

PUBLIC PRIVATE PARTNERSHIPS IN INFRASTRUCTURE: GLOBAL OVERVIEW

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ABSTRACT. The study contains basic international trends in the field of PPP in general sense and in section of several aspects. Some consequences of pandemic were also predicted as a result, respective conclusions were made, which may be of interest for application in the conditions of Republic of Moldova.

KEYWORDS: *Public-Private Partnership, project, investments, infrastructure*

Introduction

According to Knowledge Lab, Public-Private Partnership (PPP) is “a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility and remuneration is linked to performance”. [10]

PPP can be treated as strengthened legal form of interaction of state and private sectors with state and municipal property, as well as services provided and provided by state and municipal bodies, institutions and enterprises, in order to carry out projects socially important in a wide range of types of economic activities. [5, p. 116]

In other words, PPP is a specific form of attracting by public administration bodies of private business for the execution of works related to technical maintenance, operation, reconstruction, modernization or green field construction of public infrastructure objectives and provision of public services. With such objectives, the distribution of risks, competencies and responsibilities are determined by contract and national normative acts.

Authors Oktavianus Adrianto, Mahani Iris and Meifrinaldi state that PPPs offer benefits for both public and private sectors. [8]

In the vision of the public sector, PPP increases the value for the public of projects launched by reducing risk, cost efficiency, raising the level of services, efficient and faster completion. PPPs also reduce public capital investment and the use of private partner capital takes place under public partner monitoring.

The benefits of private sector within PPP are expressed by implementing better solutions, new efficiency based on their managerial, technical, financial and innovation capabilities, technologies and improving construction process. PPPs also provide private sector with access to secure and long-term investment opportunities so that they can generate business with the certainty and relative security of a government contract. In addition, the private sector benefits from PPPs by achieving project objectives and being supported by the public sector through fiscal instruments of public finances.

According to researcher Ion Crețu [3, p. 50], in order to cooperate between the public and private sector in the field of infrastructure investments, the implementation of PPP mechanism can be done, especially in those sectors where major investments are needed, depending on the importance their strategic position for national economy.

Typically, the interest in creating a PPP is dictated by the following [3, p. 50]:

- Investments in infrastructure;
- More efficient use of funds;
- Economic and social capitalization of invested funds.

The use of PPPs for infrastructure development around the world has increased significantly in the last time.

According to the World Bank, 8671 PPP projects with a total investment volume of 1.7 trillion USD have been launched in the last 30 years in the world in the field of infrastructure. [9]

At the same time, according to Hub Infrastructure Global in the period 2016-2040 for the development of infrastructure worldwide, investments amounting to 15 trillion USD are needed [2], which makes actual studies on global evolution of PPP market.

A description of used research methods

The main used source of information was The World Bank's database and Market Update Reports for the period 2010-2019, as well as results of analyzes performed by different experts.

In conducting the study, historical method was used in the compartment of global evolution of PPP studying, as well as comparative method in studying the comparative aspect between different segments of international PPP market.

Short analysis of the main bibliographical references in the field of research.

During the years 2010-2019, specialists of The World Bank conducted investigations worldwide regarding projects of private participation in financing of infrastructure. The annual dynamics of which is presented in figure 1.

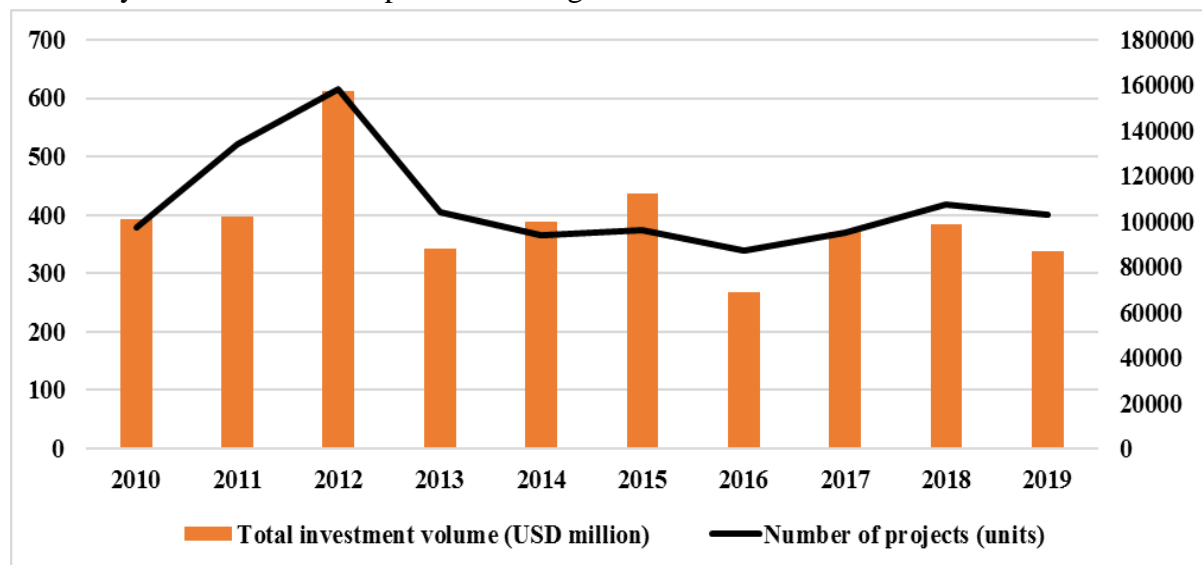


Figure 1. Annual global dynamics of number and volume of funding PPP projects

Source: [9]

Thus, during the nominated period, 4187 PPP projects in infrastructure were launched, dynamics being unstable, minimum level being 340 units in 2016, and maximum - 616 units in 2012.

The financing volume of these projects amounted to 1009.8 USD billion, the annual level also being unstable. The minimum level was in 2016 (USD 68.7 billion) and the maximum level - in 2012 (USD 157.5 billion).

The average annual number of projects was 419 units and the average annual level of investment in PPP projects - USD 101 billion. The average level of investment for a project was USD 241.2 million.

The structure of PPP projects launched during the mentioned period is presented in Figures 2 and 3.

The main share in the total number belongs to greenfield projects (72.3%) with 3027 units, the dynamics being unstable oscillating between 202 units in 2010 and 447 units in 2012.

71.6% of total volume of investments in PPPs for USD 722.8 billion was allocated to finance these projects.

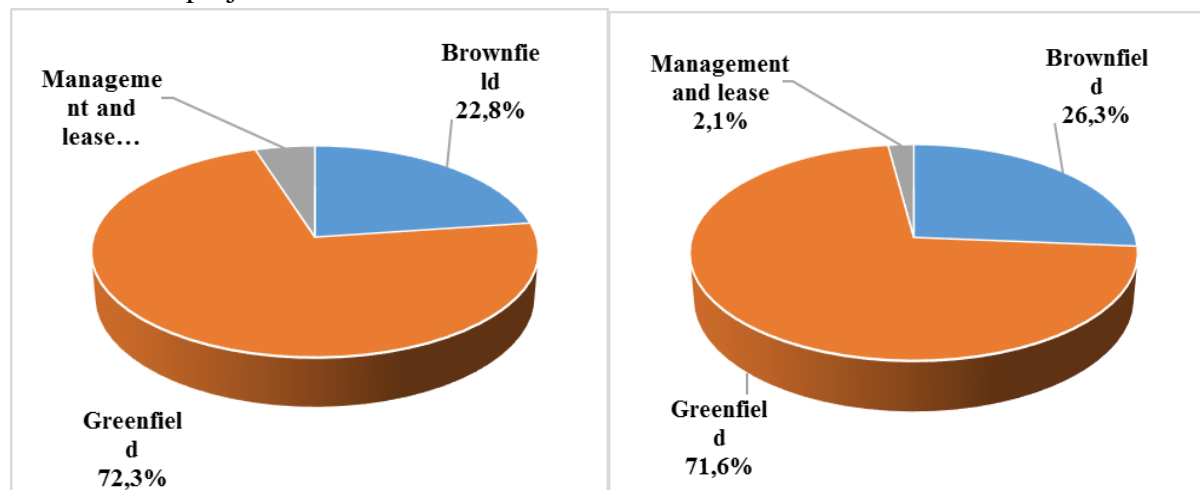


Figure 2. PPP projects number structure by their categories (%)

Figure 3. PPP funding structure by project categories (%)

Source: [9]

Annual investment amounts in these projects ranged from USD 469.9 billion in 2016 to USD 939.0 billion in 2015.

Brownfield projects had a share of 22.8% with 954 units, which were distributed unevenly over years between 52 units in 2017 and 156 units in 2010. Investments in these projects amounted to USD 265.7 billion with a share of 26.3% in the total amount of PPP financing. Annual investments ranged from USD 108.7 billion in 2018 to USD 588.3 billion in 2012.

The lowest share (4.9%) went to management and leasing projects in 206 units with an annual variation between 7 units (2017) and 29 units (2011). Investments in these projects amounted to USD 21.3 billion with a share of 2.1%, with an annual distribution between USD 0.3 billion (2013) and USD 1.7 billion (2016).

The structure of PPP projects according to the level of funding is contained in Figures 4 and 5.

Projects with investments between 100 and 500 million had a share of 32.8%.

Their total number of 1375 units with an investment volume of USD 303.6 billion, which in turn had a share of 30.1%.

Projects with investments between USD 500 million and USD 1 billion totaled 249 units (5.9% of the total number) and wanted funding of USD 177.7 billion (18.6% of the total volume of investments).

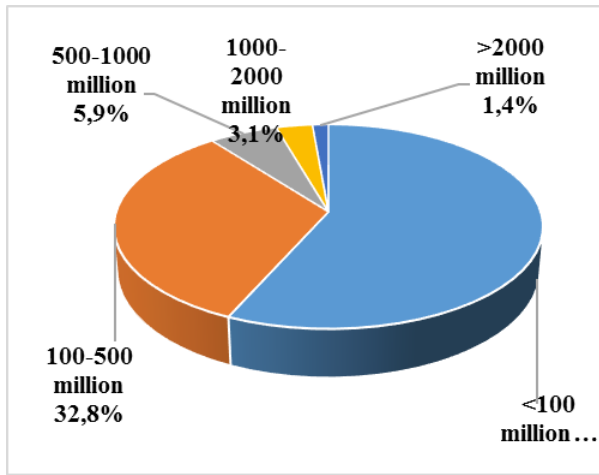


Figure 4. PPP projects number structure according to the level of funding (%)

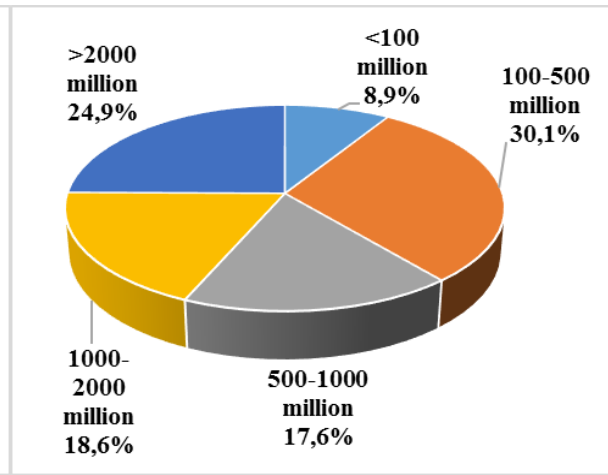


Figure 5. PPP investments structure depending on the level of financing (%)

Source: [9]

PPP projects with investments of 1-2 billion USD were less numerous - 131 units with a share of 3.1%. The amount of investments in them amounted to USD 188 billion (18.6%).

The lowest number of PPP projects (58 units) with the lowest share (1.4%) went to those with a funding volume of more than USD 2 billion. But the amount of their financing was important - USD 251 billion with a share in the total volume of investments of 24.9%

The distribution of PPP projects in infrastructure by areas is also of interest (Figures 6 and 7).

The largest share was held by PPP projects in the field of electricity (57.4%) with a number of 2403 units.

The financing of these PPPs amounted to USD 470.3 billion, which accounted for 46.6% of the total investment volume.

Road PPPs totaled 614 projects, which had a share of 14.7% of the total volume. They were allocated USD 233.6 billion in funding (23.1% of the total volume).

PPP projects in the field of water and sewerage had a share of 8.9% with a number of 372 units and an investment volume of USD 33.1 billion (3.3%).

273 projects with a share of 6.5% were launched in the field of treatment with an investment volume of USD 21.4 billion (2.1%).

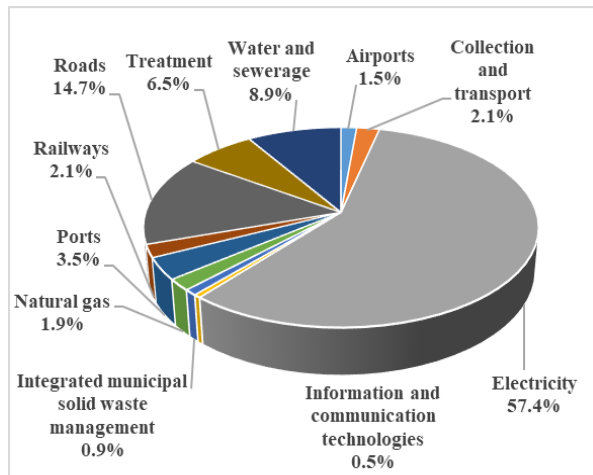


Figure 6. PPP projects number structure on domains (%)

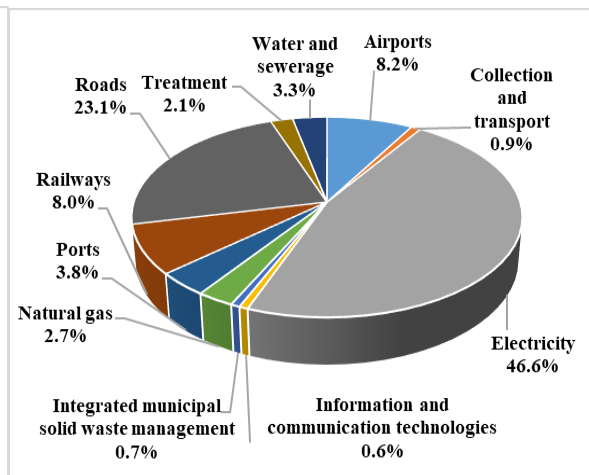


Figure 7. PPP investments structure on domains (%)

Source: [9]

148 PPP projects were launched in ports with a share of 3.5% with funding of USD 38.2 billion (3.8%).

In the field of collection and transport, there were 90 projects with a share of 2.1%, which provided investments of USD 9.5 billion (0.9%).

PPP projects in natural gas had 78 projects and launched with a share of 1.9%, with investments of USD 27.1 billion (2.7%).

60 projects were related to airports with a share of 1.5%. But the volume of investments in them was relatively high - USD 83 billion (8.2%).

The geographical distribution of PPP projects in infrastructure is demonstrated in Figures 8 and 9.

The largest number of projects of 1282 units, with a share of 30.6% of the total number, was launched in Latin America and Caribbean.

The volume of investments in these projects amounted to USD 343.7 billion with a share of 35.2% of the total amount of investments in PPPs.

PPP projects launched in East Asia and Pacific had a share of 30.3% with 1269 units, which had an investment volume of USD 259.5 billion (26.6% of the total volume of funding). PPPs in South Asia had a share of 20.4% with 856 units with a funding amount of USD 154.6 billion (15.8%).

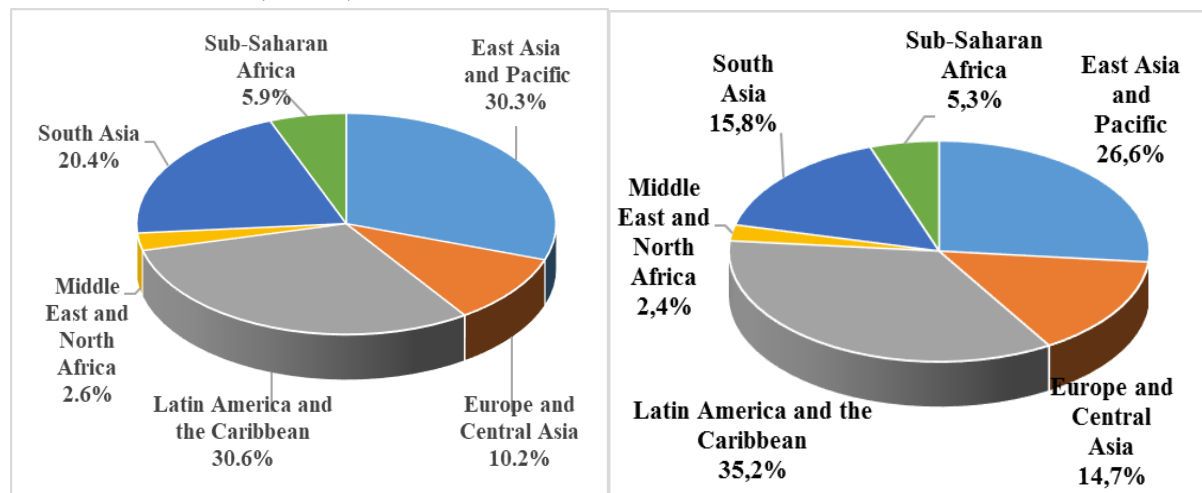


Figure 8. Regional distribution of PPP projects number (%)

Figure 9. Regional distribution of PPP investments (%)

Source: [9]

In Europe and Central Asia there were 426 projects (10.2%) with an investment volume of USD 143.3 billion (14.7%). The number of PPP projects in the Middle East and Sub-Saharan Africa was relatively small - 107 and 248 units, respectively. The volume of investments amounted to USD 23 and 52 billion respectively.

During the period 2010-2019, 652 PPP projects were launched on the European market with a total investment volume of EUR 149.9 billion. On this market took place a general downward trend from 112 projects in 2010 to 29 projects in 2019, and the volume of investments, respectively, decreased from EUR 18.3 billion to EUR 9.8 billion. [6]

The global dynamics of PPP projects in 2020 will be influenced by the crisis of COVID-19 pandemic, which some experts have called the “corona-crisis”. [12]

The total volume of losses caused by this pandemic will constitute 2.4% of global GDP. [4]

UN experts say developing countries will need USD 2.5 billion in international aid for a global victory over the coronavirus. But IMF experts consider this assessment to be very modest. [11]

This crisis will substantially reduce the ability of states to finance infrastructure development due to declining budget revenues, which will increase demand for additional PPP projects. On the other hand, capacities of private partners to assume financial commitments within PPP projects will diminish.

According The PPP Knowledge Lab, the COVID-19 crisis presents challenges for PPP projects, making sustainable design and implementation more imperative than ever. [1]

According to International Monetary Fund experts, this crisis is expected to affect the PPP market in three ways [7]:

- Creating additional costs for all PPP projects, especially those that are operational, largely due to comply with legal norms in a pandemic;
- Significant impact on revenues of PPP projects financed by users, especially transport and energy projects, due to much reduced demand;
- Specific challenges to projects under construction, such as construction delays and supply chain disruptions.

Conclusions

PPPs have become an important tool for global infrastructure development. The general trend has been to increase the number and volume of PPP financing globally, a general upward trend has formed, although in the last two years a downward trend has formed. The study allows to highlight the most popular PPPs in the world. In terms of PPP financing, are preferred projects with investments up to 100 million USD. In terms of branch the largest volume belongs to electricity. The geographical distribution of PPP projects is very uneven. The most active region is Latin America and Caribbean, as well as East Asia and Pacific. The European PPP market tends to shrink. An important challenge for the global PPP project market is the COVID 19 pandemic. It will change conditions for PPP and will probably lead to a reduction in the volume of PPPs launched and implemented. The world trends in the field of PPP market are to be taken into account in promoting respective policies in Republic of Moldova.

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