

DEVELOPMENT DILEMMAS OF PUBLIC-PRIVATE PARTNERSHIPS

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Purpose: the purpose of this article was to assess the development of public-private partnerships (PPP) in Poland. The author identified the reasons for the still small number of projects, also carrying out and animating the available statistical data and the results of his research from the field of labor competencies.

Approach/Methodology/Design: a review of PPP literature, available statistics, and surveys of PPP projects in Poland were used.

Findings: the results of the study illustrate the prospects and dilemmas of PPP development in Poland, and in particular, the importance of competence and motivation of public sector employees. In order to develop the PPP market further, greater involvement of public institutions in promoting the development of employee competence and the need to use motivational factors becomes indispensable.

Research limitations/implications: the author conducted his research to a narrow extent; further research with a more significant number of respondents and the inclusion of private sector representatives implementing the PPP formula would be recommended.

Practical implications: public-private partnership in modern conditions, including the problems of financing public tasks by central and local authorities, can become an engine of economic development (including local), the basis of modernization, a factor in the growth of competitiveness, including improving the quality of life of citizens. It is reasonable to learn about the principles of public-private partnership in broad social circles in order to promote its development, both at the central, regional, and local (e.g., municipal) level. The results of the study can contribute to the identification of critical barriers inhibiting the development of PPP in Poland. In this regard, the leveling of low competencies among public sector staff may have an impact on the further development of PPP.

Originality/Value: public-private partnerships, despite the recording of nearly 175 projects, are still an unpopular form of implementing public tasks compared to leading European countries. One of the factors limiting the development may be low or insufficient labor competencies on the part of the public sector. An additional element emphasizing the originality of the work is the author's research and reference to previous results.

Keywords: public-private partnership (PPP), competence of employees, barriers to development.

Category of the paper: research paper.

1. Introduction

With the wide range of public goods on offer, both at the central and local levels, institutions and entities representing the public sector are looking for effective methods of implementing public tasks. Staff shortages, financial problems, and the multitude of tasks make the idea of public-private partnership (PPP) a remedy. In addition to the implementation of public tasks, PPP makes it possible to spend less on public funds and increase the availability of public services, affecting their quality as well.

As Wetenhall points out, history indicates that there has always been some degree of public-sector and private-sector cooperation, but an equally important determinant remains the definition of the tasks of such cooperation (Wettenhall, 2003; 2005).

PPP seems to be a good solution for both public and private partners, and the partnership allows mutual goals to be achieved with explicit sharing of risks.

Statistics on the development of PPPs around the world indicate an increase in the popularity of these projects, although there is a lack of precise statistics to report their number and value accurately (Załączna et al., 2021, p. 87).

According to the European Investment Bank (EIB), nearly 1850 PPP projects totaling nearly EUR 380 billion have been recorded in Europe since 1990. The most popular projects have been in the transportation sector (60.8% by value and 22.3% by number of projects), the health sector (13.8% and 22.06%, respectively), and education (10.35% and 25.6%).

In 2022 year, the aggregate value of PPP transactions that reached financial close in the European market totalled €9.8 billion, a 17% increase from 2021 (€8.4 billion). An increase in the value and the number of public-private partnership deals in 2022 shows that, despite uncertainty and volatility in construction prices, the public-private partnership market is recovering after the shock of the coronavirus pandemic (European Investment Bank, 2023). The PPP market is concentrated in a few countries – the United Kingdom, Spain, Portugal, Greece, Ireland, while the others have either a PPP policy but few projects France and Germany – or proved sceptical of both PPP policy and its implementation – the Nordic countries and some new accession countries. This means that the EU member states have responded differently to the PPP trend that has invested public management.

The UK remains the European PPP leader, where annually, up to 80 new agreements are signed for hundreds of millions of pounds, that offer up to 17% savings for the country's budget. Public-private partnerships have invested £56 billion in more than 700 infrastructure projects. These include new schools, hospitals, roads, housing, prisons, military equipment and accommodation PPP transfers delivery, cost risk and performance to the private sector - it protects the public sector from delays, cost overruns and poor performance. As noted by Calugareanu & Bulat The EU PPP market is mainly concentrated in the United Kingdom, France, Germany, Belgium, the Netherlands, etc., which have implemented projects worth 90% of the entire market in 2019 (Calugareanu, Bulat, 2022).

In the European Union, the most common type of PPP implemented is the contract from the category "design-build-finance-maintenance-management" (DBFMO), in which all phases of the project are assigned to the private partner, starting with the design stage up to the construction, management and maintenance of the infrastructure, including fundraising (Calugareanu, Bulat, 2022).

In 2022 France was the largest PPPS market in Europe not only in terms of value, with a total of €4.2 billion (€1.6 billion in 2021), but also in terms of the number of projects, with 21 deals closed (18 deals were closed in 2021). Turkey was the second largest of PPPs market in terms of value, with a total of €2.0 billion (€1.4 billion in 2021). In terms of the number of projects, Germany was the second largest PPPs market with four deals closed (seven deals were closed in 2021). Nine countries closed at least two deals (six countries in 2021) and 15 countries closed at least one public-private partnership transaction (compared to 14 in 2021). Over the past five years, France, Germany and the United Kingdom have led the European PPPs market in terms of the total number of deals closed (Market update Review of the European public-private partnership market in 2022, March 2023).

In Poland, PPPs are still an unpopular form of cooperation, with the total value of broadly defined PPP projects accounting for just 0.4% of total private sector fixed asset investment (Myszczyzyn, 2022).

The author's main objective was to determine the current pace of development of the PPP market in Poland and the main barriers to development, and in particular, to assess the importance of competence and motivation on the part of the staff of public entities.

The author, in order to achieve the stated research goal, established the following research hypothesis:

H1: The high level of competence and motivation of public sector employees is a critical factor in the further development of the PPP market in Poland.

The research goal mentioned above and the hypothesis stem from the desire for further research in the search for factors inhibiting the development of PPPs. Lack of sufficient knowledge and experience of public authorities to conduct PPP projects at the stage of initiation of proceedings and project preparation was indicated by respondents in a study conducted by the author in 2022 (Myszczyzyn, 2022).

In addition to a review of the literature, including reference to previous studies' available statistics of the PPP market, own research was conducted using survey questionnaires among public entities that have already implemented PPP projects.

2. Literature review - definition and directions of PPP development

In the available literature, one can come across various definitions of public-private partnerships, including the use of the terms P3, 3P, PFI (Private Finance Initiative), PF-PPP (Private-Finance PPP), PSP (Private Sector Participation), PfPPP (People first PPP), hybrid models, etc. (Lissowski, 2019; Myszczyzyn, 2022; Nikiforov et al., 2022). However, it should be noted that most European countries use the abbreviation public-private partnership (PPP) (Ball et al., 2007).

The subjects of public-private partnerships are, on the one hand, private partners and, on the other hand, public sector entities, which include not only public authorities but also local governments, non-profit organizations, NGOs, charitable foundations, etc.

As defined by the Organisation for Economic Co-operation and Development (OECD): public-private partnerships (PPPs) are long-term contractual agreements between the government and a private partner whereby the latter typically finances and delivers public services using a capital asset (e.g. transport or energy infrastructure, hospital or school buildings). The private party may be tasked with the design, construction, financing, operation, management and delivery of the service for a pre-determined period of time, receiving its compensation from fixed unitary payments or tolls charged to users. This definition includes both “pure” PPPs (where the main source of revenue is government payments) and concessions (where the main source of revenue is user fees) (OECD, 2018).

In World Bank documents, the term PPP is defined as a long-term contractual arrangement between one or more contracting authorities and a private partner for providing a public asset or service, in which the private partner bears significant risk and management responsibility and remuneration may be linked to performance (Guidance on PPP Legal Frameworks, 2022).

PPPs may be utilised as an opportunity to cater to investment requirements and invest over the government capital budget limits, also improving the quality of investment decisions and project delivery efficiency (Greve et al., 2013).

Krumm indicates that PPP arrangements are characterized by a relatively long, fixed duration of contract time or permanent (organizational) models of the relationship between the public and the private partner (life-cycle approach), often complex funding arrangements with the private sector bearing the initial costs and long-time responsibility for operation and maintenance, whereas the public sector is in charge of the long-time refinancing of the private partner either by (regularly) fixed direct transfers or by (shadow) tolls or user fees (Krumm, 2016).

The EPEC Guide to Public-Private Partnerships identifies the following features of a PPP contract:

- a long-term contract (the PPP contract) between a public contracting authority (the contracting authority) and a private sector company (the project company) for the delivery of a public service,
- the allocation of specified risks to the project company, typically with regard to designing, building, operating and financing the infrastructure asset used to deliver the public service,
- a focus on the specification of service outputs rather than inputs,
- the application of private financing (often involves a project finance loan) to underpin the risks transferred to the private sector,
- performance-based payments to the project company, based on the level and quality of the public services delivered (EPEC Guide to Public-Private Partnerships, 2021).

In their search for standardization of partnership terminology, Hodge and Greve list several types of terms associated with different types of PPPs: 1) inter-institutional cooperation to jointly implement projects and share risks, 2) long-term infrastructure contracts, 3) public policy networks based on loose relationships between stakeholders, 4) partnerships in civil society development, 5) partnerships in the area of renovation and revitalization of urban areas (Holdge et al., 2009).

Batra indicates that the UK has been an initiator in popularising the concept of PPP, as an alternative mechanism to traditional procurement that offered limited execution and financing. Other than the UK, PPPs have been widely adopted in countries like Ireland, Germany, Norway, Denmark and the Netherlands (Batra, 2022).

Cepparulo and others emphasize that even if the EU states share a general regulatory framework - the EU directives have established a very favourable uniform legislation for PPPs and imposed binding norms aimed at granting fair competition, PPPs are very unevenly distributed (Cepparulo et al., 2020).

In this context, in Poland, public-private partnership is based on, among other things, the Act of December 19, 2008 (Journal of Laws 2009, No. 19, item 100 as amended), the Act of October 21, 2016, on Concession Contract for Works or Services (Journal of Laws 2016, item 1920 as amended), the Act of September 11, 2019 - Public Procurement Law (Journal of Laws 2019, item 2019 as amended). The Polish government, in the document Government Policy for the Development of Public-Private Partnerships until 2030, defined, among other things, the strategic objective of the PPP policy, which is to popularize the PPP formula for ensuring efficiency, quality and sustainability of public investments with the assumption of long-term maximization of socio-economic benefits (Appendix to Resolution No. 177 of the Council of Ministers of September 25, 2023).

3. Development of PPP in Poland

The value of the Polish PPP market calculated by the cumulative value of completed and ongoing projects (from 2009 to the end of 2022) was about PLN 8.9 billion (ca. €2.02 billion), and a total of 174 agreements were signed. The average value of an agreement concluded between 200.9 and 2022 amounted to PLN 53 million (ca. €12.04 billion), which means that, as a rule, projects of relatively small value prevail.

Eighty PPP agreements are for projects under PLN 5 million (operator services), and 18 agreements exceed PLN 100 million. A few projects worth more than PLN 500 million have also been recorded - Thermal Waste Conversion Plants in Olsztyn and Gdańsk and the Fast Tram in Kraków.

It should be noted that the ratio of initiated proceedings to proceedings with a signed contract remains relatively low. Between 2009 and 2022, a total of 642 PPP proceedings were initiated in Poland. At the same time, the number of signed PPP contracts was 174, which gives an efficiency of 27.1%. However, in recent years, the rate has increased significantly, and at the end of 2022, it was 39% (Government Policy for the Development of Public-Private Partnerships until 2030).

The cited data on the number of resolutions initiated and contracts concluded by year are shown in Figures 1 and 2.

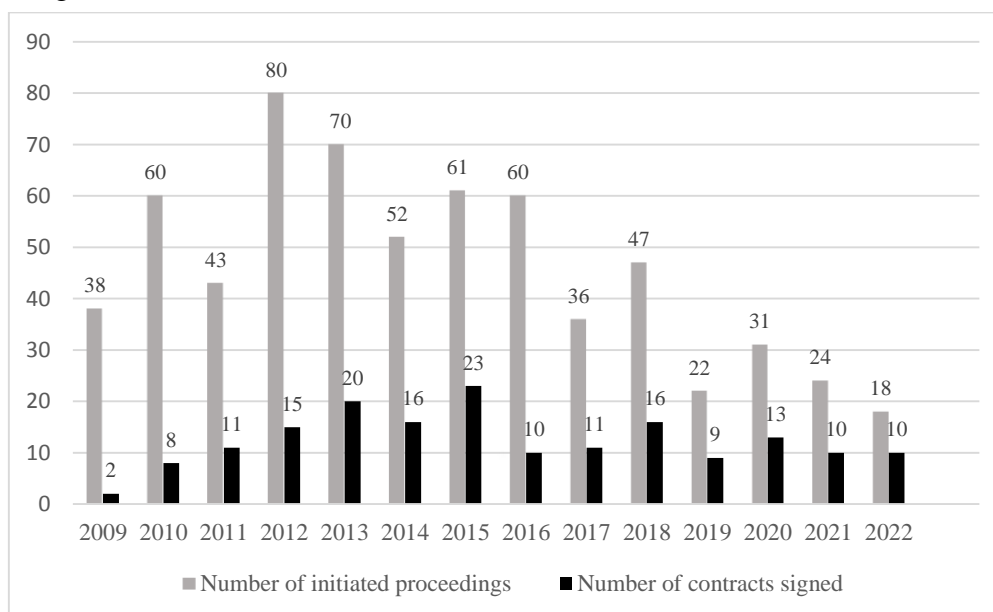


Figure 1. The number of initiated proceedings and the number of signed PPP contracts in 2009-2022.

Source: Author's calculations based on: Raport rynku PPP 2009-2020, Ministerstwo Funduszy i Polityki Regionalnej, Warszawa 2022, p. 4; Raport rynku PPP 2009-2022, Ministerstwo Funduszy i Polityki Regionalnej, Warszawa 2022, p. 3; Raport rynku PPP 2009-III kw. 2023, Ministerstwo Funduszy i Polityki Regionalnej, Warszawa 2023, p. 3.

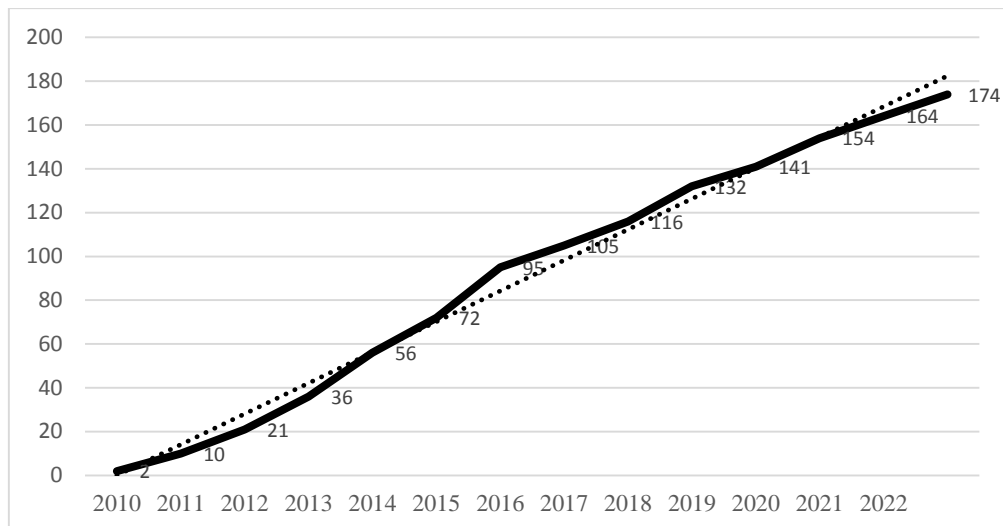


Figure 2. Number (cumulative) of PPP contracts signed 2009-2022.

Source: Author's calculations based on: Raport rynku PPP 2009-2020, Ministerstwo Funduszy i Polityki Regionalnej, Warszawa 2022, p. 4; Raport rynku PPP 2009-2022, Ministerstwo Funduszy i Polityki Regionalnej, Warszawa 2022, p. 3; Raport rynku PPP 2009-III kw. 2023, Ministerstwo Funduszy i Polityki Regionalnej, Warszawa 2023, p. 3,

Figure 2 contains a labelled linear trend line, which shows that, on average, the number of signed PPP contracts in Poland is increasing by almost 14 per year, which is far from expectations.

On a regional basis, one can see significant discrepancies in the number of contracts signed:

- in the eastern part, these are still isolated projects;
- the undisputed leader is the Masovian Voivodeship, which has undertaken 36 projects so far;
- a relatively large number concerns parts of the southern provinces of Poland (Silesia, (24) Lower Silesia (19), Lesser Poland (15)) and northern provinces (Pomerania (22), Warmia-Masuria (10));
- a high number is recorded by the Wielkopolska province (15);
- in other provinces, these are single projects.

Public entities in Poland most often implement PPPs in four sectors: energy efficiency (28 agreements), transport infrastructure (24), sports infrastructure (24), and water and sewage management (24).

In terms of value, the dominant sectors were transportation infrastructure, sports and tourism, telecommunications, waste management, water and sewerage, and revitalization.

Proceedings for the selection of a private partner were initiated most often by local government units (91%), including urban municipalities (31%), rural municipalities (25.8%), and rural-urban municipalities (14.4%); government administration accounted for only 4.6%.

At least 56 projects were planned for the end of 2022, including 12 for transportation infrastructure, public buildings – 12, sports and tourism – 8, revitalization – 6, and energy efficiency – 5.

As indicated in the PPP Market Report for Q3 2023, among the proceedings mentioned above, only four agreements with a total value of PLN 18.3 million were concluded (PPP Market Report 2009 – Q3 2023)

The author's previous research (2022) found that public sector employees generally gave a positive assessment of cooperation with the private partner during the implementation of the project (87% of respondents gave an upbeat assessment of cooperation, and 8.3% had no opinion).

Respondents assessed that the development of PPP in Poland is hampered by 1) lack of experience (54% of respondents), 2) complicated legal regulations (42% of respondents), 3) concern about ensuring the sustainability of the investment and excessive debt of the public partner (38% of respondents) (Myszczyzyn, 2022).

4. Competence and motivation as a determinant of PPP development – results and discussion

The planning and implementation of PPP projects require proper management, especially since the participants are public sector entities that are tasked with various public tasks and private sector entities that need to achieve the business objectives set. It makes it a complex process, both from a theoretical and practical point of view and success largely depends on how well the work is managed.

In this regard, it should be added that it is also necessary to take into account generational changes and the preparation of cadres in the future when implementing projects that have been planned for up to several decades.

PPP researchers stress that there are still gaps regarding the analysis of competency requirements, including management competencies necessary for the successful management of PPP projects. In this regard, there are both essential soft competencies and those traditional hard competencies.

Therefore, it can be concluded that due to the nature of PPP, one of the prerequisites for its successful implementation is the availability of specialized knowledge and skills.

In their study of management competencies in Jordan, they report that the following are critical to PPP implementation: technical experience, project management experience, negotiation and arbitration experience. Mistarihi et al. conducted a study based on two case studies and highlighted that public sector managers had fewer years of experience (both prior and project) compared to their private sector counterparts (5.6 and 4.2 versus 10.4 and 7.2 years, respectively). In addition, an important aspect was the realization that extensive knowledge of the project's financial aspects, monitoring, and planning techniques and methods is necessary. Other beneficial types of knowledge and qualifications that staff should have include

knowledge of policies and practices adopted by the partner, familiarity with the use of IT tools, and legal and contracting knowledge (Mistarihi et al., 2012).

Giving a list of critical success factors for projects, Geroniks & Lejniaks point out, among other things, the need to create favorable policies and the importance of the competence of all parties involved (Geroniks et al., 2015).

Similarly, in the case of Poland, past practice in the use of PPPs has revealed numerous shortcomings, including insufficient knowledge and lack of competence on the part of the public sector (Kania, 2021).

Also, in the resolution of the Government of the Republic of Poland titled Government Policy for the Development of Public-Private Partnerships by 2030, it is directly indicated that the most severe barrier to the development of PPP in Poland is the insufficient level of knowledge and competence in PPP among public entities (Government Policy for the Development of Public-Private Partnerships by 2030, p. 20).

In pursuit of the planned goal, the author surveyed public partners implementing the PPP formula. The electronic version of the questionnaire was made available to public partners, and the survey was conducted in the period 15.01–15.03.2023. Thirty-two completed questionnaires were received, which came from 20 public entities.

In the research group, the most considerable portion was micro-scale projects (PPP project did not exceed PLN 5 million, ca. €1.12 million).

Among the barriers hindering the development and popularity of PPPs, respondents indicated 1) complicated legal provisions (40.6%), 2) shortage of competence (31.2%), and lack of experience was indicated by 19.4% of respondents, while lack of state support was indicated by 9.7%.

In terms of PPP project preparation, almost half of the private institutions (53%) used a specialized institution (consulting offices), according to respondents. The data is similar to those reported in the PPP Market Report 2009 – Q3 2023 prepared by the Ministry of Funds and Regional Policy of the Republic of Poland (46%).

Respondents to the question of whether they were informed and trained on the specifics of PPP project implementation prior to the start of preparation and implementation answered affirmatively in only 9 cases (28% of respondents); as many as 72% negated this answer. Such a scenario means that employees were often surprised and not very familiar with the specifics of this type of project, which in turn negatively affected the effectiveness of tender proceedings for the selection of a private partner.

Respondents were also asked to assess their level of competence related to the preparation and implementation of PPP projects. They were asked to rate their level of competence on a scale of 1 to 5, with 1 meaning "definitely negative" and 5 meaning "definitely positive". The majority of the survey participants, 53.1% to be exact, rated their level of competence in this regard with a "3" (sufficient), 29% of the respondents opted for a "2" (mediocre) rating, while 9.7% of them chose the lowest rating of "1" (insufficient). It may be of concern that only

6.5% of respondents rated their level of PPP-related competence with a "4" (good), and none of them chose the highest rating of "5" (very good).

To the question of whether the respondents felt competence deficiencies during the preparation or implementation of the PPP project, they answered in the affirmative (answers "yes" or "rather yes") in 16 cases (50% of the respondents), with the opposite opinion (answers "no" or "rather no") also 50%. With the caveat that only 9.3% of respondents felt that they definitely did not respond to their competence deficiencies.

In this context, the surveyed employees evaluated the possibility of improving their competence in the position they work in. On a scale of 1-5, where 1 meant "definitely negative" and 5 meant "definitely positive. A lower rating (1) was selected by as many as five people and a rating (2) by nine people; together, these responses accounted for nearly 41% of the total. The most significant number of responses was marked off for rating (3); they accounted for 50%. Only two people (6.25%) considered that in a reasonable stipulation (4), they had the opportunity to improve their competence in the studied area. None of the respondents chose a rating (5).

Referring to the results obtained, it was reasonable to find out the opinions of respondents regarding the listing of the most critical competencies in PPP implementation. Respondents were allowed to choose from a list of competencies, up to three. Respondents also had the opportunity to add additional competencies to the list of answers that were not included. Respondents indicated knowledge of applicable laws, knowledge of risk identification techniques, and knowledge of negotiation techniques as the most critical competencies in this regard. There were far fewer indications of the following: ability to cooperate, the need for directional education, and competence in project management. One answer concerned foreign language competence.

An essential element influencing the development of PPPs besides competence was the motivations of public sector employees.

In general, respondents described their motivation at the lowest possible level of 1 or 2 - a total of 21 responses (65.6%), at a sufficient level (rating of 3) - a total of nine people (28.1%), at a good level - only two people (6.26%), at a very good level - no one.

Respondents also selected the three most important factors influencing their motivation to do their jobs. The most essential factors, in their opinion, were salary level (87.5% of respondents), family support (75%), and stability of employment (65.6%). A much smaller percentage of responses were: the opportunity to develop competence (31.3%), relationships and atmosphere in the workplace (18.8%), etc.

Respondents were also asked to assess the impact of their competencies on the professional preparation and implementation of the PPP project.

5. Conclusion

The development of public-private partnerships is an essential issue in political, economic, and social contexts and can positively affect macroeconomic as well as local development, leading to an increase in citizens' quality of life. Despite the tangible benefits associated with the implementation of public tasks in this formula, such cooperation requires adequate preparation, both in the institutional and personal sense.

The author's previous research has shown that PPP is an attractive method of implementing public tasks due to, among other things:

- limited resources of public institutions for investment;
- distribution of costs over time and their distribution among project participants;
- no impact on the current level of debt of the public entity;
- due to the lack of skills and experience (personnel) on the part of the public partner to build and manage projects, the private partner's contribution of innovative know-how;
- risk sharing, high quality of products provided by the private sector;
- sustainability of the project (Myszczyzyn, 2022).

In view of the various barriers to development, an important issue, which is the main objective of this study, was to examine the competence and motivation of the public partner's employees.

The vast majority of respondents indicated that they felt competency deficiencies during the PPP realization, and most of them rated their competencies as definitely not good.

The obtained research results allow us to verify the established research hypothesis H1 positively.

It is tangible evidence that public entities should take care to develop workforce competencies, which could positively affect PPP realizations in the future. It is consistent with other studies that the government's message of willingness to support PPP projects is clear, but the Polish PPP market does not show an upward trend - the government's declarations are, therefore, not directly translated into the development of the PPP market.

The survey results also report that the vast majority of respondents (71%) have not been trained on the functioning of PPPs prior to project preparation and implementation, which is alarming.

Public sector employees, in general, are lowly paid, and in this context, their incentives to work are quite low, which can only lead to a collapse in the further development of PPPs.

In summary, there are many factors affecting the smooth preparation and implementation of public-private partnership projects, but the competencies and motivations of public sector employees play a crucial role in them. Both hard and soft competencies affect the efficiency of work regardless of the position and lead to the achievement of the desired goals. Thus, it is worth pointing out that in order for public-private partnerships to develop at a faster

pace, those responsible for managing the public sector should pay more attention to the level of competence of employees while allowing them to grow, just as state action may prove to be a key factor.

Unleashing the potential of PPPs certainly requires comprehensive and multifaceted measures, both at the central and local levels.

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