



Article

# Critical Success Factors for Public–Private Partnerships in Urban Regeneration Projects

Paula Vale de Paula <sup>1,\*</sup>, Rui Cunha Marques <sup>2</sup> and Jorge Manuel Gonçalves <sup>1</sup>

<sup>1</sup> CiTUA, Instituto Superior Técnico, University of Lisbon, 1049-001 Lisbon, Portugal; jorgemgoncalves@tecnico.ulisboa.pt

<sup>2</sup> RCM2+, Department of Industrial Engineering and Management, Lusófona University, 1749-024 Lisbon, Portugal; rui.marques@ulusofona.pt

\* Correspondence: paulavaledepaula@tecnico.ulisboa.pt

**Abstract:** Public–Private Partnership (PPP) arrangements are used in different sectors in the provision of infrastructure and public services. The use of PPP agreements in urban regeneration projects, although more recent, has been gaining prominence in different contexts. However, in many cases, PPP projects have a controversial implementation, often not achieving the proposed objectives and presenting negative results. Their controversial implementation is the result of a lack of knowledge and lack of application of the best practices and Critical Success Factors (CSFs) associated with them. Based on this, the present study aims to identify and analyze the CSFs for PPP arrangements in urban regeneration projects. The study was conducted in two distinct parts. The first part consists of a literature review on the PPP CSFs in general. The second part consists of the development of a questionnaire seeking to identify the CSFs of PPP arrangements for urban regeneration projects. Based on the literature review and the questionnaire answers, the main success factors of PPP projects for urban regeneration were identified and structured in the framework with five main clusters: two related to the external environment (enabling environment and exogenous factors) and three related to the internal environment (preparation phase, procurement phase, and contract management phase).

**Keywords:** critical success factors (CSFs); public–private partnerships (PPPs); urban regeneration



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## 1. Introduction

Public–Private Partnerships (PPPs) arrangements have been used over the years in different urban contexts to provide a variety of infrastructure and public services [1]. Initially used in other sectors, PPP projects also became part of urban planning, including urban regeneration projects.

The use of PPP models in urban regeneration projects has been observed since the 1990s, with greater growth in recent years, especially since the 2010s [2]. More recently, PPP projects have been gaining prominence in different contexts as a response to urban degradation and aims to reduce land consumption.

In geographical terms, the use of PPPs in urban regeneration projects has been especially prominent in Europe, with an emphasis on some countries such as Italy and the Netherlands; in the UK; in Asia, with an emphasis on China; and in North America, especially the USA.

PPP arrangements in urban regeneration can be used in different types of projects, with different scales and purposes. Mega-event projects are a clear typology of project related to a very specific purpose, such as sporting events—for example, the World Cup and the Olympics—and cultural events such as world exhibitions [3,4]. Another specific typology refers to Business Improvement District (BID) projects, a model that emerged in the United States and has been expanded to different contexts, with the aim of regenerating delimited districts and improving services in these areas [5]. Brownfield’s redevelopment and industrial typology is used to combat the decline in industrial areas, which can include

soil decontamination, with a strong environmental component [6]. Urban regeneration associated with sustainable projects is another identified typology that has a strong environmental character, including concerns about promoting low carbon and reducing greenhouse gas emissions [7]. Urban regeneration associated with smart and creative city projects is a typology strongly related to culture, art, and iconic architecture [8]. Waterfront regeneration projects are also very common, and can even be related to mega-event projects, the recovery of industrial areas, or creative cities. Another typology related to creative cities is entertainment and shopping projects, the aim of which is to create a post-modern space for production, service, and consumption [9]. Finally, the urban regeneration of central and heritage areas is a project typology identified especially in Western Europe, where urban centers have gone through phases of decline [10].

Despite these different types of projects, PPP arrangements in urban regeneration are usually part of a logic of neoliberal politics and neoliberal urbanism [11], characterized by the privatization and commodification of urban planning, and the predominant action of the private sector in a context of competition between cities in the global economy [12].

Another aspect to consider is the multiplicity of actors involved in and affected by urban regeneration projects carried out through PPP agreements. The local community and residents are among the most important actors in PPP processes in urban regeneration projects, since they are the group most affected by the results of these processes, either through improvements or the negative consequences of these processes [13]. Local authorities, like the local community, play an important role in PPP processes since, in general, it is the role of local authorities in different urban contexts to implement urban regeneration policies, programs, and projects, as well as to manage relations between the public sector and citizens [14]. The private sector is another important actor since, with neoliberalism, the private sector ends up taking on functions that were initially public [15]. Other actors are the new agencies created specifically to manage these partnerships and non-profit companies which, in some situations, perform community development functions for populations.

The multiplicity of actors involved creates a difficult governance context, which in many cases leads to problems such as conflicts of interest, gentrification, social exclusion, and accountability.

Furthermore, in the context of PPP agreements in urban regeneration projects, financial and economic issues, as well as management and contract issues, have not been widely studied to obtain a better understanding of these practices [2], which can conduct to issues in their implementation and development.

Given this context, it can be seen that, in many cases, PPP agreements in urban regeneration projects have a controversial character. Despite sounding good in theory, these practices often do not have positive results, do not achieve the proposed public service objectives, and have negative consequences.

It is therefore necessary to improve the study of this type of partnership, seeking greater knowledge about its implementation and management, to make these processes more efficient. Identifying best practices through Critical Success Factors (CSFs) is an interesting way of improving these practices.

CSFs have been studied over the years by different authors, in different sectors, and using different approaches. However, no studies were identified concerning CSFs in PPP agreements in urban regeneration projects, demonstrating an important gap to be studied.

Based on this, this paper aims to identify the PPP CSFs in urban regeneration projects. The identification of PPP CSFs in urban regeneration projects, besides responding to the identified gap, makes an innovative contribution to the literature on the subject and can help professionals in the public and private sectors develop successful partnerships in this area.

Attending to the objective, the study intends to answer the following research questions:

- What CSFs should be present in the external environment to favor a PPP in urban regeneration projects?

- Which CSFs can be incorporated into PPP arrangements in urban regeneration projects to favor their implementation and management?

The methodology was carried out in two parts. The first part referred to the CSFs for PPP projects in general, through a literature review and the identification, analysis, and selection of factors. The second part referred to the PPP CSFs specific to urban regeneration projects through the application of a questionnaire, the analysis of the results, and the framework proposal.

The paper is structured in five sections. The first section consists of this brief introduction, the second section refers to the methodology, the third section refers to the literature review of the topic, the fourth section deals with the results obtained, and the fifth section presents the discussion and the conclusions of the study.

## 2. Materials and Methods

The first methodology concerns the analysis of PPP CSFs in general. Considering that this theme has not been identified for PPP agreements in urban regeneration projects but has been widely addressed by different actors in other sectors, a brief literature review was chosen to synthesize the main identified factors. The literature review was carried out in three steps: the search for articles, the exclusion and selection of articles, and the analysis of the selected articles. The search for articles was developed through three distinct searches in Scopus:

- Critical Success Factors + Public-Private Partnerships (27 articles found);
- Success Factors + Public-Private Partnerships (31 articles found);
- Critical Factors + Public-Private Partnerships (33 articles found).

The three searches resulted in a total of 91 articles. The process of exclusion and selection removed duplicate articles and articles considered not relevant to the research, such as articles aimed at PPP CSFs for ports, airports, roads, and high-speed lines. Based on this, the following numbers of articles were excluded:

- Duplicate articles (54 duplicate articles from the 91 articles found—37 unique articles);
- Articles not relevant to the research (16 articles not relevant to the research from the 37 unique articles—21 relevant articles).

After the exclusion process, 21 unique and relevant articles remained, which comprised the sample. The analysis of the selected articles considered information related to the content of the articles, seeking to identify the CSFs studied by the different authors. The identified CSFs were analyzed and categorized into clusters.

The second part relates to the PPP CSFs in urban regeneration projects. As this is a more specific theme, no literature already produced on the theme was identified. Thus, a questionnaire was created and distributed to specialists. The questionnaire was based on the clusters and factors identified in the first part of the study and was developed and applied online using the Google Forms Platform.

The formulation of the questionnaire comprised two parts: the first part contained questions related to the profile of the respondents and the second part contained questions associated with the theme of the study. The questions regarding the profile of the respondents include age, gender, country, level of education, and professional or academic experience.

The questions related to the topic of study support were developed from closed and open questions. The closed questions allowed for clusters and factors to be assigned a degree of importance according to the specialists' own opinion, while the open questions referred to the identification of the main factors among the mentioned factors and the identification of other factors in addition to the mentioned ones.

Before its general application, the questionnaire was presented at a national workshop with international academic and professional experts, where suggestions for its improvement were presented and incorporated. A pilot questionnaire was also carried out, and feedback from this was incorporated into the final version. Finally, the questionnaire was

sent to 350 experts and received 46 responses. The specialists had expertise in public–private partnerships and/or urban regeneration projects. They were identified from the scientific articles analyzed and the networks related to the topic, and belonged to different countries around the world. All 350 experts were contacted by e-mail, where they received the link to answer the questionnaire. The analysis of the answers allowed for the formulation of the framework for PPP CSFs in urban regeneration projects.

### 3. Literature Review

The review of the literature on PPP CSFs shows that the topic has been addressed by different authors in different ways, whether in different periods, focusing on different specificities of PPP projects, or different contexts. Also noteworthy are the methodologies and methods that were applied in the studies.

Regarding study periods, Osei-Kyei and Chan [16] conducted a literature review on PPP CSFs between the years 1990 and 2003, producing a summary table of the factors they obtained and highlighting five main factors: appropriate risk allocation and sharing, strong private consortium, political support, community/public support, and transparent procurement.

Regarding the specificity of PPP projects, some articles focused on PPP CSFs with specific purposes; for example, PPP studies for infrastructure related to basic services such as health, education, water supply, electricity, and transport [17], and PPP studies for affordable housing [18]. Liu et al. [17] identified CSFs throughout the partnership life cycle, relating them to three distinct phases: initiation and planning (P1), procurement (P2), and partnership (P3). Alteneji et al. [18] developed, through a literature review, a CSF summary table, highlighting four factors: political support and stability, trust and openness, a favorable and efficient legal framework, and appropriate risk allocation and risk sharing.

Regarding their context, papers on PPP CSFs for specific contexts were identified and analyzed. Examples include the papers by Ismail [19], Sanni [20], and Hwang et al. [21], who studied the contexts of Malaysia, Nigeria, and Singapore, respectively.

Ismail [19] investigated PPP CSFs in Malaysia through a questionnaire survey, further seeking to identify the perceived differences between the public and private sectors. The author identified five main factors: good governance; the commitment and responsibility of public and private sectors; a favorable legal framework; sound economic policy; and an available financial market.

Sanni [20] studied the Nigerian context, also through questionnaires, identifying seven main success factors: projects feedback, leadership focus, risk allocation and economic policy, good governance and political support, short construction period, favorable socio-economic factors, and delivering a publicly needed service.

Hwang et al. [21] studied, also through surveys, the PPP projects carried out in Singapore regarding CSFs, risk factors, and risk attribution. The CSFs found by the authors were: well-organized public agency; appropriate risk allocation and sharing; strong private consortium; transparency in the procurement process; clearly defined responsibilities and roles; clarification of contract documents; a favorable legal framework; and shared authority between public and private sectors.

Papers addressing PPP projects for specific purposes and contexts were also identified. Regarding affordable housing, for example, Alteneji et al. [22] studied the PPP CSFs in this context in the United Arab Emirates (UAE), while Kavishe and Chileshe [23] studied the same context in Tanzania.

Alteneji et al. [22] identified, from a questionnaire and based on previous international and local studies, the PPP CSFs for affordable housing in the UAE, with these being good governance, government guarantees, the commitment and responsibility of the public and private sectors, favorable and efficient legal frameworks, political support and stability, and demand for and the debt-paying ability of the project.

Kavishe and Chileshe [23], in turn, studied the PPP CSFs in affordable housing in Tanzania through semi-structured interviews and identified the following factors: a dedicated team of professionals to oversee the PPP projects, official and unofficial site visits and inspection, government support and guarantees, undertaking checks and balances from the design stage to the construction stage, scrutiny of PPP project proposal, and trust and integrity.

Another example is the infrastructure sector, studied by Nguyen et al. [24] in the context of Vietnam and by Al-Saadi and Abdou [25] in the UAE.

Nguyen et al. [24] analyzed the PPP CSFs of infrastructure in Vietnam through interviews and surveys, as well as using the word cloud technique and ANOVA technique. The results obtained by the authors led to the identification of five main factors: timely land acquisition and appropriate compensation, the financial capacity of the private sector, effective project management, a favorable and complete legal framework and regulations, and financial feasibility and attraction.

Al-Saadi and Abdou [25] identified, through interviews, the PPP CSFs in the infrastructure sector in the UAE, with these being the availability and effectiveness of proper regulatory and legal framework for PPPs; proper risk allocation and sharing among project stakeholders; a clear project brief and client outcomes; the comprehensiveness and business viability of the project feasibility study; and proper project value management systems during different project phases.

Some papers also address the topic through comparative studies of two or more contexts. Osei-Kyei and Chan [26] conducted an empirical comparison of the PPP CSFs in developed and developing countries, using Hong Kong and Ghana as case studies. The authors used surveys with professionals in the two countries and statistical analyses, identifying the main factors in each country and how these differ in order of importance. In total, eight major factors were identified for Hong Kong—appropriate risk allocation and sharing, favourable legal and regulatory framework, choosing the right private consortium, strong private consortium, clear goals and mutual benefit objectives, clear project brief and design development, detailed project planning, reasonable user fee charge—and eight for Ghana—transparent PPP process, favourable legal and regulatory framework, political stability, clarity of roles and responsibilities among parties, right project identification, political/government support, competitive tendering process, stable macroeconomic indicators.

Regarding the methodologies and methods used, as can be observed, many articles that were analyzed referred to expert opinion through surveys [18–21,24,26–30], interviews [31,32], and semi-structured interviews [23,25].

Many articles also employed statistical analysis. Osei-Kyei et al. [33] used factor analysis and fuzzy synthetic evaluation technique to identify the groups of 19 CSFs associated with the operational management of projects undertaken in PPP projects. Shi et al. [30] examine the interrelationships among CSFs through hypotheses tested using structure equation modelling (SEM). Ahmad et al. [32] utilized statistical analyses and a structural equation model to establish the relationships between the success of a PPP arrangement and CSFs.

Finally, the analysis of the 21 selected articles resulted in the identification of 121 different CSFs.

## 4. Results

### 4.1. CSFs Identified

The analysis of the identified factors allowed for a better selection and easier categorization into different clusters. The selection was based on the choice of the main CSFs, which may correspond to the factors identified in the literature, or even include other more specific factors. The classification led to five different clusters.

Concerning the clusters defined, two correspond to the PPP's external environment and three correspond to the internal environment. The internal environment clusters—the preparation phase, procurement phase, and contract management phase—are aligned with

other studies on CSFs in PPPs, as proposed by Liu et al. [17], focusing on identifying CSFs through the PPP life cycle process. Furthermore, considering that the PPP’s external environment also influences its success, two external factors were added to this study—the enabling environment and exogenous factors. The enabling environment refers to the entire environment external to a PPP project that can be controllable to favor or disfavor a partnership. The exogenous factors correspond to all factors external to a PPP project that cannot be controlled. Table 1 shows the factors selected for each cluster, comprising the basis of the questionnaire.

**Table 1.** Clusters and selected factors.

	Clusters	CSFs Selected	References
External environment	Enabling environmental	Favorable legal and regulatory framework	[18,19,21,22,24–26,29–32,34]
		Government support and guarantees	[22,23,26,29–32,35]
		Leadership focus	[20]
		Political support and stability	[16,18,20,22,26,28–32]
		Standardization procedure for PPP projects	[30]
	Exogenous factors	Well-organized and committed public agency	[21,25,29,31,32]
		Available financial and capital market	[19,25,28–32,34]
		Community support	[16,28,29,31,35]
		Favorable socio-economic factors	[20]
		Stable macroeconomic condition and sound economic policy	[19,26,28–33,36]
Internal environment	Preparation phase	Availability of resources and skilled and dedicated team of professionals	[23]
		Clear defined responsibilities and roles	[21,29,32]
		Clear project scope definition and documentation	[30]
		Comprehensive and business viability of project feasibility study	[25]
	Procurement phase	Good governance	[17,19,20,22,28,29,31,32]
		Availability of resources and skilled and dedicated team of professionals	[23]
		Competitive and standardized bidding process	[17,26,29,31,32]
		Transparent procurement process	[16,21,26,29,31,32]
	Contract management phase	Trust and openness	[18,23,28]
		Commitment and responsibility of public and private sectors	[19,22,29,31,32]
Effective conflict management		[17]	
Effective contract management		[17,30]	
		Good governance	[17,19,20,22,28,29,31,32]
		Open and constant communication among stakeholders	[33,35,36]

#### 4.2. PPP CSFs in Urban Regeneration Projects

To study the specific CSFs for PPP agreements in urban regeneration projects, the results obtained from the questionnaire answered by the 46 experts were analyzed. The 46 experts were contacted via email and answered the questionnaire using the Google Forms Platform.

The results were analyzed based on the two parts of the questionnaire. The first part refers to the profile of the respondents and the second part to the topic itself.



#### 4.2.1. Analysis of the Respondents' Profiles

The analysis of the respondents' profiles makes it possible to characterize the 46 experts who contributed to the study. The questions regarding the profile of the respondents included their age, gender, country, level of education, and professional or academic experience.

Concerning age, the questionnaire was divided into the following age groups: less than 30, 30–40, 41–50, 51–60, and more than 60. Two respondents (referring to 5%) were under 30 years old; twelve respondents (26%) were between 30 and 40 years old; thirteen respondents (28%) were between 41 and 50 years old; twelve respondents (26%) were between 51 and 60 years old; seven respondents (15%) were over 60 years old.

As far as gender is concerned, the questionnaire included the options "female", "male", and "other". Of the 46 respondents, 6 respondents identified with the female gender, which corresponds to 13% of the respondents, and 40 respondents identified with the male gender, which corresponds to 87% of the respondents.

Regarding country, the questionnaire was answered by experts from 15 different countries: Belgium, Brazil, China, France, India, Ireland, Italy, Nigeria, Portugal, South Africa, Spain, Syria, The Netherlands, the UK, and the USA. Brazil leads in terms of the number of responses, with 10 respondents (22%), followed by the UK and the USA, both with 5 respondents (11%), and Italy and Portugal, both with 4 respondents (9%).

Concerning educational qualifications, the questionnaire comprised the following options: technical formation, graduation, post-graduation, master's degree, doctorate, post-doctorate, or other. Of the 46 respondents, 1 respondent had an MBA (2%), 4 respondents had a master's degree (9%), 29 respondents had a Ph.D. (63%), and 12 respondents had a post-doctoral degree (26%).

Regarding the type of sector in which they work, the questionnaire included the following options: academia, public sector, private sector, or other. Thirty-three respondents belonged to academia, which corresponds to 72%. Seven respondents belonged to the public sector (15%) and six to the private sector (13%).

As far as job titles are concerned, the questionnaire included the following options: Project Manager, Consultant, Finance/Accountant, Quantity Surveyor, Architect, Engineer, Analyst, Researcher or other. The 46 respondents were divided into 11 positions: Analyst, Consultant, Director, Economic-Tariff Coordinator, Engineer, Lawyer, Ph.D. Candidate, Professor, Project Manager, Researcher, or Town Planner. The positions of professor and researcher stand out, with 16 respondents each (35% each), followed by consultant and project manager, with 3 respondents each (7% each).

Finally, concerning the years of experience in PPP projects or urban regeneration projects, the questionnaire included the following ranges: 0–5 years, 6–10 years, 11–15 years, 16–20 years, or 21 years or more. Six respondents had 0 to 5 years of experience (13%), three respondents had 6 to 10 years of experience (7%), nineteen respondents had 11 to 15 years of experience (41%), seven respondents had 16 to 20 years of experience (15%), and eleven respondents had 21 or more years of experience (24%).

#### 4.2.2. Analysis of Results

Regarding the analysis of the results, initially, the Likert scale results were analyzed, followed by the ranking results. To analyze the questions on the Likert scale, items on the scale were assigned weights from 0 to 3 (Table A1—Appendix A), with a null value being assigned when the factors were not considered important and a value of 3 being assigned to factors considered very important. Assigning weights helps to understand the results, making it possible to compare the scale numerically.

Through the weights assigned to each item in the Likert scale, it is possible to quantify the different clusters and factors within each cluster to understand which are the most relevant clusters and which are the most relevant factors within each cluster. The following figures show the results of the Likert scale for the clusters and the factors within each cluster with and without the assigned weights (Figures 1 and 2).

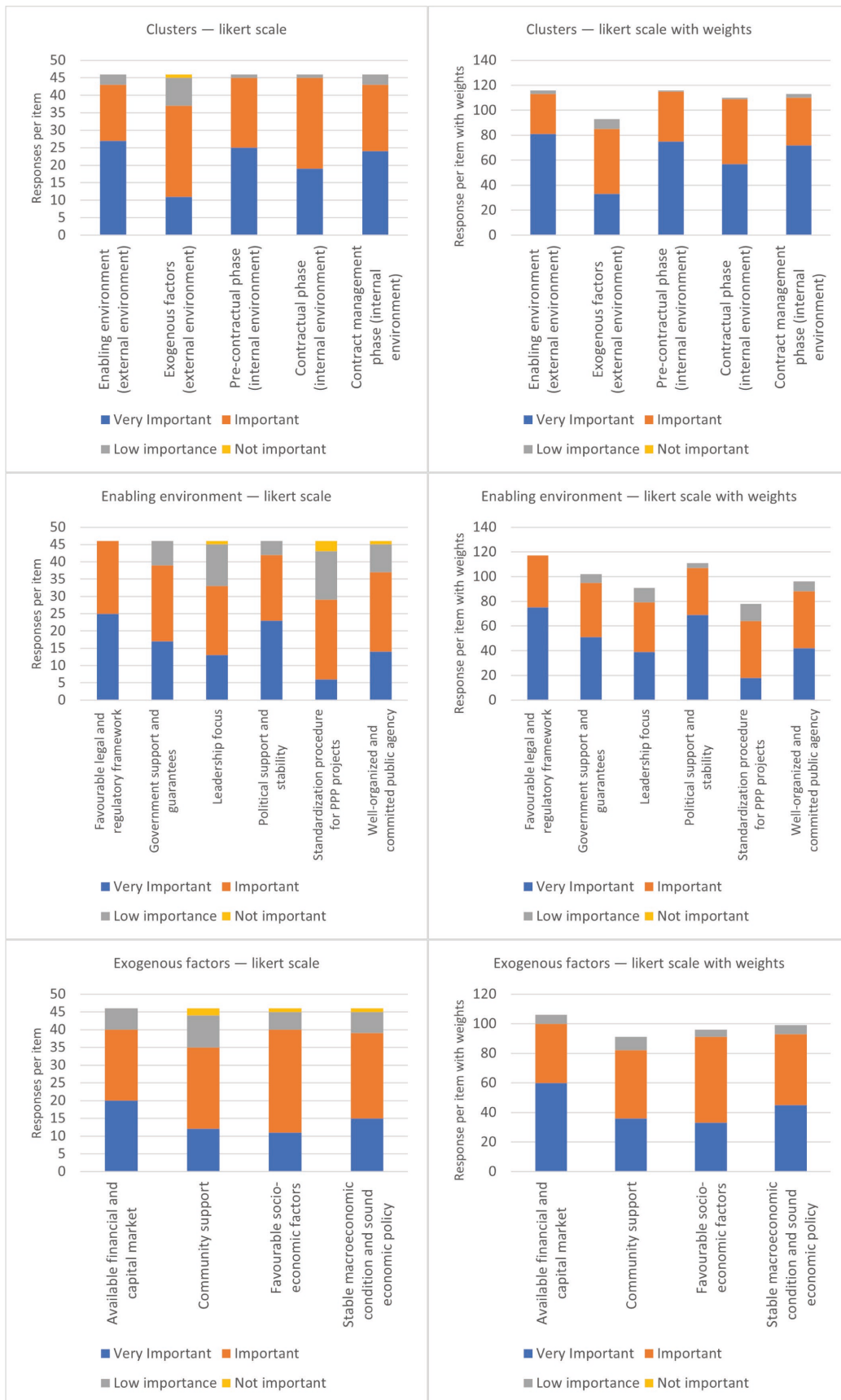


Figure 1. Likert scale analysis.



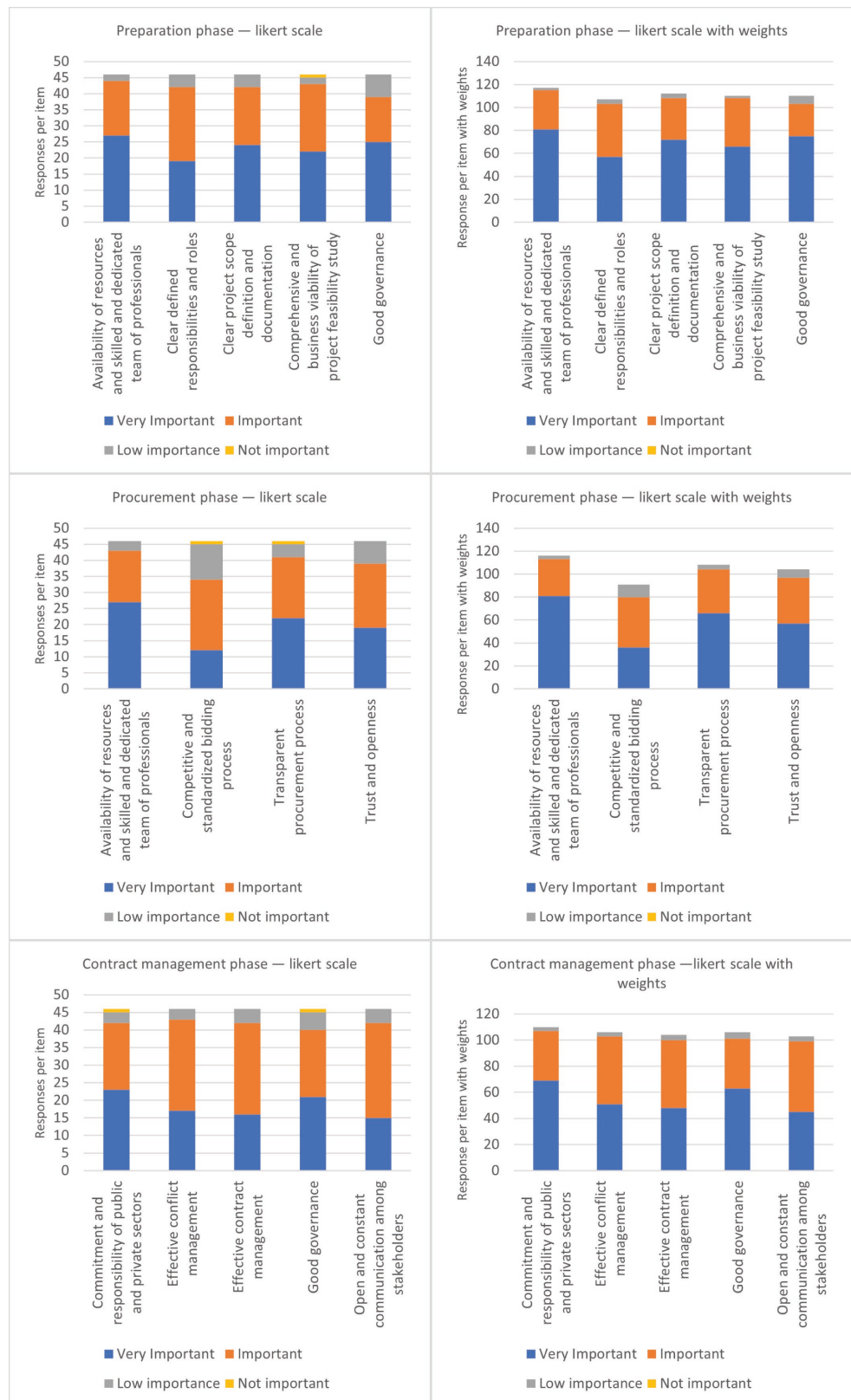


Figure 2. Likert scale analysis (cont).

Once the Likert scale response analysis was completed, the rankings of the responses were analyzed. In this case, weights were assigned according to the different rankings, i.e., rankings with four, five, or six positions (Table A2—Appendix A). Similarly, when analyzing

the Likert scale, assigning weights to the ratings makes it possible to understand the clusters and factors considered most important. The results are shown in Figures 3 and 4.



Figure 3. Ranking analysis.



Figure 4. Ranking analysis (cont).

It is also interesting to compare the results obtained by the two analyses. It can be seen that most of the results are confirmed in both analyses, such as the cluster analysis, the enabling environment, and the procurement phase. In some cases—for example, the preparation phase and contract management phase—the ranking analysis shows differences that are less present in the Likert scale analysis. Finally, in the analysis of the exogenous factors, some differences in positions are observed.

#### 4.3. Framework Proposal

Through the results obtained and the different weightings, it was possible to structure the framework of PPP CSFs in urban regeneration projects. The developed framework consists of a conceptual framework, which includes the clusters and the factors internal to each cluster. Additionally, each factor is briefly presented, including its definition and its importance to the best practices. Since no cluster or factor was considered highly irrelevant concerning the others and no other factor was included in the interviews or through the open questions presented in the questionnaire, the final framework considered the clusters and factors that were initially proposed. Figure 5 illustrates the proposed framework.



Figure 5. Framework of PPP CSFs for Urban Regeneration Projects.

#### 4.3.1. Favorable Legal and Regulatory Framework

A favorable legal and regulatory framework are the instruments that protect the rights, interests, and objectives of all parties [37]. Several authors refer to the importance of a legal and regulatory framework for PPP arrangements following each country's rule of law [18]. The World Bank defines a PPP legal framework as the sum of a country's laws and regulations, as well as guidance, precedents, and other materials, whether legally binding or not, that impact and govern the full life cycle of PPP projects and provide legal authority to the entities involved in their execution [38]. A well-defined legal and regulatory framework helps to reliably attract competitive and experienced interest from the private sector and foreign investors, as it demonstrates the government's commitment to developing PPP projects in a transparent and long-term manner [38], which motivates the private sector to enter into partnerships [39]. Furthermore, when putting PPP policy into practice, a well-defined legal and regulatory framework ensures that the partnership works efficiently [39] and satisfies the needs of the public and the government [38].

#### 4.3.2. Government Support and Guarantees

Government support translated into government guarantees is a factor that contributes to the success of a PPP project for a few reasons. Government guarantees can allow the creditworthiness of projects that would not be able to receive investments without such guarantees due to the risks that the private sector would not be willing to bear [40]. Zhang [37] explains this issue by stating that many projects involve substantial investments, and most of them are upfront and in the first years of the project, and thus have high economic value, while the objectives have higher social values, making them financially unattractive and even unfeasible without government support and guarantees to ensure financial viability. In this sense, government guarantees also demonstrate the government's commitment to PPP projects, helping build trust for private partners, especially in countries where PPP practices are more recent [40]. Finally, government guarantees can improve the terms of the financing, either by reducing the cost of financing, increasing the amount of financing that is available, or increasing the tenor of the financing [40].

#### 4.3.3. Leadership Focus

For a PPP project to be successful, the public sector must be able to play the necessary leadership role in implementing the partnership [20]. The leadership role of the public sector includes making the partnership work, aligning the implementation process with government objectives, assembling a team for documentation production, and providing good guidance to private sector participants [20]. It is also the responsibility of the public sector, as the PPP leader, to communicate with the various stakeholders, including the community. Community support, as we will see below, is also a success factor for the PPP project and is only possible based on good communication [41].

#### 4.3.4. Political Support and Stability

The process of a PPP arrangement is much longer than a political mandate. This means that, for private partners to engage in a PPP project, they need to feel that there is sufficient political stability to ensure the continuity of the partnership. A PPP project can last for decades; therefore, political stability must be maintained over long periods [18]. On the other hand, political instability and frequent policy changes can difficult the implementation of a PPP arrangement [42]. It is also emphasized that, in countries where PPP projects are still in the early stages, political support and stability are crucial elements, as this provides confidence to the actors involved [43].

#### 4.3.5. Standardization Procedure for PPP Projects

The standardization of procedures contributes to achieving efficiencies and improves the performance of PPP procurement processes [44]. On the public sector side, standardizing the PPP process helps to ensure that all PPP processes are developed in a way that is



consistent with the government's objectives [45]. In addition to this, it also helps coordinate the various entities involved [45]. On the private sector side, standardization of the PPP process facilitates better preparation.

#### 4.3.6. Well-Organized and Committed Public Agency

A well-organized and committed public agency with qualified personnel who are experienced in PPP projects and have an adequate technical capacity is important for the success of a PPP project [25]. A committed public agency can negotiate on behalf of the public sector, defending its interests [46]. In addition, a well-organized public agency demonstrates the public sector's commitment to PPP practices, and may also help to increase the private sector's confidence in engaging in partnerships. Li et al. [46] suggest that, in addition to internal organization, it could also be an asset to draw on external expertise and the experience of advisors to complement the public sector when needed.

#### 4.3.7. Available Financial and Capital Market

Considering that one of the objectives of PPP is to reduce the financial burden on the government with private sector financing of PPP projects, there must be a financial and capital market available [47]. Cheung et al. [48] state that the availability of an efficient and mature financial market that allows for low funding costs and a diverse range of financial products is an incentive to the private sector. In this sense, the availability of flexible and attractive financing instruments, such as debt, equity, supplier and buyer credit, and bonds, is considered important to enable the private sector to finance PPP projects at a reasonable cost [37].

#### 4.3.8. Community Support

Osei-Kyei and Chan [16] state that the acceptance and understanding of the public community, the media, the unions, civil society, and non-governmental organizations are determinants to ensure the progress and continuity of a PPP project. The authors also state that at the early stages, community support can prevent delays. Another positive aspect of community support can be the hiring of local labor, reducing production costs [16]. The World Bank [49], in their guide to community engagement in PPP arrangements, presents the benefits obtained when the contracting authority and the private sector give the community a voice. According to them, giving communities a voice in PPP projects helps to deliver services valued by the community; keep tariffs at fair and affordable levels; involve the community in problem-solving; manage expectations so that they are realistic and achievable; manage risks and mitigate disagreements; and reduce the prospect of delays and disruption [49].

#### 4.3.9. Favorable Socio-Economic Factors

Favorable social and economic conditions are important for the success of a PPP project. Studies show that the implementation of PPP projects would only be successful in a favorable investment environment [20]. A favorable socio-economic scenario encourages the private sector to engage in economic activities such as partnerships. In addition to a positive current scenario, a positive perspective on future socio-economic scenarios is also important. Favorable socio-economic factors allow the public sector and the population to have a robust payment capacity, ensuring stability in PPP payments [47].

#### 4.3.10. Stable Macroeconomic Condition and Sound Economic Policy

A sound economic policy is important to the success of a PPP project, considering that appropriate economic policy measures can lead to a growing and stable economic environment, which in turn allows the private sector to operate with greater confidence [19]. In addition, a stable macroeconomic environment reduces the cost of capital for the private sector, making cheaper solutions possible. A sound economic policy also allows for market certainty, further reducing risks for the private sector [19]. In contrast, an unstable macroe-



conomic condition affects the proportion of risks that the private sector is willing to accept, hindering the PPP's success [28].

#### 4.3.11. Availability of Resources and Skilled and Dedicated Team of Professionals

PPP projects are complex, sophisticated and long processes, so they are very demanding regarding resources. In addition, it is important to have a dedicated team of professionals to accompany the entire process on the public sector side, as is the case with the private sector [42]. In this sense, Kavishe and Chileshe [23] refer to the need for a dedicated team to oversee PPP projects. The same authors highlight the need to select, within the organizations that are involved, competent professionals to make up the team.

#### 4.3.12. Clearly Defined Responsibilities and Roles

A clear definition of responsibility assists in the future ability to implement the partnership [50]. A clear definition of the responsibilities and roles of the different actors involved in the PPP arrangement influences the relationship between the parties involved in the following phases of the partnership and may facilitate or hinder the implementation and achievement of the established goals. This is because, as we will see below, the commitment and responsibility of the public and private sectors in the PPP project is a factor for success in the management of the contract and should, therefore, be clearly referred to in the preparation phase [47].

#### 4.3.13. Clear Project Scope, Definition, and Documentation

As well as a clear definition of responsibilities and roles, a clear definition of the project's scope and clear documentation aids in the future ability to implement the PPP project [50]. A clear project definition presupposes a clear justification of the need for the project, the definition of a realistic project objective, the definition of the operation's scope and geographical area, the technical design, the functional responsibilities of the different organizations, previous knowledge gained from similar projects, and so on [51]. A clear definition of the project's scope and documentation is fundamental for a transparent procurement process in the contractual phase [41]. A clear definition of the scope and clear documentation, coupled with a transparent procurement process, reduces conflicts that may arise during the PPP project and the necessity of negotiations.

#### 4.3.14. Comprehensive and Business Viability of Project's Feasibility Study

A comprehensive and business viability study of the project includes the preparation of technical feasibility studies, and financial and socio-economic analyses considering realistic cost and benefit assessments [25]. The successful delivery of services and infrastructure through PPP arrangements is directly influenced by the quality of studies [52]. Problems and delays during negotiation and procurement can be avoided through comprehensive feasibility studies with a robust economic and financial analysis [53].

#### 4.3.15. Good Governance

The United Nations states that good governance is important in PPP agreements for governments to reach maturity, involving both citizens and stakeholders [54]. From a governance perspective, PPP arrangements are more complex than non-PPP projects [22]. In PPP projects, stakeholders and governance issues develop in different arenas: government, public administration, judiciary, economic society, political society, civil society, and sustainable development [54]. The challenge for good governance in PPP projects is to manage all parties, as stakeholders' interests are not always fully heard. Good governance involves principles such as participation, decency, transparency, accountability, fairness, and efficiency [54]. Good governance combats a lack of transparency and unethical behavior, which negatively affect PPP processes [28].

#### 4.3.16. Competitive and Standardized Bidding Process

Li et al. [46] state that the process should be competitive throughout. The authors further state that a competitive process enhances the project's value for money. Marques and Berg [42] explain that, for a standardized bidding process, the public sector should define a priori the criteria and the rules to be followed, providing them to the competitors before the proposals are presented. The authors further state that only through a standardized bidding process is it possible to ensure comparability among competitors and thus analyze the essential factors. This makes it possible to select the most competitive proposal for the partnership.

#### 4.3.17. Transparent Procurement Process

Natalia et al. [55] state that a transparent procurement process is key to reducing the transaction costs and shortening the negotiation and contract times. The authors further state that a clear description of the project and its requirements can help to achieve a transparent procurement process. This means that a clear project description during the pre-contractual phase ensures a transparent procurement process in the contractual phase. Osei-Kyei and Chan [16] emphasize that transparency should not be limited to procurement but should extend to the entire PPP process. Transparency should occur not only between both parties—public and private—but also with external stakeholders and users [16].

#### 4.3.18. Trust and Openness

Lambert et al. [56] state that the ability to build and maintain a deep level of trust is critical to the successful operation of a partnership. Cheng et al. [57] state that, to take advantage of the possible benefits of PPP arrangements, trust between the involved partners is fundamental, as this will increase the willingness to cooperate. Trust also solidifies the relationship between partners and achieving successful PPP projects [58]. However, there needs to be openness between the parties for trust to be built, as well as transparency regarding each other's interests, especially considering that these interests are naturally different [59].

#### 4.3.19. Commitment and Responsibility of Public and Private Sectors

Romancik [60] states that the commitment of the partner parties is necessary to ensure the success of a PPP arrangement and to achieve the objectives of the PPP project. The author further states that all parties must allocate their best resources. Chan et al. [61] states that for projects to be implemented, the public and private sectors must demonstrate an equal commitment to the objectives of the PPP project. Natalia et al. [55] state that it is important to define and share the responsibilities of each party appropriately to create a solid relationship for the PPP to run smoothly. The authors further state that the attitude of stakeholders in PPP projects can affect the quality of the outcomes and that the relationship between stakeholders should therefore be considered. Alteneiji et al. [22] state that the commitment of the partnering parties enables positive returns for both parties, improves the ability to meet the public sector's demands, and enables the creation of profit opportunities for the private sector.

#### 4.3.20. Effective Conflict Management

PPP arrangements are complex and lead to conflicts. In PPPs, conflicts are inevitable because of their long-term nature and the multiplicity of stakeholders with different beliefs and interests [62]. In discussing conflict, Marques [59] states that PPP projects are like loaded guns and that, for this reason, partnerships often come to a halt. The author explains the issue by stating that because they are complex and sophisticated arrangements, involving layers of contracts and entities, long periods, and several actors that are directly and indirectly involved, conflict within a PPP arrangement is almost always expected [59]. Given this issue, it is important to deal with conflicts efficiently. Many conflicts can be avoided or mitigated with good governance and good relationships between parties.

However, when these measures are not enough, efficient conflict management is required. Efficient management should deal with the conflict as early as possible and involve those responsible in both the public and private sectors [59], avoiding the escalation of the problem and the compromise of the partnership.

#### 4.3.21. Effective Contract Management

As well as effective conflict management, effective contract management is also key, considering the complexity of the partnerships [63]. PPP arrangements must be implemented in accordance with the contract; therefore, contract management is an important process [64]. The PPP's construction and operation can last for years, during which time contract management must obtain control over the costs, time, safety, material, techniques, and skills [64]. Contract management becomes even more important when we consider the renegotiations that occur post contracting [65]. Renegotiations are the result of incomplete contracts, tenders with bias, overly optimistic proposals in the public bidding phase, and scenario changes that occur over time [66].

#### 4.3.22. Open and Constant Communication Among Stakeholders

By their nature, PPPs include a wide range of actors with interconnected relationships. These actors are not limited to the procuring authority and the private sector companies but include other stakeholders such as the public, end users, investors, and other government departments [67]. Considering the different actors and relationships that can be established, there must be communication between them. Osei-Kyei et al. [33] states that frequent and transparent communication between external and internal stakeholders facilitates trust and deepens commitment to the management of the project. The authors further state that the concerns [1] and interests of all stakeholders should be managed to avoid any party feeling marginalized. Through its leadership role, the public sector must communicate with all stakeholders. In other words, the public sector must be responsible for stakeholder management [67]. A good relationship between the public and private sectors enables good PPP implementation and management. Furthermore, the participation of society also facilitates the PPP project's progress.

### 5. Discussion and Conclusions

The study aimed to identify CSFs for PPPs in urban regeneration projects, proposing an innovative structure. The study was carried out through two main phases. The first phase, referring to CSFs in partnerships in general, consisted of a brief literature review, through which it was possible to identify the factors cited in the available literature. In total, 121 factors were identified in 21 analyzed articles. These factors were analyzed, selected, and categorized into five clusters, with two associated with the external environment (enabling environment and exogenous factors) and three with the internal environment (preparation phase, procurement phase, and contract management phase).

The second phase consisted of the development of a questionnaire aimed specifically at the PPP CSFs in urban regeneration. The use of the questionnaire was justified by the lack of available literature on CSFs in partnerships with a specific focus on urban regeneration. The questionnaire was developed with questions regarding the respondents' profiles and questions about the study topic itself. The questionnaire was answered by 46 experts in public-private partnerships and/or urban regeneration from around the world.

According to the results of the analysis, some clusters were considered more important than others, as were some factors within each cluster. Furthermore, the use of weights for the Likert scale analysis and the rankings allowed for a direct reading of the information and a comparison between the two analyses. It is therefore possible to see that most of the results were confirmed in both analyses.

Concerning the clusters, it was observed that an enabling environment in the external environment, and the preparation phase in the internal environment were considered the

most important factors. The exogenous factors, on the other hand, were considered less relevant among the analyzed clusters.

In the cluster related to the enabling environment, in both analyses, a favorable legal and regulatory framework was considered the most relevant factor, while a standardization procedure for PPP projects was considered the least relevant.

It is interesting to note that the favorable legal and regulatory framework factor was also considered important in studies carried out by different authors. Alteneiji et al. refer to the importance of a favourable legal and regulatory framework in the context of PPPs in affordable housing projects, stating that a legal and regulatory framework is a prerequisite for PPPs [18]. Osei-Keyi and Chan refer to the importance of a legal and regulatory framework in developed and developing countries [26]. Several authors refer to the need for a legal and regulatory framework in different contexts, such as Malaysia [19], the United Arab Emirates [25], China [34], Syria [31], Singapore [21], and Vietnam [24].

On the other hand, Shi et al.'s study on CSFs in PPP arrangements in infrastructure projects also highlights the factor standardization procedure for PPP projects [30], which experts consider the least relevant factor in the context of PPP projects in urban regeneration.

Concerning exogenous factors, despite some differences being observed in the comparison of the two analyses, the factor considered most important in both analyses was an available financial and capital market. An available financial and capital market was identified by several authors as an important factor in PPP processes, such as the study on CSFs in the implementation of PPPs in Malaysia [19], CSFs for PPP agreements in infrastructure projects in the United Arab Emirates [25], CSFs for the sustainability of PPPs in China [34], and CSFs for PPPs in construction projects in Syria [31].

Concerning the preparation phase, in both analyses, the availability of resources and a team of qualified and dedicated professionals was considered the most important factor, while clearly defined responsibilities and roles scored as the least important.

In their study on PPP arrangements in housing projects in Tanzania [23], Kavishe and Chileshe considered a dedicated team of professionals important. The authors reinforce the importance of a dedicated team during all phases of the PPP project, with the necessary skills, access to external experts, and the ability to ensure that the project is delivered as planned.

On the other hand, clearly defined responsibilities and roles, although considered less important by experts on PPP arrangements in urban regeneration projects, were considered important in the studies carried out by different authors, such as the studies carried out by Chou and Pramudawardhani [29], Hwang et al. [21], and Ahmand et al. [32].

Regarding the procurement phase, the availability of resources and a team of skilled and dedicated professionals was also considered the most important factor, while a competitive and standardized bidding process was considered the least important factor. In the rankings analysis, the trust and openness factor was also considered less important, along with a competitive and standardized bidding process.

Although the respondents considered it less relevant in the context of PPP arrangements in urban regeneration projects, a competitive and standardized bidding factor was considered important by several authors. For example, Liu et al.'s study on CSFs for PPP agreements in infrastructure projects analyzed factors based on the partnership's life cycle [17]. Another example is the study by Osei-Kyei and Chan on CSFs for PPP projects in developed and developing countries, based in Ghana and Hong Kong [26].

The trust and openness factor was considered important in PPP projects in the housing sector in the studies carried out by Alteneiji et al. [18], Kavishe and Chileshe in Tanzania [23], and Muhammad and Johar in Malaysia and Nigeria [28].

Regarding the contract management phase, the public and private sectors' commitment and responsibilities were considered the most important factors, while open and constant communication between the stakeholders scored as the least important.

The commitment and responsibility of public and private sectors was also identified as an important factor for other types of PPP arrangements, such as affordable housing projects in the United Arab Emirates [22] and construction projects in Syria [31].

Although it was considered the least important factor in the context of PPPs in urban regeneration projects, Osei-Kyei and Chan referenced open and constant communication between the stakeholders in different studies [33,35,36].

The analysis of the results allowed for the design of the initially proposed framework. The framework presented the clusters and the factors identified for each cluster. Moreover, a definition of each factor and its influence on improving partnership practices was provided following the analyzed literature, ensuring that each factor is clearly defined and understood in the analyzed context.

By identifying CSFs for PPP agreements in urban regeneration projects, the study contributes to the knowledge on the topic and to the state of the art. Identifying the CSFs makes it possible to extract the associated best practices, which can lead to the better development of an enabling environment and the partnerships themselves.

From a policy point of view, it is interesting to observe that improving the enabling environment makes it more attractive for the private sector to develop partnerships, and guarantees greater security for the public sector. From a practical point of view, identifying the CSFs associated with the different phases of the partnership allows for greater control of the PPP and its development. This may be useful to academics interested in the topic, as well as to public managers and private practitioners.

Despite this, the study has limitations. The first limitation refers to the literature review that was conducted, which considered only the Scopus search engine, scientific articles, and the English language. Another limitation was the limited number of responses to the questionnaire.

Finally, considering that PPP agreements in urban regeneration projects are more recent than those in other consolidated sectors, the framework of CSFs proposed in this study is an important starting point for these practices. However, it is known that there are obstacles to the implementation of all these factors. Furthermore, these factors could be more or less significant depending on the context in which the partnership takes place.

The structure proposed in this study is intended as a starting point and should be flexible and change according to the different contexts. Because of this, it is considered important that the structure is validated using concrete case studies, which will be analyzed in future research.

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## Appendix A

**Table A1.** Weights for the Likert scale.

Item—Likert Scale	Weight
Very important	3 points
Important	2 points
Few important	1 point
Not important	0 points

**Table A2.** Weights for ranking.

Ranking with Four Positions	Weights
Position 1	4 points
Position 2	3 points
Position 3	2 points
Position 4	1 point
Ranking with Five Positions	Weights
Position 1	5 points
Position 2	4 points
Position 3	3 points
Position 4	2 points
Position 5	1 point
Ranking with Six Positions	Weights
Position 1	6 points
Position 2	5 points
Position 3	4 points
Position 4	3 points
Position 5	2 points
Position 6	1 point

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