

**OPEN UNIVERSITY OF CYPRUS**

**Faculty of Economics and Management**

***Master in Business Administration (MBA)***

**MASTER THESIS**



**The Implementation of Public Private Partnerships**

**Aikaterini Tsapikidou**

**Academic Supervisor**

**Dr. Dimitrios Folinas**

**May 2017**



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This postgraduate dissertation was submitted for the partial fulfillment of the requirements for obtaining a postgraduate degree in Business Administration (MBA) from the Faculty of Economics and Management of the Open University of Cyprus.

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# Abstract

Public Private Partnerships (PPP) has been a globally popular strategy for governments over the past two decades for delivering infrastructure assets and services. Despite the fact that numbers are gradually increasing, the figures of PPP projects in the overall public procurement, especially in Greece, are still not encouraging. The synergies and value for money that can be created by engaging in a long-term commitment can be appealing; however, as in every intricate and perplexed institution, research and planning becomes a necessity. The present research focuses on two important issues, considered as value drivers affecting value for money achieved in PPP projects; value assessment of the critical success factors in PPPs and evaluation of the existing legislative framework.

The paper begins by acknowledging the broad nature and appeal of the PPP phenomenon. After considering current research gaps appearing regarding the institution in the spatial framework of Greece, a problem statement follows containing the main aims of the thesis, as well as the main research questions the researcher will attempt to answer through empirical ex-ante and a-priori findings. An outline of the dissertation with the basic points of its structure, as well as a brief reference on the methodology that the researcher will employ is also presented, while the chapter concludes with a brief delineation of the potential demarcations the researcher will encounter during the implementation of the study, but also with the delimitations the concept of PPPs encompasses in Greece.

The second chapter of the thesis provides an extensive literature review and a discussion on the theoretical foundation of PPPs as a financial instrument, aiming to define and illustrate the PPP concept and different types of its potential arrangements, the tool's benefits and drawbacks compared to conventional procurement approaches and the main reasons and circumstances in which a PPP project can be opted for and successfully implemented. Within the international financial and Greek legal framework, an evaluation of PPPs' potentials and constraints, as well as a discussion of the significant shortcomings and criticisms these partnerships encompass, will aim to account for the fact that

in alternate macroeconomic curves only custom or carefully targeted public projects are able to deliver benefits, such as greater efficiency, value for money, timely delivery, better quality of service provision etc.

Having completed the literature review, a chapter follows defining the concepts of research methodology and research design and approach. The researcher also focuses in justifying the importance of using for the purpose of the thesis both quantitative and qualitative methods, as well as primary and secondary data selection methods, while the validity and reliability of the research instruments and the collected data are discussed. Furthermore, the description of how data is analysed and presented is discussed, accompanied by ethical issues arising at the stage of presenting research findings.

Following the interviews that were granted from carefully selected executives from the public and private PPP sector, a detailed analysis takes place in the fourth chapter of the thesis, so as to assess the data collected and process all expert assumptions and propositions in such a way that answers are given to major questions concerning the alternative method of PPP arrangements against typical public funding, when these can be safely employed in order to ensure optimum budgeting in terms of risk allocation and how the fees levied through PPPs or other legal, financial or social constraints reduce the potential, efficiency and economic feasibility of a project.

The last chapter of the paper is concluded with an overall discussion on the PPP institution and the analysis previously performed, aiming to exploit the research findings, so as to assess how PPPs can be efficiently used in different macroeconomic curves in order promote the concept of good project management. The master thesis concludes with a discussion of the findings procured through the interview phase, comparisons to existing literature and recommendations for future academic research, also taking into consideration the limitations of the researcher.

## **Acknowledgements**

I would like to thank Professor Dimitrios Folinas, as without his guidance and contribution the present Master Thesis would not have produced the desired academic results.

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Thessaloniki, May 2017

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## List of Abbreviations

BBO	Buy-Build-Operate
BOLT	Build-Own-Lease-Transfer
BOO	Build-Own-Operate
BOOT	Build-Own-Operate-Transfer
BOT	Build-Operate-Transfer
DBFO	Design-Build-Finance-Operate
DFM	Development Financing Method
EC	European Commission
EIB	European Investment Bank
EU	European Union
IFI	International Financial Institutions
IMF	International Monetary Fund
LRO	Lease-Rehabilitate-Operate
MDB	Multilateral Development Banks
OECD	Organization for Economic Co-operation and Development
PFI	Private Finance Initiative Method
PPP	Public-Private Partnership
PwC	PricewaterhouseCoopers
SDP	Service Delivery Partnership
VAT	Value Added Tax
VFM	Value for Money

# Chapter 1

## Introduction to the Basic Concepts of PPPs

### 1.1 Introduction

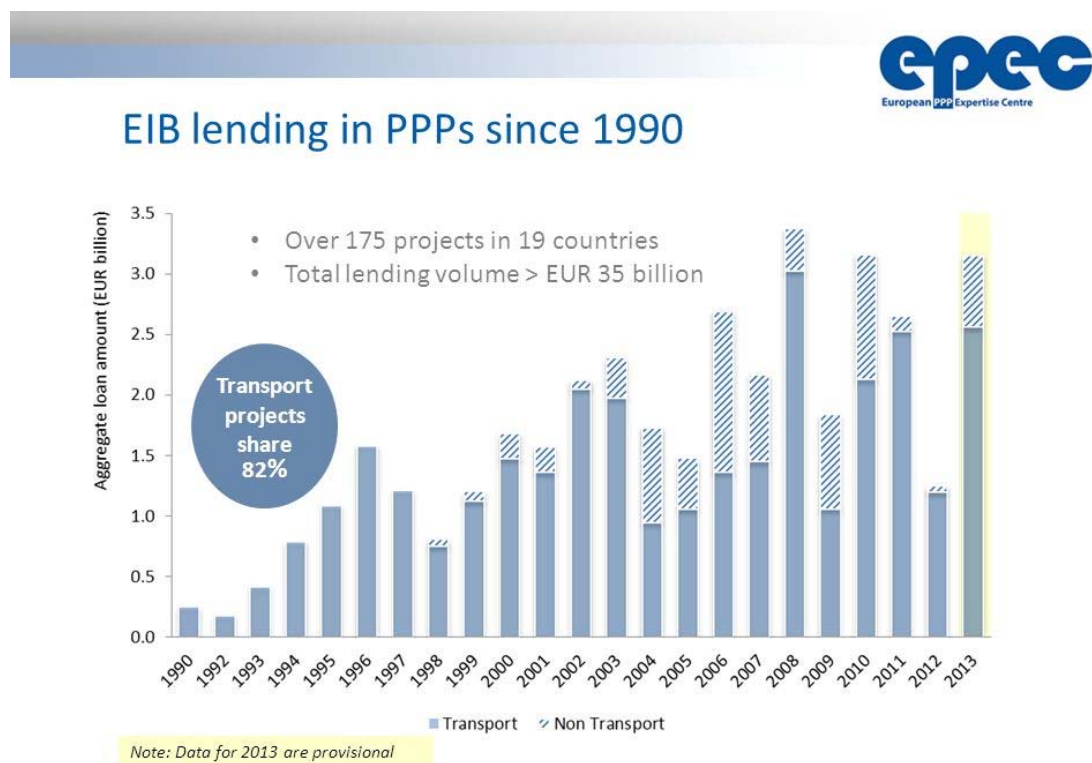
Public Private Partnerships (PPPs) are an example of concession contracting with a contractual agreement between the public and private sector, where a private party is allowed to provide public services or infrastructure, acting both as the role of financier and operator (Eggers & Startup 2006, Renda & Schrefler 2006). PPP has been used since the 1990s by a few pioneer countries (Davies & Eustice 2005) and has become one of the most important procurement models for overcoming the gap between the need of infrastructure and public resources (Eggers & Startup 2006).

The PPP institution is not a novelty, despite the fact that it is perceived as such, due to its growing popularity. This recent interest is a result of changing attitudes, as well as expectations of the society towards the government and public services (Grimsey & Lewis 2004). Society demands the State to act as a regulator, being indifferent to who the direct provider of public services is. The primary concern nowadays is how the government will be able to deliver infrastructure of better quality, making use of public funds in order to provide efficient public services. Having that in mind, PPPs can be perceived as a procurement mode, able to satisfy these changing needs. In addition, we cannot overlook the fact that PPP procurement mode presents obvious advantages to public service delivery, which might otherwise be unaffordable in cases where public sector capital funding is limited.

Nevertheless, PPPs are not a ‘miracle’ solution (European Commission 2003, Harris 2004, Meidute & Paliulis 2011) to the backtrackings of conventional procurement modes. They are costly and highly perplexed and thus only certain projects qualify for implementation through PPPs. In general terms, PPPs could be defined as a multi-functional institution, supporting long term contractual relationships between public and private entities, where exchanging resources and sharing responsibilities, risks and rewards is arranged wisely, in order to provide a high-quality public asset.

The figure below shows the growing interest in PPP procurement mode, as it appears through statistics provided by the European Investment Bank for the period of 1990–2013.

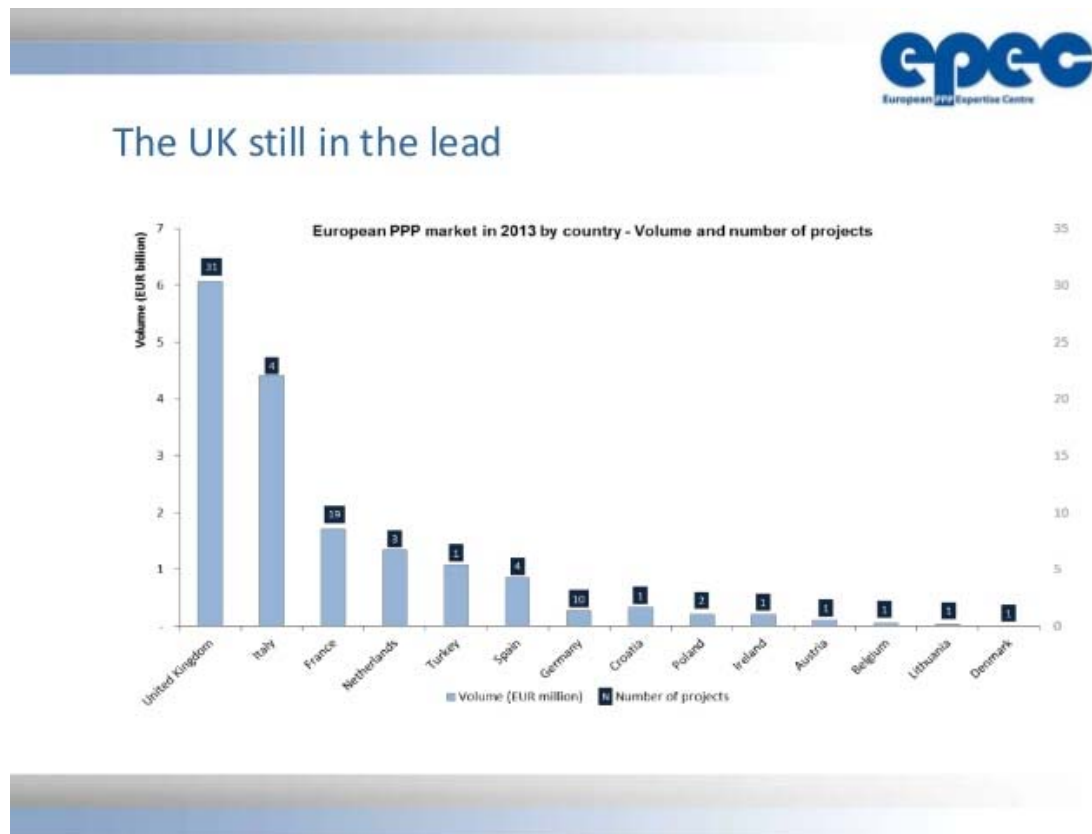
**Figure 1: European PPP trend, 1990-2013**



**Source: European Investment Bank (2016)**

It is important to note that between 1990 and 2010, the widest portion of PPP projects were arranged and carried out by the United Kingdom. Only recently, as shown in Figure 2, the trend has changed and other European countries, such as Italy and France have experienced increased use of PPPs (EIB 2013).

**Figure 2: European PPP market in 2013 by country**



**Source: European Investment Bank (2015)**

Despite the fact that numbers are increasing, the figures of PPP projects in the overall public procurement, especially in Greece, are still not encouraging. The question rises, subsequently, why PPPs represent such a small fraction of all public projects, if they deliver benefits such as greater efficiency, timely delivery of public projects, better quality of service provision, etc. Attempting to give an adequate answer to this question, the present thesis examines the PPP concept and points out the advantages, disadvantages and main the reasons for the implementation of PPPs. Apart from that, the feedback of a structured detailed

questionnaire answered by specialists in the PPP field –either from the public or the private sector- is processed, so as to provide us with the most up-to-date information about PPPs, compared to conventional procurement modes. Overall, the dissertation investigates what PPPs are, what they deliver and when they should prevail as a solution to a project.

## **1.2 Research Gap**

The growth of any economy is multifaceted and primarily based on the work in coherence of the public and the private sector. It is of no doubt that developing countries need to employ PPPs for them to thrive economically. It is crucial, however, that as the Greek economy is growing amidst inadequate government funding, such projects must be carried out successfully both at the phase of research and design, as well as the phase of implementation and maintenance. Therefore, a thorough study on the PPP institution is considered crucial, to the extent that it covers legislative gaps and crucial success factors, so as to provide an alternative form of investment financing in the country.

There are ample of theories and international guidelines describing the potential and procedures of PPPs, but vague practical knowledge or literature exists in Greece concerning the factors affecting value for money achieved. The intention of this study is to fill this gap in existing research, by identifying both financial and legal factors to consider, during the preparatory and implementation phases of PPP projects. The concluding results of this study are intended to provide extensive understanding of the PPP arrangements in terms of creating good project governance, while the findings shall be of interest both for academics and practitioners. Recommendations for further research will be also presented, based on the findings of this study and their limitations at hand.

## **1.3 Problem Statement**

Since the early 1990s, when the PPP institution was founded, few projects were completed, providing data for evaluations (Konkurrensverket 2008). As the years pass by, the microeconomic and macroeconomic environmental changes dictate the adoption of flexible and cost efficient procurement methods for

delivering public projects and/or services. Thus, PPP arrangements became an option frequently used to implement medium and high scale projects on an international lever. In Greece, the interest of cooperation in PPP arrangements between the private and public sector is growing, but knowledge on the subject is yet limited (PPP special Secretariat, 2010).

Long-term timeline implementation and operation perspectives in most PPP contracts increase the uncertainty and render difficult to form contractual agreements able to predict future costs. After all, PPPs contain greater risks allocated on the contractual relationship, a fact which makes the formation of contract agreements important for the success of a PPP project (Evans & Bowman, 2006). Discussions are ongoing and the implementation of a project under the PPP procurement system, in terms of optimal budgeting, proper strategic direction, efficient risk allocation and decision-making becomes a prerequisite.

The aim of the thesis is to analyze the implementation of the PPP concept and attempt its assessment as a financial instrument, suitable for procuring a public project, as depicted through experience. The research focuses on discovering the perception of proper risk allocation, utilizing the findings as the foundation to develop the concept of good project governance in PPP arrangements in changing macroeconomic and microeconomic environments.

## **1.4 Purpose and Objectives**

The main purpose of the dissertation is to analyze the implementation of PPPs and attempt their assessment as a financial instrument in projects, as depicted through international experience. An evaluation of the PPPs' potentials and constraints within the existing legal framework and financial environment will take place, so as to perform as an assessment tool of achieving the concept of good project management. Given the contrasting arguments in favor and against PPPs, the research also focuses on exploring the PPP concept and its implications for the procurement of public projects, by reviewing the relevant literature and performing an analysis and appraisal of questionnaires, answered by specialists of PPPs, originating either from the Greek public or private sector, so as to

approach towards optimum budgeting of public and private funds, according to the microeconomic and macroeconomic environment.

The following Table 1 illustrates the main research questions that the present thesis focuses on and will attempt to answer through empirical ex-ante and a-priori findings, as well as scientific procedure of data processing and assessment.

**Table 1: Main Research Questions of the Thesis**

Main Research Questions
Is the typical public funding of infrastructure projects an one-way street?
Which alternative methods can be employed to fund infrastructure projects?
Which are the major advantages and disadvantages of PPP projects?
How do the legal, financial or social constraints affect the potential, efficiency and economic feasibility of a PPP project?
Which is the optimum budgeting approach between public and private funds in terms of risk allocation?
Is the PPP method of procurement suitable for lower - scale projects?
Is the existing legislative framework for public project procurement in Greece sufficient or should it be modified and how?
Has Greece taken advantage the tool of PPPs to a sufficient degree?
How can these findings be used in different macroeconomic situations in order promote the concept of good project management?

## 1.5 Structure - Outline

The dissertation is divided into two main parts. It is structured in such a way that from the very beginning a thorough understanding of the concept of the tool of PPPs can be developed, in terms of weighing its financial and legal potentials and constraints in alternate microeconomic and macroeconomic environments. Following this detailed approach, in the second part of the thesis an analysis is performed, based on data collected by interviewing executives from the public and private sector, with long-term experience in the field of PPP contracting, so as to produce results that enable us to assess the PPP institution as an optimal budgeting tool for procuring medium and high-scale public projects.



The literature overview in the first part provides an extensive discussion on the theoretical foundation of PPPs as a financial instrument, aiming to define and illustrate the PPP concept and different types of its potential arrangements, the tool's benefits and drawbacks compared to other procurement approaches and the main reasons and circumstances in which a PPP project can be opted for and also successfully implemented. Within the international financial and Greek legal framework, an evaluation of PPPs' potentials and constraints, as well as a discussion of the significant shortcomings and criticisms these partnerships encompass, will aim to account for the fact that in alternate macroeconomic curves only custom or carefully targeted public projects are able to deliver benefits, such as greater efficiency, value for money, timely delivery, better quality of service provision etc.

Having completed the literature review and using the information previously acquired, a structured questionnaire was formed with open and closed-ended queries, which was addressed to ten (10) carefully selected executives from the public and private sector with an active role in PPP contractual agreements previously or currently implemented in Greece. Following these interviews, a detailed analysis took place in the second part of the thesis, so as to assess the data collected and process all expert assumptions and propositions in such a way that answers were given to major questions concerning the alternative method of PPP arrangements against typical public funding, when these can be safely employed in order to ensure optimum budgeting in terms of risk allocation and how the fees levied through PPPs or other legal, financial or social constraints reduce the potential, efficiency and economic feasibility of a project. The last part of the paper is concluded with an overall discussion on the PPP institution and the analysis previously performed, aiming to exploit the research findings, so as to assess how PPPs can be efficiently used in different macroeconomic curves in order to promote the concept of good project management.

## **1.6 Research Methodology**

The prerequisite when commencing this thesis was to comprehend the full concept of PPP projects, both from a financial and a legal point of view. To attain

that, Greek and foreign bibliography, articles and textbooks of public entities involved with such projects was perused, so as to attempt an assessment of PPPs as a financial instrument through international experience. An evaluation based on ex-ante and a-priori information of the PPP potentials and constraints within the international financial and Greek legal framework also took place, in order to identify delimitations of the PPP institution and possible gaps in existing legislation and thus perform as an assessment tool of achieving the concept of good project management for a newly constituted tool, which -when used efficiently- can be able to leverage local and regional development in different economic cycles.

To address the above issues properly, a questionnaire was formed in order to perform interviews with experts in the PPP field in Greece, both from the public and the private sector. The primary scope was to follow a deductive, “top-down” approach and apply empirical information, such as experience and practical performance data gathered from the literature overview, in order to gain feedback from the interviewees, able to give answers to important questions that often rise when discussing the PPP financial tool performance and attempting to monitor feasible outcomes and results of the instrument’s application. The research took into account project-related factors, such as time horizon, price level, discount rates etc., as well as financial factors, such as returns, investment and reinvestment costs, operating expenses etc., comparing thus different types of PPP arrangements against typical forms of financing in terms of dynamics and applicability. The information procured was analyzed in order to expand the theory and attempt to fulfill the theoretical gap of a contemporary phenomenon and its value drivers, which are a part of its real-life context.

## **1.7 Delimitations - Demarcations**

The concept of PPPs encompasses a variety of different partnership models and relationships between public and private entities, which are not fully covered in the present dissertation, as a specific variant or PPP model is not being considered. The practical experiences investigated in the thesis are those of experts in the PPP field, such as management advisors and consultants or

contractor executives from the private sector and regional administrative or ministry officers, heads of municipalities or public structures from the public sector, all considered experts in their field.

While, however, they were all in a position to perform value assessments and are therefore aware of the different aspects of the PPP perspective, the analysis has been simplified and only most important impacts were taken into account, due to time constraints and size limitations of the thesis. Thus, the research is demarcated only to the level that is enough to identify the most important points regarding the topic at hand, while due to the complexity and extent of the project, a possibility arises that there is a divergence between the results presented in the dissertation and reality.

Notice should be taken to the fact that, due to the lack of corresponding information as a consequence of the absence of relevant projects earlier in Greece, most of the assessments in the literature review are based on international experience, a fact that can produce inaccurate assumptions when a project in Greece is considered. After all, the unstable circumstances and tight fiscal conditions in the country highly differ from the macroeconomic conditions in other EU countries.

## **1.8 Conclusions**

This chapter introduces us to the basic concepts of PPPs on an international level, stating the research gap appearing regarding the institution in the spatial framework of Greece. The above follows a problem statement, containing the main aims of the thesis, as well as the main research questions it focuses on and the researcher will attempt to answer through empirical ex-ante and a-priori findings. An outline of the dissertation with the basic points of its structure, as well as a brief reference on the methodology that the researcher chose to employ was presented. The chapter concludes with a brief delineation of the potential demarcations the researcher will encounter during the implementation of the study, but also with the delimitations the concept of PPPs encompasses in Greece.

# **Chapter 2**

## **Literature Review**

### **Institutional and Legal**

### **Framework**

#### **2.1 Introduction**

An evaluation of the international literature review, as well as the current institutional framework of PPPs in Greece brings forth the body of knowledge as it presently exists and leads to the establishment of the need of the present research. A thorough review of existing literature attempting to obtain scientific documentation concerning the PPP institution took place, while international and governmental guidelines and policy reviews, including actual legislation, were examined. A select number of journal articles relating to PPPs, as well as relevant textbooks, dissertations and excerpts from conference proceedings served as a large source of information. Overall, this chapter discusses the literature review of PPPs in an international context, as well as the institutional and legal framework in Greece, dealing with literature appraisal of environmental constraints faced by PPPs and the successful implementation of PPP projects.

#### **2.2 Definition**

As the Greek PPP Special Secretariat defines, Public-Private Partnerships (PPPs) are long-term contracts concluded between a public and a private entity for the purpose of executing projects and/or providing services. In such projects,

the roles of the public and private sectors are clearly defined; the know-how and efficiency of the private sector are exploited, while the public maintains a strong supervisory role. PPPs produce quality projects and at the same time provide high quality services to the citizens/users of these projects. Thus, PPPs are considered an important tool for stimulating economic growth, by leveraging private resources into development projects with multiplier benefits. As the public entity retains ownership of its fixed assets and its strong regulatory and supervisory role, the opportunity to implement public works even in difficult economic circumstances is allowed (Greek PPP Special Secretariat 2017).

International bibliography also provides us with abundant definitions of PPPs.

One of the most descriptive ones is given by Cooper, Gray, Raymond and Walker (2005), according to which PPPs are contracts where the private sector invests in equipment and recruits workforce to provide services to the public, taking responsibility of making the service and the facilities available. The Public Sector binds the Private Sector to provide a service or to use and control a private-owned and supported infrastructure.

Li-Yin Shen (2006) argues that "PPPs are an effective method for boosting productivity of a project, employing the administrative and creative capacity of the private sector by its entrepreneurial experience and by reducing government involvement in the production of public service", while Leiringer, researcher on the role of innovation in PPPs, provides a simplified, comprehensive definition of PPPs, according to which "The agreement for a project through PPP, is primarily a business agreement that it happens to include construction work" (Leiringer 2003).

As within relevant literature exists no clear definition for PPP which would cover all aspects of different relationships that these partnerships encompass (Daube, Vollrath, & Alfen 2007, Hodge & Greve 2007, OECD 2008), PPPs in simple terms can be considered as a form of involvement, in which the private partner brings expertise, capital and innovation into the provision of the services provided by the State.

That explanation, however, covers only part of this broad concept. Weihe (2006) successfully states that the concept of PPP is vague, as it "allows for great variance across parameters such as time, closeness of cooperation, types of

products/services, costs, complexity, level of institutionalization, as well as number of actors involved". Thus, nearly any form of cooperation between the private and the public sector -whether a service contract or a joint venture- can be considered as a public-private partnership (PwC 2005).

As can be deduced, there is no single definition of PPPs. Depending on the country, the term can embody a number of transactions, where the private sector, forming short-term contracts, consortia or concessions obtains the long-term right to operate a service or a project owned by the public sector. Despite all the different approaches, it is fairly safe to assume that PPP projects complement the gap between traditional public projects procured through tenders and/or full privatization.

## 2.3 Types of PPPs

It is internationally accepted that private partner involvement arrangements in PPPs differ between each other, depending on the level of responsibilities and risks transferred to the private partner (Amekudzi & Morillos 2008). The responsibilities concerned include several activities, such as designing, financing, building, maintaining, operating and owning the facilities.

The Greek PPP General Secretariat, institution for the management of public-private partnerships, distinguishes projects that are part of the institutional framework of PPPs in contributory and non-contributory.

- **Contributory projects**, which could also be classified as concessions, are reimbursed in full or in part by the user fees and charges collected for a predetermined period by the private investor. (Sortikos 2009). These projects include transport projects, as well as environmental and tourism infrastructure projects. As far as risk-sharing is concerned, the policy of the State usually lies in seeking rational risk-sharing, aiming to allocate those concerning financing, design, operation and demand to the individual, while legal risks due to their nature are undertaken entirely by the State.

- **Non-contributory projects** are projects, whose use by citizens does not incur direct costs in the form of a contributory fee. In this case, the individual is

responsible for financing and construction, as well as meeting the appropriate maintenance and quality standards. It is noted that the use of these projects does not exclude citizens who either evade taxation or are unable to pay income taxes. As in the case of contributory works, the end of the contractual period means the individual is exempted from obligations, which are borne exclusively by the State.

A less known category of PPPs is that of fully rewarding and partially rewarding projects. These are independent financial projects, the proceeds of which come directly from citizens' fees, using the project or service. (Moustakas 2008). Regarding partially rewarding projects, according to Briastikas (2007), their main characteristic is that "the repayment of the funds is made both by means of payments made by the Contracting Authority as well as by the payment of debts by citizens, who use the work or service".

Both in Greek and in international literature, various forms of partnerships are encountered. The most common forms of partnerships, the content of which is analyzed in manuals regarding the institution of PPPs, are the following (Delitheou, Dokas, Michalopoulou 2008):

- **B.O.T. (Build, Operate, Transfer) or B.O.O. (Build, Own, Operate)**

It is considered the most widespread form of contract, in which the individual is responsible for maintenance and operation of the project, which remains to its exploitation for a specific period of time, after which the individual transfers its operation or ownership to the State.

- **Private Finance Initiative Method (PFI)**

The individual produces products and services purchased by the Public Sector. In this case, the risk of operating the investment is undertaken by the individual, while the State only incurs the cost of receiving the services. The success of the project lies in reevaluating the allocation of public funds, as a key component for further improvement of the services provided.

- **Developer Financing Method**

Applying this method is indicated in areas with rapid growth characteristics. The core concept of this method is to construct side-by-side infrastructure projects,

the use of which is linked to the operation of the project and at the same time generate revenue, part of which will be disposed for paying the project cost.

- **B.B.O. (Buy, Build, Operate)**

In terms of exploiting public property and rationalizing the associated risks, the State transfers ownership rights to an infrastructure that does not require high maintenance and repair costs for individuals undergoing repair or expansion maintenance of these infrastructures for the purpose of their operation.

- **B.O.L.T. (Build, Own, Lease, Transfer)**

The individual manufacturer of the infrastructure leases it to the State in the form of a finance lease, while upon the end of the lease period the State acquires the ownership of the infrastructure.

- **B.O.O.T. (Build, Own, Operate, Transfer)**

The Private Sector is responsible for designing, constructing, financing, operating and maintaining the project. At the end of the contractual time, the project is granted to the State.

- **Service Delivery Partnership**

These partnerships aim to limit the cost of the provision. The contract between the public and the private sector provides for the concession to the individual of services related to the operation, maintenance and management of the project.

- **D.B.F.O. (Design, Built, Finance, Operate)**

The model is best suited for implementing PPPs for public infrastructure and private sector development projects, where design, construction, financing and operating the infrastructure or investment component lies to the responsibility of the private sector. The individual regains the value of the capital invested from government payments during the contract.

- **Concession**

A PPP form, where the demand for the project or service is sufficient and therefore the proceeds from its exploitation ensure its viability. In this case, the individual is entirely responsible for financing, operating and maintaining the project to be implemented and reserves the right to exploit the economic and commercial assets of the project for a specific time period of 20-30 years, while the State retains ownership of the asset.



- **L.R.O. (Lease, Rehabilitate, Operate)**

The individual leases facilities owned by the State, assuming costs of repairing and optimizing them. The compatibility of the plant's operation by the individual is determined by the forecasts of the returns of the investment in question, but also the costs of budget contribution.

According to Giannaros (2005), PPPs can be also categorized as follows:

- **PPPs of pure conventional type**, which refer to contracts between the Public and the Private Sector, based solely on contractual ties. This PPP scheme covers various arrangements that delegate functions to the private entity, such as designing, financing, implementing and exploiting the project or service. There are various ways of procuring such public works as is bibliographically documented, such as conventional procurement, management contracts, performance-based maintenance contracts and concessions.

- **PPPs of institutional type**, which involve cooperation between the public and the private Sector, aiming to create a jointly controlled entity by the public sector partner and maintain a high level of control over the work adapted, through presence in the shareholding group of the joint body. Establishing PPPs of such type can be obtained by creating a jointly controlled entity or by acquiring control of an existing public enterprise.

## **2.4 Privatization and PPPs in growing economies**

A critical question often raised is whether PPPs can be described as a form of privatization. Although often considered as such, the argument remains that as the public sector retains primary responsibility for implementing the project, privatization is not the optimum term to use. It would be unfortunate to assume PPPs as mere commercial transactions between the public and the private sector, where the State demands and the other party delivers. Emphasis should be placed on the fact that PPPs involve long-term contracts with tight performance standards and periodic checks of deliverables that grant certain quality and quantity to the project. The private entity must provide all its administrative and

technical resources, while the risk of not meeting predefined standards can be devastating.

However, the concept of privatization has quite vague lines internationally. Grimsey and Lewis (2005) indicates that in the United States any involvement of the private sector in the production of public services can be defined as privatization, while in Great Britain the term is explicitly used to transfer public assets to private ownership. According to a study carried out in Greece, regarding the added value of PPPs, "The public character of PPP projects obliges the state to maintain a role of project manager in close cooperation with other parties involved in the project" (Mylonas 2005). It is thus considered a tricky venture to decide whether PPPs are a form of privatization or not. What can be safely assumed, though, is that in a PPP agreement the private entity does not acquire rights and jurisdictions on assets that it operates or finances, apart from those assigned by the public entity/sector.

Despite the creeping skepticism, the importance of the implementation of PPP projects in developing economies cannot be ignored. PPP is a novelty financing tool or alternative, which when put in proper use can assist the State and be proven beneficial for a country's economy. Especially in Greece, such types of projects are undertaken, so as to efficiently reduce public deficit and direct financing, with the ability to overtake problems, such as ceasing construction and at the same time deliver projects and assets necessary for the development of the economy. After all, PPP contracts in developing economies can be viewed as a steady supporter of the country's development, not only because they enhance external funding and accelerate infrastructure projects, but also because they satisfy the increasing need of up-to-date skills, know-how and technical support that the private entity brings to such contractual agreements and are inherent to PPP planning and risk management.

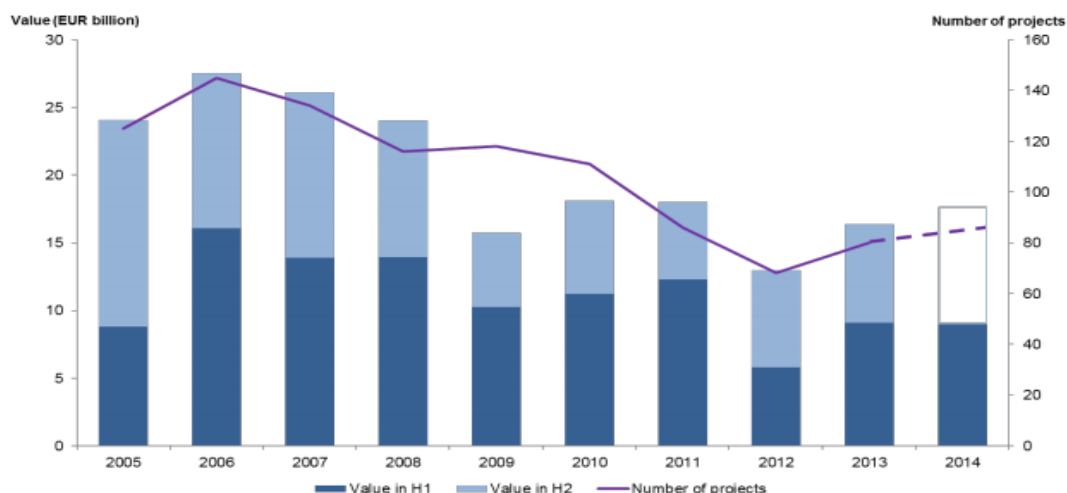
Nevertheless, this assistance offered by the private sector in PPP projects often finds restrictions on governmental fiscal policy or predefines a specific capital cost for loan capital, whereas tight performance standards demand pristine technical support and quality of labor and materials. It is, thus, imperative for the private party to excel in risk management allocation before any PPP agreement is finalized, in order to properly assess the cost and value of

those risks. On the other hand, both the public and the private sector have to address the issue of granting future usefulness and operation of the project, which is interdependent to rapid economic growth or potential political changes, making long-term planning even more intimidating. Attention must be brought, however, to the fact that preferring multiple short-term solutions may be proven more burdensome than a long-term service contract with private co-operation, so as the involved parties will be able to reach the optimal decision. According to the European Commission (2004), assessing and managing fiscal and economic risks when referring to long-term project agreements does not eliminate these risks and there is always a degree of uncertainty as to what can really happen in the future. Having accepted the factor of uncertainty, it remains a prerequisite to properly allocate that risk as well to parties involved in PPPs, in order to obtain a satisfactory project performance.

The Figure below depicts the allocation of value and number of approved PPP projects in the European Union, between the years 2005 and the first half of 2014, with statistics provided by the European Investment Bank, showing eloquently a recession in PPP contracts and highlighting potential issues in PPP planning and risk management.

**Figure 3: Allocation of value and number of approved EU PPP projects from 2005 to the first half of 2014**

**Figure 1: The European PPP Market by Value and Number of Projects since 2005**



**European Investment Bank**

Source: [http://www.eib.org/epec/resources/epec\\_market\\_update\\_2014\\_h1\\_en.pdf](http://www.eib.org/epec/resources/epec_market_update_2014_h1_en.pdf)

## 2.5 Reasons for Implementing PPPs

The main objective of implementing a public project through a PPP is to obtain value for money (VFM) (Grimsey & Lewis 2004, Quiggin 2004, Harris 2004, Shaoul 2005, New South Wales Government). According to Grimsey and Lewis (2005), value for money is “the optimum combination of whole life cycle costs, risks, completion time and quality, in order to meet public requirements”. Similar to the above interpretation is the one introduced by the European Commission (2003), which identifies a group of factors determining VFM, such as allocation of risks, quality of service, life cycle costs, time required to complete a project and ability to generate additional revenues.

In broad terms, a general principal employed to the quest of determining the implementation of a project through a PPP contract or a traditional procurement is to evaluate which choice signifies quicker project implementation with higher quality of services, lower costs, efficient allocation of risks and, ultimately, additional profits. This prospect aims to attract additional efficiency gains, while managing the service or asset in such a way so as to deliver more quality and cost efficient outcomes, than those delivered when/if the government had retained full responsibility for the project (Meidute & Paliulis 2011, Nisar 2006, EIB, 2004). Equally essential, however, is to clarify whether the private entity is capable of offering skills and expertise that the State lacks and are necessary to manage the project more efficiently compared to the public sector (PwC, 2005).

The Organization for Economic Co-operation and Development (OECD 2008) confirms this view, acknowledging that the main reasons for opting for PPPs are effective risk allocation and value for money gains, while the European Investment Bank (EIB, 2004) agrees that the critical aspect in order to reach VFM is the ability to allocate risks and rewards appropriately. Grimsey and Lewis (2005, p. 347), on the other hand, argue that VFM gains can be only achieved if a competitive environment, accompanied by optimal risk allocation is present and if comparing financial tools at hand is performed in a “fair, realistic and comprehensive” way. Note should be taken, however, to the fact that the mere

inclusion of the private partner is not sufficient to generate VMF required (OECD 2008), unless effective risk allocation management is adopted.

To be, however, exact, before attempting to assess the reasons for opting for the implementation of a PPP, one must examine the prevailing environment in each region, emphasizing to the fact that the final decision depends on each country's economic and political environment. At the early stages of a country's development, it is safe to assume that employing the solution of a PPP has a background of financing public projects, as a demand by the growing need for public infrastructure development, combined with a lack public funding to finance this need. This was encountered vividly in the cases of the United Kingdom (Grimsey & Lewis, 2004, Meidute & Paliulis 2011, IMF 2006) and Hong-Kong (Cheung, Chan, & Kajewski 2009). Experience shows that countries capable at a point of solely financing greater projects, such as Hong Kong and Australia, still choose to implement PPPs, involving the private sector in order to achieve additional value (Cheung et al. 2009), as a private partner is able to ensure better quality of services or deliver more innovative and cost efficient solutions than the public entity could realize by itself. A fact remains, however, that in challenged economies of the EU, PPP contracts are a prevailing option, due to financial reasons, such as restricted public investment or lack of public funding. According to the European Investment Bank, the "tight fiscal environment following the development of European Monetary Union" (EIB 2004) has brought most members of the EU to experience difficulties in managing broader investments or financing public projects solely depending on public funds.

In general terms, the main reason to develop a PPP project embodies the concept of creating value for money, as well as gaining external know-how, expertise and the ability to operate efficiently, while generating additional revenues with the apprentice of a private partner. Despite the lack in theoretical foundation, it can be safe to assume that PPPs are opted for in cases where there is need for public infrastructure, but there is also lack of public funding and scarce public resources.

## 2.6 Differences between PPPs and Traditional Procurement

The differences between a project carried out under the PPP procurement model, where a contract between a public entity and representatives of a private entity is being realized, are diverse and varied. The table below depicts the most important of these variations and diversifications, which are a result of a review performed in foreign literature and a processed feedback from interviews conducted with specialists in the PPP field -either executives from the public or the private sector- in Greece.

**Table 2: The most important differences between public projects realized through traditional procurement and PPPs**

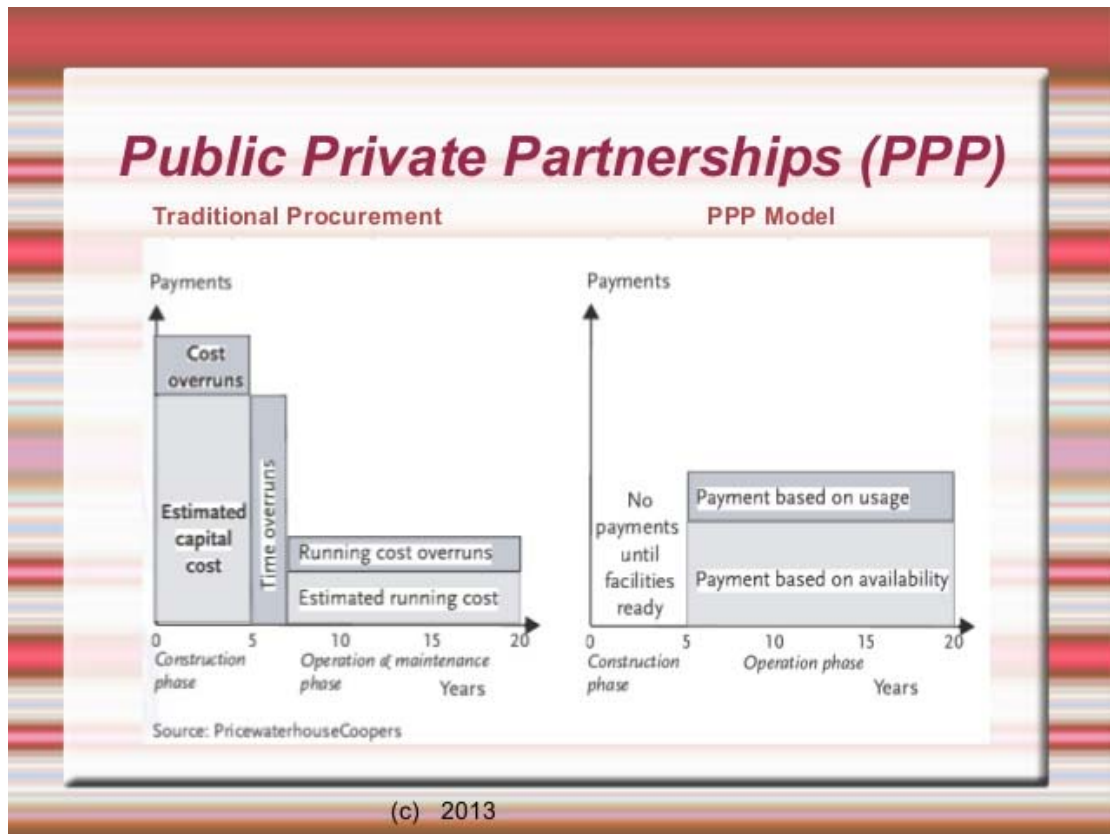
Traditional Procurement	PPP Procurement Model
The large amount spent directly on the investment has a great impact on the state economy deficit and debt.	The regularity of public payments to the private entity is of low burden, but accumulates a fixed charge over time, binding future cash flows.
Employees who work on operating and managing the project are public servants.	Employees of the contractor are private employees or subcontractors.
In case of delay during construction or failure to provide a service, there exist no penal clauses, as the State is the provider of the service.	There are pre-agreed clauses for discrepancies in timelines and costs and thus emphasis is placed on such issues.
The State determines only the construction specifications of the project.	The State sets performance and/or operation standards, ensuring optimal service delivery to citizens.
Project design and tracking is realized by the State.	Basic design is made by the private entity, so as to meet the predetermined specifications.

A call for interest and offer submission is being made for the construction of the project.	A call for interest and offer submission is made for the whole project, including its financing.
The State has the role of an auditor and conservator of the project for the entire duration of its life cycle.	The State has the role of controlling the performance of the project, as well as the payments associated with the quality of the service provided.
A contract is concluded for delivering the service/project. The private entity bears responsibility only during the construction phase.	A long-term contract is concluded for construction, maintenance and provision of services. The private entity bears responsibility throughout the contractual time.

**Source: Primary Research / Own Processing**

Particular emphasis, however, should be placed to the obvious financial differences between the two types of projects in question. As shown in detail in Figure 4 below, traditional procurement projects are being auctioned, bearing an estimated capital cost for construction. Until the completion of the project, the State faces the possibility of cost and/or time overruns, while upon completion of the project, it assumes the cost of maintaining and operating the project, as well as running cost overruns or interest payments for the capital borrowed and used for direct financing. Unlike traditionally procured projects, PPP contracts are based on Non-Recourse financing. The essence of that kind of financing is that the capital debt for financing a project is fully covered and repaid by the project's cash flow, while no payments are required until the facilities are ready and running. On the contrary, reimbursement is based on usage and availability during the operation phase, according to the contractual agreement made between investors.

**Figure 4: Differences between traditional Procurement and the PPP model**



**Source: Price Waterhouse Coopers (PwC, 2013)**

## 2.7 Advantages and Disadvantages of PPPs

According to the Greek Ministry of Finance (PPP Summary Guide 2006), "Through PPPs, the public enables various actors and private sector investors to participate in development projects, innovations and new creative activities. The long-term nature of PPP contracts creates companies with predictable revenue and financial stability. These actions provide feedback on the market, resulting in a general improvement in the economy."

As already reviewed, an appropriately constructed PPP delivers better value for money compared to the traditional procurement approach. Delivering projects on time and on budget set (Meidute & Paliulis 2011) are two of the most important benefits hidden under the concept of VFM. A study conducted by the National Audit Office in 2003 in the UK indicated that 70% of the projects implemented with conventional procurement procedures were not delivered on time, while 73% bore costs exceeding the initial budget (data of 1999). At the



same time only 22% of Private Finance Initiative (PFI) projects exceeded set deadlines and 24% in excess of the budget (data of 2002). Behind these vast statistical differences lie the efficiently allocated risks to the private partner in the cases of PPP arrangements. These may burden contractors with excess accountability, but at the same time impel them to operate in the most efficient way. In PPPs, private entities simultaneously manage complex technical tasks and tight financial arrangements, as they possess innovative skills and expertise; on the other hand, public entities undertake to control legal aspects, regulations and policies. This combination of the leading features of both partners produces a higher value (Harris 2004). After all, due to the long term margins of these partnerships, the contractors involved tend to act in synergy, creating additional reciprocal benefits.

Moreover, PPP arrangements enable co-operating entities to allocate the budgets of high-scale investments over the lifecycle of the asset, a fact addressed as an attractive advantage for the public sector. This means that governmental deficit is not further burdened with the obligation of large cash outflows in a short-time horizon. Subsequently, the public sector can finance multiple projects, even though in reality there are no public funds available. This advantage is of dual benefit; high-scale investment costs are spread out, while private funds are considered as the new financing opportunities for the government (Meidute & Paliulis 2011). One, however, cannot be too cautious, as a PPP project sometimes inclines governments to exaggerate possible benefits of a project at hand, just in order to secure its financing.

Apart from that, public administrators have the advantage of constructing a proposal to procure public works, focusing more on outputs rather than inputs. Such a potential encourages thorough research about the aims of the asset developed and discussions on which services should be offered to the public and at what performance standards, while the project is thought upon with long term strategic goals rather than short term objectives. However, detailed negotiations on asset development and provision of services requires a thorough analysis of the project, a fact that may possibly hinder the public entity from moving ahead if the project is rendered inadequate.

It should be noted that PPPs also have a positive impact on private entities, as they administer the opportunity for them to operate and gain experience in new markets, such as energy, waste systems or telecommunication, which otherwise would be prohibited for private sector participation. And all that, with the invaluable support of the public sector, which controls legal and fiscal issues and/or facilitates appropriate budget allocation.

Table 3 below depicts the most important advantages of PPP agreements, as derived through international experience and imprinted in a research attempting to identify risks in PPP projects in Greece (Delasoudas 2007).

**Table 3: Advantages of Public Private Partnerships**

<b>Advantages of Public Private Partnerships</b>
<ul style="list-style-type: none"> <li>• The cost of construction is divided into future public budgets, thus avoiding short-term disbursements and increasing governmental deficit or debt.</li> <li>• The public entity has the potential to promote multiple projects, overcoming the issues of limited budgeting.</li> <li>• PPPs enable the possibility of correlating payments with performance, availability and/or quality of the project or service.</li> <li>• PPPs fully exploit the skills, know-how and flexibility of the private sector.</li> <li>• The private entity has incentive to complete construction, in order to be reimbursed by operating the facility.</li> <li>• PPPs allocate risks to the private sector, which can handle them better.</li> <li>• PPPs improve value for money for public sector resources in the provision of services or infrastructure projects.</li> <li>• PPPs place commercial incentives to private entities, which drive efficiency and innovation throughout design, construction, maintenance and operation of the projects.</li> </ul>

**Source: Identifying risks of PPPs in Greece, Delasoudas 2007**

PPP projects are considered highly complicated ventures; they involve both public and private parties, but also banking executives, who all have personal and contradicting aims. In order to be able to construct a tight and fruitful agreement, time and capital requires to be invested on long and complex

negotiations. These contractual and bidding costs, allocated both to the public and the private partner, constitute one of the main disadvantages of PPP arrangements, often acting as a rejecting force for the contractors, who find themselves unwilling to invest in the bidding process, while at the same time public entities find it difficult to manage or bear legal or preparation costs, as well as costs of feasibility studies.

It is argued that PPP arrangements deliver benefits by allocating a significant amount of risks to private entities. However, although most of the risks are initially transferred to the private partner, the public sector is in practice the one bearing the ultimate responsibility for granting services or providing assets to the end-user. This implies that the public entity has to address the consequences and try to find alternate expedients in case of an unforeseen event, such as borrowing weaknesses or bankruptcy of the private partner, as the project has to be carried out and delivered to the public. That means, in reality, that even though the main risks are transferred to the private contractor, the public sector retains an amount of responsibilities in case the private partner fails to deliver.

Apart from that, we must bear in mind that in PPP agreements the public sector contracts to a single private entity for a long period of time, binding itself legally and financially, in order to in due time deliver assets or services to the public. That implies a certain amount of risk, as far to whether the utility or need of the service or infrastructure project will be necessary in the future and we must consider that the public contractor may end up delivering services no longer required by the public. These risks, highly associated with alternate microeconomic and macroeconomic environments and fragile political conditions, may result to an unsuccessful or less valuable partnership than initially expected.

It is generally safe to assume that PPP arrangements are considered an example of good project governance only when put into operation for specific projects, which are generally perplexed and require intricate skills, know-how and experience. Therefore, PPPs may be perused as the optimal financial tool and produce benefits only if certain project characteristics cannot be otherwise met, whereas in the cases of simpler procedures and projects, executing through PPP formations implies higher preparation costs and consequently lower VFM.

Table 4 below depicts the most important deficits of PPP agreements, as derived through international experience and imprinted in a research attempting to identify risks in PPP projects in Greece (Delasoudas 2007).

**Table 4: Disadvantages of Public Private Partnerships**

<b>Disadvantages of Public Private Partnerships</b>
<ul style="list-style-type: none"> <li>• PPPs bear additional costs of funding due to the recruitment of consultants.</li> <li>• PPPs face increased completion time, due to the Public Comparative Costing process, the use of expert consultants and the existence of negotiations.</li> <li>• PPPs are overly sophisticated, cost-bearing projects, not applicable to smaller or medium-sized projects.</li> <li>• Due to the long duration of PPP arrangements, the probability of non-operating projects due to unforeseen events is greater than other public works contracts.</li> <li>• Due to the long duration of PPP arrangements, it is particularly complex to clarify specifications and requirements of the project in detail.</li> <li>• PPP fixed payments bind public money flows for many years.</li> <li>• The public does not supervise the service itself, but only sets the standards, which involves risks.</li> </ul>

**Source: Identifying risks of PPPs in Greece, Delasoudas 2007**

Considering the above, the main idea behind opting for a PPP arrangement is to have a project intricate enough that can justify the additional preparation and negotiation costs. Procuring a project through a PPP may ensure benefits, such as timely and on budget implementation; however, these advantages should be addressed bearing in mind the risks involved in such a long-term contract between a public and a private entity and all facts should be carefully considered.

## **2.8 Legal framework in Greece**

The legal framework for PPP contractual agreements in Greece, which was developed in 2005 and is being completed until today, includes:

- **Law 3389/2005 “Public Private Partnerships” (Government Gazette 232/A/22.09.2005)**

- **Law 3299/2004 "Incentives for private investment" (Government Gazette 261/A/23.11.2004)**

The above law works complementary to the financing of eligible categories of investment with geographic and other criteria. Article 3 refers to investment plans for each sector of economic activity, which are divided into five categories, so as to define the aid granted.

The law differs from the previous Law 2601/1998 to the fact that all country regions, including Athens and Thessaloniki, are eligible for the provided aid. Exceptionally, investment projects that are not part of the investment fund are granted, provided that concessions of more than 15 years have been granted as referred in Article 3, par. 6. That exception provides flexibility to Local Government Organizations, as well as investors to take action.

Since the end of March 2005, the law is in full force and several relevant decisions and circulars having been issued. The law was revised at the beginning of 2006, adjusting the incentives for investment and attention has been paid to the proper funding of PPP projects, which were incorporated and financed through Law 3389/2005 and the Public Program of Investments.

- **Law 3316/2005 "Assignment and execution of public contracts for the preparation of studies and related services and other provisions" (Government Gazette 42/A/22.02.2005)**

Through this law, the conclusion and execution of all public contracts, irrespective of value, is regulated.

- **Law 3483/2006 “Amendments and completion of provisions about leasing, provisions on public revenue and other regulations” (Government Gazette 169/A/07.08.2006)**

- **The Green Paper on Public-Private Partnerships and Community Law on public procurement and concession contracts**

The Green Paper sets the guidelines for the implementation of the European Directives by the European governments and attempts to illuminate various complex problems that have arisen. The Green Bible attempts create an

environment of effective competition and legal clarity, in order to enable PPP contracts, without prejudice to the political decisions to be taken.

• **Law 3274/2004, Art. 2 "Local Governmental Organizations' Development Programme "THESEAS"" (Government Gazette 195/A/19.10.2004)**

The law gives priority to local authorities (Municipalities and Decentralized Districts) for realizing PPP contracts and funding of pre-contractual and contractual services. The law had a limited duration until 2009 (with a two-year extension) and among others concerned:

- Maturing projects through financing project studies and specification reports
- Supporting inter-municipal development cooperatives
- Supporting partnerships between Local Authorities and Private Institutions
- Simplifying the process of integrating projects by securing financing through the written observation and compliance with the annual limit of approved credits per Region.

• **Law 3342/2005 "Sustainable Growth - Development of Olympic Installations" (Government Gazette 131/A/06.06.2005)**

The law includes various institutional interventions for the implementation of PPP projects.

• **European Commission Regulation (EC) N. 2083/2005 of 19.12.2005**

The Regulation amends Directives 2004/17/EC and 2004/18/EC of the European Parliament, regarding the lower thresholds of their application in the procurement procedure.

• **Law 3669/2008 "Ratification of the Codification of the Construction Legislation of Public Works" (Government Gazette 116/A/2008)**

• **European Union Directives 2004/17/EC and 2004/18/EC**

The Directives attempt the coordination of procedures for the assignment of public contracts.

• **Presidential Decree N. 59/2007 (Government Gazette 63/A/16.03.2007)**

"Adaptation of Greek legislation to the provisions of Directive 2004/17/EC on the coordination of procedures for the assignment of public contracts in water, energy, transport and postal service sectors"

• **Presidential Decree N. 60/2007 (Government Gazette 64/A/16.03.2007)**

“Adaptation of Greek legislation to the provisions of Directive 2004/18/EC on the coordination of procedures for the assignment of public works’ contracts, public supply contracts and public service contracts, as amended by Commission Directive 2005/51/EC and 2005/75/EC of the European Parliament”

• **Presidential Decree N. 118/2007 "Government Procurement Regulation" (Government Gazette 150/A/10.07.2007)**

The above Decree provides for simplification of procedures, reduction of administrative costs and the development of competition through widening individual participation in public auctions. Apart from that, the Decree defines the optimal way for technical specifications, terms and evaluation of offers.

• **European Union Directives 2014/24/EU and 2014/25/EU**

The Directives of the European Parliament and of the Council of 26<sup>th</sup> February 2014 attempt the coordination of procedures for the assignment of public contracts and repeal Directives 2004/18/EU on public procurement and 2004/17/EU on the procurement of entities operating in the water, energy, transport and postal services sectors.

• **Law 4412/2016 “Public Works, Procurement and Services (Adaptation to Directives 2014/24/EU, 2014/25/EU)” (Government Gazette 147/A/08.08.2016)**

Through this law, the conclusion and execution of all public contracts, irrespective of value, is regulated. The law is the sum of the provisions of Directives 2014/24 and 2015/25, which replaced the repealed Directives 2004/17 and 2004/18, as well as the Presidential Decrees 59/2007 and 60/2007, which were thus incorporated into the national legal framework.

The law also incorporates the repealed laws 4281/2014, 3669/2008 and 3316/2005, as well as the Presidential Decree 118/2007 and Law 3886/2010 on interim measures and repeals Law 3369/2008 on public works, with the exception of articles 80 and 11, as well as Law 3316/2005, with the exception of articles 2, 11.2, 39 and 40.

Before the adoption of Law 3389/2005, the validation of Concession Agreement from the Greek Parliament was necessary. The aim of the Legislative Ratification was to validate the outcome of the negotiation process, to secure the

rights of the contractor and to introduce various derogations from previous pieces of legislation, in order to facilitate the implementation of a PPP project. These exemptions concerned a special tax regime, an acceleration of licensing, etc. Apart from its obvious positive feedback, the Legislative Ratification of separate PPP agreements had negative connotations as well, as it caused problems of legal and practical nature. Questions were often raised as to whether a PPP agreement is a contractual agreement or a law depository, whether it could be modified and under which circumstances, while at the same time further delays in the completion of the contracting procedures occurred.

Nowadays, with the adoption of Law 3389/2005, the minimum content of contractual PPP projects is clearly defined in Article 17, while at the same time the applicable legal framework is clear and flexible and thus the need for derogations is strictly limited. It must be noted that chapters E and F of Law 3389/2005 solve problems that previously required specific legislation, such as expropriation, licensing, environmental protection etc.

## **2.9 Overview of Law 3389/2005**

This law was published in the Government Gazette on 22<sup>nd</sup> February September 2005. Its provisions, combined to these illustrated in the "Summary Guide to PPPs" and the "Handbook for the implementation of projects and Services through PPPs" issued by the Greek PPP Special Secretariat of the Ministry of Economy and Finance, regulate the formation of PPPs between public entities and private operators. The Special PPP Secretariat states that Law 3389/05 codifies the relevant concepts of PPPs, defines their scope and provides for the creation of two responsible carriers or administrative bodies, the Inter-ministerial PPP Committee and the Special PPP Secretariat, responsible for setting up policies and better management. Among others, the Law defines assignment procedures in PPP contracts, as well as provides for regulations regarding contractual and legal issues, licensing, taxation etc.

The most important fields that Law 3389/2005 negotiates are the following:

- Through the establishment of Special Purpose Societe Anonymes, the public entities (Ministries, Local Authorities, Municipalities etc.) are able to enter



partnership agreements with private entities, cooperating in their areas of their activity.

- The object of the partnerships is the creation of infrastructure and/or the provision of services, depending on the area of activities of each public entity.
- Private entities are responsible for a great portion of the risks associated with financing, infrastructure construction and the availability of the service that is to be financed. The exchange or fee is either paid on a one-off basis or in part by the State or end-users.
- The private entity, featuring its own funds and resources, undertakes to finance the whole or part of the infrastructure or to provide the service to its users.
- The total budget limit for the cost of carrying out the project or providing the service is 200.000 €. In special cases, the Inter-ministerial PPP Committee may opt for allowing a larger budget contract.
- A PPP has the effect of delivering high quality projects at competitive costs. This helps to increase public utility and makes PPP contracts a desirable choice for governments.
- The public, in co-operation with the private sector, gains expertise and innovation by the procured results, which are endowed to the citizens.
- Activities which, according to the Greek Constitution, belong exclusively and derive directly from the State, such as national defense, justice, correctional system, legal order etc. are not the subject to a PPP contract.
- An Inter-ministerial PPP Committee is funded, which sets out government policy to build infrastructure or provide services through private equity funding.
- A Special PPP Secretariat is funded at the Ministry of Finance, with purpose to identify the infrastructures and services that can be procured through PPP contracts, promote their development and undertake the facilitation and support of the State during the assignment procedure for the selection of the private entity.
- The law also specifies the obligations of public entities during the contractual period, as well as the contractors' obligations in relation to the subject matter of the partnership, such as financing, procedures for the collection of contractual exchanges, licensing, environmental protection, public service involvement,

matters of legal nature (claims, prestige of property, corporate transformations, tax matters and dispute settlement) etc.

## **2.10 Public Private Partnerships Administrative Bodies**

According to Law 3389/2005, two administrative bodies are instituted at a central level:

### **- The Inter-Ministerial Public Private Partnerships Committee**

The PPP Committee consists of the Minister of Finance, the Minister of Development and the Minister of Environment, Land Planning and Public Works. As an extra member the PPP Committee hosts the Minister overseeing the public entity involved in the contractual procurement. The Minister of Finance, who acts as President of the PPP Committee, oversees the completion of its works and undertakes to submit recommendations to it.

Among the PPP Committee's responsibilities are the following:

- Approval of the inclusion of PPP contracts in the provisions of Law 3389/2005
- Revoking the above approvals in cases the public entities do not comply with the provisions of the law and do not respect their obligations,
- Deciding on the inclusion in the Public Investment Program of the fee payable to the private entities.
- Deciding whether financing the implementation of the project or provision of services will be made entirely by private operators or whether the public body will also contribute financially.
- Any other relevant decision.

### **- The Special Secretariat for Public Private Partnerships**

The Special Secretariat for PPPs was instituted as a part of the Ministry of Finance with the aim of promoting PPPs and supporting counterparties, during the phases of selection, contracting and execution of PPP agreements. The Special Secretariat assists the PPP Committee and the State and among its responsibilities are:

- Identifying the projects or services that can be implemented through PPPs and be subject to the provisions of Law 3389/2005.
- Promoting the implementation of projects or delivering services through the establishment of PPPs.
- Facilitating and supporting public entities in the process of assignment and selection of the private contractors with which they will cooperate.
- Monitoring the PPP contracts, so as contractors adhere to the deadlines of the frequent checks and updates, as well as processing and submitting suggestions for addressing potential problems.
- Drawing up annual reports and presenting them to the Administrative Committee of the Greek Parliament.

Figure 5, which can be found below, eloquently depicts the procurement procedures of PPP projects, as legislated by Law 3389/2005 and introduced by the Greek Ministry of Economy and Finance in the Guide for the Implementation of PPPs in Greece (2006).

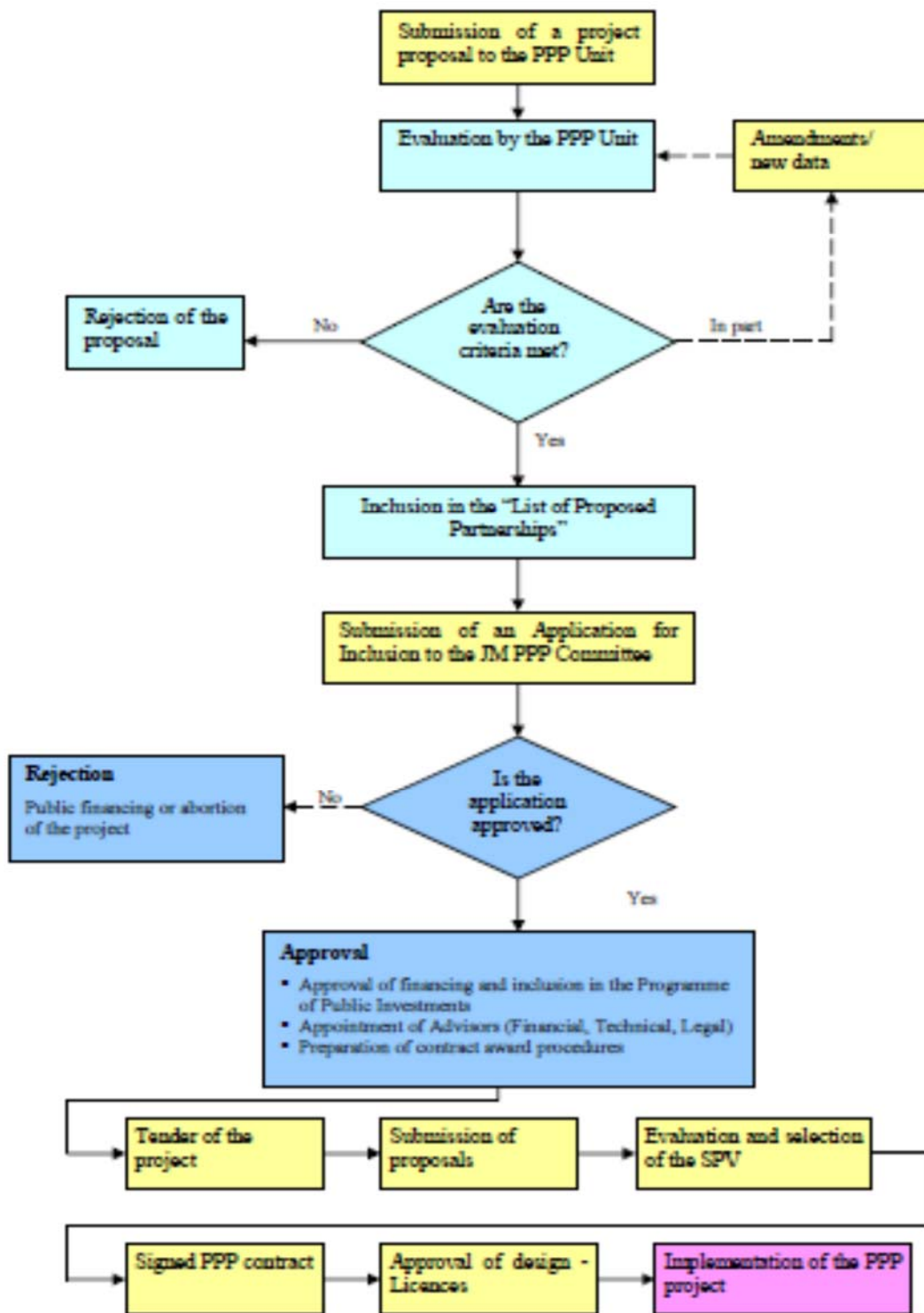
## **2.11 Prerequisites for Compliance with the Provisions of Law 3389/2005**

The main objective of Law 3389/2005 is to create a simple, comprehensive and clear framework for the development of the PPP institution in Greece, complying with European regulations. Each PPP project maintains its uniqueness and thus a uniform treatment of PPPs could create problems. It is expected that a law cannot universally cover the specifications of features of certain categories of works or services.

In order, thus, for a PPP agreement to comply with the provisions of Law 3389/2005, the sum of the following conditions must be fulfilled:

- An agreement must have as an object the realization of a project or provision of a service, which belongs to the administrative responsibility of the State under the provisions of the law or its founding statute.

Figure 5: PPP Procurement Procedure in Greece



Source: Guide for the Implementation of PPPs in Greece, Ministry of Economy and Finance (2006)

- The agreement must clearly stipulate that the repayment of the private entity is to be made in single or partial installments by the State or by the end-users of the infrastructure or services and that the private contractor undertakes most of the risks associated with financing, operation, maintenance, availability and demand of the work or service provided.
- The agreement must foresee that financing for the construction of the project or the provision of the service will be made, in whole or in part, with funds and resources of the private entity.
- The cost estimated to be required to implement the object of the partnership does not exceed 200.000 €, excluding the equivalent Value Added Tax (VAT).

Although all the above cases must be met in order for a cartel to be subject to the provisions of Law 3389/2005, there are also exceptions where an agreement may be subject to one or more of the required conditions. In order for such a decision to be made, unanimity must be reached by the Inter-Ministerial Committee for PPPs.

## **2.12 Benefits of Subjects to Law 3389/2005**

In the past, co-financed projects by private contractors have resulted in various problems, during the financing and/or implementation phase, which in order to be resolved had to become a special object of discussion and part of special laws regulated by the Greek Parliament, which validated the contracts. By the publication of Law 3389/2005, the Greek government sought to create a wider planning of projects and services through co-operation with private entities and thus meet the proper conditions, so as for the PPP institution could be developed and successful collaborations with the desired results could be implemented. Therefore, Law 3389/2005 embodies all beneficial provisions for partnership contracts, as well as those which in the past through special laws have been proven to benefit co-financed projects.

Law 3389/2005 attempted to deal with prominent issues, in order to achieve optimal cooperation between PPP partners, such as timely handling of licenses, archaeological finds, expropriations, favorable taxation and the process of collecting contractual fees by the State or end-users of the project or service.

Some of the benefits of linking a project or service to the provisions of Law 3389/2005 are indicatively depicted as follows:

- Acceleration of the procedures for recruiting consultants, due to the assistance provided by the PPP Special Secretariat.
- Timely and detailed briefing of the Ministers responsible for the implementation of the approved PPP projects, aiming to the rapid handling and resolution of potential problems.
- Integration to the Program of Public Investments, in order to secure funds for the availability payments, in the context of non-contributory PPP projects.
- Support and coordination of the Inter-ministerial Committee and the Special Secretariat for PPPs, facilitates the procedure for procuring the PPP contract.
- Flexibility and clarity of legal and institutional framework.

## **2.13 Theoretical Framework**

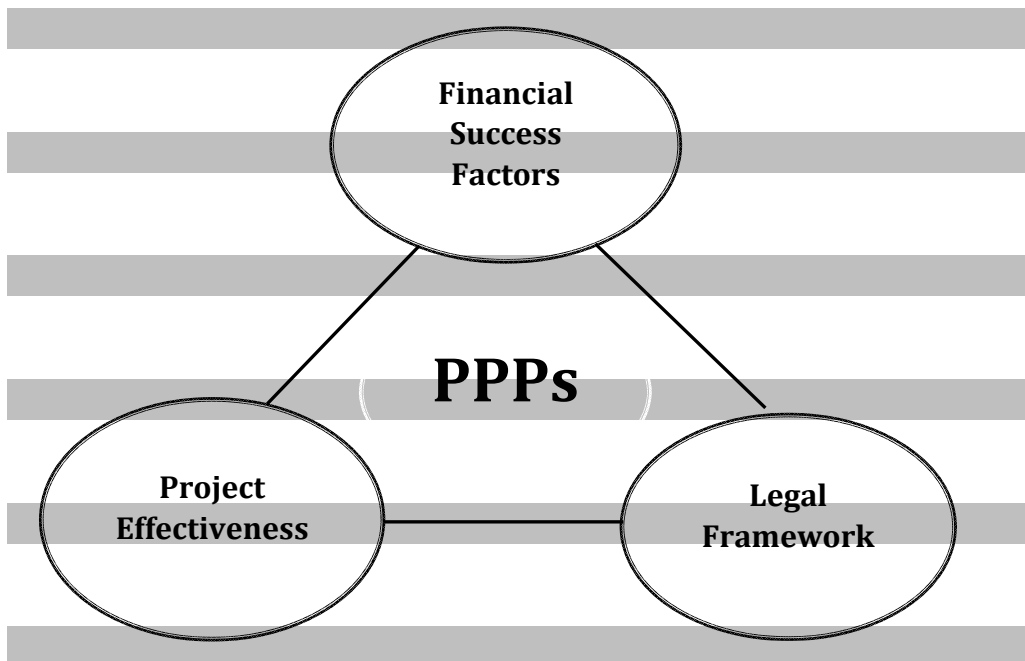
Acknowledging the existing research gap in Greek literature, as thoroughly analyzed before, the researcher established the need to extend the feedback regarding PPP arrangements, specifying all crucial factors that will enable future studies to focus on evolving the PPP institution, in terms of optimal project management. After all, such projects must be able to be carried out successfully both at the phase of research and design, as well as the phase of implementation and maintenance, so as to provide an optimal alternative investment design.

Recognizing that PPP implementation is directly affected by factors, such as the financial and legislative environment of the country where the project is developed, the study was established on these two basic pillars, proposing a research framework devoted to a comprehensive analysis of a novelty tool, able to deliver efficient results for all stakeholders involved in the contractual process. Each of the two pillars is characterized by a set of dimensions and each dimension is characterized by a set of variables. Having identified and defined them, after reviewing the relevant literature and perusing the legal framework regarding the PPP institution, the researcher will attempt to carefully structure a questionnaire, which after being carefully administered to experts in the PPP

field, both from the private and the public sector, will produce results able to lead to the research prerequisite of optimal project management.

Figure 6 below eloquently depicts the above theoretical framework. The financial pillar of PPPs is characterized as a variable affected by the economic and financial conditions of the country, otherwise the evolving microeconomic and fiscal environment. An evaluation of the application of PPP schemes in financial terms will produce information that will enable the researcher to understand the critical success factors of a project, as well as the country's propensity to use the PPP procurement method to deliver public infrastructure and/or services. On the other hand, the legislative pillar of PPPs is considered as an aspect referring to the presence of a specific institutional mindset supporting the development of PPPs. An assessment of the legal/statutory framework at a national level will procure results which, if processed carefully, will produce feedback efficient enough to lead to legislative improvements or amendments that will bring added value to both private and public initiatives. Both of the above factors, designed and operated in synergy, could promote the PPP institution and facilitate the delivery of complex projects between the private and the public sector, leading undoubtedly to PPP project effectiveness.

**Figure 6: Thesis Theoretical Framework Scheme**



**Source: Primary Research / Own Processing**

# Chapter 3

## Research Methodology

### 3.1 Introduction

Research Methodology can be defined as the principle, method or procedure employed for data gathering and analysis for the subject under study. It is also described as an approach a researcher uses to investigate a subject (White, 2000). This chapter presents an overview of the methodological perspective of the research. It describes research design and approach, data collection methods, justification for combining both quantitative and qualitative approaches, as well as the method of data analysis employed in the present study.

### 3.2 Research Design and Approach

Research Design and Approach relates to the strategy, tools and procedures that are used in collecting and analysing empirical data; it is otherwise a basic plan, guiding the data collection and analysis phase of the research. It specifies information on the type of data to be collected, the source of the data, as well as the procedure for the data collection. A proper research design ensures that the information collected is consistent with the objectives of the study and that the data collection procedures are efficient and accurate.

In the research at hand, the combination of both quantitative and qualitative approaches was employed, in order to provide answers to the basic research questions listed above (Table 1, Section 1.4).



### **3.2.1 Quantitative Methods**

Quantitative Research Methodology relies primarily on assumptions from the positivist approach to science; the mode of inquiry has a deductive logic, where the researcher converts observations into discrete units that can be compared to other units, using statistical analysis focusing on explanation, prediction and proof (Choudhuri et al., 2004). The main characteristic of quantitative research methods is that they are formalised and unstructured. They attempt to clarify phenomena with numbers; therefore their conclusions are based on quantifiable data, rendering the researcher, who has a relatively high degree of control in the study, objective in exporting conclusions. Based on the research questions, the researcher identifies the parameters that are of interest to the study. It is crucial for him/her to be objective, in order to conduct formalised analysis and make well-aimed comparisons and generalisations. Generalisations are feasible to make, since many objects are studied, although relatively little information is collected from each object (Cooper et al., 2003).

### **3.2.2 Qualitative Methods**

Qualitative Research, on the other hand, is intensive in nature and aims to find the core of a problem. It generally contains examining people's words or actions in narrative or descriptive ways, more closely representing the experiences of the people involved (Choudhuri et al., 2004); in other words, it focuses on acquiring a profound understanding of the objects under study. The possibility of making generalisations in a qualitative study is limited, since the number of objects is limited and studied more in depth (Cooper et al., 2003). Qualitative researches investigate, interpret and understand the phenomena, by means of an inside perspective; thus, subjectivity by the researcher is usually an issue, when conducting research. Cooper et al. (2003) identified "five main methods to be used for qualitative research; observation, interviewing, ethnographic fieldwork, discourse analysis and textual analysis".

### **3.3 Justification for using both Qualitative and Quantitative Approaches**

The rationale behind the combination of the two approaches is to enable the researcher to explore the advantages of both methodologies, so as to strengthen the outcome of this research and make it more robust and valid (White, 2000).

Employing the qualitative research method produces a wealth of detailed information about a much smaller number of people and cases; it is also proven effective for studying nuances in attitudes and behaviours (Luthans & Davis, 1982). Flexible and in-depth, this approach has potential to observe a variety of aspects of social situation (Silverman, 1998). Saunders, Lewis & Thornhill (2007) noted that qualitative research is emergent and flexible, open to unanticipated events and offers holistic depictions of realities, which cannot be reduced to few variables.

Quantitative research methodology, on the other hand, administers the possibility of measuring the reactions of many people to a limited set of questions, thus facilitating comparison and statistical aggregation of the data (Zhang, Waszink & Wijngaard, 2000). This produces a broad, generalizable set of findings, presented succinctly and parsimoniously. Smith (2003) argued that the combination of both qualitative and quantitative research approaches, otherwise methodological triangulation, can yield greater benefits than single methodology, as it enables the researcher to increase the robustness of the results, fill the gap of weaknesses that each methodology created and thereby complement each other harmoniously.

### **3.4 Data Collection Methods**

Yin (1994) listed six sources of information that are reliable when performing a case study research, “namely; documentation, archival records, interviews, direct observation, participant observation and physical artefacts”.

Documentation relates to documentary information such as written reports, administrative documents, formal studies and articles from mass media. Archival records include maps and charts, survey data previously collected organisational

and personal records. Interviews as a source of information can be open-ended or focused. Open-ended interviews are performed in a conversational manner, where the respondents may provide facts, opinions about events and own insights about occurrences. Focused interview, on the other hand, attempts to confirm facts that have already been established and does not raise questions of a broader nature. Direct observation includes visitation to the study, so as to observe how things are realized. It may, thus, involve attending meeting or visiting a facility. And last, participant observation constitutes a special mode of observation, where the observer can participate in the events being studied. Physical artefacts may be an instrument for the researcher, as well as a work of art or some other physical evidence collected or observed during a visit to the study area.

For the purpose of this research, both primary and secondary methods of data collection were used, as depicted below:

### **3.4.1 Primary Methods**

#### **➤ Documentation**

Documentation relates to documentary information, such as books, written reports, administrative documents, formal studies and articles collected from the mass media. This affords the researcher to get first-hand information about the phenomenon or institution under discussion.

#### **➤ Questionnaire**

This involves the construction of some research questions, related to the work or project involved. In the field of quality management, a number of researchers have used questionnaire surveys (Flynn et al., 1994, Saraph. 1989, Mann 1982). All of these researchers developed their questionnaires for data collection, based on their own research purposes; thus, their questionnaires differed from each other. Therefore, it was necessary to develop a new research questionnaire for the purpose of this thesis.

#### **➤ Interview**

Conducting interviews preconditions face-to-face discussion with the person/ persons involved in order to gain additional relevant information concerning the study objectives. The design of the structured interviews for this study was

based mainly on the research objectives, the research questions, the extensive literature review, the theoretical models, valuable input from colleagues and previous research conducted by other researchers.

### **3.4.2 Secondary Methods**

This involves the use of data collected for a purpose other than the problem at hand. Secondary data is often found in a library (books, scientific magazines, journals etc.), a company's annual report, information derived via internet or organisations specialising in providing information on different subjects. The collection of secondary data is quicker and cheaper than primary data gathering and has shown to be useful when performing exploratory studies, since it spares the researcher from 're-inventing the wheel'. Nevertheless, it is pertinent to remember that secondary data has either been collected for another purpose and may not meet the needs of the researcher, or the data might be out-dated at the time the researcher accesses it (Zikmund, 2000).

The secondary data used in this study was sourced from the documented materials on the field of PPPs, such as Greek and foreign journals, relevant studies, reports, textbooks, newsletters, magazines and/or seminar proceedings.

### **3.4.3 Instrument of Data Collection**

The essence of choosing a questionnaire survey is its ability to collect data in systematic and ordered fashion, proven, thus, cost effective compared to other methods. A questionnaire survey is mostly used when the objectives of the study are clear and not complex (White, 2000). Interview, on the other hand, is useful in obtaining more dynamic and detailed related information within a relatively short period compared to questionnaires. More so, some information that cannot be obtained through questionnaire surveys can be obtained through interview. In fact, findings from interviews can be used to explain the result of the questionnaire (Zhang et al., 2000).

The research instruments used for this research are questionnaires and structured interview schedules, conducted personally by the researcher via personal and/or skype meetings.

### **3.4.4 Questionnaire Design and Administration**

The questions of the questionnaire were designed with the research objective and the research questions in mind. In order to ensure the correspondence between the questionnaire and the problem area, the questions were checked by the supervisor and some experts in the subject area of PPPs. This proved helpful in making amendments.

The questionnaire structured for this thesis was administered to experts in the field of PPPs in Greece, both from the public and the private sector. The primary scope was to follow a deductive, “top-down” approach and apply empirical information, such as experience and practical performance data gathered from the literature overview, in order to gain feedback from the interviewees. Thus, the questions used in this research were based on ex-ante scientific and empirical accessions, as highlighted in the literature review earlier discussed, while the information procured was analyzed in order to expand the theory and attempt to fulfill the theoretical gap of a contemporary phenomenon and its value drivers.

The questionnaire consists of three sections, able to give targeted answers to important questions that often arise when discussing the PPP financial tool performance. Section A. attempts an accession of previous and existing PPP projects and the field of their implementation in Greece; Section B. accesses the implementation processes of PPP arrangements, taking into consideration the existing financial and legal framework in Greece, whereas Section C. examines planning and development suggestions that can incur important improvements in the general process of PPP procurement.

## **3.5 Population of the Study**

The population for this study comprises of experts in the field of PPPs, such as management advisors and consultants or contractor executives from the private sector, as well as regional administrative or ministry officers, heads of municipalities or public structures from the public sector. The researcher selected all ten (10) respondents, based on their previous or current positions and their knowledge, related closely to the procurement process of PPPs. This is

in line with the observation of (Saunders, Lewis & Thornhill, 2007), emphasising that it is sensible to collect data from specific population, when the population is below 100. It should be mentioned that, in order to improve the current process, questions related to the procurement and implementation procedures in PPPs and the feasibility of applying them in fact, were asked to the respondents.

### **3.6 Reliability and Validity of the Method used**

The validity of a research instrument is related to the notion that the research design fully addresses the research questions and stated objectives. Cooper & Schindler (2003) believe that validity refers to the extent to which a test measures what should be actually measured, while Saunders et al. (2003) argue that it also refers to the extent to which the data collection method/methods accurately measure what they were intended to measure. There are two major forms of validity; external and internal validity. External validity of research findings refers to the ability of the data to be generalised across persons, settings and times. Internal validity refers to the ability of a research instrument to measure what is purposed to measure.

Reliability deals with the consistency of the instrument and whether it can be replicated by another researcher, obtaining therefore similar findings (White, 2000). It also refers to the degree to which data collection methods will yield consistent findings or similar observation, compared to other researchers using the same method. A measure is considered reliable to the degree that it supplies consistent results. Reliability is a necessary contributor to validity, but is not a sufficient condition for validity.

For this research, a pilot test was conducted to assess the validity of the questions and the reliability of the data collected. This was carried out by drawing sample from the targeted population and the procedures and protocols designed for the data collection simulated. Two respondents, experts in the field of PPPs in Greece, were selected in order to complete the questionnaire. Their suggestions, amending to the enhancement and establishment of the content validity conducted to the final structure of the questionnaire. To ascertain the reliability and validity of the data collected, the questionnaire was administered

using the non-probability (convenience and judgment) sample. This entailed focusing on the target respondents that were adjudged to be technically capable of providing relevant response to the questions for valid results. That provided that only interviewees who had cognate experience in PPP research, design and management were approached.

### **3.7 Method of Analysis**

The information and raw data obtained from the interviewees, all experts in the field of PPPs in Greece, was derived through the use of a structured questionnaire containing both close and open-ended questions. Subsequently, the interviews were analysed using descriptive statistical tools, such as frequency and percentages. Simple statistics supported by series of tables, charts and figures were also presented, in order to enhance illustration of the findings, whereas processed interview findings were used to support and synthesise the main results obtained from the administered questionnaire.

### **3.8 Ethical Issues**

The questionnaires appearing in Appendices A and B of the thesis (in the Greek and the English language) were administered to experts in the fields of PPPs, who are presently active both in the Private and the Public Sector. The researcher is fully aware that the Public Sector is saddled with confidentiality and that the present research does not constitute an exception in this regard. In fact the release of official information in such conditions can only be made with express permission and such permission was granted. This notwithstanding, the researcher made a promise to the respondents, based on ethical grounds, that any information that is likely to cause damage in whatever form to any of the parties' performance or reputation, would be cancelled from this report.

## **3.9 Conclusion**

This chapter describes the methodology used in this study and is followed by the justification for selecting the methods. Research design and approach were presented, followed by data collection methods and instruments of data collection used in the specific research study. Furthermore, the validity and reliability of the research instruments and the collected data were discussed. Finally, the description of how data will be analysed and presented was also discussed.



# Chapter 4

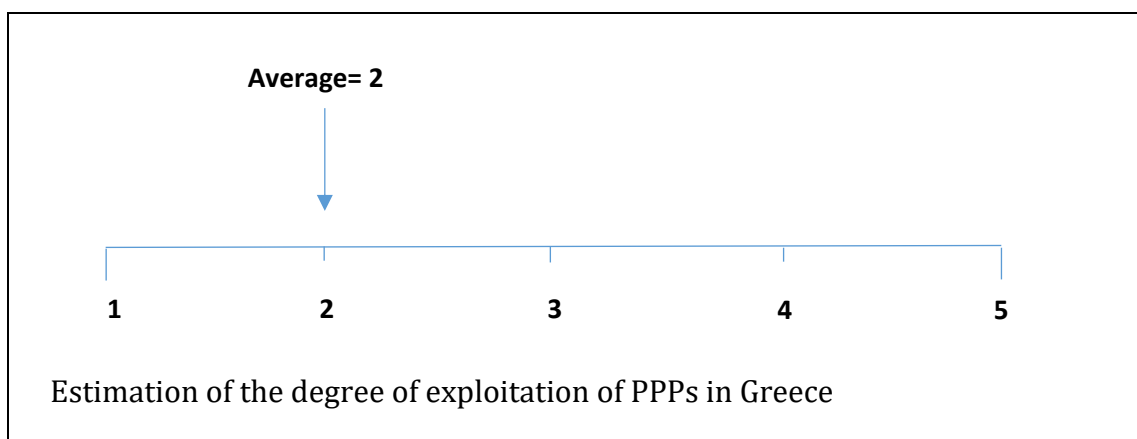
## Research Findings

### 4.1 Evaluation of PPP Projects in Greece – Field of Application

The researcher decided to devote the first part of the questionnaire to the evaluation of PPP projects in Greece, aiming to select information about how PPP arrangements are affected from the uncertain macroeconomic environment and tight fiscal conditions in the country.

The general estimation of the interviewed experts when asked to consider on a five degree Likert scale whether Greece has taken advantage of the tool of PPPs to a sufficient degree during the years of its implementation moved on the same wavelength, bringing the result of the estimation below the average degree of 3. All answers (1 = Not at all, 2 = A little, 3 = Adequately, 4 = A lot, 5 = Very much) fluctuated between 1 and 3, resulting to an average of 2 (see below, Figure 7) which indicates that the PPP exploitation is overall considered fairly inadequate.

**Figure 7: Estimation of the degree of exploitation of PPPs in Greece**



**Source: Primary Research / Own Processing**

This question was followed by a request to substantiate the answer provided. Most interviewees conceded to the fact that, during the period 2005-2009, there was a strong mobility towards design and implementation of PPP projects at a national, as well as a local level. However, from the year 2011 and on, due to “resource constraints”, “budgetary” or “financial” inability to procure private and public funding, these initiatives were significantly reduced. Prominent in the majority of the answers provided were terms, such as “economic crisis”, “austerity measures”, “IMF control” and the “memorandum period”, which resulted in the overall opinion that almost any type of investment in Greece seems nowadays “prohibitive”, “restrictive” or “not encouraging for investment initiative”, both on the part of the State, as well as on the part of private entities (domestic or foreign). Nevertheless, everyone pointed out that a number of PPP projects have been completed until 2013 in the fields of education and transport, whereas there are appear to be approved projects in the fields of energy and waste management, without sufficient data in terms of their evolvement. Others, however, argued that the PPP method of procurement has not been exploited in key areas of the Greek economy, a fact attributed to the “lack of know-how” or “expertise” or even inability of private entities to “support” or “finance” complex institutional procedures in an economic cycle of recession.

Following that, the participants were asked to estimate on a five Likert scale the effectiveness of PPP projects in relation to factors, such as implementation speed, leveraging of the local economy, ensuring steady quality after project completion and cost-quality ratio.

**Table 5: Estimation of the Effectiveness of PPP projects in Greece**

<b>Estimation of the Effectiveness of PPP projects</b>			
	<b>Average</b>	<b>Estimation</b>	<b>Tendency</b>
Implementation speed	3	1,7	↓
Leveraging of the local economy	3	1,7	↓
Ensuring steady quality after completion	3	2,9	↓
Cost – quality ratio	3	2,9	↓

**Source: Primary Research / Own Processing**

All answers, as depicted above on Table 5, indicated a tendency below the average degree of 3 (1 = Not at all, 2 = A little, 3 = Adequately, 4 = A lot, 5 = Very much), giving, however, the third and fourth of the above points a clear lead in the race of the most influential factors linked to the effectiveness of a PPP arrangement. And while none of the interviewees added another factor related to that aspect of PPPs, it was considered that these are the most important factors for a public entity to opt for the PPP model, whereas implementation speed and leveraging the local economy are of minor importance. After all, experience shows that governments choose to implement PPPs in co-operation with the private sector, aiming primarily to ensure better quality of services or more innovative and cost efficient solutions.

The research also focused on the effectiveness of the existing institutional processes of PPPs in Greece and the interviewees were requested to point out their estimations about the stages of research and design and negotiations, as well as the crucial factors of cost, time range and risk allocation. On a five Likert scale with an average of 3 (1 = None, 2 = Little, 3 = Adequate, 4 = A Lot, 5 = Very), all estimations indicated a tendency below or near average.

**Table 6: Estimation of the Effectiveness of Institutional Processes of PPPs**

<b>Estimation of Effectiveness of Institutional Processes of PPPs</b>			
	<b>Average</b>	<b>Estimation</b>	<b>Tendency</b>
Process Design	3	2,5	↓
Negotiations	3	2,3	↓
Cost	3	2,4	↓
Time	3	1,5	↓
Risks	3	2,9	↓

**Source: Primary Research / Own Processing**

More specifically, institutional processes, as far as risk allocation is concerned, are considered to be almost adequate and that obviously relates to the fact that the potential of failure in risk allocation may have devastating results both for the public and the private entity involved in the PPP. The stages of process

design, negotiations and costs incurred from a PPP contract were considered of minor inadequacy and most experts expressed their reservations regarding the complexity of the legal framework, which is clear and distinct, nevertheless time and cost-consuming for any private entity interested in entering a PPP.

To complement the above quest, the participants were asked to estimate, on a five Likert scale as well (1= Not at all, 2 = A little, 3 = Adequately, 4 = A lot, 5 = Very much), all reasons affecting the implementation of PPPs in Greece. All factors were considered of heavy impact, with the tendency fluctuating above the average of 3. As indicated on table 7 below, of notable importance are considered finance-related factors, such as funding problems, lack of public resources and the macroeconomic environment, whereas factors of political nature, such as political developments and fiscal issues seem to be capable of adequately affecting a long-term PPP contract.

**Table 7: Estimation of the Reasons affecting PPPs in Greece**

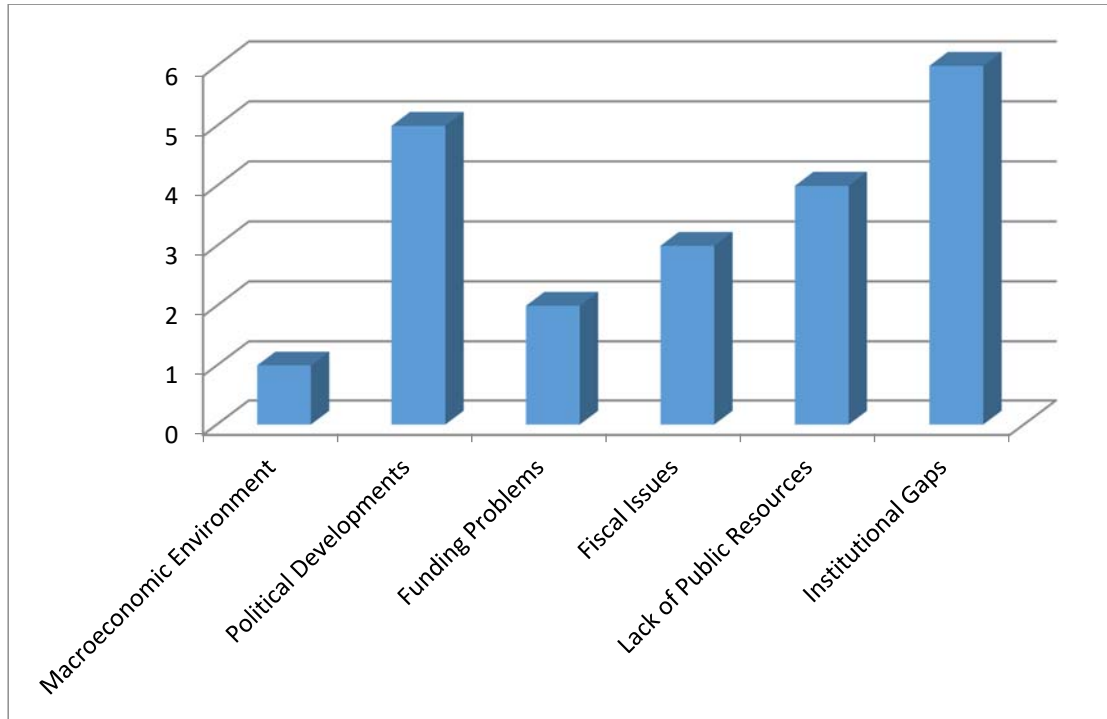
<b>Estimation of the Reasons affecting PPPs in Greece</b>			
	<b>Average</b>	<b>Estimation</b>	<b>Tendency</b>
Macroeconomic Environment	3	3,9	↑
Political Developments	3	4	↑
Funding Problems	3	4,5	↑
Fiscal Issues	3	4	↑
Lack of Public Resources	3	4,2	↑
Institutional Gaps	3	3,3	↑

**Source: Primary Research / Own Processing**

Valuable results were also derived from the following fifth question, where participants were asked to prioritize the above factors, according to their estimated degree of influence in the Greek PPP reality (wherein 1 = most important, 2 = less important). As Graph 1 indicates, the general macroeconomic environment was considered the most important of these factors, followed by funding problems, fiscal issues and lack of public resources. As fifth in importance were deemed political developments, while institutional gaps was considered the least affecting factor, with emphasis, however, placed on the fact

that they might create minor implications or bear additional costs to the private stakeholders.

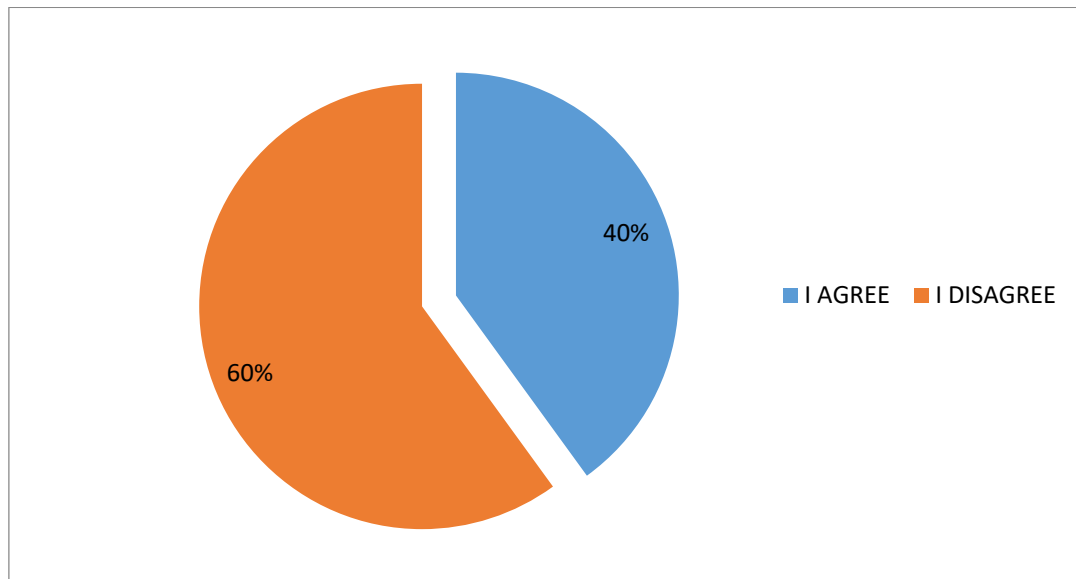
**Graph 1: Prioritization of reasons influencing the implementation of PPPs**



**Source: Primary Research / Own Processing**

The last question of this section was related to political choices that were made during the last years of the crisis in Greece, which resulted to a significant decrease in PPP project contracting, with a characteristic example the inability of using public funding for Municipalities (1<sup>st</sup> Degree of Local Administration). Most interviewees responded that, indeed, the changes of recession in the economic cycle of the country have resulted in significant cuts in infrastructure or other high-scale projects, regardless of whether they are being procured through ventures or the PPP model. 60% of the respondents concede to the fact that this was a failure of the country's political leadership, whereas 40% disagree, mainly arguing that this was not an outcome of mere political decision-making, but a circumstantial admission bound to be made, due to the fact that Greece was placed under guardianship from the IMF. The relevant results appear on Graph 2 below:

**Graph 2: Estimation of political choices in the field of PPP implementation**

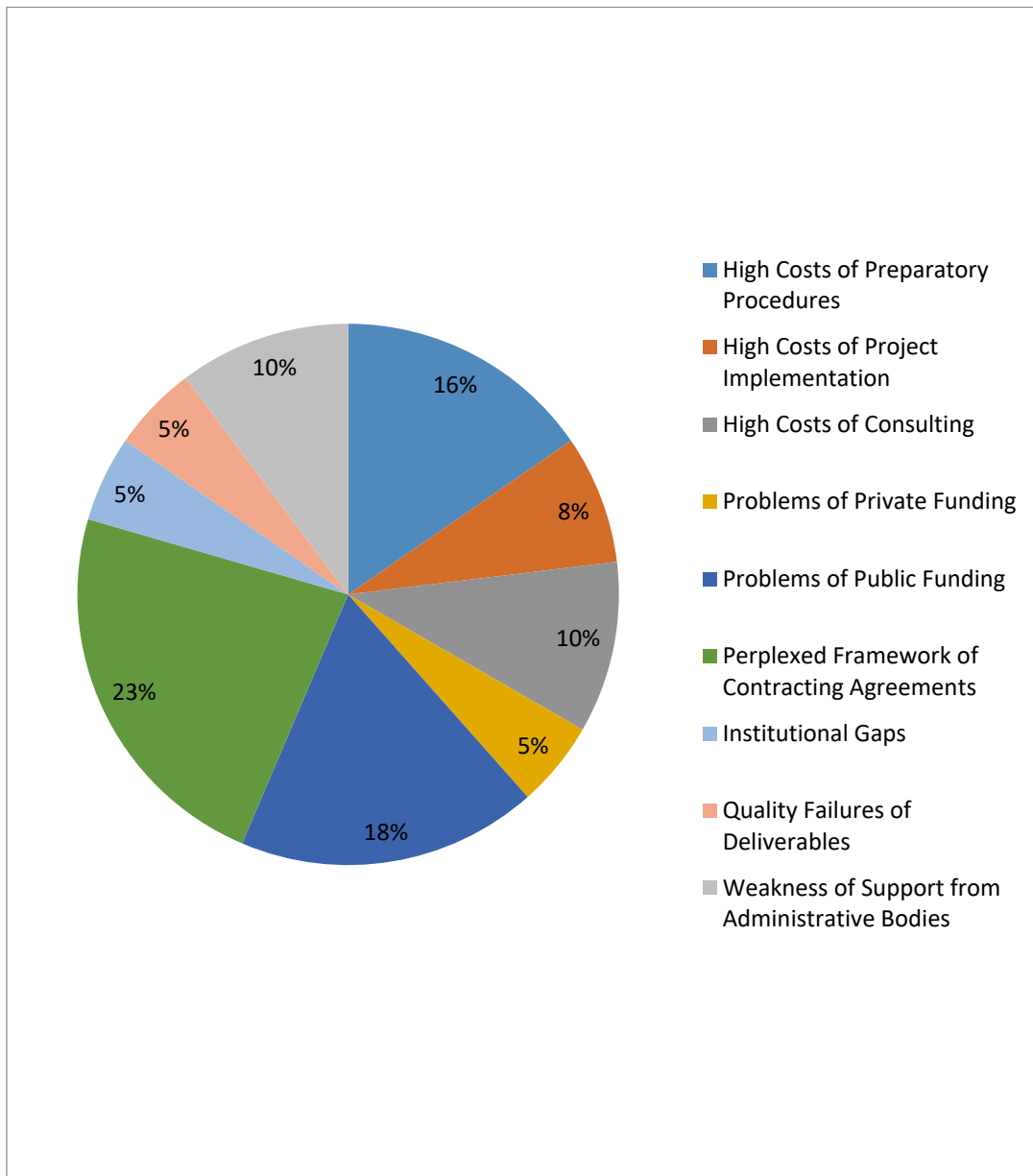


**Source: Primary Research / Own Processing**

## **4.2 Implementation of PPP Projects in Greece**

The second part of the questionnaire focused on questions concerning the process of PPP implementation in Greek reality. Primarily, the recipients were asked to indicate the most important problems encountered in the process of PPP materialization. The process of the answers was made in accordance with the frequency of occurrence of each sub-option, as depicted below on Graph 3, resulting to quite interesting findings. First in occurrence was the perplexed framework of contracting agreements, (23%), followed by problems of public funding (18%) and high costs of preparatory procedures (16%), which were considered factors of almost equal importance. High costs of consulting and the weakness of support from the institutional administrative bodies concentrated both 10%, while high costs of project implementation 8%. Finally, problems in private funding, institutional gaps and quality failures of deliverables were the ones acknowledged as problems of lower scale, concentrating only 5%. Note should be taken to the fact that none of the interviewees specified other problem factors appearing throughout the implementation process of PPP contracts.

**Graph 3: Problems in Project Implementation of PPPs in Greece**



**Source: Primary Research / Own Processing**

In an attempt to specify the degree of success of projects implemented through the PPP institution in Greece, all experts were asked to evaluate on a five Likert scale (1 = Not at all, 2 = A little, 3 = Adequate, 4 = A lot, 5 = Very much) all sectors of PPP implementation (as listed on the Special PPP Secretariat official site). Table 8 below imprints the results of these estimates, with the last column indicating the tendency, compared to the average of 3 in the Likert scale.

**Table 8: Estimation of the Success Degree of PPP Projects per Sector**

<b>Estimation of the Success Degree of PPP Projects per Sector</b>			
	<b>Average</b>	<b>Estimation</b>	<b>Tendency</b>
Security and Defense	3	1,5	↓
Urban Planning	3	1,7	↓
Public Administration	3	2	↓
Energy	3	2,5	↓
Transportation	3	2,1	↓
Education	3	3,3	↑
Environment	3	2,4	↓
Environment – Waste	3	3,5	↑
Information Technology	3	2	↓
Tourism	3	2	↓
Health	3	1,6	↓

**Source: Primary Research / Own Processing**

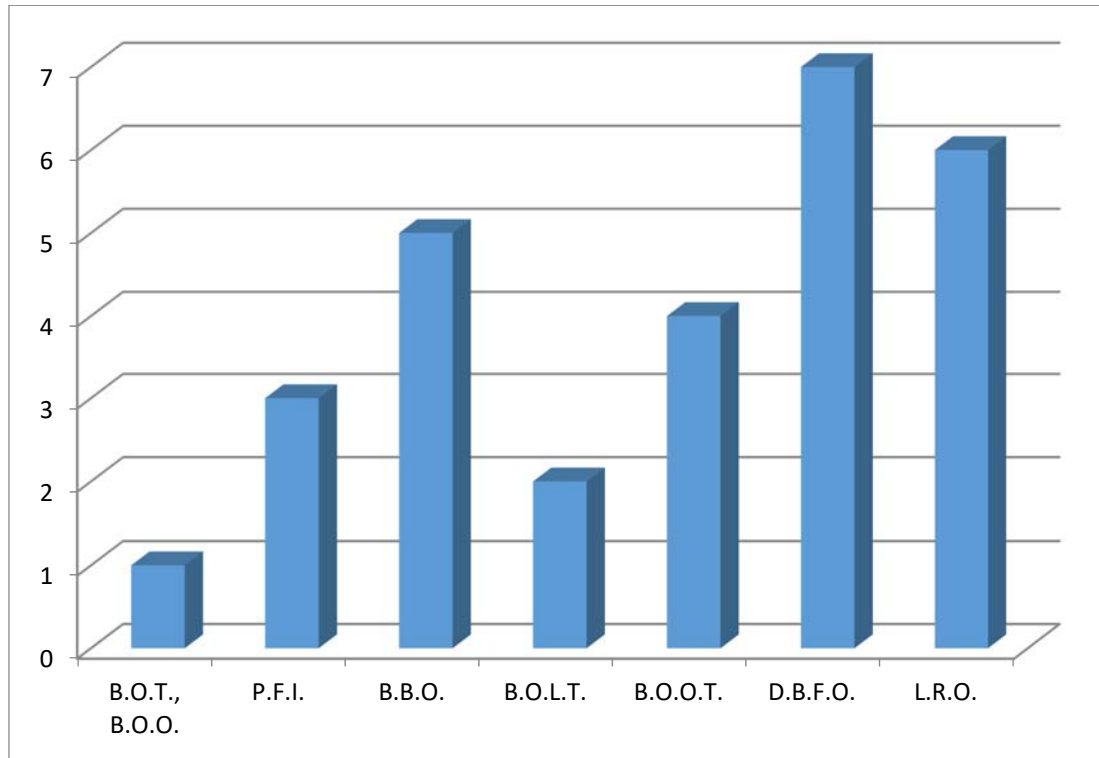
As can be assessed from the above, endeavors in the sectors of environment-waste and education are considered of high success, with estimates above average, whereas of minor success are deemed PPP projects implemented in the fields of energy, transportation, environment, IT, public administration and tourism. Finally, projects aiming urban planning, health and security and defense are overall considered of little or no success.

The following ninth question requested expert opinions regarding the best way of putting PPPs into practice in Greece. The respondents were asked to prioritize three of the options available (wherein 1 =the most indicated process). The results were processed according to occurrence and are depicted as follows in Graph 4 below. Answers with no preference were for obvious reasons omitted from the depiction. As we can see, the most indicated way of PPP procurement is B.O.T. or B.O.O., followed by B.O.L.T. and Private Funding Initiative, a method preferred in evolving economies or economies attempting to rebound from a recess period. As the above options, all the rest of the proposed methods - B.O.O.T., B.B.O., B.D.B.F.O. and L.R.O. - entail some form of asset exploitation or



facility operation from the private sector for a significant time period. This fact indicates that all experts, regardless of their descent, deem that private initiative is preferable to be exploited not only during the construction period, but also during the life cycle of the asset, so as to ensure proper maintenance and/or exploitation, through qualified human resources.

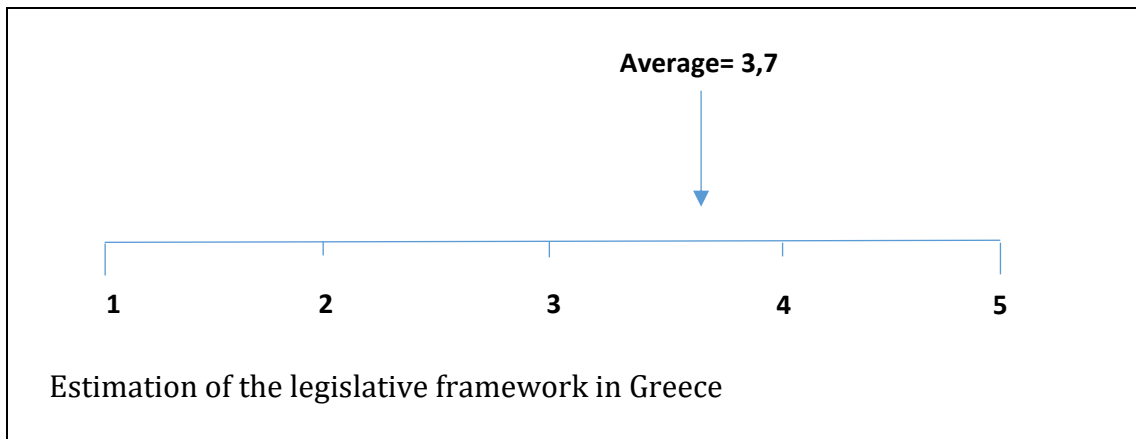
**Graph 4: Prioritization of the forms of PPP procurement in Greece**



**Source: Primary Research / Own Processing**

The general estimation of the interviewed experts when asked to consider on a five degree Likert scale the adequacy of the existing legislative framework of PPP procedures in Greece moved on the same wavelength, bringing the result of the estimation above the average degree of 3. All answers (1 = Totally Inadequate, 2 = Inadequate, 3 = Sufficient, 4 = Satisfactory, 5 = Very Satisfactory) fluctuated between 3 and 5, resulting to an average of 3,7 (see below, Figure 8), which indicates that the legal and institutional framework is overall considered satisfactory.

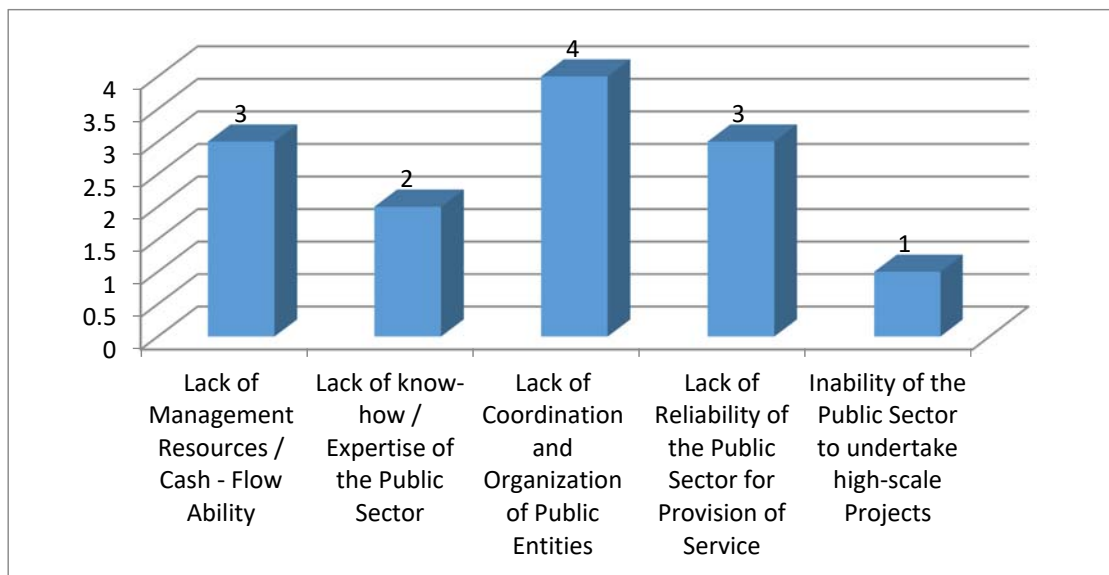
**Figure 8: Estimation of the Legislative Framework in Greece**



**Source: Primary Research / Own Processing**

Participants were also asked to prioritize from the options available the most important reasons underlying the implementation of PPP project arrangements in Greece (1 = the least significant). The results were processed according to occurrence and are depicted as follows in Graph 5 below.

**Graph 5: Prioritization of Factors affecting PPP Implementation in Greece**



**Source: Primary Research / Own Processing**

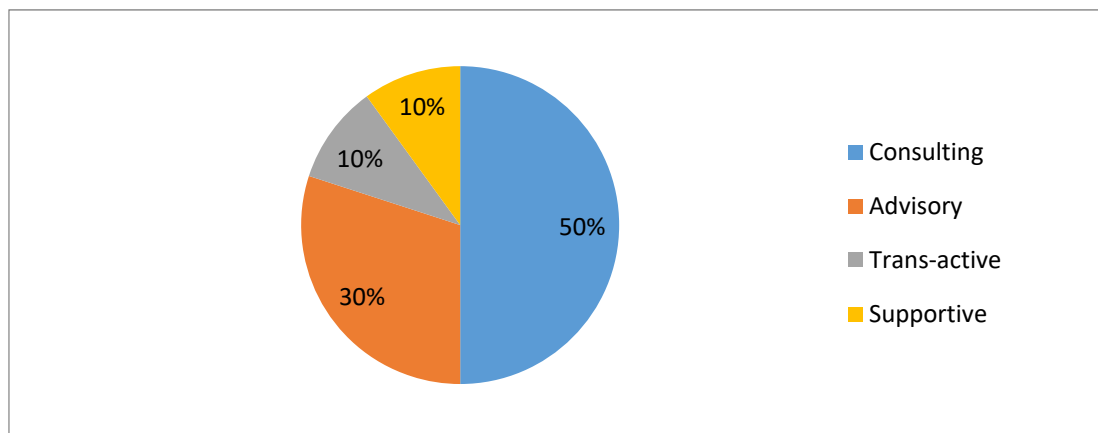
As we can observe, the least significant seems to be the inability of the public sector to undertake high-scale projects, followed by the lack of know-how and/or expertise. These factors remain an unpleasant fact for the State, not affecting, however, the overall performance of a project. What seems to urge

public entities to adopt the PPP procurement solution is their lack of cash-flow ability, management resources and reliability for providing a service, found third in row, concentrating the same percentage in occurrence. Finally, the lack of coordination and organization of the public entities is considered the most important of the above paragons, a fact which vividly illustrates the general picture and emphasizes on the inability or inflexibility of the public sector to operate on slim budgets and confined choices regarding acquiring skilled human resources.

The last question of this section focuses on the institutional role of the Special PPP Secretariat, regarding its areas of jurisdiction, as is legally defined. The participants were asked to characterize the role as consulting and therefore helpful, advisory but not interfering, merely trans-active and therefore distant, or really supportive and providing solutions. The areas of jurisdiction were indicated as follows:

A. Identification of projects or services that can be implemented through PPPs. Graph 6 below indicates that at this area the role of the PPP Secretariat is considered mostly supportive (50%) and therefore helpful or advisory but not interfering (30%).

**Graph 6: Perception of the role of the PPP Secretariat – Paragon I**

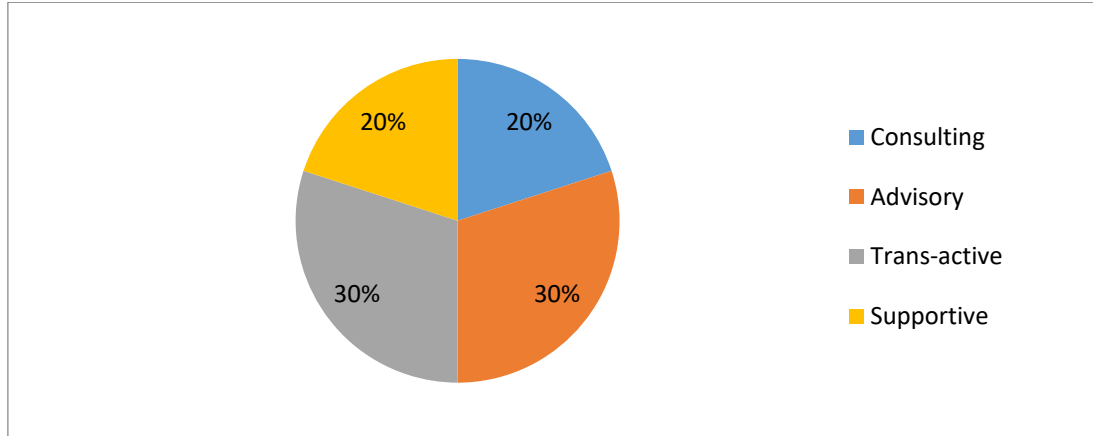


**Source: Primary Research / Own Processing**

B. Evaluation of public entity proposals and promotion to the inter-ministerial Committee. Graph 7 below indicates that at this area the role of the PPP Secretariat is considered mostly advisory but not interfering (30%) or trans-

active and therefore distant (30%), whereas consultation (20%) and support (20%) are not deemed as strong points of the administrative body.

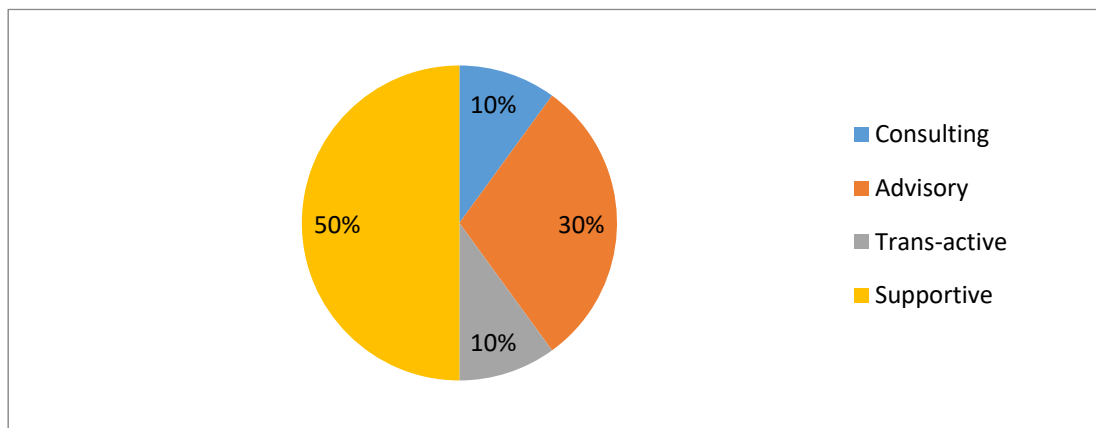
**Graph 7: Perception of the role of the PPP Secretariat – Paragon II**



**Source: Primary Research / Own Processing**

C. Promotion of the implementation of PPP projects/services through know-how dissemination to all stakeholders. Graph 8 below indicates that at this area the role of the PPP Secretariat is considered mostly supportive (50%) and therefore helpful or advisory but not interfering (30%).

**Graph 8: Perception of the role of the PPP Secretariat – Paragon III**

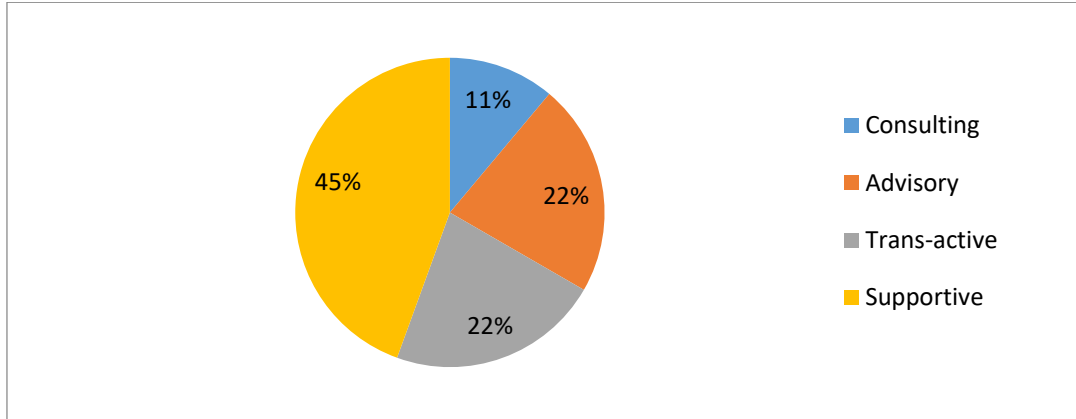


**Source: Primary Research / Own Processing**

D. Facilitation and support of public entities during contracting procedures with private partners. Graph 9 below indicates that at this area the role of the PPP Secretariat is considered mostly supportive (45%) and therefore helpful. A

quite large portion of the participants deem its role as either advisory but not interfering (22%) or merely trans-active and distant (22%).

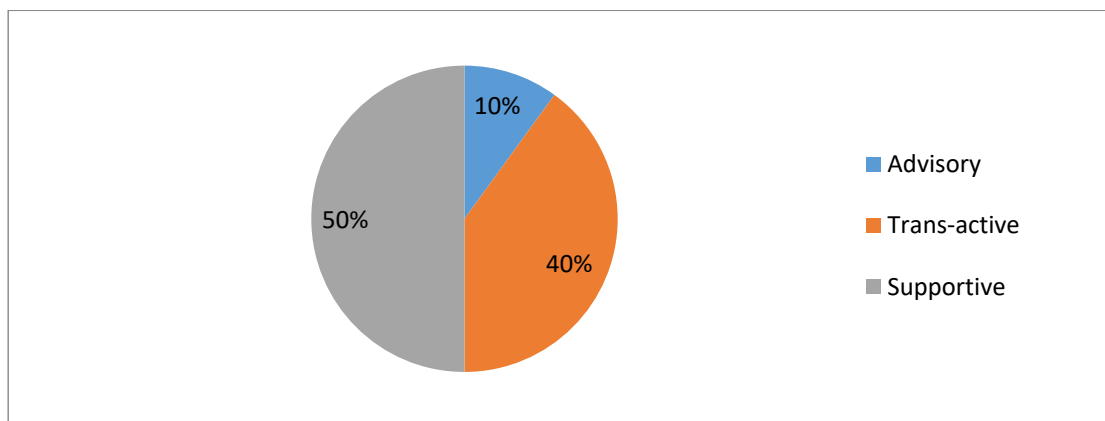
**Graph 9: Perception of the role of the PPP Secretariat – Paragon IV**



**Source: Primary Research / Own Processing**

E. Monitoring the implementation of the Partnership Contracts. Graph 10 below indicates that at this area the role of the PPP Secretariat is considered mostly supportive (50%) and therefore helpful or merely trans-active (40%), a fact which beyond a doubt indicates the diversion of opinions between the private and the public sector experts.

**Graph 10: Perception of the role of the PPP Secretariat – Paragon V**



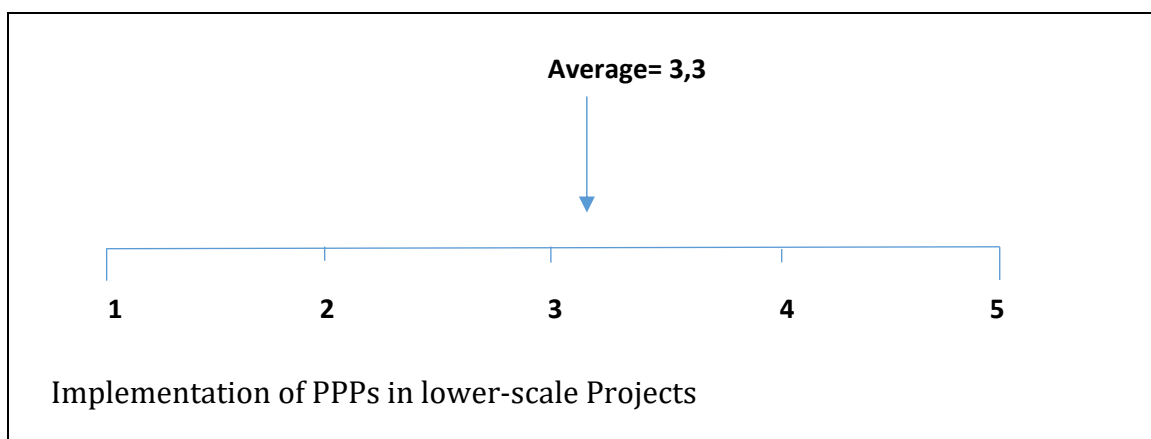
**Source: Primary Research / Own Processing**

### 4.3 Planning & Development Suggestions

The third part of the questionnaire was devoted to planning and development suggestions in the field of PPP procurement, which the researcher deemed important, in terms of clarifying vague aspects of PPPs as a financial tool aiming to achieve good project management.

The general estimation of the interviewed experts when asked to consider on a five degree Likert scale the option of implementing the PPP method in lower - scale projects in Greece procured the average result of 3,3, marginally above the average degree of 3(see below, Figure 9). The answers provided (1= Completely Negative, 2 = Negative, 3= Neutral, 4= Positive, 5= Very Positive) were quite ambiguous and fluctuated between 1 and 4, a fact which indicates an uncertainty concerning such an option. Therefore, participants were called to elaborate on their opinion.

**Figure 9: Opinion on implementation of PPPs in lower-scale projects**



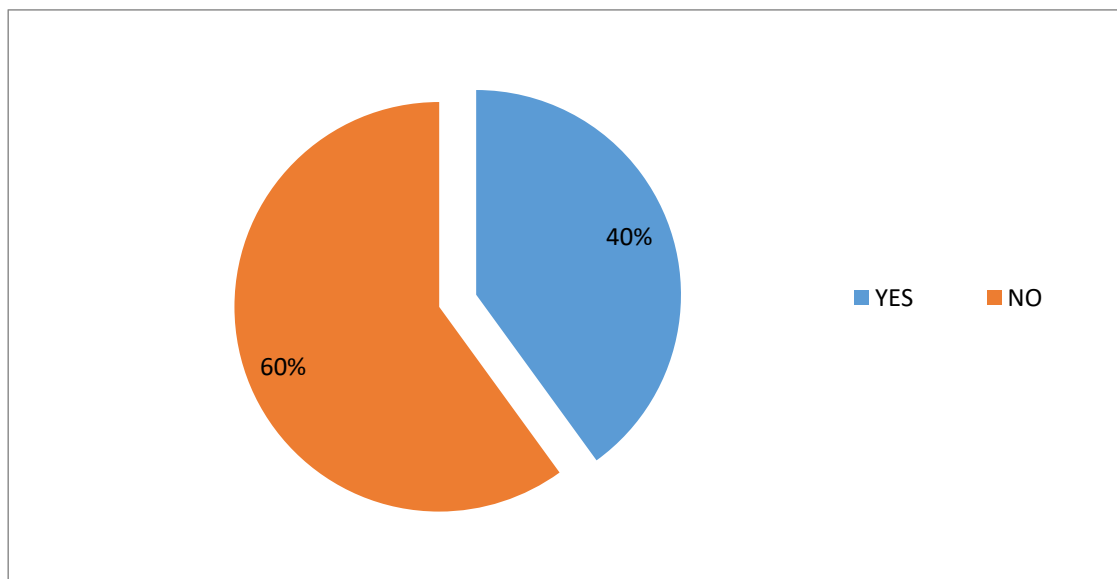
**Source: Primary Research / Own Processing**

The majority of the participants (approximately 60%) argue that international experience proves that it is possible to contract individuals for smaller-scale PPP projects; this, in any case, requires “clearly defined conditions”, “proper planning and safeguarding” and “feasibility and efficiency studies” in terms of risk allocation and/or cash inflows from the exploitation of the project, which should be documented before signing the contract. It was also noted that in Greece, private sector involvement is the only capable of providing “growth potential” or “added value”, while the “complexity of procedures” (preparatory stage,

negotiation, consultant costs) and “lack of flexibility” by the government usually hinders the completion of PPP procedures. Indeed, as experience at a local level has shown, the State is often unable to undertake or carry out even short-range projects within the foreseeable time limit, whereas -notwithstanding the involvement of private initiative, which mostly ensures speed and timing of implementation of a project- the PPP method of procurement has shown significant shortcomings, which render its implementation in smaller projects “unfeasible”, “impossible” or “not preferable”. In fact, the most austere opinions of the participants argued that looking at such a possibility for the implementation of smaller-scale projects would have “devastating”, “destructive” or “irrevocable” effects on Greek reality.

Another question which procured ambiguous answers was the one referring to the possibility of contributory PPP projects returning to the public entity after their completion (infrastructure/ services). As Graph 11 below depicts, 40% of the responding experts were strongly opposed, while 60% of them seemed more open to such a potential; each of them, however, posed arguments in order to support the undertaken position, which fairly enlightened the researcher.

**Graph 11: Opinion on whether assets should return to the public entity after the completion of the PPP project**



**Source: Primary Research / Own Processing**

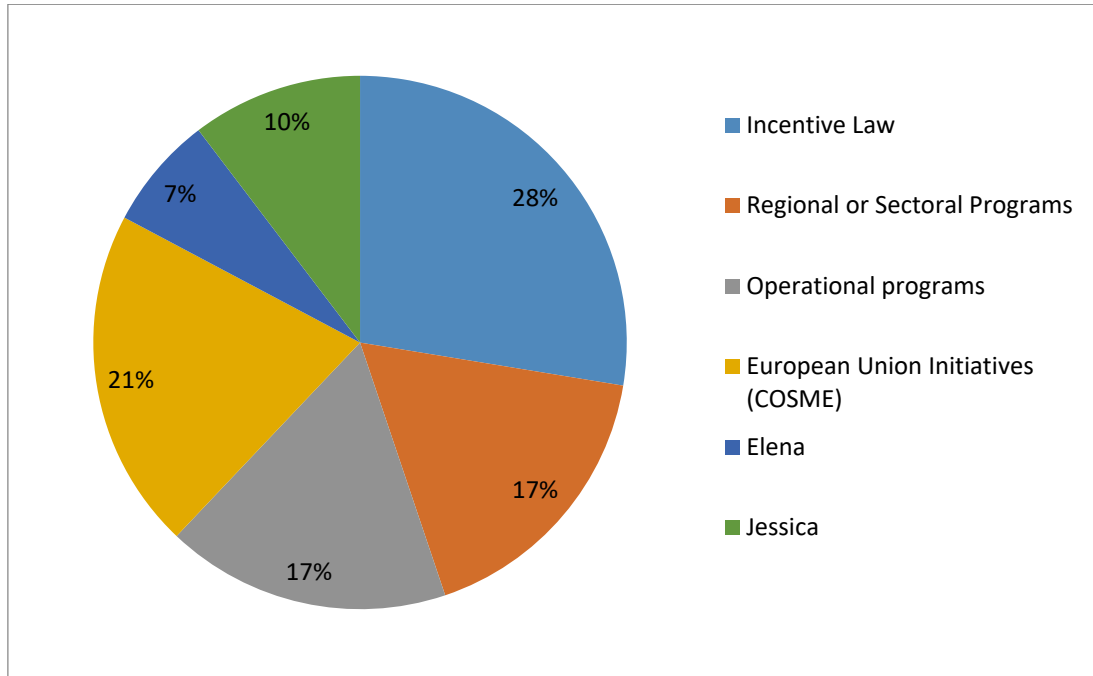
What appears to be prominent in every answer is the fact that, currently, the Greek State is unable to cope with the maintenance of any kind of project (given that only larger projects are carried out through PPPs), due to either “financial difficulties”, “limitations in the institutional framework” for Municipalities and Local Regions, or inability of the State in terms of “recruiting staff” or “procuring skilled human resources” with the necessary “know-how”, “incentives” or “expertise” to maintain and utilize assets. The above mentioned factors were considered by all respondents quite restricting for contributory projects returning to the State after the stage of their completion. What the majority of the experts pointed out, though, is that within a reasonable time horizon it would be possible for assets to return to the State, depending on the character of the project, the operation and maintenance costs, as well as the benefits that the exploitation of the asset involves. Overall, it was argued that the lack of opportunities for Greece to expand the institutional framework and overcome the disadvantages of recruiting staff for the operation of infrastructures makes it rather prohibitive to utilize realized projects, staff them with the necessary resources, allocate the necessary funds and ensure quality of the services offered in the long run and efficient maintenance, in order for the asset to achieve the “maximum value for money”, “produce added value” or “procure maximum benefits during its life cycle”.

In terms of further seeking to develop the current institutional framework, the recipients of the questionnaire were asked whether they would find appropriate the ability to materialize PPP projects through other financing or budgeting tools than the ones L. 3389/2005 provides. The answers to that question were almost unanimous, with 90% of the respondents stating that other incentives should be created and institutionally put into practice, while only 10% did not identify gaps in the existing framework. Proposing alternate ways of PPP project procurement, 28% of the experts leaned towards motives administered through Incentive Laws, while others showed preference to more flexible financial incentives, such as European Union Initiatives (21%), Regional or Sectoral programs (17%) or Operational programs (17%). In fact, European Union Programs, such as Elena and Jessica were referred to as quite appropriate and already institutionalized



tools, able to provide to PPP arrangements a flexibility that maybe L.3389/2005 deprives. The above findings are eloquently depicted in Graph 12 below.

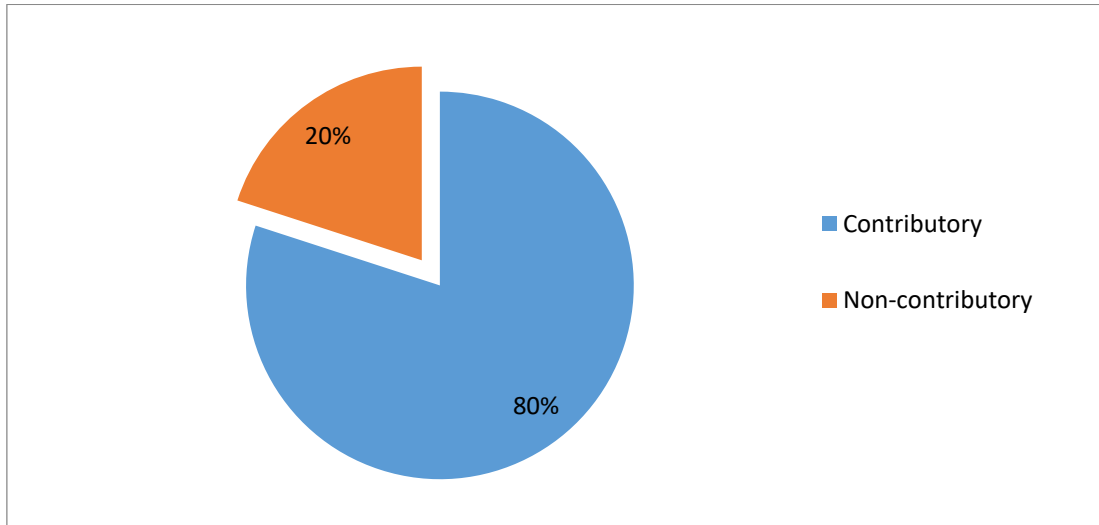
**Graph 12: Suggestions on realizing PPPs through alternate budgeting tools**



**Source: Primary Research / Own Processing**

Following that, the participants were asked to specify the category of projects whose implementation they would propose via the PPP method in Greece. As Graph 13 below shows, 80% of the expert opinions leaned towards the choice of contributory projects, while only 20% argued that non-contributory projects were a viable or indicated solution for the spatial framework of Greece. It was, however, noted that not all contributory projects are identical in the ways that they support their end-user content and that transport projects for example might incur different fees than environmental or tourism infrastructure projects. In any case, opinions conformed to the observation that communities are mostly interested in receiving efficient services that are available at an affordable cost, irrespective of who is delivering them; and quality services accompanied by the notion of good maintenance and sophisticated operation can probably only be delivered by private entities, who do not lack know-how and expertise.

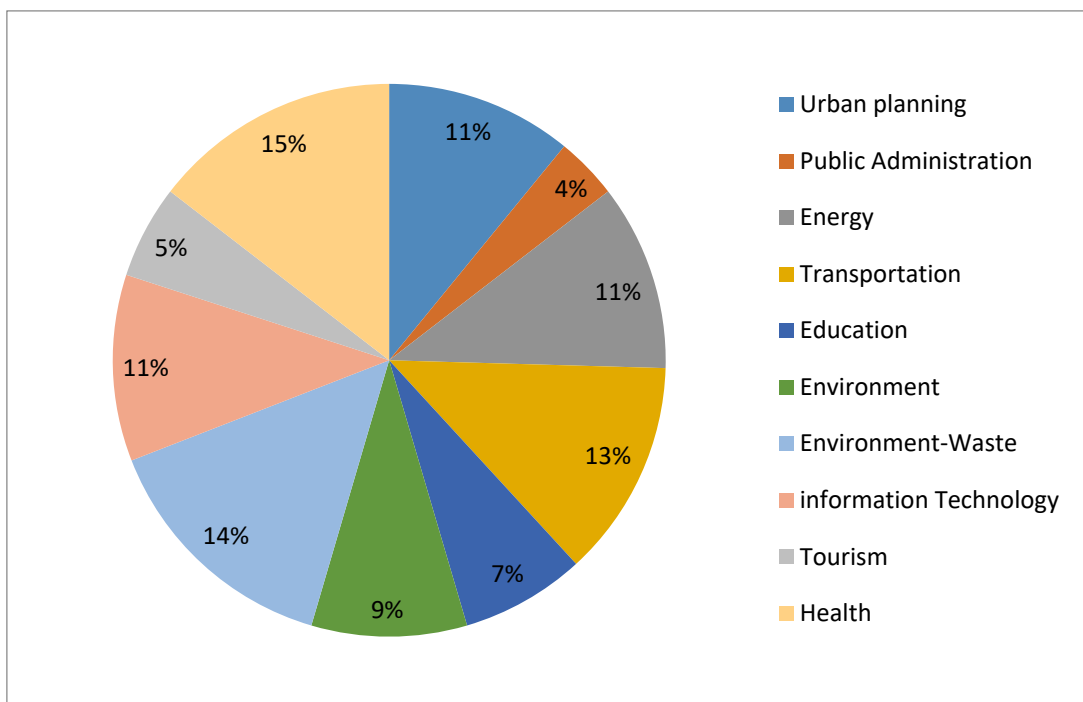
**Graph 13: Qualified category for PPP procurement in Greece**



**Source: Primary Research / Own Processing**

Planning and development of the PPP institution, however, relates also to the areas in which the greater shortcomings in terms of existing assets or provided services are identified. Thus, all experts were asked to prioritize the fields which are of great interest in Greece, as specified on the Special PPP Secretariat official site. The results of this inquiry were processed and presented as follows:

**Graph 14: Proposed Areas of PPP application in Greece**



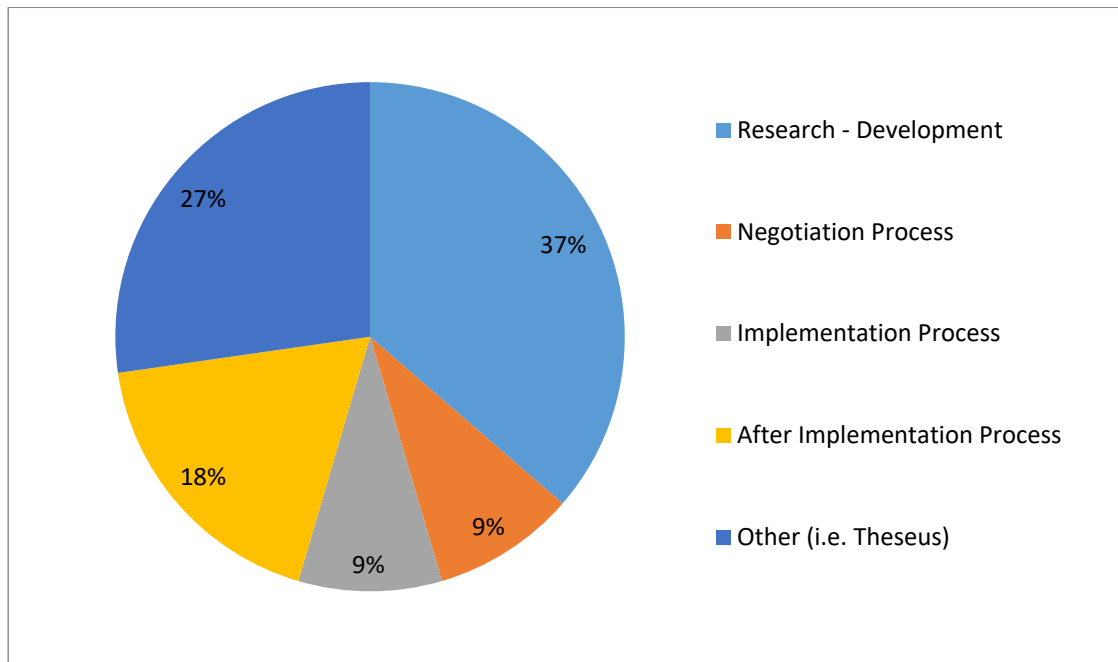
**Source: Primary Research / Own Processing**

Graph 14 above places at the top of the pyramid in Greece the field of Health (15%), which according to PPP experts is in dire need of new facilities and provision of efficient services. Environment and waste concentrates 14% of the interest, while of almost equal importance (13%) is considered the field of Transportation. IT (11%), Energy (11%) and Urban planning (11%) are fields of growing interest, which most of the participants believe that will monopolize future discussions, while of minor importance and need in complimenting existing assets and facilities are considered sectors, such as Environment (9%), Education (7%), Tourism (5%) and Public administration (4%). Security and Defense was a field which attracted no answers.

Under overall criticism, finally, was put the existing institutional framework of public project procurement in Greece and questions were raised as to whether modifications should be employed, so as to strengthen project implementation in Greece. The responding experts were equally divided, with 50% of them claiming that current laws concerning public procurement, especially after L. 4412/2016 was put into practice, are more than efficient and provide flexibility to the public sector and 50% of them arguing that there are still fields where amendments should be made. As Graph 15 below eloquently shows, 37% of the participants located problems in the field of research and development, while 18% at the stages after project implementation, which are believed to be in need of further elaboration, in order for public and private entities to be working in harmony.

What made an impression, however, was the fact that 27% of the PPP experts drew attention to the fact that in Greece, after 2011, when Law 3274/2004 (Development Programme "THESEAS") which gave priority to local authorities (Municipalities and Decentralized Districts) for realizing PPP contracts and funding pre-contractual and contractual services was rendered obsolete, there appears to be no appealing alternative, which can leverage local economies or create added value with projects of direct benefit to the citizens. These institutional gaps were considered as "unacceptable" or "serious institutional failures", while the ability of utilizing such programs was characterized as "bound to create a tangible impact" on the citizens of smaller societies or indicate the system's "clear intention to produce added value" and "leverage local economies" at times of tight fiscal conditions and changing economic cycles.

**Graph 15: Suggestions on modifying the Institutional Framework in Greece**



**Source: Primary Research / Own Processing**

# Chapter 5

## Research Conclusions

### 5.1 Introduction

PPPs have increased in popularity over the last few decades. They brought along a whole new glossary in the field of contractual arrangements and also specific features, which make PPPs both interesting and ambiguous. Researchers performed numerous case studies and surveys all over the world, while the diversity of the content and the different interpretations of PPP arrangements globally make it safe to assume that this topic is a real challenge.

In accordance with the purpose, this study investigated and identified two main areas as value drivers affecting value for money achieved in PPP projects; value assessment of critical success factors and evaluation of the existing legislation. Studying theoretical value drivers in traditional procurement, national PPP guidelines and interviewing practitioners from the public and the private sector was also complimentary in the process of fully comprehending the notion of effective project management.

This paper claims that the research and planning of each partnership must be developed in detail from the perspective of all stakeholders. The implementation of PPPs worldwide varies from country to country, sector to sector and project to project and such differentiation has to be taken into consideration when PPP features during implementation are discussed. And even though this study has an advisory perspective, its findings are both relevant and interesting for representatives from both public and private sectors in Greece. This dissertation concludes with a discussion of the findings procured through the interview phase, comparisons to existing literature and recommendations for future

academic research, also taking into consideration the limitations of the researcher.

## **5.2 Discussion**

The global need for delivering projects and/or services of large scale is highly significant, particularly in emerging or recovering from recession markets. In this context, typical public funding of infrastructure projects is found insufficient, whereas the public sector is considered inadequate to bear the economic risks of such projects throughout the years and, additionally, cannot support them, due to the lack of skilled human resources and sufficient know-how. This much-discussed “gap” comes to bridge the novelty PPP tool, which, under appropriate conditions, guarantees to provide solution for all speculation and deliver tangible results for all stakeholders. According to consensus estimates of OECD to the Boston Consulting Group and the World Bank Group, the estimated annual global infrastructure investment need is about \$3.7 trillion, of which only about \$2.7 trillion is currently met on an annual basis (OECD, 2015). That means that, in emerging markets, the PPP industry needs to further develop financial products, so as to enhance its reliability. Under the circumstances, both the public and the private entities involved in PPPs should consider the benefits and deficits the PPP model embodies (as analyzed in Chapter 2, Section 7), in order to overcome possible obstacles and attain the concept of optimal project management.

Whatever the reason for implementing a PPP, experts indicated that the projects still need robust and long-term public sector assistance, so as to provide VFM over their lifecycle. Regardless which arrangement is adopted, governments should aim to the efficiency benefits derived from dedicating in long-term PPP projects, compared to the public sector procurement alternative. The point made was that public entities must have the ability to service such obligations, as well as the money to sustain a project, even if it falls beyond estimates. While there are many sources of financing investment costs of PPP projects, such as plain budget financing, long-term loans, bonds, equity etc., for most types of PPP projects there appear only two sources of funding the full cost of infrastructure: general taxation and fees derived directly from the end-users. Unless there are

adequate fiscal resources and/or end-user willingness to pay, bankable projects are unable to be developed. Thus, a combination of the two sources of funding is often needed, whereas public budget financing is imperative when full-cost recovery tariffs are not feasible, due to affordability constraints.

As the private sector receives a major impact in risk and uncertainty, it is anticipated that it will factor all risks into the rates of return targets from projects. When contracting to a PPP, private entities tend to compare the risk-return profile of the project. If the comparison is unfavorable, capital will not flow; it is, therefore, important to find the right balance between risk and reward in a project structure. As experts of the study eloquently state when recalling the reality of the last years in PPPs, if a project is well-structured and has credible public sector support, money will flow to that project efficiently.

Research showed that there was a growth in the number of PPPs in many countries until the late 2000s, but the field of project procurement was badly affected by the financial crisis, which has made difficult for private entities to borrow money from bankers. Private companies always had to pay higher interest than governments on loans; the gap, however, has recently widened – especially during the capital control period- as banks are unwilling to lend companies for such long-term projects. In Europe, the number and value of PPPs in 2012 was the lowest for at least 10 years, with 66 new deals worth €11.7 billion. Half of these were contracted in the UK and the rest in France and the Netherlands, whereas other European countries made very little use of PPPs. These numbers show that, on average, interest rates on the borrowing of PPPs increased, making this according to the EIB (2016) the main factor behind this decline. Overall, changes in the political climate, lack of government guarantees and austerity measures are leading to general cuts in public spending plans.

That is the reason why, according to the interviewees, contracting PPPs for smaller scale projects is not feasible in Greece. Despite the fact that international experience shows that such projects are financially efficient, there are currently no present circumstances for opting for lower-scale PPPs, despite the fact that private incentive guarantees quick and timely delivery of projects. After all, the State or any private entity cannot under the current institutional framework be

flexible enough to afford drafting feasibility and efficiency studies for projects, which do not guarantee medium to long-term returns.

The institutional framework of PPP contracts is defined by the provisions of Law 3389/2005, as well as the laws discussed under Chapter 2, Section 8. Among the positive points of the framework, according to the interviewed experts, are considered the clear scope and conditions of PPP contracts, aligning with the provisions of the EU law and the laws for public procurement, which help in achieving transparency and guarantee a minimum level of competition and risk-sharing arrangements. These provisions are thought of as defining public-private relations during the contractual period and creating the conditions, under which PPP investment projects can be financed. However, proposals could be made for amendments of the legal framework mainly in the stages of designing and negotiating procedures. In addition to that, note should be taken to the fact that interviewees strongly highlighted as a negative aspect of the existing framework the lack of laws or provisions about programs, which could enable the use of the financial tool of PPPs for citizens of smaller societies (Municipalities, Regions). As they point out, programs like the ones Law 3274/2004 "Local Governmental Organizations' Development Programme "THESEAS"" introduced, demonstrated that the public sector had the clear intention and capacity to create and implement infrastructure projects with direct benefits for the citizens.

Whatever the current financial and legal situation, the need for financing PPP projects for obtaining medium and large-scale assets is growing. Experience shows that Greece has taken advantage to the novelty PPP financing tool, without, however, exploiting it to a sufficient degree. The macroeconomic environment in the country is not encouraging, whereas there are not yet fully implemented projects able to provide VFM or sustainability indicators. But even if the fiscal condition and economic situation in Greece improve, the need introduced by the financing gap, as analyzed above, is unlikely to be met from public sources alone. This generates an expectation that private capital and end-user fees or charges must be mobilized to saturate these gaps. This is an entirely predictable problem and over the years the international community has made efforts to provide assistance in building PPP capacity in emerging markets. Finding ways to leverage private sector investment through sound, consistent



and sustained public sector policies should be a focal point for governments around the world. The alternatives of collaborating with International Financial Institutions (IFI) and Multilateral Development Banks (MDB) are prominent and can provide great benefits, given their unique relationships with emerging market governments.

Although PPPs are often promoted as a solution for countries under fiscal constraints, evidence suggests that such projects are often complicated by fiscal problems. According to the EIB (2014), the six countries that have made the greatest use of PPPs in recent years are Cyprus, Greece, Ireland, Portugal, Spain and the UK. Four of these are subject to Troika rescue packages and the other two –Spain and the UK– face major fiscal problems. The IMF and Troika in Portugal and Cyprus have acknowledged PPPs as a contributory cause of the countries' fiscal problems and have required audits and renegotiation of existing PPPs and a freeze on new such projects.

Overall, PPP projects are considered politically sensitive, increasing the need to manage political risks during the project's lifecycle. As a form of long-term outsourcing project financing and operation, the political aspects of considering and allowing the private entity to participate are crucial. Strong political will, coherence and its continuity are considered an important factor for the success of PPP projects, as government changes may often be associated with changes in attitude or political direction. Therefore, public entities need to manage and provision for handling political risks, namely by using robust VFM schemes, during and after procuring a project/service. No single formula fits all requirements; different types of PPP arrangements are appropriate at different times and for different sectors. Therefore, local private sector capacity in PPP transactions needs to be built, so as to increase PPP investment overtime and broaden the pipeline of bankable projects of short to medium term.

Working in coherence with the local national counterparties, such as the inter-ministerial Committee and the Special PPP Secretariat is essential for building domestic capacity. Sharing the great collective body of knowledge on PPPs gathered through hundreds of projects in all regions around the world is also critical, allowing for real interactive peer-to-peer learning, both from PPPs that have succeeded, as well as the ones that haven't yet achieved their goals. Overall,

beyond the vast sums of investment needed to close the gap in projects and/or services, what will really sustain the much hoped-for gains in global growth will be spreading knowledge on PPP arrangements from emerging markets at a local level.

### **5.3 Recommendations – Managerial Implications**

PPP arrangements are cooperation agreements between Public Authorities and Private Entities, regarding the implementation of projects or the provision of services. Although complementing the framework of concession projects, it is essential to comprehend that PPPs are not classical public projects. PPPs are spread throughout different continents and European countries and, depending on the different needs of each region have different expressions, such as concessions, contributory or non-contributory projects, PPPs of conventional or pure-institutional type etc. Each country, depending on its requirements and its institutional particularities, perceives the development of PPPs differently and applies variant legislative provisions.

It is widely accepted that there are several areas where the public and private sectors can cooperate, such as transport, education, health, safety, waste and waste management, energy and the IT sector. In recent years, a growing number of PPPs have been employed in various European countries, as well as in Greece, due to budget deficits, lack of innovation and/or skilled workforce, producing benefits for the public sector through the efficiency and advanced skills of the private sector. Therefore, the promotion of the PPP institution aims to improve the quality of the state services provided to citizens and create the necessary added project value, by combining public with private resources.

The PPP projects that have been implemented so far in Greece, although with more burdened budgets than previously employed public procurement methods, have gained positive feedback, as they were deemed necessary for the citizens and improving their standards of living. Apart from the theoretical controversy over the usefulness and efficiency of the institution, the projects and services implemented through this method depend on political decisions, the nature of the projects and the possibilities available for taking advantage of private sector

offers, in terms of satisfying the public interest. Experience, however, at both central and local levels has shown that in most cases risk sharing is at the expense of the public sector and the distribution of benefit to the private entity. Therefore, the PPP method should not be treated as the only solution for an investment initiative of a publicly funded entity, as the individual is prone to demand high returns for participating in the partnership.

From the conclusion of the contract until its expiration, the law applicable is the one laid down in the regulations of the PPP contract in combination with the provisions of the Civil Code. The legal framework set by Law 3389/2005 has a series of advantages and disadvantages. To its positive aspects must be considered tax incentives, rapid resolution of various procedural problems and facilitation of procurement procedures through coordination provided by the inter-ministerial PPP Committee and the Special PPP Secretariat. On the other hand, to its weaknesses are accounted law ambiguities and high costs during the stages of research, negotiations and consulting, a fact resulting to exit from the market of small or medium-scaled private initiative. In order to make PPPs more desirable and preferable amongst other methods of project procurement, it is imperative to simplify the procedures and assign as many independent projects as possible to private entities.

In regard to future PPP projects, it is necessary to assess their viability and in general terms consider them as being necessary and providing important services to the community. Non-contributory projects are thought of as most important for the State, as they aim to serve the community and increase the quality of life (education, health, transport projects etc.), while contributory projects should preferably be treated as concession projects and not be included in PPP contracts. However, in order to integrate a project into PPPs, it is necessary to examine in detail and record the essential and urgent needs of the country and then to prioritize them on the basis of certain stable criteria and political consensus.

The public sector's objective is to release government funds and make them available for other developmental purposes, through the use of private funds for project construction and/or service provision. In addition, the budget deficit is reduced, as PPP projects do not appear in the state budget and state economy

indicators. Through partnerships with the private sector, the State achieves higher quality in services and projects provided, as the involvement of the private sector automatically connotes higher competition, efficiency, know-how and innovation. The fact that the contractor's payments are triggered by the delivery and proper and timely operation of facilities increases the sense of responsibility of the individual entity. According to the clauses in the contract, low quality services and infrastructure also entail reduced concessions for the contractor.

Through PPP arrangements, risks are reallocated from the private to the public entity, which retains strategic control of the program. However, possibilities of risk reallocation must exist in case of design provisions or operation changes of the project. It is, thus, imperative that PPP contracts include terms and clauses relating to amendments or additional work to be carried out. In such cases, carrying out additional work with other contractors should be allowed or provided. As the construction sector is undergoing a severe crisis and companies in Greece are trying to maintain reliability, applying a scale of intermediate boundaries in public procurement processes could allow each company to participate in projects of its dynamics, giving "breath" to the difficult period of recession and fiscal instability. Additionally, in regard to financing PPP projects, individual entities could explore the possibility of being financed through international institutions, such as the EIB. Overall, the main features that need to be provided are the ones that guarantee smooth implementation of PPP projects, such as sustainability, financial efficiency and candidates' skills.

## **5.4 Limitations – Criticism**

As mentioned earlier, due to time and content limitations, the dissertation at hand is restricted to a general perspective of PPPs and does not consider a specific variant or PPP model. The investigation of the PPP instrument may be examined both from an economic and a legal point of view; this, however, was limited only in the Greek territory. Thus, the research is demarcated only to the level that is enough to identify the most important points regarding the topic at hand in Greece, while due to the complexity and extent of the institution

internationally, a possibility arises that there is a divergence between the results presented in the dissertation and PPP reality worldwide.

Furthermore, it should be highlighted that due to the lack of corresponding information as a consequence of the absence of relevant projects earlier in Greece, most of the assessments in the literature review section are based on international experience, a fact that can produce inaccurate assumptions when a project in Greece is considered. After all, the unstable circumstances and tight fiscal conditions in the country highly differ from the macroeconomic conditions in other EU countries.

Finally, the practical experiences investigated in the thesis are those of just ten (10) interviewees. While one could, however, claim that the sample is limited, it should be noted that all participants are experts in the PPP field and therefore in a position to perform reliable value assessments, derived from their awareness of the different aspects of the PPP perspective. What is more important, nevertheless, is the fact that these participants descend both from the private and the public sector, a fact which has never before been considered or combined in any other relevant PPP research. The study, thus, combines esteemed opinions of both management advisors, consultants or contractor executives from the private sector, as well as administrative or ministry officers and heads of municipalities or public structures from the public sector, enabling the researcher to a wider result acquisition, which leads to a universal and more accurate PPP institution assessment.

## **5.5 Recommendations for Future Research**

PPP arrangements are definitely a challenge for the Greek State. The transfer of know-how and experience between the private and the public sector is considered beneficial to the extent that, if properly used, it promotes added value for all parties involved. That kind of synergy, nevertheless, requires the familiarity of both the private and the public sector with concepts such as risk, risk management and proper risk allocation. The study of these critical success factors and the institutional framework in Greece, in order to define the concept

of good project management in PPP contracts, has above all proven that prudence in decision making is a necessity.

The present dissertation has, by interviewing PPP experts in Greece, attempted to investigate value drivers in PPP procurement, so as to consolidate the concept of good project governance. All the participants in this research - advisors, practitioners and administrative executives- pointed out the importance of precise and accurate evaluations, in terms of gaining experience and valuable feedback for their future work.

Further investigation could focus on the factors contributing value in a PPP project. For example, interviewing a number of other practitioners, especially within the public sector, would produce valuable feedback from representatives of the public sector, who are restricted by confidentiality issues and are usually unable to disclose information. The questions addressed to them would consider the benefits hoped to be reached through PPPs, the synergies between the public and the private sector in terms of proper risk allocation and the effectiveness of the legislated administrative bodies, which could be considered as a direct criticism to the public sector itself.

Of great interest would be to investigate the investment potential in PPP projects by taking a private party's perspective. Other countries could be also placed under research, in order to investigate whether nationality and continent are factors affecting the success of PPPs. Therefore, the assessment could be performed in a country where the PPP concept is in its initial stage, so as to see if and how the private sector is affecting the interest in PPP implementation. If the potential is found to be large, it could affect private firms to show more interest for PPP projects and thereby contribute to their development, as well as to the country's economy.

However, the most interesting scope of such a research would be that, which could incorporate the views of all stakeholders involved in a PPP arrangement. Thus, collecting feedback and empirical opinions from bankers or budgeting stakeholders, such as guarantors, lenders and stakeholders in a consortium, during the creation of a Special Purpose Company in Greece, could provide a future researcher with innovative information, which, assessed under the scope

of the evolving macroeconomic environment in the country, could lead to groundbreaking findings and novelty assessments in the field of PPPs.

In terms of assessing PPPs as a financial instrument, due to the lack of VFM final evaluations on such projects in Greece, a formal evaluation could be performed on actual VFM outcomes in projects delivering assets other than infrastructure, i.e. services. An investigation of the gap between VFM assessed and VFM achieved, would therefore be of great importance. A potential difficulty the researcher would face is that most PPP projects in Greece are incomplete and that information during the operation phase is controlled and maybe classified by the private party, whereas the public party might keep records of quality and payments, which could enable evaluations, but not always accurate.

Finally, although a wide range of methodologies concerning PPPs have been developed, it should be investigated how these methods can be implemented comprehensively. Game theory, thus, could be proven an efficient tool to model the PPP process and provide advice to both public and private partners in the process of decision making. Further research could consist of developing quantitative methods, with assumptions as valid and as representative for reality as possible, leading to methodologies that a practitioner could easily apply in a particular context, whereas other quantitative methods could lead to valuable management insights to govern PPPs from both the public, as well as from the private sector's point of view.

# Appendices

## Appendix A

The Questionnaire used for the Research in the Greek Language



**OPEN UNIVERSITY OF CYPRUS**  
**Faculty of Economics and Management**  
**Master in Business Administration (MBA)**

### The Implementation of Public Private Partnerships

*Aikaterini Tsapikidou*

Παρακαλώ απαντήστε στις παρακάτω ερωτήσεις που αφορούν στο χρηματοδοτικό εργαλείο των ΣΔΙΤ, συμπληρώνοντας με «X»

#### **A. Αξιολόγηση Έργων ΣΔΙΤ – Πεδίο Εφαρμογής**

1. Θεωρείτε ότι η Ελλάδα έχει αξιοποιήσει τις ΣΔΙΤ με κατάλληλο τρόπο και σε επαρκή βαθμό; (1= Καθόλου, 2= Λίγο, 3= Επαρκώς, 4= Πολύ, 5= Πάρα πολύ)

1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Παρακαλώ τεκμηριώστε:

.....  
.....



2. Πως κρίνετε την αποτελεσματικότητα των έργων ΣΔΙΤ ως προς τα εξής σημεία (1= Καθόλου, 2= Λίγο, 3= Επαρκώς, 4= Πολύ, 5= Πάρα πολύ);

Ταχύτητα υλοποίησης	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Μόχλευση της Τοπικής Οικονομίας	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Διασφάλιση σταθερής ποιότητας έπειτα από την ολοκλήρωση του έργου	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Σχέση κόστους-ποιότητας	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

Άλλο (παρακαλώ προσδιορίστε):

3. Παρακαλώ προσδιορίστε την αποτελεσματικότητα των υφιστάμενων θεσμικών διαδικασιών ΣΔΙΤ στην Ελλάδα ως προς τους εξής τομείς (1= Καθόλου, 2= Λίγο, 3= Επαρκώς, 4= Πολύ, 5= Πάρα πολύ)

Σχεδιασμός	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Διαπραγματεύσεις	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Κόστος	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Χρόνος	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Ρίσκο	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

4. Ποιοι λόγοι θεωρείτε ότι επηρεάζουν την υλοποίηση των έργων ΣΔΙΤ στην Ελλάδα και σε ποιο βαθμό; (1= Καθόλου, 2= Λίγο, 3= Επαρκώς, 4= Πολύ, 5= Πάρα πολύ)

Μακροοικονομικό περιβάλλον	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Πολιτικές Εξελίξεις	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Προβλήματα Χρηματοδότησης	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Δημοσιονομικά Ζητήματα	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Έλλειψη Δημοσίων Πόρων	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Θεσμικά κενά	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

5. Παρακαλώ ιεραρχήστε τους παραπάνω λόγους ανάλογα με το βαθμό επιρροής τους στην ελληνική πραγματικότητα (όπου 1= ο πιο σημαντικός, 2= ο λιγότερο σημαντικός):

Μακροοικονομικό Περιβάλλον	<input type="checkbox"/>
Πολιτικές Εξελίξεις	<input type="checkbox"/>
Προβλήματα Χρηματοδότησης	<input type="checkbox"/>
Δημοσιονομικά Ζητήματα	<input type="checkbox"/>
Έλλειψης Δημοσίων Πόρων	<input type="checkbox"/>
Θεσμικά κενά	<input type="checkbox"/>

6. Τα τελευταία έτη στην Ελλάδα ως αποτέλεσμα της κρίσης η εφαρμογή και διερεύνηση των έργων ΣΔΙΤ περιορίστηκε, με χαρακτηριστικό παράδειγμα τη μη δυνατότητα χρήσης δημόσιας χρηματοδότησης για την α' φάση του σχεδίου από του ΟΤΑ Α' Βαθμού. Θεωρείτε ότι αυτό αποτέλεσε μία σωστή πολιτική επιλογή;

ΣΥΜΦΩΝΩ

ΔΙΑΦΩΝΩ

## **B. Εφαρμογή στην Πράξη Έργων ΣΔΙΤ στην Ελλάδα**

7. Ποια είναι κατά τη γνώμη σας τα σημαντικότερα προβλήματα κατά τη διαδικασία υλοποίησης των έργων ΣΔΙΤ στην Ελλάδα;

Υψηλά Κόστη Προπαρασκευαστικών Διαδικασιών

Υψηλά Κόστη Υλοποίησης Έργου

Υψηλά κόστη Συμβούλων

Προβλήματα Χρηματοδότησης Ιδιωτών

Προβλήματα Κρατικών Επιχορηγήσεων

Συνθετότητα Διαδικασιών Συμβασιοποίησης

Θεσμικά κενά

Αστοχίες Ποιότητας Παραδοτέων

Αδυναμία Υποστήριξης από Θεσμοθετημένα Όργανα

Άλλο (παρακαλώ προσδιορίστε):

8. Παρακαλώ προσδιορίστε κατά τομείς το βαθμό επιτυχίας των έργων που υλοποιήθηκαν με την μέθοδο των ΣΔΙΤ στην Ελλάδα. (1= Καθόλου, 2= Λίγο, 3= Επαρκώς, 4= Πολύ, 5= Πάρα πολύ)

Άμυνα και Ασφάλεια	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Αστική Ανάπλαση	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Δημόσια Διοίκηση	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Ενέργεια	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Μεταφορές	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Παιδεία	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Περιβάλλον	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Περιβάλλον – Απορρίμματα	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Τεχνολογία της Πληροφορίας	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Τουρισμός	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
Υγεία	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

9. Ποιος πιστεύετε ότι είναι ο βέλτιστος τρόπος υλοποίησης έργων ΣΔΙΤ στην ελληνική πραγματικότητα; Ιεραρχείστε τρεις από αυτούς. (όπου 1= ο πλέον ενδεικνυόμενος)

- |   |                          |
|---|--------------------------|
| B.O.T. (Build, Operate, Transfer) or B.O.O. (Build, Own, Operate) | <input type="checkbox"/> |
| Private Finance Initiative Method (PFI)                           | <input type="checkbox"/> |
| Developer Financing Method  | <input type="checkbox"/> |
| B.B.O. (Buy, Build, Operate)                                      | <input type="checkbox"/> |
| B.O.L.T. (Build, Own, Lease, Transfer)                            | <input type="checkbox"/> |
| B.O.O.T. (Build, Own, Operate, Transfer)                          | <input type="checkbox"/> |
| Service Delivery Partnership                                      | <input type="checkbox"/> |
| D.B.F.O. (Design, Built, Finance, Operate)                        | <input type="checkbox"/> |
| Concession  | <input type="checkbox"/> |
| L.R.O. (Lease, Rehabilitation, Operate)                           | <input type="checkbox"/> |

10. Πως κρίνετε το υφιστάμενο νομοθετικό πλαίσιο σχετικά με τις διαδικασίες υλοποίησης έργων ΣΔΙΤ στην Ελλάδα; (1= Εντελώς Ανεπαρκές, 2= Ανεπαρκές, 3=Οριακά Επαρκές, 4= Ικανοποιητικό, 5= Πολύ Ικανοποιητικό)

- |                          |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1                        | 2                        | 3                        | 4                        | 5                        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

11. Ποιοι θεωρείτε ότι είναι οι πιο σημαντικοί λόγοι που υπαγορεύουν την υλοποίηση έργων ΣΔΙΤ στην Ελλάδα; Παρακαλώ ιεραρχείστε. (1= ο λιγότερο σημαντικός)

- |   |                          |
|---|--------------------------|
| Έλλειψη Πόρων Διοίκησης / Διευκόλυνση Χρηματικών Εκροών | <input type="checkbox"/> |
| Έλλειψη Τεχνογνωσίας / Αυθεντίας Δημοσίου Τομέα         | <input type="checkbox"/> |
| Έλλειψη Συντονισμού και Οργάνωσης Δημοσίων Φορέων       | <input type="checkbox"/> |

- Έλλειψη Αξιοπιστίας Δημοσίου Τομέα για Παροχή Υπηρεσίας
- Αδυναμία Ανάληψης Έργων Μεγάλης Εμβέλειας από το Δημόσιο

12. Πως γίνεται από εσάς αντιληπτός εν τοις πράγμασι ο θεσμικός ρόλος της ΕΓΣΔΙΤ αναφορικά με τους ακόλουθους τομείς του έργου της;

α. Εντοπισμός έργων ή υπηρεσιών που μπορούν να εκτελεσθούν μέσω ΣΔΙΤ

- Γνωμοδοτικός
- Συμβουλευτικός
- Διεκπεραιωτικός
- Υποστηρικτικός

β. Αξιολόγηση προτάσεων δημοσίων φορέων και προώθησή τους στη ΔΕΣΔΙΤ

- Γνωμοδοτικός
- Συμβουλευτικός
- Διεκπεραιωτικός
- Υποστηρικτικός

γ. Προώθηση εκτέλεσης έργων ή παροχής υπηρεσιών μέσω ΣΔΙΤ με διάχυση τεχνογνωσίας σε όλους τους φορείς

- Γνωμοδοτικός
- Συμβουλευτικός
- Διεκπεραιωτικός
- Υποστηρικτικός

δ. Διευκόλυνση και υποστήριξη δημοσίων φορέων στο πλαίσιο των διαδικασιών ανάθεσης για την επιλογή των ιδιωτικών φορέων

- Γνωμοδοτικός
- Συμβουλευτικός
- Διεκπεραιωτικός
- Υποστηρικτικός

ε. Παρακολούθηση υλοποίησης των Συμβάσεων Σύμπραξης

Γνωμοδοτικός

Συμβουλευτικός

Διεκπεραιωτικός

Υποστηρικτικός

## Γ. Προτάσεις Σχεδιασμού

13. Ποια είναι η άποψη σας για την εφαρμογή της μεθόδου ΣΔΙΤ σε έργα μικρότερης εμβέλειας στην Ελλάδα; (1= Εντελώς Αρνητική, 2= Αρνητική, 3=Ουδέτερη, 4= Θετική, 5= Πολύ Θετική)

1                      2                      3                      4                      5  
                                                                                       

Παρακαλώ εξειδικεύστε:

.....  
.....

14. Πιστεύετε ότι τα έργα που πραγματοποιούνται μέσω ΣΔΙΤ (υποδομές/υπηρεσίες) έπειτα από την ολοκλήρωσή τους θα πρέπει να περιέρχονται στο Δημόσιο (ανταποδοτικά έργα);

ΝΑΙ  ΟΧΙ

Παρακαλώ αιτιολογείστε:

.....  
.....

15. Κρίνετε σκόπιμη στην Ελλάδα την ύπαρξη δυνατότητας αξιοποίησης των έργων ΣΔΙΤ από χρηματοδοτικά εργαλεία;

ΝΑΙ

ΟΧΙ

Αν ναι, παρακαλώ υποδείξτε με ποια:

Αναπτυξιακός Νόμος

Περιφερειακά ή τομεακά προγράμματα

Επιχειρησιακά προγράμματα

Ευρωπαϊκές Πρωτοβουλίες (COSME)

Άλλα

.....  
.....

16. Παρακαλώ προσδιορίστε την κατηγορία έργων των οποίων την υλοποίηση θα προτείνετε να πραγματοποιηθεί μέσω ΣΔΙΤ στην Ελλάδα.

Ανταποδοτικά

Μη ανταποδοτικά

17. Παρακαλώ προσδιορίστε σε ποιους τομείς θα προτείνετε την εφαρμογή ΣΔΙΤ στην Ελλάδα:

Άμυνα και Ασφάλεια

Αστική Ανάπλαση

Δημόσια Διοίκηση

Ενέργεια

Μεταφορές

Παιδεία



- Περιβάλλον
- Περιβάλλον – Απορρίμματα
- Τεχνολογία της Πληροφορίας
- Τουρισμός
- Υγεία

18. Κρίνετε ότι θα έπρεπε να τροποποιηθεί το υφιστάμενο θεσμικό πλαίσιο των δημοσίων συμβάσεων στην Ελλάδα, ώστε να ενισχυθεί η εφαρμογή των έργων ΣΔΙΤ;

ΝΑΙ  ΟΧΙ

Αν ναι, παρακαλώ εξειδικεύστε ή προσδιορίστε με ακρίβεια τη θεματική:

- Σχεδιασμός
- Διαπραγμάτευση
- Διαδικασία Υλοποίησης
- Μετά την Υλοποίηση

Άλλο (παρακαλώ προσδιορίστε):

.....  
.....

# Appendix B

## The Questionnaire used for the Research in the English Language



**OPEN UNIVERSITY OF CYPRUS**  
**Faculty of Economics and Management**  
**Master in Business Administration (MBA)**

### The Implementation of Public Private Partnerships

*Aikaterini Tsapikidou*

Please answer the following questions regarding the PPP financing tool, completing the boxes provided with an "X".

#### **A. Evaluation of PPP Projects – Field of Application**

*1. Do you deem that Greece has taken advantage the tool of PPPs in an appropriate manner and to a sufficient degree? (1 = Not at all, 2 = A little, 3 = Adequately, 4 = A lot, 5 = Very much)*

1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Please substantiate:*

.....  
.....

*2. How do you deem the effectiveness of PPP projects based on the following points (1 = Not at all effective, 2 = A little effective, 3 = Adequately effective, 4 = Quite effective, 5 = Very effective):*

<i>Implementation speed</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Leveraging of the Local Economy</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Ensuring steady quality after project completion</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Cost – Quality Ratio</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Other (please specify):</i>					

3. Please specify the effectiveness of the existing institutional processes of PPPs in Greece, as far as the following areas of implementation are concerned (1 = None, 2 = Little, 3 = Adequate, 4 = A Lot, 5 = Very)

<i>Process Design</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Negotiations</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Cost</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Time</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Risk</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

4. According to your opinion, what are the reasons that affect the implementation of PPP projects in Greece and to what extent? (1= Not at all, 2 = A little, 3 = Adequately, 4 = A lot, 5 = Very much)

<i>Macroeconomic Environment</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
----------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

	1	2	3	4	5
<i>Political Developments</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Funding Problems</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Fiscal Issues</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Lack of Public Resources</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Institutional Gaps</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

5. Please prioritize the above reasons, according to the degree of their influence in the Greek PPP reality (wherein 1 = most important, 2 = less important):

Macroeconomic environment	<input type="checkbox"/>
Political Developments	<input type="checkbox"/>
Funding Problems	<input type="checkbox"/>
Fiscal Issues	<input type="checkbox"/>
Lack of Public Resources	<input type="checkbox"/>
Institutional Gaps	<input type="checkbox"/>

6. During the last years in Greece, as a result of the crisis, the implementation and research of PPP projects is limited, with a characteristic example the inability of the use of public funding for Municipalities (1<sup>st</sup> Degree of Local Administration). Do you believe that this constitutes a correct political choice?

I AGREE  I DISAGREE

## B. Implementation of PPP Projects in Greece

7. What are, according to your opinion, the most important problems in the process of implementation of PPP projects in Greece?

- |  |                          |
|--|--------------------------|
| High Costs of Preparatory Procedures           | <input type="checkbox"/> |
| High Costs of Project Implementation           | <input type="checkbox"/> |
| High Costs of Consulting                       | <input type="checkbox"/> |
| Problems of Private Funding                    | <input type="checkbox"/> |
| Problems of Public Funding                     | <input type="checkbox"/> |
| Perplexed Framework of Contracting Agreements  | <input type="checkbox"/> |
| Institutional Gaps                             | <input type="checkbox"/> |
| Quality Failures of Deliverables               | <input type="checkbox"/> |
| Weakness of Support from Administrative Bodies | <input type="checkbox"/> |

*Other (please specify):*

8. Please specify, according to sectors, the degree of success of projects that were implemented through the PPP institution in Greece. (1 = Not at all; 2 = A little, 3 = Adequate, 4 = A lot, 5 = Very much)

<i>Security and Defence</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Urban Planning</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Public Administration</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Energy</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	1	2	3	4	5
<i>Transportation</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Education</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Environment</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Environment - Waste</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Information Technology</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Tourism</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5
<i>Health</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

9. Which, according to your opinion is the best way of implementing PPP projects in Greek reality? Prioritize three from the below (Wherein 1 = the most Indicated)

BOT (Build, Operate, Transfer) or BOO (Build, Own, Operate)	<input type="checkbox"/>
Private Finance Initiative Method (PFI)	<input type="checkbox"/>
Developer Financing Method	<input type="checkbox"/>
BBO (Buy, Build, Operate)	<input type="checkbox"/>
BOLT (Build, Own, Lease, Transfer)	<input type="checkbox"/>
BOOT (Build, Own, Operate, Transfer)	<input type="checkbox"/>
Service Delivery Partnership	<input type="checkbox"/>

- DBFO (Design, Built, Finance, Operate)
- Concession
- LRO (Lease, Rehabilitation, Operate)

10. How do you deem the existing legislative framework for PPP project implementation procedures in Greece? (1 = Totally Inadequate, 2 = Inadequate, 3 = Sufficient, 4 = Satisfactory, 5 = Very Satisfactory)

1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Which do you deem as the most important reasons underlying the implementation of PPP project arrangements in Greece? Please prioritize (1 = the least significant)

- Lack of Management Resources / Cash - Flow Ability
- Lack of know-how / Expertise of the Public Sector
- Lack of Coordination and Organization of Public Entities
- Lack of Reliability of the Public Sector for Provision of Service
- Inability of the Public Sector to undertake high-scale Projects

12. How do you perceive the institutional role of the Special PPP Secretariat, regarding the following areas of jurisdiction?

A. Identification of projects or services that can be implemented through PPPs

- Consulting
- Advisory
- Trans-active
- Supporting

B. Evaluation of public entity proposals and promotion to the inter-ministerial Committee

- Consulting
- Advisory
- Trans-active
- Supporting

C. Promotion of the implementation of PPP projects/services through know-how dissemination to all stakeholders

- Consulting
- Advisory
- Trans-active
- Supporting

D. Facilitation and support of public entities during contracting procedures with private partners

- Consulting
- Advisory
- Trans-active
- Supporting

E. Monitoring the implementation of the Partnership Contracts

- Consulting
- Advisory
- Trans-active
- Supporting

**C. Planning & Development Suggestions**

13. *What is your opinion regarding the implementation of the PPP method in lower - scale projects in Greece? (1= Completely Negative, 2= Negative, 3= Neutral, 4= Positive, 5= Very Positive)*





- Contributory
- Non-contributory

17. Please specify in which areas you would propose the PPP application in Greece:

- Defense and Security
- Urban Planning
- Public Administration
- Energy
- Transport
- Education
- Environment
- Environment - Waste
- Information Technology
- Tourism
- Health

18. Do you deem that the existing institutional framework of public project procurement in Greece should be modified, so as to strengthen the implementation of PPP projects in Greece?

- YES  NO

*If yes, please specify or designate the time point:*

- Research - Development
- Negotiation Process
- Implementation Process
- After Implementation Process

*Other (please specify):*

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