

NAVIGATING THE RISKS OF PUBLIC- PRIVATE PARTNERSHIPS: CHALLENGES AND MITIGATION STRATEGIES

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Abstract: This study explores the obstacles and risks that Public-Private Partnerships (PPPs) encounter in carrying out economic development initiatives, across Romanian nations. The study addresses financial, regulatory, risk management and social-environmental factors that influence the success of PPPs in the current economic environment. The research has as main objective to identify and analyze the major risks associated with PPPs in Romanian national governance systems. Drawing from a comprehensive review of existing literature, the study highlights a literature review regarding the most common issues, as limited sources of financing, high upfront costs, technological and cash-flow risks, uncertain returns and weak regulatory frameworks. By integrating theoretical frameworks, the research explores the correlation between these challenges and the factors that slow down the effectiveness of PPPs in the nowadays economic trends. The findings emphasize the need for enhanced government capacity, tighter regulatory enforcement, and improved risk management strategies. Policy suggestions are offered to bridge the gaps and enhance the overall efficiency of PPPs in fostering sustainable economic and social development. Finally, the study outlines directions for future research to further explore the evolving dynamics of PPPs in sustainable economic growth and their potential role in achieving sustainable development goals.

KEYWORDS: Economic challenges, Romanian regulatory, PPP, technical expertise, risk management, social impact, economic strategies.

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Introduction

Although the public sector has traditionally been viewed as responsible for delivering public services, private sector companies have also been involved in this field for some period of time (Mota, Moreira, 2015). Public-private partnerships (PPPs) have become an important policy instrument in recent years given growing demands on public resources and the need for increased private investment in infrastructure and services. Public-private partnership (PPP) based infrastructure projects generally face many risks and uncertainties at all stages of the project, including initial studies, design, construction and operation.

Despite their advantages, PPPs remain complex undertakings involving high financial commitments and long-term contractual obligations. Numerous failed or underperforming PPPs across Europe demonstrate that inadequate risk management, inconsistent regulatory frameworks, and limited administrative capacity continue to

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challenge their success. Thus, understanding *why* and *for whom* such research matters becomes critically important. For policymakers, PPP practitioners, regulators, and public institutions, identifying the risks and determinants that influence PPP outcomes at the national level is essential for designing effective partnerships and avoiding costly failures. Also, for academics and researchers, the topic remains central due to persistent gaps in comparative European analyses, especially regarding the interplay between risks, institutional quality, and development outcomes.

Methodological approach

Qualitative research is the main design of the present study, and I have used thematic analysis to investigate PPPs. The analysis followed a systematic procedure, including:

- familiarization with the data;
- identification of initial themes;
- review and refinement of the themes;
- synthesis and interpretation of findings.

I have selected the sources based on explicit inclusion criteria such as relevance, publication date, document type etc. and the unit of analysis consisted of interviews. Thus, an in-depth, semi-structured interview was conducted, involving five representatives of local public administration, one representative of a non-governmental organization, and six managers of commercial companies in Romania. This method was selected for this stage because in-depth interviewing allows for a high degree of flexibility and facilitates an open discussion (C. Bobâlcă, 2014).

The interview included 17 predefined open-ended questions designed to elicit participants' perspectives (J. Creswell, 2009). This paper represents a review of the qualitative academic literature that has concentrated on economic development of the Romanian economic system, considering the PPPs as a reliable source of financing. In the preparation of this literature review, the studies of the last 7 years were especially taken into account.

The reviewed articles have been collected from journal databases such as Science Direct, DOAJ, RePEc selected based on keywords public-private partnership, economic growth, PPP risks, institutional good practices, etc considering also their citations, the relevance of the journal and the quality of the literature on this subject.

Analyzing the data collected from the specialized literature, either directly or indirectly, the impact of PPPs on the economic development of local communities in our country is confirmed. Furthermore, based on the interviews conducted, it can be observed that both within institutional settings and in the private sector, the perception of the impact of PPPs on economic development is a positive one. Respondents frequently emphasized the role of PPPs in economic growth, attracting both foreign and domestic private investors, as well as the legislative and fiscal challenges, the inefficiency of the public administration, and other related issues.

In the present study, the research limitations concern the small size of the sample (12 participants), as well as the possibility of subjective bias in their responses regarding the topic under discussion, given the professional status of the interviewees and their obligation to comply with institutional etiquette and protocol.

Research Objective

The overall purpose of this research is to analyze the risks associated with Public-Private Partnership (PPPs) in the Romanian economic context, which may hinder the effectiveness and sustainability of the partnership, as well as to review the current practices in mitigating these risks. The study aims to investigate the effect of macro-economic conditions on the financial feasibility of PPP projects and the subsequent risk realization during the life of the contract for concessionaire, municipality, government and consumers.

The research has as main objective to identify and analyze the risks associated with PPPs in Romania. With a wide range of possible risks, both *ex-ante* and *ex-post*, the intention of this investigation is not only to analyze the risks from a theoretical perspective, but also to examine their implications and consequences on the effectiveness and sustainability of the partnership in a practical context.

Theoretical framework

This article will concentrate on the risks and strategies for managing risks in public-private partnerships across Romania. Nevertheless, numerous unsuccessful PPP projects have been reported worldwide. Therefore, it is crucial for both the public and private sectors to implement effective risk assessment strategies to allocate and manage risks more efficiently. Coupled with this, the complexity of PPPs makes the projects more exposed to risk. The analysis sometimes specifies a mis-procurement of the risk measures. Such a situation discourages the private partner from getting involved in such projects (Mohsen Korayem, 2017).

Drawing on the principles derived from new institutional theory and service-dominant logic, this essay will explore why and where risk emerges in public-private partnerships. Direct risks related to public-private partnership construction will be examined first, followed by a review of the principal risks for each stakeholder. Possible risks are many and varied, according to each of the partnerships. However, the strategic management as the form is mature and professionalized holds many panaceas which offer to control risk and enable the parties to avoid being blinded by potential risks (Song Yong, 2019). The essay suggests that under conditions of increasing entry by smaller firms and the switch to a market-based approach with its emphasis on competition among suppliers, public entities will face an increasing problem of managing risks in working with the private sector. This has implications for the design and operation of public-private partnership in order to reduce risks, increase efficiency, and encourage greater competition.

Public-private partnerships (PPPs) have been used in many European countries and sectors to bring together the specific strengths of the public and private sectors and at the same time mitigate their weaknesses in order to deliver infrastructure and services (Jin, 2012). PPP has been touted as an innovative and revolutionary procurement method, considered as one of the solutions to deliver public infrastructure and facilities. The PPP scheme has evolved in different disciplines. It evolved from the Concession scheme in transport and utility business in the 1990s to the current PPP scheme where it had been used in many countries to deliver all types of public projects such as schools, highways, hospitals and many more. I have identified five types of PPPs in the key references reviewed:

- Build-Own-Transfer (BOT) is a contractual arrangement in which the private sector builds an asset, operates it, and transfers ownership to the government at the end of the concession period. It is the most common PPP approach used to develop infrastructure such as roads, water treatment plants, and airports.
- Build-Own-Operate (BOO) is another common approach of a PPP project where assets are established by the private sector to deliver an essential public service or for the government. After a specified period the ownership of the assets is transferred back to the public sector (Sarvari, 2016).
- Build-Lease-Transfer (BLT) is a PPP development approach where the ownership of the asset is transferred to the public sector after a specified contractual period. The private sector builds an asset, leases it to the public sector for a specific period, and then transfers the ownership to the government at the end of the period (Cheng, et al 2018).
- The Private Finance Initiative (PFI) is a way to deliver a public-private project through a long-term arrangement under which a private consortium is responsible for designing, building, financing and managing a facility, typically a public sector facility such as a school, hospital or prison, and then subsequently leasing it back to a public sector client.
- Design-Build-Finance-Operate (DBFO) involve the private sector providing and arranging finance for an infrastructure project. The construction of the infrastructure should be relatively straightforward and the function of the facility should be easy to specify and monitor. Once information is available that the implemented investment strategy is not promising the expected results and adverse experiences have accrued, there is the need to reconsider the current investment strategy and investigate potential alternative scenarios.

Public-Private Partnerships (PPPs) have emerged as an increasingly significant model for the provision of public infrastructure and services, addressing a broad spectrum of domains including transport, utilities, public health, and education. While the operational and financial risks of PPP activities tend to be considerable for both sectors, the collaborative provision of facilities and expertise has the potential to greatly enhance the quality and availability of public services across various social sectors. By sharing the financial obligations and operational prerequisites of a project, both public and private

entities are able to introduce desired specialization, efficiency, and innovation which would be otherwise difficult to arrange. A PPP venture is characterized by a well-defined revenue and rehabilitation risk analysis (FRONE & Florin FRONE, 2013).

PPPs can be structured in a number of ways depending on the particular infrastructure or service being provided and the legislative framework in the host country. Frequently, a concessional contract is arranged where a quantity or quality benchmark is set by government authorities, financial compensation is achieved via user fees or direct subsidy payments; an operating company compliant with specified operational performance and professional background requirements receives the remittance. Users can include both members of the public and the sponsoring governmental body, while the administering business distributes these funds across various maintenance, expansion and operational acts such as the construction of treatment plants, storage facilities, and distribution networks, supplying meters, responding to contaminants, addressing complaints, or following other legislative bylaws. Alternatively, public service obligations (PSO) can take the setup of a service concession contract where general area plans are outlined by the governmental agent and more specific arrangements are then made by a third-party service provider, which may in the form of a long-term management authorization (Song Yong, 2019).

Definition and Types of PPPs

Nowadays, interest in and exploration of public-private partnership (PPP) opportunities are growing. However, the PPP models may be very different. Essentially, PPP is seen as a long-term form of collaborative agreement between the public sector bodies and private sector ones, aimed at designing, financing, building, operating or maintaining new infrastructures or providing public services that were, traditionally, within the public domain. A feature of PPP is an involvement of the private investor, regarded as the project executor. Moreover, PPP agreements are characterized by sharing risks in the course of the project execution. At the same time, the task of risk management has become essential due to the fact that the risks being borne by the investor threaten the intended economic efficiency of the project. PPPs model spectrum is extended, too. A feature of the PPP model is the relationship between the involved public and private partners, as well as the situation with the aforementioned risks and options for managing them. Correspondingly, main types of PPP are following.

The essential principles that guide such relationships remain the same, but in practice, PPPs can take many forms and there is no "one-size fits all" approach to making PPPs work. PPPs can also vary depending on the nature of the project and the relevant sector involved.

Romanian Legal and Regulatory Framework

From where I stand, public-private partnerships (PPPs) remain a vital aspect for sustainable economic development. However, PPPs are exposed to various risks. An institutional perspective highlights the interactions and potential conflicts among different stakeholders within the institutional framework, which can impact the success of a PPP. It is contended that negative results occur as a result of a misalignment between institutions and institutional environments (Skelcher, 2010). As such, win-win partnerships, which according to the law of convergence are predicted to be underpinned by common norms, often fail. Because many developing economies have differing informal and formal systems, understanding the institutional environment of PPPs in the developing world proves particularly difficult. It is found that the “non-prototypical prescriptions” of the system do not necessarily hinder PPP development. Some of the less frequently cited policy prescriptions to improve PPP efficacy are aimed at clearing the path for hybrid PPPs to fair no worse than their prototypical counterparts (Nwangwu, 2021). This investigation takes “governing partnerships” as the point of departure.

Ultimately, a framework of five dimensions is called upon to help to understand the governance environment surrounding a given PPP. Specifically, these dimensions pertain to: 1) the regulatory setting; 2) the kind of stakeholders the agreements create; 3) monitoring and compliance mechanisms; 4) conflict/dispute resolution processes; and 5) multi-tiered structures overseeing the projects. In Romania, the legal framework governing public-private partnerships (PPPs) has undergone several significant changes in recent years. A major reform was introduced in 2018, when the Government adopted Emergency Ordinance No. 39/2018 on public-private partnerships, which regulates the conclusion, implementation, and termination of PPP contracts.

Under this ordinance, PPP contracts cover the development, rehabilitation, or expansion of assets or services that ultimately become part of the public partner's patrimony (gov.ro). The main legal basis remains G.E.O No. 39/2018, subsequently amended in January 2024 by Law No. 7/2024. Together, these instruments establish the legal framework for the initiation, management, and completion of PPP projects in Romania. Their primary purpose is to encourage and facilitate the use of PPPs as a tool for increasing public and private investment whether through national budget allocations, improved absorption of European funds, or the mobilization of private capital. Strengthening Romania's macroeconomic outlook is expected to rely on a balanced combination of fiscal, budgetary, and monetary policies, with the broader objective of improving overall quality of life.

One of the most critical factors in managing risk is the contractual safeguards built into agreements between public and private partners (Nwangwu, 2021). Well-designed contracts can help to clarify who is responsible for what, allocate risks to the party that is best positioned to manage them, and establish performance benchmarks for partners.

Effective risk management requires that the contract contain the appropriate provisions to mitigate each particular risk.

Table 1. Core Components Required in PPP Contracts under Romanian Law

Nr.	Contractual element	Description
1.	Parties	Identification of the public partner and the private partner participating in the PPP.
2.	Object of the Contract	Clear definition of the project, asset, or service to be developed, operated, or rehabilitated.
3.	Obligations of the Parties	Allocation of duties, responsibilities, and specific tasks for both partners throughout the project lifecycle.
4.	Negotiated Investment Value	The agreed financial commitment required for project implementation.
5.	Contract Duration and Completion Deadline	The total period during which the contract is valid, including the final date for project completion.
6.	Implementation Timeline	Detailed schedule outlining project phases and key milestones.
7.	Participation Shares and Assets Contributed	Specification of each partner's contribution (financial, material, or operational) to the project.
8.	Risk Allocation	Distribution of risks between the public and private partners based on their capacity to manage them.
9.	Performance Criteria	Indicators and benchmarks used to assess the achievement of project objectives.
10.	Withdrawal or Termination Clauses	Conditions under which either partner may withdraw from or terminate the agreement.
11.	Penalties	Sanctions applicable in case of contractual non-compliance or failure to meet performance standards.

Source: Based on Civil Code provisions and Emergency Ordinance No. 39/2018, 2025.

To facilitate the resolution of disputes and to avoid lengthy and financially draining court cases, contract agreements specify mechanisms dedicated to the resolution of disputes between public and private partners, such as notice and cure periods, conciliation, arbitration, and the establishment of Public-Private Partnerships (PPPs) interstate courts (Cunha Marques & V Berg, 2010). As I wrote in Table 1, contracts should include provisions that enable project restructuring under stressful situations, safeguarding the continuity of essential services and the reimbursement of capital investments. Thus, the optimal design and management of PPP contracts can be crucial for aligning the interests and profitability of the partner firms and for ensuring the long-term stability of PPP projects.

At the same time, PPP contracts should be flexible enough to adapt to unforeseeable circumstances, but the actual responses to these changes should be predictable. Obviously, changes are agreed by both parties or established according to pre-determined rules, given that ad-hoc financial and contractual adjustments may raise the

cost of capital or reduce the incentives of the private partner. Consequently, PPP contracts should anticipate as much as possible the issues to manage the long-term relationship with clear and unambiguous clauses.

Public Sector Capacity Building

In Romania, Public-Private Partnerships (PPPs) in essential public services - such as utilities, energy, water supply, transportation, telecommunications, waste management, and public facilities-remain largely absent, despite representing a modern approach to infrastructure development that has gained considerable traction in many other European states.

Such partnerships are in the best interest of both the public sector as well as the private sector, and can lead to a more efficient allocation of resources, greater accountability, better project planning, risk management, and problem-solving skills as well as knowledge of the main principles and procedures (Mohsen Korayem, 2017). In an ideal framework, public capacity development for PPPs includes education and training programs, workshops, study tours, e-learning and various other resources directed at improving public officials' skills and knowledge for effective risk assessment, negotiation, implementation, monitoring and oversight of such projects. To foster and maintain reliable partnerships, countries need to implement various policy instruments. They include accurate and unambiguous regulations and policies, a well-designed process of project selection and procurement, a transparent and accountable decision-making mechanism and governance structure within the public authorities, efficient monitoring, problem-solving, and dispute resolution mechanisms, and sustained capacity building of public officials and staff dealing with PPPs in public agencies. It is in the best interest of countries to implement a reliable framework since timely and well-coordinated actions at all stages can significantly influence risk management and, eventually, the overall success of the project.

Various guidelines on risk management in PPP projects recognize the improved likelihood of PPP success through proactive identification of risks. A number of studies stress the importance of the proper assessment of project risks and flows in the early project phase since that can lead to the establishment of appropriate risk management systems. On the other hand, Romanian public sector participants in PPPs are usually less informed compared to their private sector counterparts due to the complexity of such arrangements and the multitude of risks involved. As a result, the public sector may enter into disadvantageous contracts leading to the misuse of public funds and drastic cuts in social spending. The problem is further exacerbated due to the absence of institutional frameworks and the lack of governance structures that support capacity development. I have noticed that since the number of PPP related risks is greater in countries with less experience in such partnership arrangements, it is important to address those issues that make timely actions at every stage almost impossible.

Risks in Public-Private Partnerships

The ability to properly identify and manage risks is a critical aspect of successful public-private partnerships (PPPs). The uniqueness of PPPs as a form of project delivery involves a distinct set of risks, many of which are specific to this type of arrangement and must be addressed to ensure the achievement of intended benefits. Risks in PPPs are varied and numerous, and can materially affect the ultimate success of projects (Mohsen Korayem, 2017). High profile risks, if manifest, could give rise to a sub-optimal project, including failures to deliver the infrastructure as promised, particularly through delays and cost overruns, and losses of future service delivery quality. Adverse risk realizations may increase pressure for renationalization and may damage the prospects of obtaining of a well-calibrated risk transfer, undermining the intended contribution of the PPP to the wider management of fiscal and service delivery responsibilities. As with any procurement, risk is a key issue for clients and potential tenderers, although PPPs can involve a more complex allocation of risks than the more traditional procurement routes.

The risks that may emanate from a PPP project can generally be grouped into four categories:

- **Financial risks**, which are to do with the financing of the project and include concerns about the inability of the private sector and/or the Special Purpose Vehicle (SPV) to raise adequate finance, interest rate fluctuations, revenue generation risk, etc;

Financial risks are among the most significant challenges in public-private partnerships (PPPs), as they can lead to project failure, strain public budgets, and increase national debt. One of the most common financial risks is cost overruns, where actual project expenses exceed initial estimates. These overruns can result from material price fluctuations, such as unexpected increases in the cost of steel, cement, and fuel, as well as labor shortages, which can lead to hiring delays or wage inflation. Unrealistic initial cost estimates also contribute to financial strain, as some bidders may underestimate costs to secure contracts. Additionally, design changes and scope creep, where project specifications are modified after contract signing, can further escalate costs. Revenue risks also pose a significant challenge in PPP projects. If expected revenues, such as tolls or user fees, fall short of projections, the private partner may struggle to maintain financial stability. Another critical concern is the potential increase in public debt. Some PPP agreements create hidden liabilities for the government, leading to a rise in national debt if financial guarantees are triggered.

Effectively managing these financial risks requires thorough risk assessment, careful contract structuring, and proactive financial planning by both public and private stakeholders.

- **Operational risks**, which are related to the operating phase and include fears

of failure of the private sector to provide the required infrastructure, lower than expected volumes of use, increased maintenance costs, etc;

- **Legal risks**, which may stem from non-compliance with legal and regulatory regimes;
- **Reputational risks**, risks that something could go wrong and that such an occurrence would affect the repute of either partner in the relationship. However, the proper appreciation of what may go wrong is an important first step for all parties involved in PPPs.
- **Political and regulatory risks** pose significant challenges to public-private partnerships (PPPs), as changes in government policies, regulations, or leadership can alter project terms or even lead to contract cancellations. Policy shifts may result in reversals where a new administration cancels, modifies, or delays existing PPP agreements based on its political agenda. In some cases, governments may expropriate or nationalize assets, seizing control of projects they perceive as unsuccessful.

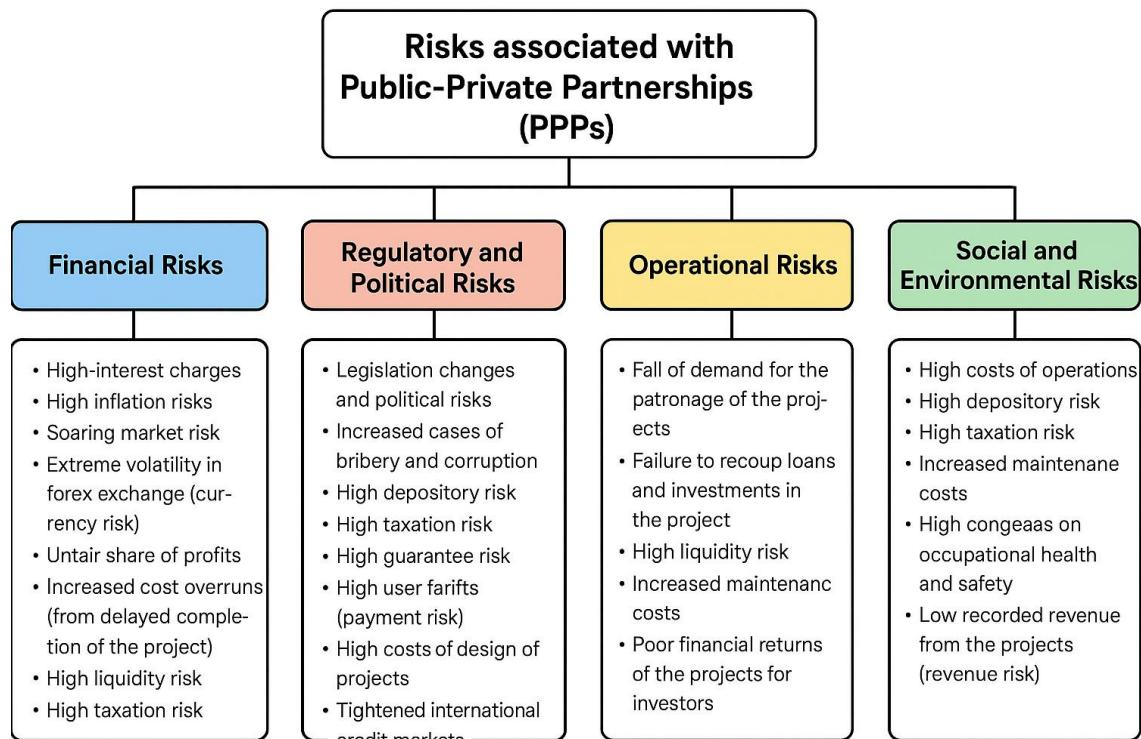


Figure 1. Risk associated with PPPs

Source: Author's processing.

From a certain point of view, a weak regulatory environment can lead to unpredictable enforcement of contracts, increasing financial and operational risks. Additionally, public opposition can play a critical role in the success or failure of a PPP. For example, Romanian legal framework is still without a clear structure and this uncertainty further complicates the business environment, also the investors. If a project is

unpopular due to high toll fees, environmental concerns, or other issues, widespread protests may pressure the government to renegotiate or cancel agreements altogether.

To mitigate these risks, clear and stable legal frameworks, transparent policymaking, and open communication between stakeholders are essential for maintaining long-term project stability.

The most obvious form of risk for the public sector arising from PPPs – namely lack of expected public sector benefits (which are however difficult to predict at the bidding stage). Of course, privately operated prisons still have to contend with the same volatility in inmate numbers as state-run ones, but legal contracts setting out the terms and penalties in advance are more complex to write and potentially oversee than formula-based payments for capacity or utilization, thus leaving unanticipated mitigants of the government from the risks associated with change. Also, badly designed or poorly enforced contracts can create large opportunity costs for the public sector or create large financial transfers to the private sector - either of which can undermine the credibility of PPPs as a whole.

Public-private partnership (PPP) projects are deemed as substantial investments with several types of risks accompanying them. Nevertheless, overseas and private investors are interested in investing in PPP schemes as they could be a viable alternative not only for participation in crucial infrastructure projects but also due to the expected potential of economic return on investments. The risks covered within PPPs can be categorized in different groups, where financial, operational, political, social, and other types of risks are identified. Each project is likely to encounter a unique combination of various risks that each has an influence on several counterparts. The negative scenario may manifest due to the existence of certain risks that can be enhanced by additional impacts of other types of risks through a cascading risk propagation. Understanding the classification of such impact is crucial while identifying mitigating actions. In return, the severity of risks allows for the prioritization of such impacting risks and helps in the proper allocation of available resources for managing these risks.

Mitigation Strategies for PPP Risks

Comprehensive risk identification and assessment represent the key first steps to develop strategies to mitigate the risks associated with a public-private partnership (PPPs). Comprehensive information about the project features and the collaboration parties should be obtained, including the historical PPP knowledge of the concerned public authority. This will help with the identification of past risks that materialized and thus utilize them as a benchmark. This risk identification activity should usually be carried out in coordination with stakeholders and external advisors. Detailed data about similar financing projects or the context of executing a project similar to the intended one might be sought (Mohsen Korayem, 2017). Reliable risk identification might indeed require adopting a model or instrument that is capable of widely covering most of the trappable risks. As a rule of thumbs, it is important to tailor the method selected according to the project characteristics and the knowledge levels of the participants in the analysis.

After accumulated risks are itemized and listed, they should be assessed to evaluate their magnitude and their likelihood to occur. Not all the accumulated risks share the same characteristics in terms of the severity of their impact, the time-period in which they might occur, and their social acceptability by public opinion. Therefore, a multidimensional risk assessment exercise should be conducted, with risks divided into target socio-economic categories. The assessment outcomes should invariably be used to determine the required level of risk buffer in the financing structure and to better select the banks. External banks' advisors might also verify the assessment quality and evaluate the scenarios adopted to devise suitable risk instruments. The un-conventional instruments available for executing such an activity shall also be recognized, with this activity being mostly related to innovative financial mechanisms or initiatives. If the project might affect some disputed areas, possible mitigation instruments should be devised in advance and possibly be enclosed in the financial agreements.

Risk Identification and Assessment

Recognizing and managing risks is often the most challenging function in public-private partnerships (PPPs) implementation. PPPs require significant investments, while providing substantial returns on investments. This situation makes PPPs attractive to both the public and private sectors. The stakes and risks are high. If one or both sides do not manage these investments and potential risks carefully, the consequences or losses can be substantial. The risks are magnified when each party is engaging in an endeavor it is not experienced in. In the case of PPPs, the public sector is venturing into private sector business, and for the private sector, it is venturing into operations in the public realm. Managing these risks in both realms requires a lot of skills and patience.

For PPP schemes to prosper, it is essential to accurately recognize the potential risks at the project's inception in order to enhance decision-making (Mohsen Korayem, 2017). As risks can vary depending on the scope and nature of the project as well as the broader social-political context, there are a variety of techniques and frameworks for the systematic identification and categorization of risks. It is important that different stakeholders are engaged in the process as they may have differing perceptions of risk. An effective risk assessment is a combination of thorough analysis of the project documents and ongoing analysis of the project execution. Where an appropriate framework is in place, such analysis can be conducted regularly at key project milestones and updated as necessary.

Continuous monitoring of potential risks throughout the life cycle of the project allows emergent risks to be determined and addressed with the provision of countermeasures in a timely manner. A transparent process is key to the development of a participatory project culture - everyone in the risk assessment process should be sure that his/her remarks are taken into account and that the required actions are understood. Two important tools for risk assessment are the risk matrix and scenario analysis. The risk matrix provides a snapshot of the project's risks profile, while scenario analysis permits a simulation of a variety of risk management scenarios to understand their positive or

negative impact. These methodologies and tools allow for more consistent and proactive project risk assessment, management, and monitoring.

Challenges Faced in PPPs

Within the infrastructure sector, they commonly take the form of contracts in which a private party designs, builds, finances, operates, and/or maintains the assets (typically on behalf of a public sector client) (Skelcher, 2010). PPPs have been leveraged globally since the 1990s to attract private investments into infrastructure and deliver, maintain, and operate public services—leading to a more efficient allocation of risk and resources. PPPs can take many forms, with contracts and risks distributed in a variety of ways. Yet common to all forms is the challenge, for the involved parties, of acting in concert when responding to the diverse risks and pressures posed by the projects (Nwangwu, 2021).

The execution of PPPs can be fraught with a myriad of challenges, whether internal or external to the partnership. The former relate to the soundness and robustness of the agreements underwriting the projects, while the latter relate to the economic, financial, and political factors impacting the stakeholders on a project. These agreements, or contracts, define the distribution of risks, rights, and obligations between the public and private partners over the project term, but more importantly detail the distribution of financial risks between public and private sectors.

However, the pace and complexity of PPP contracts have often been seen as obstacles to the effective execution of PPPs, leading to misunderstandings on the content and delays in reaching agreement, which can ultimately predispose to conflicts with the emergence of claims, start-up delays, and projects deduction. Many problems in the execution of PPPs are commonly related to the behavior of the parties, including inadequate risk assessment, poor knowledge of the projects, unrealistic expectations, and timing. This underlines the importance of setting clear objectives, engaging in an open dialogue, and fostering balanced and transparent agreements that can only be achieved through an early and structured program engagement.

Conclusion

This study shows that the effectiveness of Public–Private Partnerships in Romanian and European national governance systems depends primarily on the ability of public and private actors to identify, allocate, and manage risks in a coherent and transparent manner. The qualitative analysis reveals that financial pressures, regulatory instability, limited administrative capacity, and fluctuating public acceptance remain the most significant obstacles affecting PPP performance. These risks are not isolated, rather they appear consistently across countries and stages of the partnership cycle. Based on the patterns identified, personally I consider that strengthening institutional capacity and improving regulatory coherence are essential steps for enhancing PPP sustainability. The evidence examined throughout this research suggests that projects perform better when responsibilities are clearly defined, when risk allocation frameworks are consistently

applied, and when cooperation between partners is built on transparency and information sharing. Overall, this study contributes to the literature by synthesizing the principal risk determinants that shape PPP outcomes and by outlining practical directions for improving governance and implementation.

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