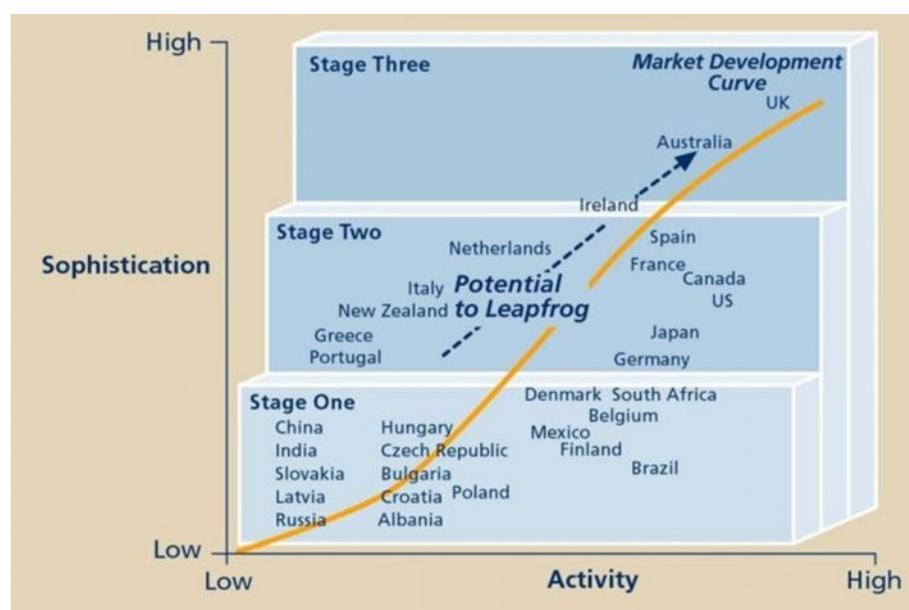
The third level of development of the PPP system is the most sophisticated and it implies a vast experience in the implementation of PPP, a large number of PPP projects, a significant profit from PPP projects and already accepted new role of the public and private sector in the new joint partnership. Activities carried out at this level are related to:

- Improving new innovative models;

- Improving creativity and flexibility in the mutual roles of the public and private sector;
- Using more sophisticated risk-taking and risk assessment models;
- Greater focus on the overall life cycle of the project;
- Acquiring a new role as a public sector and transferring knowledge from private to public sector in managing infrastructure and services after the expiration of the lifetime of the project;
- Transferring obtained benefits from the project into the financial assets of the partner;
- Organizing and preparing public sector to take over the project management after the expiration of the partnership.

Starting from the specific activities implemented or still being implemented in the countries that apply and improve the PPP concept, Deloitte has charted the maturity curve (Table 6) through which it shows the global economies in three stages by the degree of development of the PPP market.

Table 6 Maturity curve of the PPP system



Source: Deloitte 2006

As can be seen in Table 6, most countries are still in the first two phases of PPP development. In the third and most advanced phase are England and Australia, followed by Ireland, the Netherlands, Spain, France and Italy, which lately have significantly improved their PPP systems.

5.3. A key foundation for a successful public-private partnership according to Farquharson et al.

According to Farquharson et al. (2011), during the process of setting the foundations of public-private partnership in developing PPP markets, it is necessary to achieve the following:

- Establish and clarify the policy framework, as the private sector needs to understand the drivers that lie behind the projects.
- Establish a clear legal and regulatory framework, as PPPs depend heavily on contracts that are effective and enforceable.

- Ensure consistency, as well as clarity, of the policy and legal framework, which reduces the uncertainty for investors.
- Use legal terms and approaches, where possible, that are familiar to the international private sector, if they are to be sought as partners.
- Draw up investment plans, which can be useful to demonstrate high-level political support, to indicate the potential flow of future projects, and to explain how projects fit together within the context of national or regional economic plans.
- Avoid sending out wish lists of disconnected projects that are not part of a coherent program.
- Establish a clear PPP process map, including quality assurance and approvals processes.
- Adopt the appropriate institutional solution, so that governments can effectively perform the specialized functions needed to manage successful PPP programs. When creating a PPP unit, ensure that it has the relevant commercial and legal skills needed to be a key source of support for policy makers and public bodies developing and sponsoring projects (taking these crucial steps will send a powerful message of consistency and credibility to the private sector about the public sector's competence and seriousness of intent).
- Capitalize on the experience of others who have managed the process, as the private sector takes considerable comfort from working with public officials who have been through the process before.

5.4. Key elements of the "Public Private Partnership Governmental Support Index" according to Verhoest et al.

The measurement of public support for the development of the Public-Private Partnership concept was carried out by using the method of the "PPP Governmental Support Index" - PPP GSI (Verhoest et al. 2015), by analysing key indicators for twenty European countries, based on which a comparative analysis was carried out regarding similarities and differences in national governmental support to infrastructural Public Private Partnerships. This research analysed the key elements of the PPP GSI method, including: the policy and political commitment to PPP, legal and regulatory framework, and the presence/absence of dedicated PPPs. The results of the research are shown in Table 7.

Table 7. PPP-GSI for 20 European countries

| Country | PPP-GSI dimensions | | | |
|---------------------|---------------------------------|--------------------------------|-----------------------------|-----------------------|
| | Policy and political commitment | Legal and regulatory framework | PPP-supporting arrangements | Overall PPP-GSI score |
| AT Austria | 1.0 | 1.8 | 1.5 | 1.4 |
| BE Belgium-Flanders | 3.0 | 1.8 | 2.8 | 2.5 |
| CH Switzerland | 2.3 | 1.8 | 1.8 | 2.0 |
| CZ Czech Republic | 1.7 | 2.3 | 2.1 | 2.0 |
| DK Denmark | 2.3 | 1.0 | 1.8 | 1.7 |
| EE Estonia | 1.0 | 1.3 | 1.3 | 1.2 |
| FR France | 1.3 | 2.8 | 3.1 | 2.4 |
| GR Greece | 2.3 | 2.8 | 2.3 | 2.5 |
| IT Italy | 2.0 | 2.3 | 2.3 | 2.2 |
| NL The Netherlands | 3.7 | 1.8 | 3.3 | 2.9 |
| PT Portugal | 2.0 | 2.8 | 2.8 | 2.5 |
| RS Serbia | 1.3 | 2.5 | 2.0 | 1.9 |
| SI Slovenia | 1.3 | 2.3 | 2.2 | 1.9 |
| SE Sweden | 1.0 | 1.8 | 1.2 | 1.3 |
| UK United Kingdom | 3.7 | 1.8 | 3.6 | 3.0 |
| CY Cyprus | 1.7 | 2.3 | 1.8 | 1.9 |
| FL Finland | 1.3 | 1.8 | 1.3 | 1.5 |
| SL Slovak Republic | 2.0 | 1.8 | 1.9 | 1.9 |
| DE Germany | 3.7 | 1.8 | 3.4 | 2.9 |
| HU Hungary | 1.7 | 1.8 | 2.2 | 1.9 |

Source: Verhoest et al. 2015

"When we analyse the scores of the different countries on the three dimensions, we learn that the policy dimension and the dimension of the PPP supporting institutions are positively correlated. Governments which make an explicit policy framework, a PPP program and a strong political commitment for PPP will in most cases also have more elaborated supporting institutions compared to countries which lack clear policies and political commitment. Compare for instance, Belgium, Netherlands as well as United Kingdom on the one hand, and Czech Republic and Sweden on the other hand. However, governments which have explicit policies and political commitments concerning PPPs will not necessarily have a well-elaborated legal framework, especially designed to foster PPPs, and vice versa. The correlation between the scores of countries on the policy dimension on the one hand and the legal framework dimension is very weak and even negative" (Verhoest et al. 2013).

This survey showed that the highest level of organizing the Public-Private Partnership system was achieved in the United Kingdom, with the largest PPP-GSI index of 3.0. The Netherlands, Germany, Belgium-Flanders, Greece and Portugal are also highly positioned with PPP-GSI scores between 2.5 and 2.9. The three countries have a score between 2.0 and 2.4: France, Italy and the Czech Republic, while Austria, Denmark, Estonia, Serbia, Slovenia, Cyprus, Finland, Slovakia, Hungary and Sweden are positioned at the bottom of the table with a score below 2.0.

5. FINAL CONSIDERATIONS

The research results we showed in the first part of this paper point to the conclusion that the value of the PPP investments has been stable over the past several years, and a slight decline in the number of the PPP projects combined with stable financial investments points to the consolidation of the PPP market. The largest number of public investments realized according to the principle of Public-Private Partnership refers to capital infrastructure projects for the construction of highways, tunnels, bridges, dams, etc. The trend of consolidating the global PPP market means that the private sector has more trust in this type of partnership with public sector, and that it is ready to integrate its resources in financing public investments. This is a substantial budgetary relief for public sector, enabling transfer of budget funds into various development programs, employment assistance, etc.

The results that we obtained through this research in the second part of the paper can suggest that there are several elements that can be identified as key factors in the development and implementation of the Public-Private Partnership concept. Previous research has shown that the national development of PPP depends, *inter alia*, from the political commitment (Flinders 2005), fiscal conditions (McQuaid and Scherrer 2010) and the presence and support of the legal framework (Tvarnø 2006).

According to the "PPP Governmental Support Index" - PPP GSI, countries like Serbia, Slovenia or Cyprus have a more developed legal PPP framework than the UK, the Netherlands or Belgium. The results achieved by the United Kingdom, the Netherlands or Belgium in the application of the Public-Private Partnership concept are nevertheless more significant than the PPP arrangements of the previously mentioned economies. The legislative context is certainly an important aspect in the implementation of a Public-Private Partnership, however, without the fulfilment of other elements that will be discussed further in the final considerations, this condition is simply not sufficient. One of the most important factors influencing the success of PPP is the political context. Governmental institutions can adopt all necessary laws and regulations for establishing a PPP framework, but if there is no political will to implement it - then the application of these regulations can have only declaratory character and cannot affect the real processes. In institutional sense, it is necessary to establish and clarify the political framework because the private sector needs to understand the drivers that lie behind the projects (Farquharson et al. 2011). Another key factor for the impact on

Public-Private Partnership performance is the administrative context. The current literature has highlighted the importance of studying the administrative aspect of PPP and the role of partner units (the so-called PPP support units) as indicators of national institutional support for PPP (Mahalingam et al. 2011). PPP support units can be viewed as a specialized public agency whose task is to develop national PPP development of guidelines for the development of PPP policies, capacity building, encouraging PPP projects, the provision of finance and approval of PPP projects. The way these units are organized varies globally. In the period from 2001-2011, the British model of the central PPP unit "Partnership UK" (PUK) was designed according to the principle of Public-Private Partnership after 51% of the shares were sold to private investors, while the remaining 49% was retained by the public sector. Alan Milburn, then chief secretary of the HM Treasury UK, said it would "provide the public sector with a key commercial skills to encourage greater and better partnerships with the private sector under equal conditions" (Allen 2003). Since 2011, the operations of the central PPP unit have been led by Infrastructure UK (IUK), which, by fusion with the "Major Projects Directorate", grew into the "Infrastructure and Projects Authority" (IPA) in 2016. Mexico as one of the mature PPP markets by 2012 had no Law on Public-Private Partnership. However, most government agencies implementing projects through the PPP model had the support of the Mexican National Infrastructure Fund (FONADIN). This PPP unit, through the support from the Mexican Development Bank (BANOBRA), assisted the agencies in grants for preliminary studies for the project, preparation of project documentation and conducting tender procedures. In practice, this meant that, through the presidential decree by which FONADIN was established in 2008, this unit, as Sanghi, Sundakov and Hankinson (2007) point out, received a "clear and specific mandate and decision-making power, not just an advisory role".

Therefore, adequately designed PPP units along with the fulfilment of conditions from a political context can be key factors for the success of efficient development and application of the Public-Private Partnership concept. This research can serve as a basis and a manual for further research that will evaluate opportunities and offer a solution to build an efficient and functional Public-Private Partnership system in countries that are in the initial phase of its application.

6. REFERENCE

-
- Akintoye, Akintola, Mathias Beck, and Clif Hardcastle. 2003. *Public Private Partnerships, Managing Risk and Opportunities*. MA: Blackwell Science. Ltd. Malden
- Amović, Milomir, Mladen Ivanić, and Đoko Slijepčević. 2014. *Javno-privatno partnerstvo i koncesije: teorijski aspekti i primjena koncepta*. Banja Luka: Grafid
- Amović, Goran. 2017. "Efficiency of PPP implementation in Bosnia and Herzegovina" *Zbornik radova Ekonomskog fakulteta u Istočnom Sarajevu* 15:49-54.
- Allen, Grahame. 2003. "The Private Finance Initiative (PFI)". Economic Policy And Statistics Section. House Of Commons Library 03/79
- Bovaird, Tony. 2004. "Public-Private Partnerships: From Contested Concepts to Prevalent Practice". *International Review of Administrative Sciences* 70(2):199-215.
- Brzozowska, Krystyna. 2006. *Advantages and Threats of Public-Private Partnerships in Larger Infrastructure Projects*. Warsaw: CeDeWu.PL.
- Deloitte. 2006. *Closing the Infrastructure Gap: The Role of Public-Private Partnerships*. A Deloitte Research Study. UK: Deloitte
- Farquharson, Edward, Clemencia Torres de Mästle, Edward Raymond Yescombe, and Javier Encinas. 2011. *How to Engage with the Private Sector in Public-Private Partnerships in Emerging Markets*. Washington: The International Bank for Reconstruction and Development and The World Bank
- Flinders, Matthew V. 2004. "The Politics of Public-Private Partnerships". *British Journal of Politics & International Relations* 7(2): 215 – 239

- Grimsey, Darryn, and Mervyn Lewis. 2004. *Public Private Partnerships: The Worldwide Revolution in Infrastructure Provision and Project Finance*. Northampton: Edward Elgar Publishing
- HM Treasury. 2012. *Standardisation of PF2 Contracts*. United Kingdom.
- Koppenjan, Joop. 2005. "The Formation of PublicPrivate Partnerships: Lessons from Nine Transport" *Infrastructure Projects in The Netherlands* 83(1): 135-157
- Mahalingam, Ashvin, Ganesh Devkar, and Satyanarayana N. Kalidindi. 2011. "A Comparative Analysis of Public- Private Partnership (PPP) Coordination Agencies in India: What Works and What Doesn't." *Public Works Management & Policy* 16(4), 341–372
- McQuaid, Ronald, and Walter Scherrer. 2010. "Changing reasons for public–private partnerships (PPPs)" *Public Money & Management* January: 27-34
- Morales, Dorothy, Adjo Amekudzi, Catherine Ross. and Michael Meyer, M. 2009. "Value for Money Analysis in U.S. Transportation Public-Private Partnerships". *Transportation Research Record: Journal of 108 the Transportation Research Board No. 2115. Transportation Research Board of National Academies*.
- OECD. 2010. *Public-Private Partnerships and Investment in Infrastructures*. Paris: OECD
- PPP Knowledge Lab. 2019. *Mexico's FONADIN*. Accessed on June 5. <https://pppknowledgelab.org/guide/sections/19-the-role-of-public-finance-in-ppps#box-19>
- Barutha, Philip J. 2016. *A framework for value for money assessment on public private partnership mega-projects*. PhD Diss Iowa State University.
- Sanghi, Apruva, Alex Sundakov. and Denzel Hankinson. 2007. "Designing and Using Public-Private Partnership Units in Infrastructure" *Lessons from Case Studies Around the World*. Gridlines 27.
- Tvarnø, Cristina D. 2006. "Denmark: Public-Private Partnerships from a Danish Perspective." *Public Procurement Law Review* 3
- Verhoest, Koen, Ole Helby Petersen, Walter Scherrer. and Radem M. Soeipto. 2013. "Policy commitment, legal and regulatory framework, and institutional support for PPP in international comparison:" *Journals Public Money & Management* 37 (2): 133-140
- Verhoest, Koen, Ole Helby Petersen, Walter Scherrer. and Radem M. Soeipto. 2015. "How Do Governments Support the Development of Public Private Partnerships?." *Measuring and Comparing PPP Governmental Support in 20 European Countries, Transport Reviews* 35:2: 118-139
- Yescombe, Edward Raymond. 2007. *Public-Private Partnerships – Principles of Policy Finance*. Yescombe Consulting. Kindlinton: Elsevier Ltd