



Critical Success Factors for Public Private Partnership in the UAE

عوامل النجاح الحاسمة للشراكة بين القطاعين العام والخاص في دولة الإمارات
العربية المتحدة

by

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Abstract

Countries such as UAE are increasingly pursuing PPP with the goal of improving service delivery to the public as the economy becomes increasingly diversified. As such, the current paper key seeks to investigate the extent and the key success factors of PPP in UAE.

For key aims of this research as it sought to investigate the research questions and deliver on the research objectives:

- i. To explore the concept of public-private partnerships in UAE.
- ii. To investigate the key factors that lead to the success of PPP in the country.

the current research adopted the research onion model to conduct the data with the key objective of answering the research question. After Analyzing and reporting on the results, it emerged that the different factors had more influence on some players than the others. For the government, technological and managerial success factors were the key motivation in joining PPPs. Such is the case since most government institutions are unable to keep with technology changes and have weak management structures hence the need to partners and benefit from the private sector that excels in the two factors. On the other hand, the private sector key motivation of entering into PPP was driven by the regulatory and financial consideration that have a huge impact on their ability to operate with the needed flexibility. As such, it is the role of the private sector to improve their managerial and technological prowess whereas the government pursue fair and robust regulations and provide the needed huge capital outlay to encourage private sector partner with the government to realize the goal of improved service delivery to the people of UAE.

نبذة مختصرة

تسعى الدول مثل دولة الإمارات العربية المتحدة بشكل متزايد إلى الشراكة بين القطاعين العام والخاص بهدف تحسين تقديم الخدمات للجمهور مع تنامي الاقتصاد بشكل متزايد. على هذا النحو ، يسعى هذا البحث إلى التحقيق في مدى عوامل النجاح في تعادل شراكة المشاريع بين القطاع الخاص والعام في الإمارات العربية المتحدة وعوامل النجاح الرئيسية فيها.

الأهداف الرئيسية لهذا البحث:

- استكشاف مفهوم الشراكات بين القطاعين العام والخاص في دولة الإمارات العربية المتحدة.
- التحقيق في العوامل الرئيسية التي تؤدي إلى نجاح الشراكات بين القطاعين العام والخاص في دولة الإمارات العربية المتحدة.

بعد تحليل النتائج والإبلاغ عنها ، ظهر أن العوامل المختلفة لها تأثير أكبر على بعض اللاعبين أكثر من غيرها. بالنسبة للحكومة ، كانت عوامل النجاح التكنولوجي والإداري هي الدافع الرئيسي للانضمام إلى الشراكة بين القطاعين العام والخاص. هذه هي الحالة لأن معظم المؤسسات الحكومية غير قادرة على مواكبة التغيرات التكنولوجية ولها هياكل إدارية ضعيفة ومن ثم الحاجة إلى الشركاء والاستفادة من القطاع الخاص الذي يتفوق في هذين العاملين. من ناحية أخرى ، كان الدافع الرئيسي للقطاع الخاص للدخول في الشراكة بين القطاعين العام والخاص هو الاعتبارات التنظيمية والمالية التي لها تأثير كبير على قدرتها على العمل مع المرونة اللازمة. وعلى هذا النحو ، فإن دور القطاع الخاص هو تحسين مهاراتهم الإدارية والتكنولوجية بينما تسعى الحكومة إلى لوائح عادلة وقوية وتوفير النفقات الرأسمالية الضخمة اللازمة لتشجيع شركاء القطاع الخاص مع الحكومة لتحقيق هدف تحسين تقديم الخدمات.

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Chapter 1 – Introduction

1.1 Background

Public-private partnerships have become a key pillar leveraged by the government to increase service delivery to the people in the wake of increased demand for quality public services that need to be realized within budget as the government seeks more sustainable development. As Geddes and Wagner (2011) observe, the public sector in the UAE has been riddled with underperformance due to the use of the sector as a key political pillar of keeping the electorate happy. Such has been the case due to the expansive availability of oil that the government uses to guarantee that each resident in the country can have a share of it hence keep their loyalty. To this end, the public sector has been plagued with key management and efficiency issues. The public sector issues affecting the UAE are not unique. Rather, other countries such as Qatar and even advanced economies such the United States and European countries. Resultantly, it has become a key concern for policy makers more so in the wake of rapid rise in technology. Moreover, the public is increasingly demanding high quality and reliable services from government institutions. Moreover, with government commitment increasing hence, resources strain becoming a key constraint for the operation of the government, the literature of efficiency is increasingly making inroads in public sector literature (Hwang, Zhao, & Gay, 2013).

A key approach utilized by government to address efficiency and management deficit in the public sector has been entering into an agreement with the private sector to undertake projects that would help the government meet its goals of delivering service to the public

whereas the private sector could get a chance to generate returns from the investment. Such partnerships are informed by the idea that the private sector excels in harnessing current technology, has better management and internal controls, and has the finance the government needs to deliver service to the public. To this end, PPP has risen as a new approach that modern government is using to deliver huge projects at a less cost and with reduced propensity to risk. Through public-private partnerships, both the public and investors in countries where PPP has been successful has witnessed huge gains in terms of improving services to the public, increased public sector efficiency and increased gains to investors in the private sector. To this end, the most government has been pursuing the PPP as countries such as the United States have realized huge gains through collaborating with the private sector. Such have seen the county's public institutions such as the military and universities become the center of innovation due to the government financial muscle that has promoted research and development (Kahwajian, Baba, Amudi, & Wanos, 2014).

However, despite the increased use of PPP and huge success in mature democracies and economies, there has been a challenge facing such agreements, more so in the emerging economies. Such have been the case due to lack of commitment from the side of the government. The key to the challenges proposed by Kahwajian, Baba, Amudi, & Wanos (2014) is a lack of transparency on the side of the government due to institutional corruption. Resultantly, such agreements have in some instances served as the conduits used by ruling class to siphon money from public coffers. To this end, little gains have been realized in emerging countries where corruption is endemic. Secondly, a lowly developed sector, more so in oil-rich countries such as Qatar and UAE has been cited as a key inhibitor of PPP in such countries. Such is the case since in most resource-rich countries; the governments have nationalized companies tasked with

exploiting such resources making the public sector a formidable competitor that have left the private sector weakened. However, despite the challenges, countries such as UAE are increasingly pursuing PPP with the goal of improving service delivery to the public as the economy becomes increasingly diversified. As such, the current paper key seeks to investigate the extent and the key success factors of PPP in UAE.

1.2 Problem Statement

In the UAE, the government was in top gear as it prepared a documentation to govern PPPs in the country (Dubai Government, 2016). Such efforts were geared towards enticing the private sector increase participation in government projects as a means of increasing the country speed of pursuing sustainable development. According to Dulaimi, Alhashemi, Ling, and Kumaraswamy (2010), UAE, more so Dubai, has been undergoing rapid growth in terms of infrastructural development as it seeks to invest its oil wealth in sustainable projects the can benefit the current and future generations. However, as the country increase, it's spending on infrastructural projects, state finances are coming under heavy pressure as the projects run into hundreds of billions of dollars. For instance, Dubai is spending heavily on rail projects as well as roads and modern buildings whose costs will run into hundreds of billions (Sharif and Narayanan, 2016). Secondly, UAE is undertaking a massive expansion of airports such as Abu Dhabi while construction is under way to ensure the country develops a fair site for the world expo slated for 2020 in Dubai. The two projects run into tens of billions of dollars that call not only for managed risk but also cost sharing with the private sector that holds a huge amount of resources needed to pull the projects through. Further, such huge projects need to raise income to

ensure that the invested money can generate returns that can be used to roll out other projects the country needs to undertake to achieve sustainable projects (Sharif and Narayanan, 2016).

With such projects that require not only cost sharing but also their effective management and leveraging of current technology, no one offers better help to the government than the private sector (Dubai Government, 2016). The sector has proven itself versatile regarding marshaling resources, efficient and effective use of technology, and a strong management team that can make sure that such projects can be delivered on time and within the budget. Emirate of Dubai has been at the forefront of leading another part of UAE into adopting public-private partnerships. By 2016, Dubai had already begun the first edition of their PPP documentation as the region moves faster to encourage the private sector to increase participation in the country's infrastructural drive (Dubai Government, 2016). However, despite the strong lead taken by Dubai in adopting PPP, the drive has been rather sluggish in other parts of the country as the government seeks the input of the private sector to invest in the future of the country.

Notwithstanding the low pace, the country is making great strides with key projects such as the expansion of airports bringing together the private sector and the government together. By the end of 2016, the country promised to deliver a documentation seeking to govern the relationship between the private sector and government as sought to ease the tensions that sodden such agreements (Dubai Government, 2016).

Due to the newness of PPP as a driver of the context of UAE, whereas scholars have invested a huge amount of their fine studying PPPs, the research has been largely inclined towards the developed economies in Europe and the Americas. Therefore, the literature on the dynamics of PPP is very limited or non-existent for emerging markets. Consequently, the existing literature fails to capture the unique conditions that may affect or motivate the government seeks PPP in

countries like UAE where Sharia law has a tight grip on the country investments as well as the operation of the private sector. In the realization of the research gap, the current research seeks to fill the gap by conducting research on PPP success factors in the context of UAE (Dulaimi, Alhashemi, Ling, and Kumaraswamy, 2010). The success factors studied in the current dissertation are categorized into managerial, financial, regulatory, and technological regulatory factors in line with propositions of the existing literature. Through studying these factors, the current paper seeks to address the gap in the literature that assumes that research findings on PPP success factors in developed economies apply to emerging economies such as UAE

1.3 Research Questions

The current research had four key research questions that underlie the research findings and discussions deliberated in the dissertation:

- i. How significant financial factors in the success of PPP in UAE
- ii. How significant technological factors in the success of PPP in UAE
- iii. How significant environmental factors in the success of PPP in UAE
- iv. How significant managerial factors in the success of PPP in UAE

1.4 Research Aims

For key aims guided the whole process of undertaking the current research as it sought to investigate the research questions and deliver on the research objectives:

- i. To explore the concept of public-private partnerships in UAE.
- ii. To investigate the key factors that lead to the success of PPP in the country.

1.5 Research Objectives

The current research had five key objectives that were instrumental in meeting the research aims as outlined:

- i. Synthesize the existing literature on PPPs success in other countries and use the results a foundation of investigating PPP success factors in UAE
- ii. To investigate the different facets of PPP as they apply to the case of UAE
- iii. To examine the key factors in delivering successful of PPPs in UAE

1.6 Research Hypothesis

The current research rode on four key hypotheses on which the data used to deliver the results was obtained. Through developing the hypothesis, it became easy to develop a survey questionnaire whose responses form the foundation of the current research. The current research leveraged the following four hypotheses:

- i. There is no difference between the respondents in rating the key factors that lead to the success of PPP projects in UAE
- ii. There is a difference between the respondents in rating the key factors that lead to the success of PPP projects in UAE

1.7 Research Contribution

The current research contribution to the existing literature on PPPs is achieved in three key ways. First, it adds a new dimension of the research of PPPs by increasing the literature to cover an emerging economy that is UAE. Secondly, it helps capture the unique nature of a sharia-based economy and its modifying role on the success of government engagement with the private sector. Lastly, the current research broadens the literature of PPPs and yields new paradigms that help to make the aging literature current.

1.8 Dissertation Layout

Outline Chapters:

Chapter 1 –“Introduction “- Introduces the aims, objective and the problem statement of the study.

Chapter 2 –“Literature Review”- This chapter provides an overview, definitions of PPPs in UAE and its success factors

Chapter 3 –“Methodology”- Methodology of the research and the nature of the study is shown; the survey and the questionnaire are explained too.

Chapter 4 –“Data Analysis and Findings”- Descriptive analysis and the data collection of the research, and the responses were analyzed by SPSS program.

Chapter 5 –“Results”- It shows the results in detail.

Chapter 6 –“Discussions and Conclusion”- It summarizes the results and concludes the research involvement, participation.

2 Chapter 2 – Theoretical Background

2.1 Introduction

This section presents a literature review that explores existing research work on the unique issues that affect the success of PPP projects. The section identifies research studies that have been carried out on the effectiveness of PPP initiatives as a government strategy for development and their ability to deliver benefits for both the public end-users while creating returns for private corporations participating in a project. The review will trace the evolution of PPP initiatives and examine previous research that has been conducted on PPPs. The review mentions the challenges that are unique to PPP initiatives compared to ordinary projects. The literature review will then examine the various success factors identified for PPP initiatives as categorized based on their impact on project financing, technology use, and regulatory environment. The literature review will also examine the success criteria developed for evaluating PPP projects and how the various success factors contribute to the success of PPP initiatives. The review will further outline the conceptual framework that will guide this research and propose specific research hypotheses to be tested in the study.

2.2 Previous Research Literature

Previous research on PPP initiatives has focused on examining the nature of PPP arrangements adopted around the world and identification of the particular factors that influence

the success of such arrangements. Seminal research reports on PPPs include Hodge (2004), Currnow et al. (2005), Akintoye et al. (2005), Choi (2008), and Cheung (2009). Others include Agrawal (2010), Minnie (2011), Chou et al. (2012), Ng, Wong, and Wong (2012), Cheung, Chan, and Kajewski (2012), and Tang et al. (2013). Research studies that have examined PPPs in the Middle East region include Ismail (2013) and (Ismail & Ajija 2013). These studies identify various factors that have varied degrees of influence to the success of PPP projects. Among the success factors for PPPs identified in these studies include a strong consortium of private companies, appropriate risk allocation and sharing among the contractual parties, and a strong financial market. Others include thorough and realistic cost-benefit feasibility assessment, nature of the contract and its economic viability, a favourable legal framework, delivery of relevant public goods, and stable economic conditions. The primary objectives of PPP initiatives have been identified as the provision of additional capital for development given the shortage of public funding and provision of alternative skills and techniques for project management and implementation that are not available in government agencies. Other key objectives of PPP initiatives are providing better value added to the public end-users, and providing better identification of development priorities and optimal use of available resources.

While PPP presents a number of advantages for the government, it must be remembered that such schemes are complex in their design, implementation, and management, and thus should only be considered if they hold a demonstrable potential benefit and additional value for meeting the objectives of parties in the partnership and for stakeholders. In order to realize the envisioned benefits of PPP initiatives, all participants must seek to enhance their understanding of the different forms of PPPs and the optimal methods for structuring such schemes. There is, however, limited research available on the interrelationship of critical success factors in PPP

projects for specific countries, particularly in the Middle East. Future research efforts should, therefore, seek to fill knowledge gaps existing in understanding the factors influencing the success of PPP initiatives for individual countries. Such research would examine the differences existing in individual countries concerning the significance of each of the factors in facilitating the success of PPP initiatives.

2.2.1 Evolution of Public Private Partnership

There now exists a long experience of private sector involvement in public service provision through PPPs in the two decades of their existence. Public-Private Partnership (PPP) has been defined as “... an entrenched cooperation involving the public and private sector players that, in the quest of their objectives, work collaboratively in realizing mutual organizational and development objectives” (Alsafran, Edum-Fotwe & Lord 2016). PPPs take the form of long-term collaboration between public and private sector corporations to improve public service provision. The existence and possibility of PPP initiatives is based on cooperation between government and business organizations to provide public goods while being guided by their mutual interests and common benefits of participation. The partnership is governed by formal contractual agreements that guide the cooperative relationship between participants based on legally binding conditions, the obligation for performance, and agreements for sharing risks and profits. The effectiveness of PPP projects as a better strategy for realizing development and delivery of public services is based on the level of competence, technical and financial strengths that business corporations are able to avail to the government in implementing innovative solutions in public sector projects in return for profit.

PPPs have a short history and began in the US and UK during the early 1990s following efforts by the governments to privatize some state corporations and bring on board the expertise

and technical capabilities of the private sector in delivering large-scale projects mostly in infrastructure development (Hwang, Zhao & Gay 2013). The move to partner with the private sector in public sector projects was necessitated by government's recognition of the need to share the financial burden and bring on new thinking in finding innovative and quicker solutions to social problems. PPP initiatives provide an appropriate means for addressing market failure in the provision of public goods through the creation of equity and mutual accountability among public and private sector partners. PPP initiatives provide direct ownership and control of public sector projects for private sector participants in a cooperative manner that would not be possible using simple arms-length market-based contracts for public procurement. PPP agreements are also indispensable in enabling the government to transfer market risk involved in delivering public goods to business organizations that can best handle that risk. PPP initiatives, therefore, enable a process for dialogue, cooperation and follow-up for developing more innovative and cost-efficient solutions to public service provision and infrastructure development (Demirag et al. 2011).

PPPs have taken various forms based on different characteristics determining ownership rights, financing, contracting period, roles of participants, and transferring ownership of finished projects to the government. The nature of PPP initiatives is still an evolving concept that seeks to adapt to the particular characteristics and needs of each project and its participants. Five main types of PPP arrangements are identified in research literature, and they are direct contracting for procurement, build-operate-transfer agreements, design-build-finance-operate arrangements, private finance initiatives, and concession (Hellowell & Vecchi 2012). Build-Operate-Transfer (BOT) arrangement is the most common form of PPP and is mostly used for infrastructure development. In BOT arrangements, the private sector participants build and operate the project

for an agreed upon period, after which they transfer the project to the government. Design-Build-Finance-Operate (DBFO) arrangements are also a common form of PPP initiatives where the private sector partners are tasked with developing the entire project and operate it to repay their capital. Under such arrangements, the government never gets to fully own the project, and the project is rented to the public sector for an extended period. Private Finance Initiatives are PPP arrangements in which the government accesses private funds to develop public projects. A less common type of PPP is concessionary agreements whereby private sector participants undertake to operate, manage and maintain public facilities and provide services at a fee that is paid by the government. In all PPP initiatives, the government contributes by providing the technical specifications for the project and some financing (Chou et al. 2012).

Over the past twenty years, the UAE has succeeded into an international business hub that is competing in the Middle East region to attract foreign private investment by creating a friendly business environment. The government has managed to attain this objective through partnership with the private sector to facilitate rapid development of infrastructure, supply of energy and portable water, urban housing and commercial spaces, and extending the transport network. There is, however, more to be done to attract additional private investment in future envisioned development projects in tourism, international trade and port facilities, water and power supply, transport utilities and waste management. The UAE mainly faces challenges in engaging business organizations through PPP arrangements in the development of education and healthcare provision in the country to expand their availability and accessibility to citizen (Wolfs et al. 2016). There is thus need to research PPP initiatives and how their unique features may be harnessed to expand social welfare and accelerate economic development for the country.

2.3 Barriers and Challenges facing PPP Projects

PPP is a unique method for public procurement involving partnership with private sector participants to deliver public goods and services. PPP projects are, therefore, faced with unique factors that pose challenges to the success of PPP projects besides those that commonly affect large projects in general. These include lack of requisite organizational skills, high project value and participation costs for undertaking public sector projects, lack of credible business contacts to partner with, poor communication among participating partners, and long procurement process. As a new method for accomplishing large projects, both public and private organizations lack adequate manpower with skills and experience necessary for managing PPP initiatives. PPPs involve numerous unforeseeable costs of construction, operation, and maintenance that have to be quantified and forecasted during the project's planning phase. The difficulty of forecasting costs across all activities over a long concession period adds to the complexity of designing PPP projects (Geddes & Wagner 2011; Alharthi, Soetanto & Edum-Fotwe 2014a).

Differing organizational management practices create difficulty for individual corporations to function in consortium with organizations in different sectors. The complexity of resultant consortium organizations affects sharing of authority and responsibility, decision making, effectiveness of communication and information transfer, and assessment of project milestones. Complexity of organization and long procurement and negotiation processes takes up substantial management time compared to normal lines of business for participating organizations, which erodes potential benefit of PPP projects for contractor firms and deters high-performance business corporations from participating in partnership with government agencies. The extensive scope of the project activities entails high participation costs for private organizations and high financing cost for public organizations, and additional costs for legal and

consultation fees in contracting and building the consortium. High project value and project risks and the long-term commitment of organizational resources deter many private companies especially those operating locally from bidding for PPP projects. The cost and risk barriers preventing smaller domestic companies from participating in PPP projects results in substantial outflow of capital resources to foreign corporations. Lack of credible business contacts among willing domestic and international contractors desiring to bid for projects and join the PPP consortium also limits the government's readiness to adopt such initiatives.

2.4 Success Factors

The success of projects, in general, is normally influenced by common factors that determine the effectiveness of project management, which include project design, management skill, and experience implementation time. PPP projects, however, require broader technical knowledge and management experience, new technology, the large-scale scope of the project that is not readily available locally. PPP projects exist in a unique contractual environment involving multiple corporations working in consortium and multiple stakeholders with differing interests in the project, which adds to project complexity compared to traditional contractual agreements. The success of PPP initiatives is further influenced by additional factors that are unique to the special nature of such projects (Kahwajian et al. 2014). These factors are divided in terms of their influence on financial, technology and regulatory environment aspect of PPP projects, and are discussed below.

2.4.1 Critical Success Factors Relating to Project Financing

2.4.1.1 Risk Transfer

One of the main aims of PPP initiatives is to transfer and share the risk of construction, operation, and maintenance of large projects for delivering public goods and services. Successful

PPP initiatives should transfer technical and market risks from the government agencies to business organizations that can handle implementation and delivery of such projects more efficiently than the public sector. The implementation of large projects in PPP arrangements usually involves the application of technological capabilities and management knowledge that is not readily available to public sector corporations, and that is held by private sector corporations (Fahad, Bhamra & Salman 2014). The private sector has better risk forecasting methods for technical and market aspects of large projects, innovative instruments for allocating project risk and responsibility to third party contractors, implementation, and control using cutting-edge management practices that best minimize risk in a manner that would not be possible using traditional contractual arrangements. Effective risk transfer and forecast benefits to society that justifies the case for government to seek such initiatives and private sector to participate and charge a premium for sharing in the project's risk. Effective risk sharing is, therefore, a critical factor in the success of PPP projects and forms a significant part of cost savings for government in improving build ability and accelerating project completion and commissioning the project for public use. PPP initiatives should aim to minimize project risk through adoption of appropriate and useful technology, and innovative and creative solutions for operating and sustaining the complete project and extending the capacity of the complete good to serve the public (Hwang, Zhao & Gay 2013).

2.4.1.2 Project Financing and Cost Efficiency

Government is interested in PPP initiatives owing to the need to expand provision of public goods and services in a more efficient manner while overcoming budget constraints and the economic development situation of the country. Government would also want to utilize PPP arrangements to transfer present costs of financing the project from the government to private

sector organizations while reducing the amount of public funds tied up in financing large capital projects. The public sector criticized for high operating costs that cause high inefficiency especially in implementing large projects as compared to the private sector whose competitiveness and profit-maximizing objectives necessitate greater cost-efficiency of operations and management practices. The private sector is able to employ and lay off human resources with greater flexibility and can procure goods and services more efficiently, unlike government agencies that are faced with political pressure and labour union activism. The private sector is also able to raise and access financing for initiating large projects quicker than government agencies (Chou et al. 2012).

In PPP initiatives, private sector corporations bear most of the risk and are thus compelled to use innovative designs, quality solutions, cutting-edge technology, and management practices to ensure successful implementation of projects at minimal cost and error to maximize returns. The private sector is better able to compete at the international level given its greater flexibility in managing fluctuations in market demand and supply (Osei-Kyei & Chan 2015). The cost-efficiency of PPPs justifies the incentives for government to participate in such arrangements with the private sector. Bidding for PPP initiatives further stimulates competitiveness among private sectors willing to participate in the projects, thereby ensuring that the public gets the most competitive solution for development initiatives (Demirag et al. 2011).

2.4.1.3 Government Financial Guarantee

The success of any PPP initiative is dependent on its ability to meet the various conditions required by both the public sector client and the private contractor. The arrangement arrived at in the PPP initiative must have the ability to provide sufficient safeguards that would protect the business objectives and controlling interests of private sector financiers and grant

providers during the duration of the contract (Osei-Kyei & Chan, 2015). This requires adequate contractual provisions that define the roles of the public sector in building institutional capacity at all levels of the PPP project. The government should also give assurance that it would allocate adequate human resources in the form of qualified and motivated staff that is trained to specialize in PPP units to support the private sector parties in implementing and delivering the project (Wolfs et al., 2016). The government should also undertake measures that would reduce market risks facing the project and private sector contractors by implementing user-oriented strategic approaches and adopting development facilitation mechanisms that encourage and support private sector investment.

2.4.1.4 Well-developed Capital Market

The financing of many PPP projects is on a limited recourse or non-recourse basis that requires various financial instruments to effectively distribute the burden and risk of financing among partners in such initiatives. According to Demirag et al. (2011), the availability of various financial instruments such as debt, mezzanine financing, equity, contracts and supplier credit and sureties that are necessary for constituting the capital structure of PPP initiatives is thus a key success factor for such projects. The capital markets in the country should, therefore, be able to provide attractive investment instruments with low-interest rate charges and flexible repayment schedules to provide quality financing options for PPP projects (Nsasira, Basheka & Oluka 2013).

2.4.1.5 Economic Stability of the Country

PPPs attract domestic and international private organizations to invest in such projects ... require a stable macroeconomic environment to ensure smooth implementation of large projects without necessitating budget cuts. Alsafran, Edum-Fotwe, and Lord (2011) recommend that the

government needs to pursue economic stability through a balanced budget and sound monetary policy that would ensure stability and credibility of the price regime and convertibility of national currency on international markets. A stable money market also protects the value of debt and equity held by foreign investors and tied up in the project and reduces risk of procuring labour and materials from outside the country. A stable economic environment would also ensure sustained demand for finished products offered by the complete project and is essential for assuring private investors of a profitable return and repayment of debt from the completed project (Hellowell & Vecchi 2012).

2.4.1.6 Project Growth Potential and Cost Savings

The financial and economic implications of PPP initiatives should not create a negative impact on the efficient operation of open labour, commodities and securities markets. The PPP arrangement should also not obstruct the clear and transparent rules that support the operation of these markets. This is particularly necessary with respect to the tendering and private contractor selection procedures, the use to which public funds and international grants are put, and the enabling provisions made by the parties for renewing contracts (Chou et al., 2012). Provisions must be made by market regulatory authorities to ensure that private parties get guarantees for adequate opportunity to generate revenues and realize financial returns. This must be matched with regulatory conditions to govern the PPP arrangement that will avoid the creation of closed or non-competitive markets.

The particular characteristics of the PPP project, public and private sector partners and the unique implementation arrangements are bound to create a series of constraints and opportunities that may affect the success of the project. These must, therefore, be fully identified and integrated into the planning phase of the project. The PPP arrangement must be regarded as

an active partnership that requires some flexibility from each of the parties to realize project success (Fahad, Bhamra, & Salman, 2014). The extent of flexibility must, however, be clearly defined in the contract to ensure that the project boundaries and requirements are clearly outlined and known. Management of public funds and international grants imposes stringent requirements for transparency on how private sector contractors can be selected, how the funds can be utilized, performance and quality requirements, and the particular benefits that the parties and the public can expect from the finished project.

2.4.1.7 Compatibility of Private and Grant Financing to Project Objectives

For the success of PPP projects being financed by international and private contractors, there is a need for integrating financing requirements to the desired objectives of the PPP initiative. In designing the PPP initiative, there is need to define the optimal level of private or grant financing necessary for realizing an economically viable and sustainable project especially considering that such financing would have to be repaid over the long-term (Alsafran, Edum-Fotwe, & Lord, 2016). Defining the right level of private loan funding and international grant contribution for the project should consider the relative strengths and weaknesses of such financing, and the various opportunities presented by such sources of financing for the public. This is necessary not only to ensure financial efficiency but also to ensure that the loan financing options and limited public funds are optimized and utilized to the maximum. This also requires careful consideration of the project's viability by calculation of the actual financing requirements against economic benefits of the project over the long-term.

The provision of international grant financing and private funding must be matched to the real financing needs of the project. This is necessary to ensure an adequate balance between the government's desire to facilitate the realization of the project in the public's benefit and the

ability of the private sector participants to enjoy undue profits in future from participating in the project's financing. In particular, care must be taken to ensure that the private loans and grants do not provide an unfair assistance to the private sector participants in their involvement in the project's implementation, which would constitute an unacceptable aid under the rules and regulations governing competitive markets (Hellowell & Vecchi, 2012). Consideration should also be made to avoid the possibility that such grants might constitute an incompatible aid under international lending rules.

2.4.2 Critical Success Factors Relating to Technology

2.4.2.1 Feasibility Assessment Study

Conducting thorough feasibility assessment is an important step in the design and planning phase of any project and for PPP initiatives to identify and forecast the costs and benefits that could potentially be incurred or realized from the project. A feasibility study is necessary for defining the project's cost and tariff requirements, milestones, deliverables and time schedules, and identifying reference standards in designing and implementing the envisioned project (Basilevsky & Wiley InterScience 1994). The feasibility assessment also sets down the distribution of tasks and responsibilities and provides assurance to public sector clients that the private contractors can handle the scope of the project. In conducting a technical feasibility study, the project's managers should undertake to accept submissions of queries, responses, and suggestions that would guarantee that the interests of stakeholders in the project are effectively represented (Hwang, Zhao & Gay 2013).

2.4.2.2 Innovative Solutions for Social and Development Problems

Private sector participants in PPP projects are expected to develop and implement novel ideas and solutions to ensure successful implementation of the project and provide value for

public funds in the complete project (Chou et al. 2012). Private contractors executing PPP projects are confronted with conservative ideas and processes in the public sector. This requires challenging the assumptions that guided previous public policies and actions, and adoption of different perspectives and solutions to approaching existing social problems targeted by projects in PPP initiatives. It is also necessary to ensure flexibility of the contract in selecting among alternative decisions and to establish trust in the public and government agency clients in testing new solutions and concerning the capacity of the private contractors to deliver on the requirements and expectations of PPP projects (Kahwajian et al. 2014).

2.4.2.3 Effective Technology Transfer

Successful PPP initiatives need to effectively transfer useful technologies from the private sector to the public sector (Hwang et al. 2013). This requires a long-term commitment by private sector participants for partners that are providing that technology. PPP initiatives should also provide assurance to private investors that they would recover the costs of developing and granting the technology for the period of the project, and that intellectual rights in the technology transferred would be protected (Reinhardt 2011). For the effective transfer of proposed technologies, the project's managers should consider the attitudes and appreciation of communities served by the project for the technology being transferred and its appropriateness to solve local social problems. For successful PPP initiatives, the technology being transferred to the project should be practicable, affordable and available for end-users, and should be adopted with regard to already existing domestic technologies for solving the social problem.

2.4.2.4 Suitability of the PPP Arrangement for the Project

PPP arrangements result in procurement expenditure by the government and therefore should not be entered into for the mere sake of a political regime undertaking a large PPP

project. There is a need for a detailed review of the various costs and potential benefits involving the private sector in government projects as comparable to other alternatives available for the government (Nsasira et al. 2013). This would ensure that any PPP initiative undertaken by government enhances public benefit. The type of PPP arrangement selected for the project has an impact on the designed duration of the concession contract. The conception, planning and implementation stage of any PPP initiative should evaluate the project's cycle to determine the type of PPP arrangement that would be most effective for the particular project. The particular type of PPP arrangement selected should be compatible to the issues that could be encountered during the project implementation phase and their possible solutions. The implementation of PPP projects may require a review of some existing legal provisions to ensure that they are compatible with the PPP arrangement chosen for the project.

The type of PPP arrangement selected should also consider the project's interaction with regional economic block regulations, and national, sub-national and municipal legislation. The procurement procedures in the PPP project must respect the current body of legislative directives, principles, and rules setting out the conditions for open and fair market competition, transparency in procurement and proportionality in the division of costs and benefits. The degree of private involvement in public sector projects needs to be carefully matched to the needs of delivering the project, and the particular objectives of development and needs of the public (Wolfs et al. 2016). In selecting a PPP structure, considerations must be made for its appropriateness for the project, its costs and the ability of parties involved implementing and managing it effectively.

2.4.3 Critical Success Factors Relating to Regulatory Environment

2.4.3.1 Favourable Legal Framework

PPP initiatives are highly dependent on government to provide oversight and monitoring for projects. A sound legal and regulatory framework ensures optimal performance of private parties in the arrangement and enforcement of responsibility to deliver the project requirements in line with the broader objectives for public policy and environmental protection. Providing a favourable legal framework for PPPs requires the establishment of special governmental authorities for handling and supporting partnerships with the private sector. Such government bodies would provide judicial security for private sector participants, define the roles of different parties in the consortium in financing and implementation of PPP projects, and guarantee that adequate public funds are set aside for securing payment to private concessionaries providing public services on behalf of the government (Geddes & Wagner 2011).

In supporting PPPs, the government, therefore, has a role in establishing a stable economic environment that would assure a return to investors throughout the duration of the project. The legal framework governing the PPP initiative should outline specific mechanisms for reviewing tariffs and compensation of concessionaries in a manner that protects collective welfare provided by the project. The framework adopted should promote open competition in bidding and democratic participation of partners in decision making, and also reduce opportunistic behaviours without enforcing unnecessary controls. The framework should provide a system for accounting, auditing and assessment of the project's progress and achievements. The legal environment should protect private sector participants from expropriation and unforeseen changes in project requirements and negotiated agreements. The legal framework should ensure the protection of public rights in the project by outlining fair regulatory

frameworks for procurement, market competition and dispute resolution (Osei-Kyei & Chan 2015).

2.4.3.2 Political Support

Political environment determines the state of markets and regulatory policy that affect the success of projects operating within the jurisdiction of the particular political regime. The successful design and implementation of PPP initiatives requires a positive political environment that would support the operations of business participants in partnership with government agencies. Committed government leadership alleviates fears of expropriation and nationalization, and insulates the project from political interference, corruption, force majeure, volatile internal markets and delays in approval that may deter private corporations from partnering with the government (Yang et al. 2010). Government regimes are also crucial in encouraging public acceptance of the complete project by taking an active leadership role in collaborating with the private sector to deliver public goods to end users. Political environment influences the international credit rating of the country, which influences the quality of financing and willingness of private sector to participate in PPP initiatives. Private partners in PPP projects should in turn work with the government in addressing sensitive political issues such as cross-border diplomacy, regionalization of market blocks, labour relations and downsizing after project completion, and opposing public policy alternatives (Alharthi, Soetanto & Edum-Fotwe 2014a; Nsasira, Basheka & Oluka 2013).

2.4.3.3 Strong Private Consortium

In PPP initiatives, private firms undertake substantial risk participating in the provision of public goods. This requires partnering with a number of other business organizations together with government agencies to gather the skills, experience, technical knowledge, and capabilities

for providing innovative methods and solutions required in implementing large public sector projects (Geddes & Wagner, 2011). It is necessary for willing private sector bidders to develop a strong consortium of private and public organizations that brings together the strengths of the different participants in PPP projects. The consortium should enable participants to complement each other's strengths and weaknesses in their respective lines of business in a manner that adds value in the different aspects such as legal consultancy, financial and technical knowledge, and research development (Alharthi, Soetanto & Edum-Fotwe 2014b).

2.4.3.4 Transparent and Competitive Procurement Processes

The degree of transparency in the contracting and procurement processes is a significant success factor that is determined by the regulatory environment created through the participation of government agencies (Osei-Kyei & Chan 2015). Good communication, open consultancy, competitive bidding and selection criteria, an efficient approval process, and standardized documentation are essential for the successful implementation of PPP initiatives in reducing time and costs of managing procurement operations involved in project. Transparent contractual processes ensure private sector partners are adequately briefed of the required outcomes of projects and incorporate community input and necessary consultation with the public sector clients (Nsasira, Basheka & Oluca 2013).

2.4.3.5 Public Opinion and Satisfaction

A key success factor of any PPP initiative is its ability to protect the interests of the public and maximize value added for the government and end-users. This determines the interest of key stakeholders and their acceptance and positive attitude towards the project's implementation as well as the public's level of recognition of the particular social needs being addressed in the project. The approach used by the government for pursuing any PPP initiative should follow

control mechanisms that would protect the public's interest in the project's design, scope, and implementation (Alsafran et al. 2016). These mechanisms relate to the norms, quality standards and performance objectives adopted for the project together with effective systems for monitoring and management in use by the public sector partners and at the local level. Public opinion of the PPP project is highly dependent on the degree of reassurance that can be obtained at the tendering, evaluation and contracting stages of the project including the possibility of renegotiating financing conditions that pose particularly sensitive issues to sustaining the local capacity to repay the financing in the long-term. There is a significant part for public sector participants to play in the successful delivery of PPP projects and therefore the need to create various independent consumer groups and professional associations that would provide oversight and monitoring the project's implementation on behalf of the public (Demirag et al. 2011). The consumer must also be integrated and given the power to influence PPP design and operation. Adopting a bottom-up approach at the conception stage of the project is influential to ensuring the sustainability of the PPP project by including the public in contributing input necessary for ensuring relevance of the project for communities.

PPPs that are well executed tend to be more cost effective than projects carried out by the government. For instance, PPPs for different projects in the UK were found to have cost savings ranging from 10 to 40% compared to the traditional public procurement approach. However, some PPPs are impeded by the slow progress of implementation, poor implementation, and strong public opposition leading to their failure. These problems are inevitable given the complexity of PPPs and the problems related to uncertainties, risks, the multiple participants involved, and the lack of experience and expertise among participants (Hardcastle et al. 2004).

The increasing adoption of PPPs by many governments calls for the identification of a workable and efficient approach to PPPs.

Category	Success Factor	Papers
Financing Success Factors	Risk Transfer	(Fahad, Bhamra & Salman 2014), (Hwang, Zhao & Gay 2013)
	Project Financing and Cost Efficiency	(Chou et al. 2012), (Osei-Kyei & Chan 2015), (Demirag et al. 2011).
	Government Financial Guarantee	(Osei-Kyei & Chan, 2015), (Wolfs et al., 2016).
	Well-developed Capital Market	(Demirag et al. 2011),(Nsasira, Basheka & Oluca 2013).
	Economic Stability of the Country	Alsafran, Edum-Fotwe, and Lord (2011), (Hellowell & Vecchi 2012).
	Project Growth Potential and Cost Savings	(Chou et al., 2012). (Fahad, Bhamra, & Salman, 2014).
	Compatibility of Private and Grant Financing to Project Objectives	(Alsafran, Edum-Fotwe, & Lord, 2016),(Hellowell & Vecchi, 2012).
Technology Success Factors	Feasibility Assessment Study	(Basilevsky & Wiley InterScience 1994), (Hwang, Zhao & Gay 2013).
	Innovative Solutions for Social	

	and Development Problems	(Chou et al. 2012), (Kahwajian et al. 2014).
	Effective Technology Transfer	(Hwang et al. 2013), (Reinhardt 2011).
	Suitability of the PPP Arrangement for the Project	(Nsasira et al. 2013). (Wolfs et al. 2016).
Regulatory Environment	Favourable Legal Framework	(Geddes & Wagner 2011). (Osei-Kyei & Chan 2015)
	Political Support	(Yang et al. 2010). (Alharthi, Soetanto & Edum-Fotwe 2014a; Nsasira, Basheka & Oluka 2013).
	Strong Private Consortium	(Geddes & Wagner, 2011), (Alharthi, Soetanto & Edum-Fotwe 2014b).
	Transparent and Competitive Procurement Processes	(Osei-Kyei & Chan 2015), (Nsasira, Basheka & Oluka 2013
	Public Opinion and Satisfaction	(Alsafran et al. 2016), (Demirag et al. 2011).

2.5 Critical Success Factors

A number of factors contribute the success of PPPs and such factors need to be recognized to guarantee the effective apportionment of limited resources. The success of construction projects depends on the four factors of project participants, project characteristics, contractual arrangements, and project participants (Dada & Oladokun 2012). The most important CSFs identified in the literature include project leadership, identifying the right project, strength of the project consortium, the financial package, technical solution and provision of guarantees. Some scholars include support from the community and short construction period as critical success factors (Dada & Oladokun 2012).

2.5.1 Executive

For PPPs to be successful, both the contractor's executive needs to articulate on how to allocate and manage project risks (Hardcastle et al. 2004). The private finance initiatives should be well structured to avoid wastage and depletion of resources. The PPPs procurement protocol should be based on a win-win principle by creating a favorable environment and necessary support for private sector participation (Hardcastle et al. 2004). The executive should establish measures to ensure that the privatized projects and services are delivered at acceptable cost, standard, and quality.

Most investors like to invest in environments that encourage private investments and regulations make contracts enforceable (Ismail & Ajija 2011). PPPs are most successful in environments that have favorable legal, political and economic environments for private sector participation. Executives should induce the partnering government to create such an environment through proper laws and mitigating project risks (Ismail & Ajija 2011).

2.5.2 Senior Manager

The senior manager should ensure that risks are allocated through appropriate contract arrangements. The obligations of each party should be properly articulated with the clarity of plans and technical specifications and formal dispute resolution processes. Different risks should be allocated to the parties in the best position to manage them. The economic viability of the project is critical to the success of any PPP (Ismail & Ajija 2011). The senior manager should ensure that the project is financially sustainable in the long-term by limiting competition from similar projects. He/she should ensure that the project has sufficient profitability prospects to convince investors and sufficient cash flow to attract lenders (Ismail & Ajija 2011). It should be affordable to the public so that the government is not forced to subsidize overpriced products or services. The senior manager should make adequate and sustained marketing of the project so that all stakeholders understand the long-term implications of the project and its benefits.

2.5.3 Manager

The manager ought to ensure that all the significant stakeholder's interests have been addressed prior to the commencement of the project (Ismail & Ajija 2011). He should then gather a competent project team with all the requisite skills to accomplish the project. He should then ensure that sufficient resources have been allocated to the project to avoid disruptions once the project has commenced (Ismail & Ajija 2011). The manager should possess all the skills and competencies required of a project manager because PPPs require project management skills.

2.5.4 Engineer

The technical strength is a critical success factor for any project (Zhang 2005). The project engineers should be selected through rigorous verification and tendering processes. The selected engineers should have the technical and financial strength to complete the project. The

engineers should be able to employ value engineering techniques to determine the cost/benefit profile of the project and potential technical solutions to pertinent issues (Zhang 2005).

2.6 CSFs in the UAE

In the case of the UAE, one of the problems encountered by the private sector is their lack of experience of working in the country. Most firms that win PPP contracts are foreign and lack contacts and supplier networks (Chan et al. 2010). Foreign firms can overcome some of these challenges by collaborating with local partners with a reputation for completing infrastructure projects. Such partners can improve the success rate of PPPs by mobilizing their local partner networks. Private investors in the UAE often complain of the long time the public sector takes to make decisions (Chan et al. 2010). The long waiting period and drawn out negotiations can be very strenuous to the management as they spend valuable time discussing issues at meetings. This extra cost has to be added to the project costs leading to extremely high project costs.

Another issue that has been identified in the UAE is the lack of political support for PPP projects. The government is wary of the high costs of tenders that tend to be higher than the cost of conventional procurement methods due to the extra costs of hiring advisors to advise both the public and private participants (Chan et al. 2010). The concern is that these high costs would translate to a high cost of the amenities provided by these projects. There is also concern that some PPPs may render government workers redundant as they can potentially replace local workers with foreigners violating the government policy of prioritizing employment to UAE nationals. These concerns have caused the government to withdraw support for some PPP projects (Chan et al. 2010). The implication is that the government may have to change the

revenue collection regime for PPPs or provide subsidies for services provided under such projects so that they can be successful.

One of the most successful PPPs carried out in the UAE was the partnership between a local municipality and private contractor in the construction of a theme park (Chou & Pramudawardhani (2015). The municipality provided the space while the private contractor financed the project. The project was successful because private partner took responsibility for the financial and technical risks associated with the project. The private partner handled the design, construction, financing and operations of the project (Chou & Pramudawardhani 2015). The private partner had sufficient experience and knowledge of the project requirements to deal with the risks and complexities adequately. The contractor addressed the issue of financial viability of the project by developing a detailed marketing plan to sensitive the public on the educational and recreational value of the theme park. It minimized the risks by forming a limited liability company to protect the investors from personal liability (Zhang 2005).

The political support for the project came from the municipal officials processing the approvals with urgency taking the initiative to seek government approvals on behalf of the contractor. The project also had overwhelming support from the tourism sector (Chou & Pramudawardhani 2015). The project's managers recruited staff with experience in the entertainment industry. It was this staff that conducted the feasibility study of the project and signed the contract with the municipality (Zhang 2005). The contractor also sought a local partner with knowledge of the local market to negotiate with the municipality and advise them on the best procurement methodologies for the project.

Another project involved the construction of an industrial zone. The project was successful because the public and private partners agreed to share the risks. The private partner

handled the technical part of the project including the design, construction, and operation of the industrial zone. The public partner handled the financial risks of the project by contributing almost 75% of the project cost (Alhashemi et al. 2009). This approach minimized the financial risk incurred by the private partner as it did not have to worry about covering the rental costs of units that failed to attract tenants. Such an arrangement encourages private investors to enter into PPPs. The UAE government facilitated the implementation of this project by enacting new laws and decrees to allow the leasing of land to foreign investors. This law allows GCC nationals to own land in the UAE while non-GCC nationals could lease for prolonged periods (Alhashemi et al. 2009). Other laws were enacted to allow non-UAE nationals to start and own businesses in the UAE thereby allowing foreign companies to set up business in the industrial park. Thus, the project enjoyed political support due to the government's desire to see it succeed.

The project consortium had all the knowledge, skills and experience required to complete the project successfully (Alhashemi et al. 2009). The consortium included a foreign bank that had knowledge and experience managing PPP projects. It also mobilized the contacts it had with big construction companies through its banking networks (Alhashemi et al. 2009). The bank also had experience in the financial aspect of the project as banking and investment management is its core function (Alhashemi et al. 2009). The tendering was not drawn out as it involved direct negotiations between the consortium and the government.

2.7 PPP Success Criteria

The criteria for evaluating the success of PPP initiatives would look at the ability of the projects to deliver their envisioned benefits for both the participant organizations and for the end-user public. Given the main incentive for the public sector to participate in PPP initiatives, the success of partnerships with the private sector is evaluated on its ability to deliver the best design

and construction technique (Collis & Hussey 2009). It is also evaluated on its capacity to create and sustain market demand for usage, deliver public services, and lower costs of construction, operation, and maintenance of the completed facilities. Technical requirements and feasibility of the project should align with the main goals for implementation envisioned by the public sector client, and financial feasibility should align with relevant market capabilities without increased risk or costs of construction and operation. The parties in the PPP initiatives must possess the financial capacity and ability to undertake the liabilities arising from the project including servicing long-term obligations for potential cash flow and refinancing.

2.8 How Success Factors Contribute to Success of the Project

The different success factors for PPPs have varied significance for different countries depending on their stage of economic development, technological progress, and internal political and regulatory environment. There is thus need for examining the interrelationships that exist among the critical success factors for PPPs and their influence on the successful implementation of such schemes in the UAE (Dembowski & Hanmer-Lloyd 1995). Guidelines for ensuring the success of PPP initiatives focus on four key areas. The first is ensuring open market access and fair competition in bidding and procurement. The second is protecting public interests in projects and maximizing value added for end-users. The third is defining the optimal level of participation and financing for a viable and sustainable project, and final is avoiding unfair opportunity for windfall profits from grants, and assessing the most effective type of PPP for particular projects. The project must also be able to facilitate sustainable economic development and achieve its long-term objectives without encountering sharp changes in priorities over the short-term. For the government, the PPP initiative must be able to handle geopolitical risks that could emerge during its implementation and in its utilization after commissioning (Di Gregorio

& Davidson, 2008). The management of the project should follow guidelines for good governance and enhance the quality and efficiency of specific functions in public service.

3 Chapter 3 – Methodology

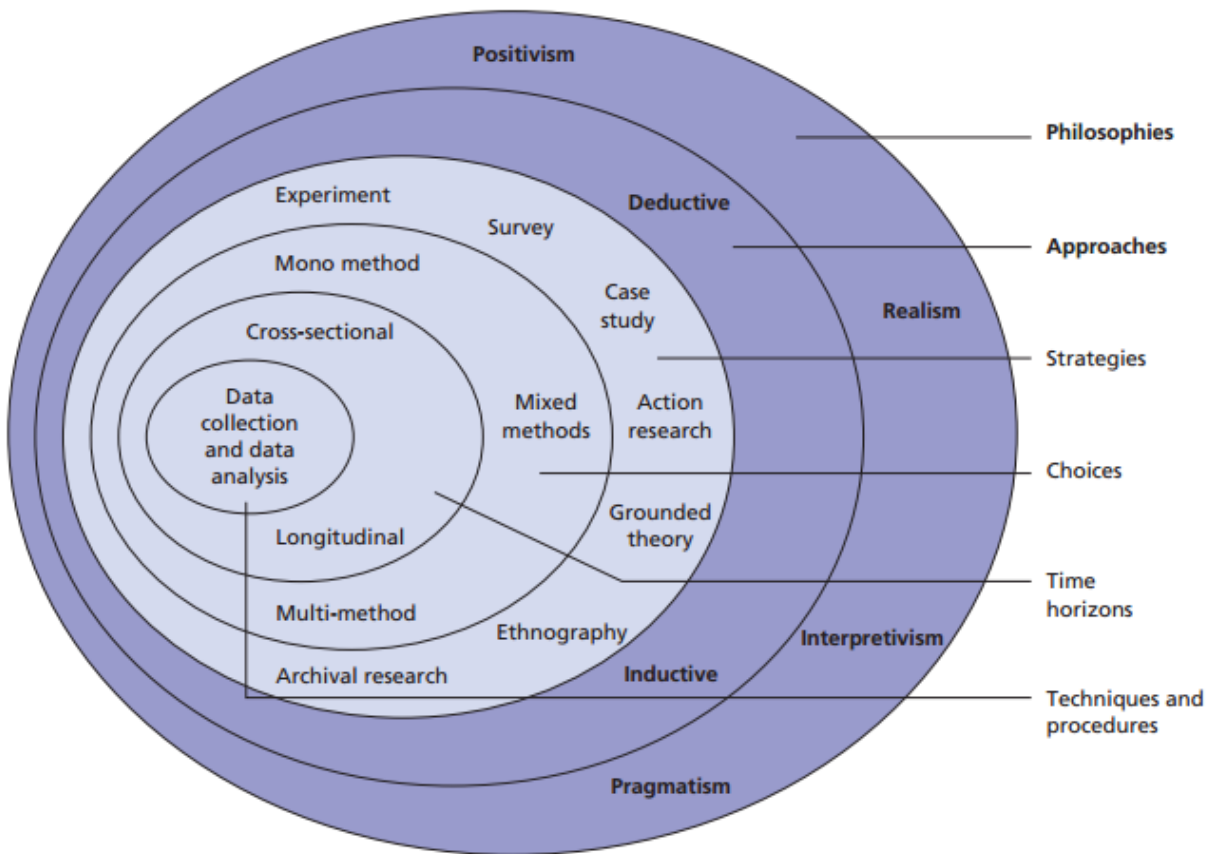
3.1 Introduction

Research requires data to validate the findings arrived at the end of the research process. As such, a researcher needs a procedure to guide him or her in the process of collecting and analyzing the data. The current paper adopts the research onion model proposed by Saunders, Lewis, and Thornhill (2011) to guide students undertaking business research. Further, the research makes use of quantitative method as the research seeks to understand how given factors influence the success of PPP in the UAE. For this application, qualitative method is unsuitable as it seek to give a greater understanding of which factors facilitates PPP in UAE, which is not an objective of the current research.

3.2 Knowledge Creation Methods

Gathering data is central to any research process due to the need to validate the different observations and concussions arrived at after completing the whole process. Consequently, selecting the most applicable methodology is key to the success and reliability of data used to infer particular conclusions. As such, several researchers have proposed and used different approaches to doing their research. However, the research onion model developed by Saunders, Lewis, and Thornhill (2011) is the primary model used in the realm of business research to describe the format used to conduct the research. Figure 4.1 depicts the research onion model with an in-depth elaboration of the steps followed in conducting business research. The current research seeks to investigate public-private partnership and factors that make it a success. Therefore, the research falls in the domain of business research making the research onion model an invaluable tool for describing the format used to conduct the research as the chapter outlines.

Figure 4.1: The research Onion



Source: Saunders, Lewis, and Thornhill (2011)

3.3 Research Philosophy

Saunders, Lewis, and Thornhill (2011) regards philosophy as an over-arching term referring term in research referring to how a researcher develops knowledge and the nature of the developed knowledge. As such, the research philosophy is at the core of the current research helping to elaborate concepts specific to public, private partnerships. The philosophy guides the whole process of research as it forms the foundation beliefs that underpin the whole investigation into in the United Arab Emirates.

Several research philosophies exist that help guide business researchers as they head to the field to collect data and support their research findings. As Bryman and Burgess (2015) elaborates, such philosophies may include realism, positivism, pragmatism and interpretivism. However, the current research makes use of positivism and interpretivism to help investigate the PPP phenomenon in a more holistic manner. Positivism research philosophy gives the current research rigor in four key ways. First, it gives the study a philosophical nature akin to that of a natural scientist. As such, the research will be based on observable social reality whereas the outcome of the paper will mirror those arrived at by natural scientists. Secondly, a positivist view of the research philosophy will lead to the production of credible data since the data collected and analyzed to produce the results originate from observable social reality. Moreover, a positivist view implies that the current research is undertaken in a value-free way making it close to impossible to alter the collected data. Lastly, the high-reliability nature cultivated by positivism philosophy makes the current research easily replicable (Burns and Burns 2008; Ghauri and Grønhaug 2005; Saunders, Lewis, and Thornhill 2011).

Besides, the paper also makes use of interpretivism philosophy in a mission to provide authentic data to respond to the research question. Apart from making use of a positivist view to obtain objectivity in the research findings, the paper makes use of interpretivism to factor in the role of a complex human factor into PPP in UAE. Key tenets of interpretivism include phenomenology and symbolic interactionism. Phenomenology entails ways human beings view and interact with the world around them (Saunders, Lewis, and Thornhill 2011). Therefore, in conducting the current research, an empathic stance is assumed to make it easier to enter into the social world of the research respondents and try to see PPP from their perspective. Such a stance makes it easier facilitates the applicability of the research findings in the context are under study.

3.3.1 Inductive Approach

The inductive approach use in the current study entails making specific observations from acute generalizations of theories attempting to contextualize PPP in different countries (Holden and Lyncnh 2004; Ng and Coakes 2014). Such theories assume that factors the lead to the success of PPP in a given country can be replicated in all other countries to achieve these results. In a move to challenge that notion, the current study makes use of exploratory research to pinpoint ways different researchers have found different results when investigating PPPs in different countries. The inductive approach will help address the weaknesses in the current research and validate why the research deviates from using approaches used by current researchers (Teti 2005; Saunders, Lewis, and Thornhill 2011).

3.3.2 Deductive Approach

The research also makes use of the deductive approach to collect data in the context of UAE and develop a new theory specific to the experiences of individual located in the country. While the inductive approach is concerned with generalization theory that assumes one fits all model, deductive approach leverages data from affected respondents to come up with a theory applicable to a given setting rather than generalized for multiple settings. To this end, the research collects data on PPP and its success factors in the UAE and analyses it to come up with new insights specific to the country

3.4 Research Design

A researcher does use research design in organizing and intenerating different aspects of the research to ensure coherence in addressing the research problem (Bryman and Bell 2015). The current research employs mixed-method of research. Essentially, the mixed research method

provides the blueprint for collecting, measuring, analyzing, and interpreting the collected data (Crossan 2003). A variety of research design constitutes the mixed research used in the current study. The mixed research method used in the current study comprises of a variety of research design. Public-private partnerships in UAE present unique scenarios due to the Islamic laws that form the foundation of business operations and ethics in having cooperation between the private sector and the government. As such, making use of a single research design will limit the level of analysis needed to offer deep-founded observations. Saunders, Lewis, and Thornhill (2011) had similar observation noting that when a research phenomenon traverse different sphere of society, a variety of research designs are needed to offer conclusive and reliable results. Therefore, the current research design encompasses characteristics envisioned bet Green (2011) that help cover the multifaceted nature of Public Private Partnerships in UAE. First, the mixed method makes use of case study analysis to offer a contextual understanding of PPP, ways culture influence the partnership in UAE, and the PPP multilevel perspectives from a UAE context. Secondly, it makes use of a qualitative approach that adds rigor to the research by seeking responses from individuals who have been at the center of implementing the partnerships in the country. Lastly, the research leverages the strengths of the two characteristics to formulate a framework holistic enough to confer an understanding of PPP from the perspective of an Islamic country.

3.5 Sampling Size and Techniques

Whereas census makes it possible to collect data from every relevant group due to adequate time and resources, the current research makes use of a representative sample to a representative sample. Access to data, time restrictions, and budgetary ceilings discussed by Saunders, Lewis, and Thornhill (2011) as limiting factors that make a researcher considers

making use of a representative sample plagues the current research. To this end, the paper makes use of random sampling technique that Teti (2005) categorizes as probabilistic sampling techniques. The sample size was chosen to ensure it as in line with the central limit theorem that states that a sample size of a large absolute size; it will tend to have a normal distribution curve hence making the sample increasingly robust. Emails were used as the primary means of sending the questionnaires (Appendix1) to respondents through the survey monkey platform. The approach did not only make it easier to administer the data but also encouraged the respondents to give authentic samples to safeguard the quality of the survey. A larger sample size of 150 respondents was used to make sure the sample was robust in line with the tenets of the central limit theorem that mandates the choice of a larger sample size (Saunders, Lewis, and Thornhill 2012).

3.6 Data Collection

Both primary and secondary data sources are utilized to collect data used in the current research. While primary data sources helped contextualize the research phenomena in real-life situations, secondary data provided valuable information regarding similar researchers and their strengths and weaknesses hence giving the needed to learn from them while seeking to avoid their pitfalls.

3.6.1 Secondary Data collection

Secondary data is data collected from existing literature relevant to the current phenomena under study. The literature on PPP is extensive following decades of research. As such, data from existing literature is utilized to form a sound empirical study as Hair (2015) proposes. Journals, magazines, books, news articles, and web-based sources comprise the source

from where secondary data for this study came from. The secondary data was instrumental in laying a robust theoretical foundation used to evaluate the outcome of primary data to ascertain that it is consistent with what previous researchers established (Green 2011).

3.6.2 Primary Data Collection

Primary data collection forms the bulk of data collected and used to support research findings and conclusions. The survey was a key research strategy used in implementing the current research. As such, questionnaires were used to responses from stakeholders engaged in public partnerships in the United Arab Emirates. Verschuren, Doorewaard, and Mellion (2010) assert that questionnaires are invaluable as they help create a load of data when time is a key limiting factor in research. Ideally, questionnaires form the basis of surveys. As such, a researcher does not require going to the physical location where the respondents reside. Besides, one can reach hundreds of respondents with less cost making the method most effective for students who do not only have limited time but also limited by finance. Structured questionnaires were utilized while questions made use of both open-ended and closed questions depending on the research question. Open-ended questions sought to give the respondents freedom in giving their views without being constrained by the researcher's subjective weaknesses. Contrarily, structured questions where respondents had a set of questions to choose helped foster consistency in the collected data making it easy to apply quantitative statistical techniques for analysis (Verschuren, Doorewaard, and Mellion 2010).

3.6.3 Access to Participants

United Arab Emirate organizations have a strict code of doing business applying to both the outsiders and employees working for them. As such, observing the set guidelines as

instrumental in getting the permission have a chance of interviewing employees working for organizations engaged in public-private partnerships. Moreover, conversance with the local languages and dialects were instrumental in building rapport with the managers who in turn offered hospitality envisioned in the Sharia laws (Verschuren, Doorewaard, and Mellion 2010). Moreover, since the country is undergoing a transformation where research and development and education have become a key attraction for corporates, the managers encouraged workers to give sincere responses to facilitate the research. After obtaining the permission from the management to conduct research in the sampled organizations located in Dubai, random sampling was used to select employees to take part in the exercise. Particularly, the respondents came from different levels management to gain a clear picture of PPP success factors at different levels of implementation from policy making to the actual enforcement of the policies. The selected employees consent to participate in the survey was then sought by sending them confirmation emails, which upon confirmation, they were sent the actual questionnaire using the survey monkey platform.

3.7 Research Approach

Hair (2015) and Saunders, Lewis, and Thornhill (2011) envisions two research approaches employed widely in the field of business research. First, the deductive approach is invaluable in testing an existing theory that forms the foundation of the research. As such, it becomes imperative to test the theory by means of creating a hypothesis and testing the theory using the collected data. Contrarily, an inductive approach entails collecting data and developing a new theory based on the research (Green 2011; Sreejesh, Anusree, and Mohapatra 2014). Due

to the multi-faceted nature of the current research, the two approaches are utilized to leverage the advantages of existing PPP theories and generate new ideas in the context of UAE.

3.8 Research Strategies

The research makes use of three research strategies envisioned by Bryman and Bell (2013) and Saunders, Lewis, and Thornhill (2011) proposes. A researcher may make use of different strategies to realize their research objectives. One may decide to use experimental research where the research seeks to quantify a theory. Action research, ethnography, case study, survey, and grounded theory are other strategies a researcher may employ. The choice of either the strategies depends on their ability to help the researcher answer the research questions. As such, no strategy is superior to the other as Zikmund, Babin, Carr, and Griffin (2013) assert. To this end, the current research makes use of both case study approach and surveys to investigate the extent of PPS in UAE and factors that are rendering them a success. Survey research is common in business research as Teti (2005) points out. Such is the case due to its robustness in answering pertinent questions that business researchers seek to answer in investigating given business phenomena. Ideally, it may be accomplished using questionnaire and spread across a considerable sample to make the outcome reliable. As such, the method is best suited for exploratory research, which is a key research approach characterizing the current research. Secondly, the research makes use of case study strategy by empirically investigating some PPP success factors that are difficult to capture through use of questionnaires. As Yin (2013) points out, the case study approach makes use of leverages multiple sources of evidence to contextualize a phenomenon in real life. As such, Saunders, Lewis, and Thornhill (2011)

observes that the strategy is invaluable for gaining a deeper understanding of the phenomenon under study as it helps answer the four fundamental research questions.

3.8.1 Questionnaire Design

Though questionnaires are rather simple from their outset, Green (2011) regards them as powerful survey tool that can generate a huge amount of data with the researcher having to spend less in terms of money and time. . It is divided into two sections: first demographic and general information related to the respondents nature. Secondly the second part of the questionnaire is related to success factors knowledge, background and involvement of the respondents of PPP in UAE. The scales are ranking from 1 to 5, where 1 represent very likely , 2 represent likely , 3 represent neutral, 4 represent unlikely and 5 represent very unlikely .

More so, the emergence of the internet has made it easier for a researcher to reach many respondents in different geographical locations with relative ease. Moreover, the questionnaires make it easy to hide the identity of the respondents particularly in scenarios where the responses are largely personal. As such, the current research made use of the questionnaires to leverage those advantages while keeping the obtained responses a secret in line with a confidentiality clause in research.

The questionnaire was structured across the different reasons why the government in UAE would like to collaborate with the private sector. Further, the questions were structured in line with success factors in each of the categories. Moreover, general questions were also used to capture the respondents years of experience, type of organizations, and their position in the respective organizations. Structured questions were mainly multiple choice questions with

answers restricted to predetermine scale like strongly agree or disagree. The choices gave the respondents room to factor in their attitudes to their responses as Crossan (2003) asserts.

A reconnaissance or pilot is instrumental for a researcher to familiarize himself or herself with the environment of the actual study (Hair 2015). The study helps the researcher form a rapport with the key figures that may influence the willingness of the respondents to take part in the research. Besides, a pilot study is key as it may aid a researcher in realizing the hurdles arising from organizational or cultural barriers that may affect the outcome of the study hence develop a contingency plan. First, the researcher visited the targeted organizations to learn what was required to grant the permission to engage employees in the forthcoming research. Besides, during the reconnaissance, 20 respondents were identified who helped assess the accuracy of the questions posed to the respondents, pinpoint grammatical errors, and report on the quality of the questions. Caution was exercised to ensure none of the participants knew about the other respondents and those who would take place in the actual study. All the detected inconsistencies and grammatical mistakes were corrected before administering the questionnaire to the sampled respondents who did not include those used in the pilot study.

3.8.2 Role of the Researcher

The researcher plays a critical role in encouraging the respondents give honest responses by ensuring he or she takes part in the research (Verschuren, Doorewaard, and Mellion 2010). To this end, the researcher leveraged his prowess of the local culture and language to develop proxies who felt close due to less cultural barriers. UAE citizens are Muslims who value cultural interactions and honest with one of their own. Therefore, the feeling of brotherhood encouraged the respondents to give authentic responses as truthfulness to a fellow Muslim is a key pillar of good moral standing in Sharia Law. Besides, collecting data was easy due to lack of cultural and

language barriers that arise when a researcher seeks to conduct research are an alien cultural background.

3.9 Time Horizon

Time is of essence while conducting research. Ideally, a researcher may make use of longitudinal research horizon when the sampled data repeats itself over a long period. Such is the case when a researcher is attempting to find a link between a given variable and corporate performance. In such cases, a researcher will utilize time series data since companies post different financial performance hence data in different years. However, the current study does not make use of time series data, as the investigated variables do not vary with time. As such, cross-sectional research was employed to take a data snapshot at a specific time. Saunders, Lewis, and Thornhill (2011) observes that the cross-sectional approach is instrumental for students whose research cannot traverse years of study, as their time is limited. Nevertheless, as Crossan (2003) observes, the limited time of cross-sectional research employed in the current study does not increase bias due to the use of a large representative sample.

3.10 Ethical Considerations

Ethics is a key pillar in any research (Gregory 2003). Research does not only lack credibility if ethics is not observed but also applicability in real life as the credibility of the data used in the study cannot be ascertained. High levels of ethics were observed in conducting the current research owing to the understanding of the importance of research in changing lives

through providing solid background through which policies are formulated (Gregory 2003; Ghauri and Grønhaug 2005). Consequently, the respondents were briefed on the need offer honest responses and notifying them that there were no financial incentives to participating the research. Besides, the respondent information regarding their workplaces and their level in the management hierarchy remained confidential. Further, caution was exercised to ensure respondents did not get to know each other and that the collected information would only be used for meet the research objectives and not for financial gains.

4 Chapter 4 - Data Analysis and Findings

4.1 Introduction

The current chapter presents an analysis of the data and an interpretation of trends in the data regarding their implication on in the success of PPP in the United Arab Emirates. The goals of the current research are to examine four key factors determining the success of PPP in UAE. Data was collected using survey questionnaires before being decoded into SPSS. Tables and graphs are the two key visuals used to represent the data while statistical analysis used to establish the significance of the variables. The chapter presents the analysis of the questionnaire and the findings

4.2 Descriptive Statistics

Analyzing the participants' demographics is key to understanding the characteristics of the sample. The characteristics of the sample were obtained by asking the respondents to gives responses on general questions relating to their years of experience, types of the institution where they worked, and the position they hold in the company. Data was then coded into the SPSS program to allow for further analysis in determining the validity of the sample. Half of the participants were selected from private institution while the rest were selected from a private organization to have a symmetric sample along the employee's sector.

Table 4.1: Experience in PPP

Experience in PPP in years

	Frequenc y	Percent	Valid Percent	Cumulative Percent
2 years	64	42.7	42.7	42.7
4 years	57	38.0	38.0	80.7
Valid 6 years and above	29	19.3	19.3	100.0
Total	150	100.0	100.0	

The data shows the number of participants in the study and their experience working in a PPP.

The table shows that most of the respondents comprising of 42.7% had two years of experience working in PPP, 38% had four years of experience, and 19.3% had 6 years of experience. The samples show a typical organization where younger employees are many, and the elderly in the profession declines significantly.

Table 4.2: Position in the Organization

Position in the organization

	Frequenc y	Percent	Valid Percent	Cumulative Percent
Senior manager	34	22.7	22.7	22.7
Manager	29	19.3	19.3	42.0
Valid Engineer	49	32.7	32.7	74.7
Executive	38	25.3	25.3	100.0
Total	150	100.0	100.0	

Table 4.2 shows the position that the interviewees held in the organization. The data shows that the sample had less number of managers in taking part in the survey at 19.3% followed by senior managers at 22.7%, and executives at 25.3 percent. However, engineers were the majority in the survey, at 32.7%, indicating that most PPP happened in the construction sector where the government may be looking for support to further its agenda to improve social lives for the people of UAE. Further, the results emphasize the core role of executives in facilitating implementation of PPP's in the country playing the role of support staff. Contrarily, senior managers at 22.7 percent indicate that policymaking is key where people with years of experience are needed to create the policy. However, PPP does not have many office staff as shown by the minimal number of managers in the survey.

Table 4.3: Factors for Government Adopting PPP in UAE

Adoption factors

	Frequency	Percent	Valid Percent	Cumulative Percent
financial capabilities in the private sector	12	8.0	8.0	8.0
technology capabilities in private sector	54	36.0	36.0	44.0
Valid regulatory capabilities in the private sector	14	9.3	9.3	53.3
Managerial capacity in private sector	70	46.7	46.7	100.0
Total	150	100.0	100.0	

The survey sought responses from respondents to give their views on why they thought the government chose to engage in partnerships with the government. Only 8 % of the respondents felt that government entered into PPP with the private sector due its financial capabilities. Such responses show that government rarely collaborates with the private sector due to financial reasons. Such was also the case with the regulatory capability of the industry with only 9.3% of the respondents feeling that government adopted PPP for regulation purposes. However, 36% of the respondents felt that the government entered into PPP to take advantage of technological capabilities of from the private sector. Lastly, 46.7% of the respondents felt that

the government entered into the private sector to take advantage of the managerial prowess of the private sector firms.

4.3 PPP Success Factors

The success factors for adoption of PPP by the government were categorized into four key categories including financial factors, regulatory environment factors, technology factors, and managerial capability factors. The responses to the questions were quantized to five levels with 1 representing implying the respondent very Likely with the success factor and 5 showing they very unlikely that the factor under question was significant. A respondent was then required to answer a set of questions under each of the category seeking to determine PPP success factors. A bivariate analysis is then conducted on each of the variables under each category to narrow down on questions relevant to the current study.

4.4 Inference statistics

A key goal of inference statistics is to draw conclusion from the sample of what the entire population in UAE thinks about the factors resulting to success of PPP in their country (Balakrishnan and Cohen 2014; Wasserman, 2014). The p-value is the primary mean used to make conclusions about what the selected sample say about the entire population. Ideally, the p-value should be less than 0.05 showing that there is a 95% percent probability of the observed difference in the dependent variable is due to independent variable(Wasserman, 2014). Correlations in table 4.4 shows that majority of the UAE citizens think that technological success factors, financial success factors, and environmental success factors are the key determiners of PPP sues in the country. Such is the case since finance success factors have a p-value of 0.049

showing that there is a 95.1% chance of PPP being fueled by government need to leverage the private sector financial prowess to further social development. Similar case applies to technology success factors with a p-value of 0.000 showing 99.999% chance of technology compelling the government to enter into PPP. Surprisingly, environmental success factors have a p-value of 0.049 similar to financial success factors. However, few people think that managerial success factors compel the government enter into PPP as the p-value is 0.5 showing a 50% chance that changes in PPP occurred due to managerial factors.

5 Chapter 5- Results

5.1 Introduction

The chapter presents the results of the outcome of the research. Questionnaires were the primary means used to collect data. There were a total of 69 questions categorized into financial success factors, managerial success factors, environmental success factors, and technological success factors. Several questions were formulated under of the category seeking to seek responses from the respondents on what were the opinion regarding the role of each factor in facilitating the adoption of PPP in UAE by the government. The core goal of the chapter is to present the findings following the analysis of the collected data. The chapter composes of descriptive and regression analysis.

5.2 Descriptive Statistics

This part describes the collected data using resulting obtained from the SPSS program. The chapter helps summarize the bulk of data in visual format while seeking to confer insights from the data (Bedeian 2014; Bickel and Lehmann 2012). The descriptive statistics measure the

spread and variability of data using measures of central tendency such mean, mode, and median. Further, kurtosis, skewness, variance and standard deviation will be used to measure the variability of data (Bickel and Lehmann 2012). The Likert scale is used to categorize the responses.

5.2.1 Type of the Organization

5.2.1.1 Analysis of Variance (ANOVA)

Table 5.1: Descriptives

Descriptives		N	Mean	Std. Deviation
Financial success Factors	Public	75	39.9733	4.72765
	Private	75	39.0400	4.63663
	Total	150	39.5067	4.69005
Technology Success Factors	Public	75	34.8933	4.85067
	Private	75	34.5067	4.04493
	Total	150	34.7000	4.45522
Environmental Success Factors	Public	75	47.3200	4.07749
	Private	75	46.4533	3.58033
	Total	150	46.8867	3.84871
Management success Factors	Public	75	39.8533	3.24118
	Private	75	38.0933	3.25565
	Total	150	38.9733	3.35575

Table 5.1 shows the mean rankings for the different type of organizations to determine the impact of their commitment towards the success of PPP in UAE. The means shows the responses of the respondents from private and public institutions. It is evident that means is more for public organizations regarding to financial success factors is the case with technological and management factors. However, the mean is more for private sector in environmental success factors.

Table 5.2: Test of Homogeneity of Variance

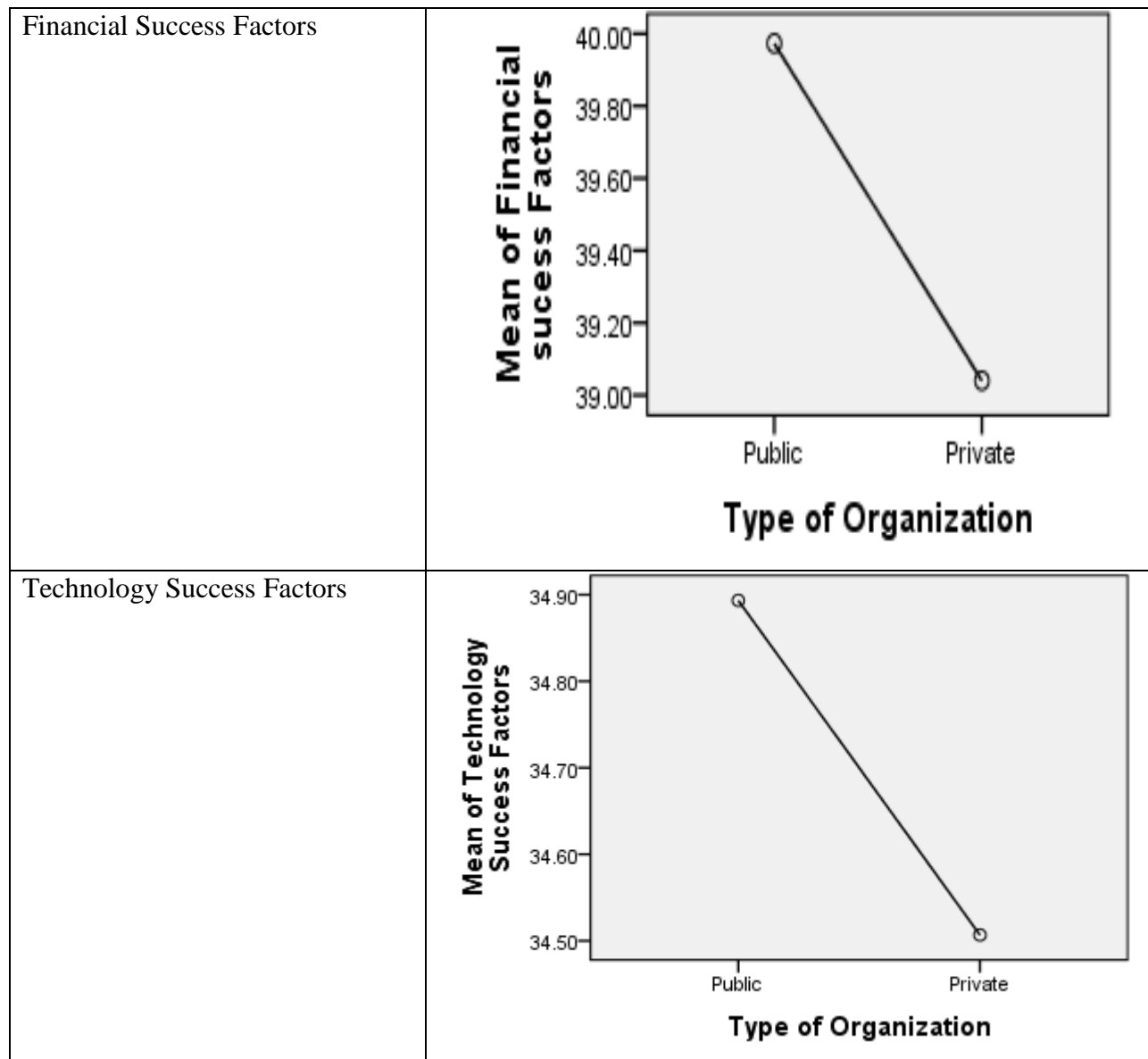
Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Financial success Factors	.003	1	148	.959
Technology Success Factors	1.937	1	148	.166
Environmental Success Factors	.444	1	148	.506
Management success Factors	.185	1	148	.668

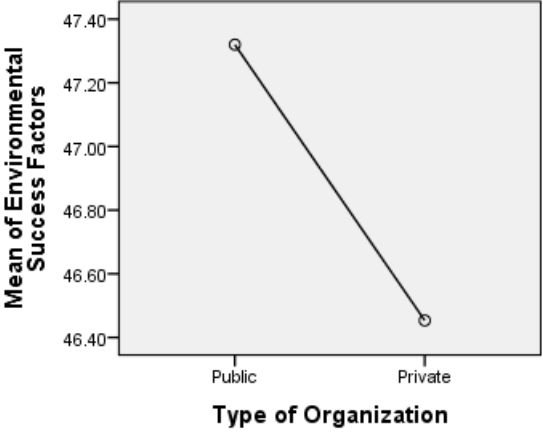
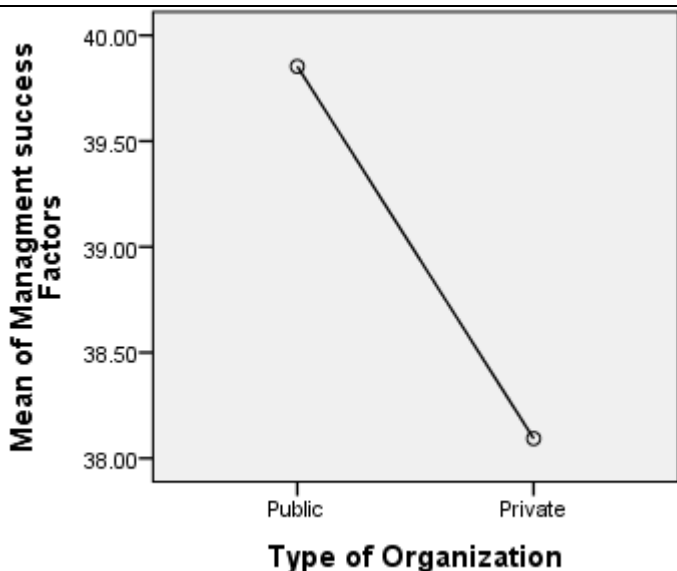
Test of homogeneity of variance was conducted to ascertain that the data has not violated the assumption of homogeneity of variance. Such violation occurs if the significance value is less than 0.05. The data shows that neither of the four measure of PPP success violates the homogeneity of variance. Hence the mean plots can be used to interpret the role of public and private organization in determining the success of PPP in UAE.

5.2.1.1.1 Mean Plots

Table 1 shows the mean plots for the PPP success factors and type of the organization. It emerges that the mean is higher for all factors for the public organization compared to those of private sector showing that the government commitment towards PPP is a key incentive to its success whereas for private organization it is the least. As such, government must take the lead in PPP for the PPP to succeed.

Figure 5.3: Mean plots for PPP Success Factors against Type of Organization



Environmental Success Factors	 <p>A line graph with 'Type of Organization' on the x-axis and 'Mean of Environmental Success Factors' on the y-axis. The y-axis ranges from 46.40 to 47.40 in increments of 0.20. The x-axis has two categories: 'Public' and 'Private'. A line connects two data points: Public (approx. 47.32) and Private (approx. 46.46).</p> <table border="1"> <thead> <tr> <th>Type of Organization</th> <th>Mean of Environmental Success Factors</th> </tr> </thead> <tbody> <tr> <td>Public</td> <td>47.32</td> </tr> <tr> <td>Private</td> <td>46.46</td> </tr> </tbody> </table>	Type of Organization	Mean of Environmental Success Factors	Public	47.32	Private	46.46
Type of Organization	Mean of Environmental Success Factors						
Public	47.32						
Private	46.46						
Management Success Factors	 <p>A line graph with 'Type of Organization' on the x-axis and 'Mean of Management success Factors' on the y-axis. The y-axis ranges from 38.00 to 40.00 in increments of 0.50. The x-axis has two categories: 'Public' and 'Private'. A line connects two data points: Public (approx. 39.84) and Private (approx. 38.12).</p> <table border="1"> <thead> <tr> <th>Type of Organization</th> <th>Mean of Management success Factors</th> </tr> </thead> <tbody> <tr> <td>Public</td> <td>39.84</td> </tr> <tr> <td>Private</td> <td>38.12</td> </tr> </tbody> </table>	Type of Organization	Mean of Management success Factors	Public	39.84	Private	38.12
Type of Organization	Mean of Management success Factors						
Public	39.84						
Private	38.12						

5.2.2 Position in the Organization

5.2.2.1 Analysis of Variance

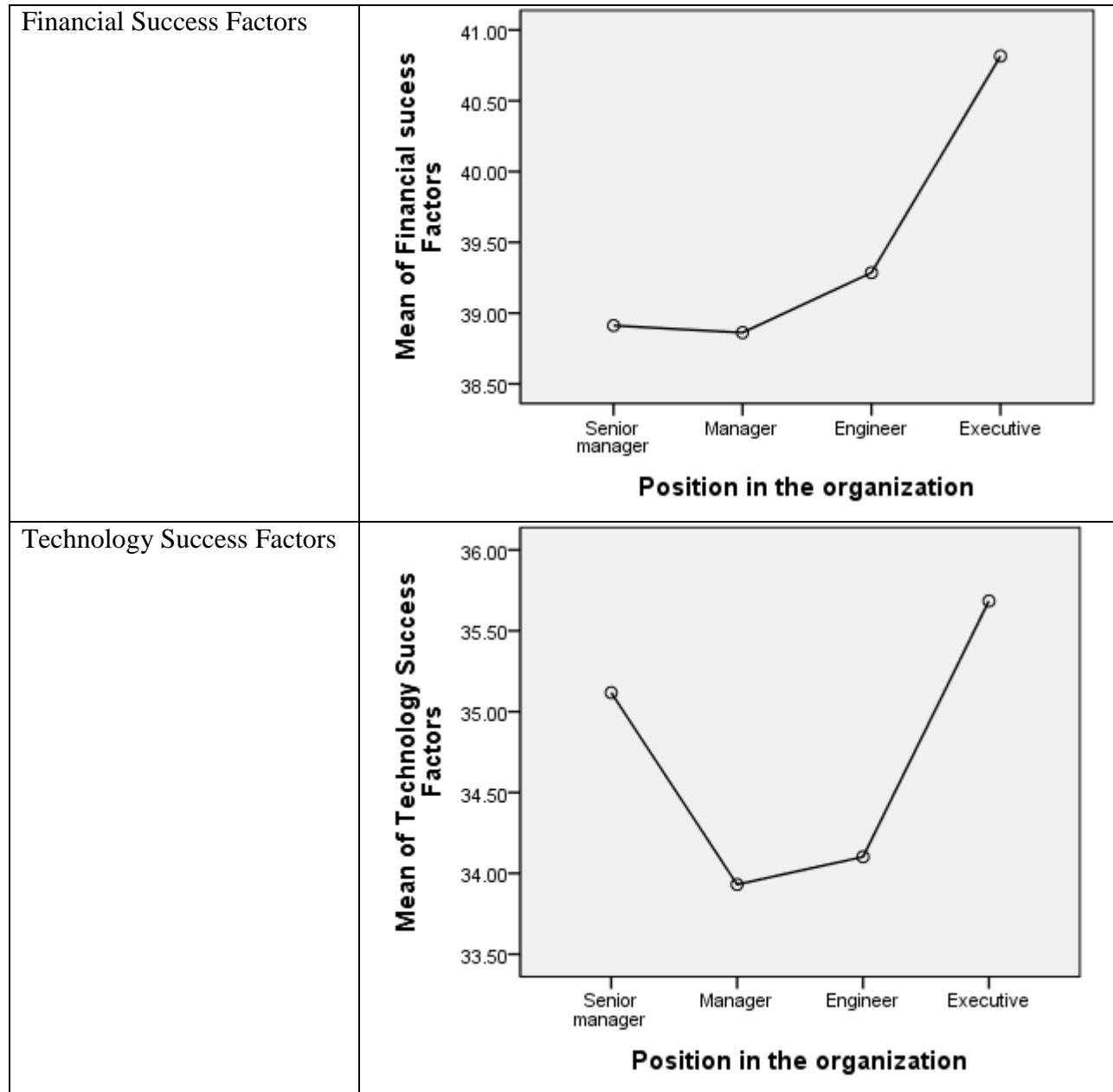
Table 5.4: Test of Homogeneity of Variance

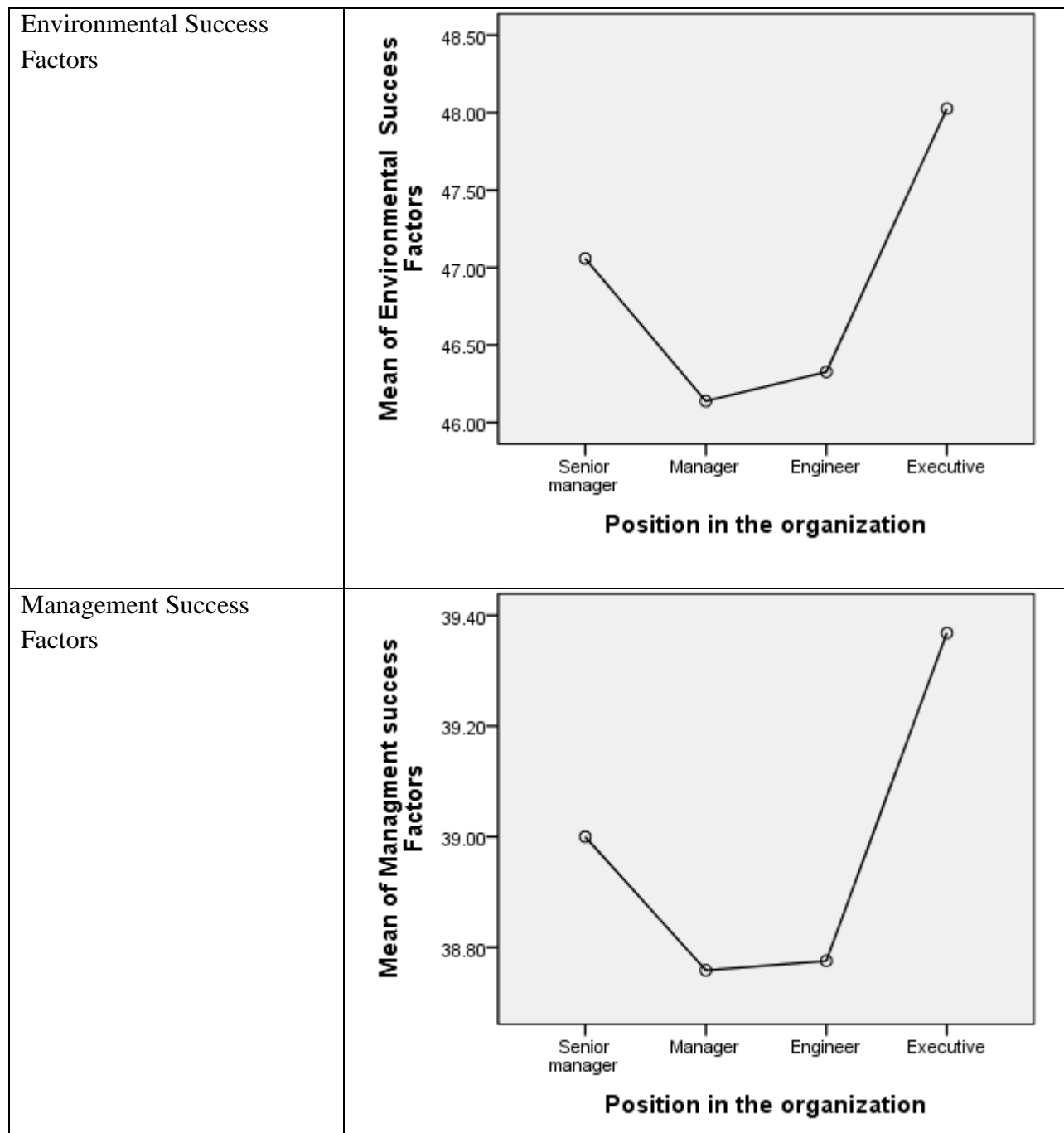
Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Financial success Factors	.666	3	146	.574
Technology Success Factors	1.378	3	146	.252
Environmental Success Factors	.926	3	146	.430
Management success Factors	.656	3	146	.581

While undertaking mean rankings, test of homogeneity of variance was conducted to determine whether any of the indicators of PPP success violated the assumption of homogeneity of variance. However, the data confirms that the assumption of homogeneity of variance was not violated in the dataset hence the mean plots ranking could be used to discuss the role of importance of different member of an organization in determining the success of PPP in UAE.

5.2.2.1.1 Mean Plots

Figure 5.2: Mean Rankings Plot





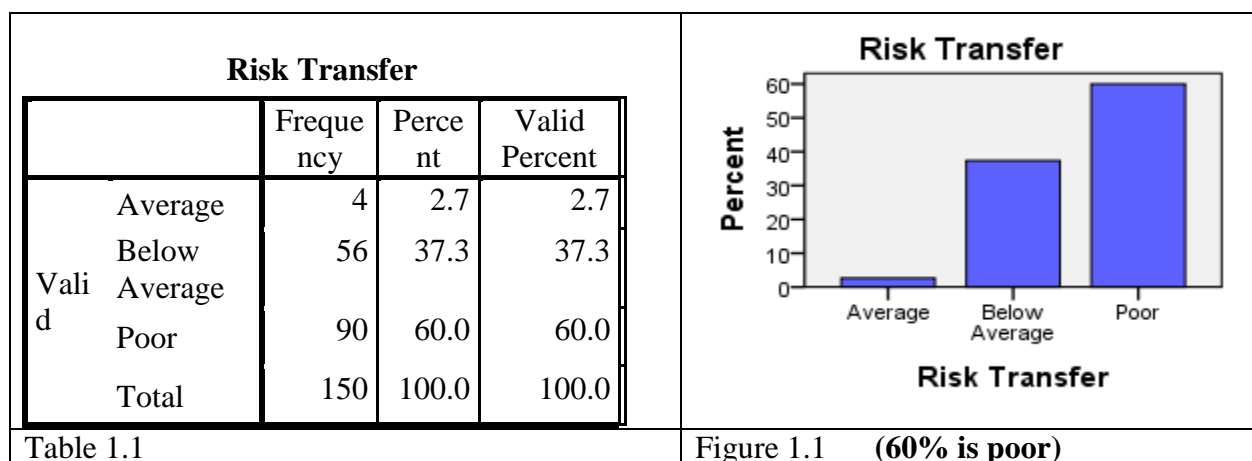
The table shows for all factors, the executive has the highest mean implying they are instrumental in the success of PPP's measured by any metric be financial technological, environmental, or managerial. However, the input of each if fundamental for the success of PPP in UAE.

5.2.3 Financing Factors (FF)

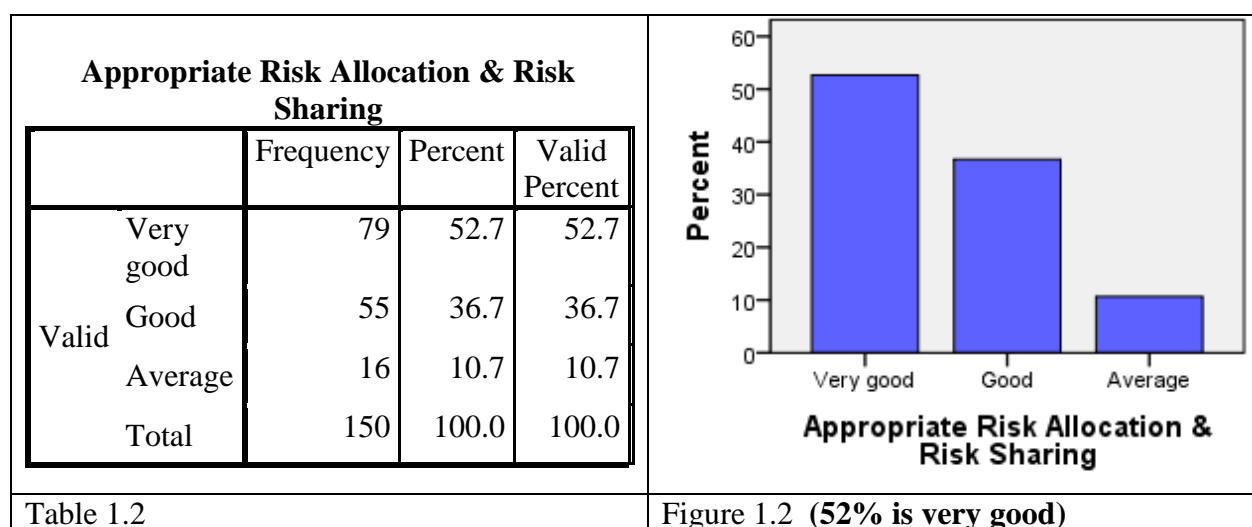
The research postulated that financing factors were a key reason why the UAE government pursued PPP. Therefore, the first part of the questionnaire sought to have the participants' rate of the sub-question according to the predetermined Likert scale. The key question was:” *How would you rate the significance of the financing factors to increase the success of PPP projects in the country and way of leveraging them to increase the success of PPP initiatives in the UAE?*” Under the main question, there were 17 sub-questions displayed in the table below.

SN	Financing Success Factors 1. How would you rate the significance of the financing factors to increase the success of PPP projects in the country?	
1.1	Risk Transfer	FF1
1.2	Appropriate Risk Allocation & Risk Sharing	FF2
1.3	Reward of Risk Mitigation	FF3
1.4	Project Financing & Cost Efficiency	FF4
1.5	Project Financial Feasibility	FF5
1.6	Financial Capacity/Ability of the Parties	FF6
1.7	Growth Potential	FF7
1.8	Government Financial Guarantee	FF8
1.9	Project Growth Potential & Cost Saving	FF9
1.10	Compatibility of Private & Grant Financing to project Objectives	FF10
1.11	Well-developed Capital Market	FF11
1.12	Available Financial & Capital Market Instruments	FF12
1.13	Certainty of International Grant & State Funding	FF13
1.14	Economic Stability of the Country	FF14
1.15	Sound Economic Policy	FF15
1.16	Stable Macroeconomic Environment	FF16
1.17	Favorable Policies with Respect to Lending for PPP Construction Projects	FF17

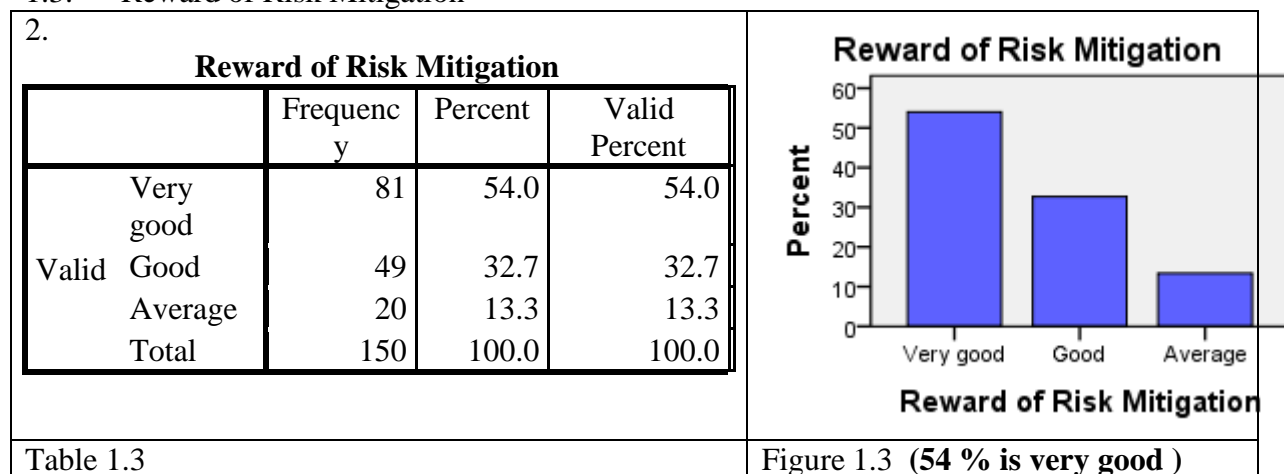
1.1. Risk Transfer



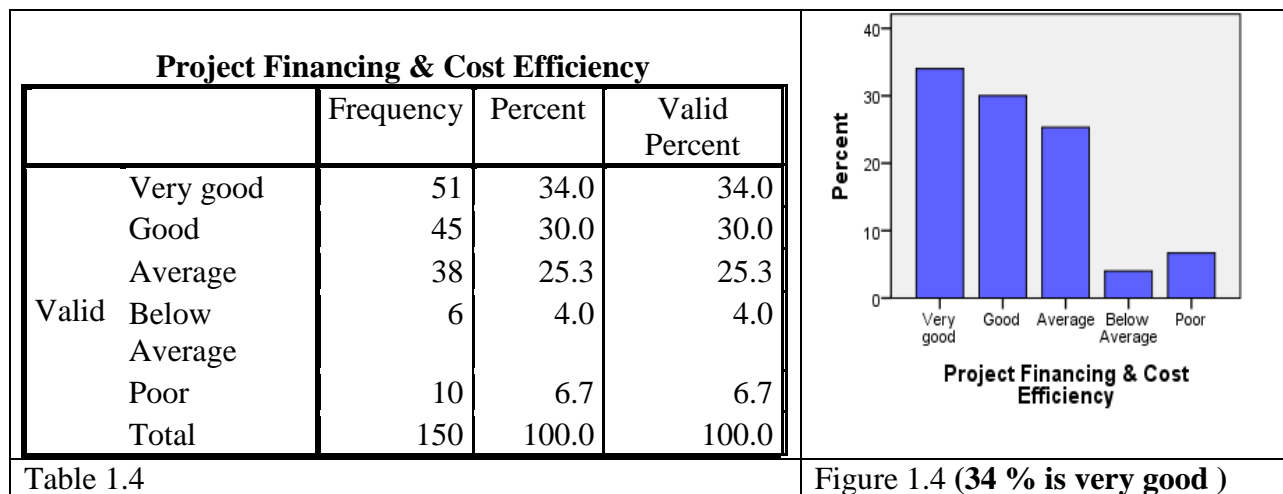
1.2. Appropriate Risk Allocation & Risk Sharing



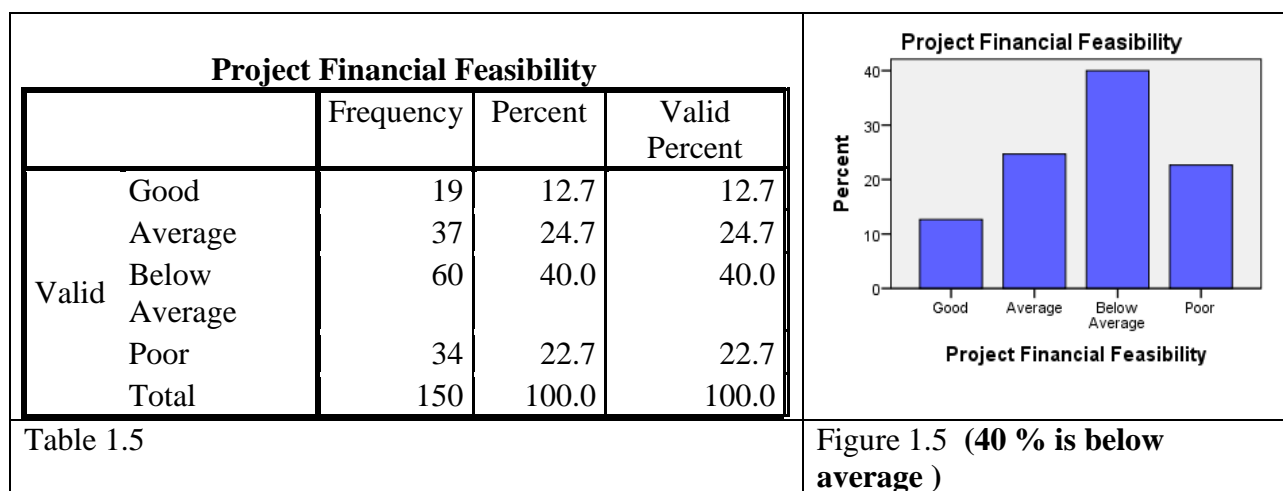
1.3. Reward of Risk Mitigation



1.4. Project Financing & Cost Efficiency

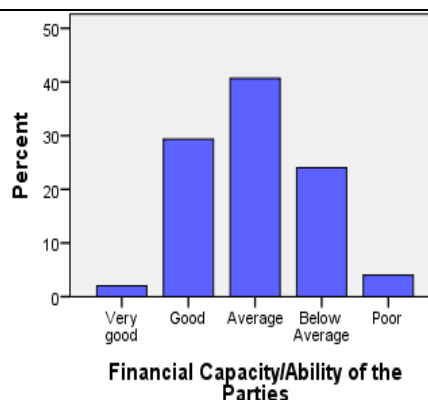


1.5. Project Financial Feasibility



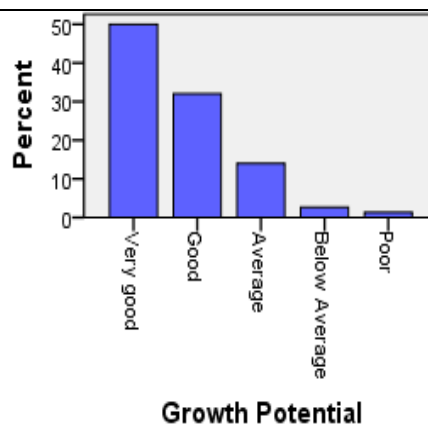
1.6. Financial Capacity/Ability of the Parties

Financial Capacity/Ability of the Parties				Percent
	Frequency	Percent	Valid Percent	
Valid	Very good	3	2.0	2.0
	Good	44	29.3	29.3
	Average	61	40.7	40.7
	Below Average	36	24.0	24.0
	Poor	6	4.0	4.0
	Total	150	100.0	100.0
Table 1.6				(40.7 % is average)



1.7. Growth Potential

Growth Potential				Percent
	Frequency	Percent	Valid Percent	
Valid	Very good	75	50.0	50.0
	Good	48	32.0	32.0
	Average	21	14.0	14.0
	Below Average	4	2.7	2.7
	Poor	2	1.3	1.3
	Total	150	100.0	100.0
Table 1.7				Figure 1.7 (50 % is very good)



1.8. Government Financial Guarantee

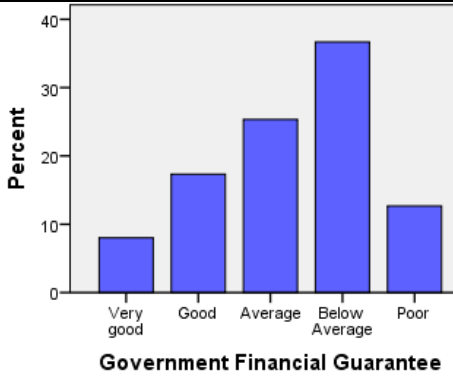
Government Financial Guarantee				Percent
	Frequency	Percent	Valid Percent	
Very good	12	8.0	8.0	
Good	26	17.3	17.3	
Average	38	25.3	25.3	
Valid Below Average	55	36.7	36.7	
Poor	19	12.7	12.7	
Total	150	100.0	100.0	

Table 1.

Figure 1.8 (36.7 % is below average)

1.9. Project Growth Potential & Cost Saving

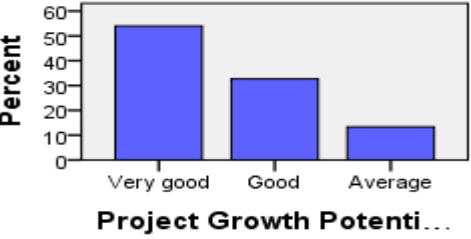
Project Growth Potential & Cost Saving				Percent
	Frequency	Percent	Valid Percent	
Very good	81	54.0	54.0	
Valid Good	49	32.7	32.7	
Average	20	13.3	13.3	
Total	150	100.0	100.0	

Table 1.9

Figure 1.9 (54 % is very good)

1.10. Compatibility of Private and Grant Financing to project Objectives

Compatibility of Private & Grant Financing to project Objectives				Percent
	Frequency	Percent	Valid Percent	
Very good	30	20.0	20.0	<p>Compatibility of Private & Grant Financing to project Objectives</p>
Good	48	32.0	32.0	
Average	35	23.3	23.3	
Below Average	28	18.7	18.7	
Poor	9	6.0	6.0	
Total	150	100.0	100.0	

Table 1

Figure 1.10 (32 % is good)

1.11. Well-developed Capital Market

Well-developed Capital Market				Percent
	Frequency	Percent	Valid Percent	
Very good	81	54.0	54.0	<p>Well-developed Capital Market</p>
Good	51	34.0	34.0	
Average	18	12.0	12.0	
Total	150	100.0	100.0	

Table 1.11

Figure 1.11 (54 % is very good)

1.12. Available Financial & Capital Market Instruments

Available Financial & Capital Market Instruments				Percent
	Frequency	Percent	Valid Percent	
Very good	49	32.7	32.7	<p>Available Financial & Capital Market Instruments</p>
Good	38	25.3	25.3	
Average	47	31.3	31.3	
Below Average	6	4.0	4.0	
Poor	6	4.0	4.0	
6.00	4	2.7	2.7	
Total	150	100.0	100.0	

Table 1.12

Figure 1.12 (32.7% is very good)

1.13: Certainty of International Grant & State Funding

Certainty of International Grant & State Funding				Percent	
	Frequency	Percent	Valid Percent		
Valid					
Very good	2	1.3	1.3		
Good	45	30.0	30.0		
Average	50	33.3	33.3		
Below Average	39	26.0	26.0		
Poor	14	9.3	9.3		
Total	150	100.0	100.0		

Table 1.12

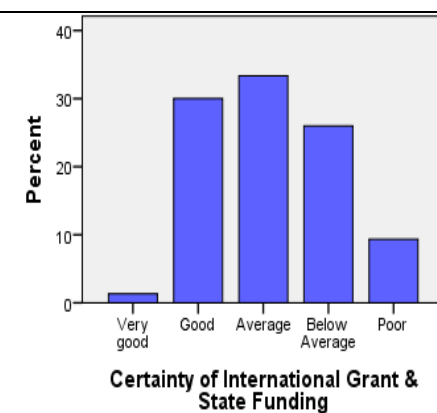


Figure 1.12 (33.3% is average)

1.14: Economic Stability of the Country

Economic Stability of the Country				Percent	
	Frequency	Percent	Valid Percent		
Valid					
Very good	93	62.0	62.0		
Good	46	30.7	30.7		
Average	11	7.3	7.3		
Total	150	100.0	100.0		

Table 1.12

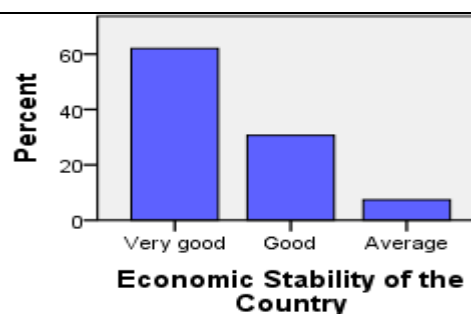


Figure 1.12(62% is very good)

1.15. Sound Economic Policy

Sound Economic Policy				Percent	
	Frequency	Percent	Valid Percent		
Valid					
Very good	71	47.3	47.3		
Good	45	30.0	30.0		
Average	23	15.3	15.3		
Below Average	9	6.0	6.0		
Poor	2	1.3	1.3		
Total	150	100.0	100.0		

Table 1.15

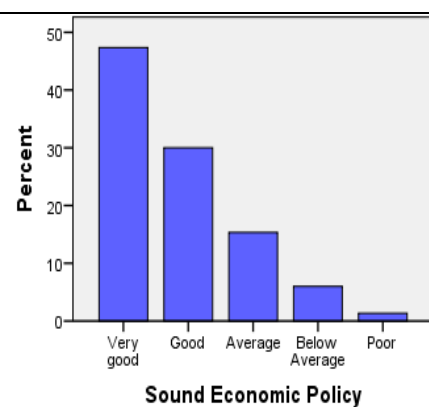
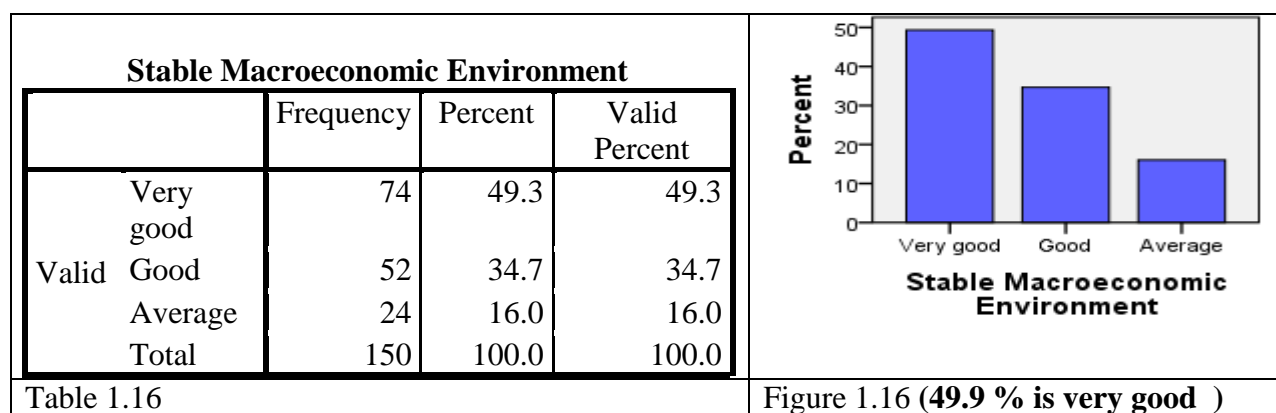
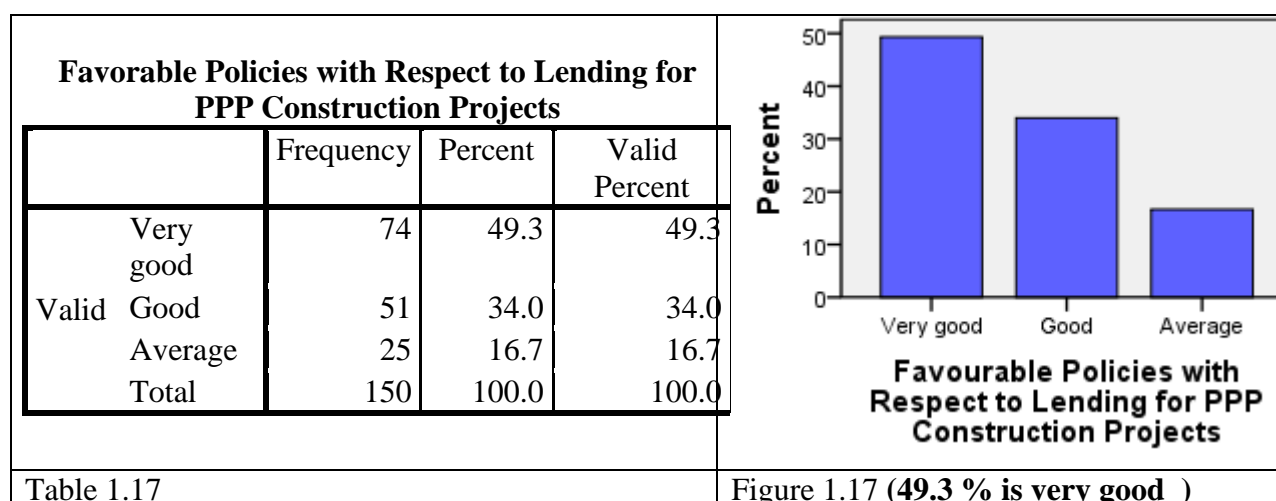


Figure 1.15(47.3% is very good)

1.16. Stable Macroeconomic Environment



1.17. Favorable Policies with Respect to Lending for PPP Construction Projects



5.2.4 Technology Factors (TF)

The research also hypothesized that technology success factors were key drivers of the government move to engage private sector through PPP. The private sector tends to have stiff competition hence investment in the latest technology as a means of seeking to differentiate them from the competition. The main question was:” *How would you rate the significance of the technology factors to increase the success of PPP projects in the country and way of leveraging them to increase the success of PPP initiatives in the UAE?*” with a set of 13 sub-questions. The respondents were supposed to match the significance of each factor to the Likert scale. The main question and the set of subset questions are shown in the following table.

SN	2. How would you rate the significance of the technology factors to increase the success of PPP projects in the country?	
2.1	Feasibility & Assessment Study	TF1
2.2	Project Technical Feasibility	TF2
2.3	Thorough and Realistic Cost/Benefit Assessment of the Projects Involved	TF3
2.4	Clear Project Scope Definition & Documentation	TF4
2.5	Conservative Cost/Revenue Assumptions	TF5

2.6	Rigorous Financial Analysis	TF6
2.7	Innovative Solutions for Social & Development Problems	TF7
2.8	Project Complexity & Ease Of Implementation	TF8
2.9	Concession Period	TF9
2.10	Effective Technology Transfer	TF10
2.11	Attaining International Standards	TF11
2.12	Objectives for Improving Service Levels & Coverage in a Manner That Maximizes Societal Benefits	TF12
2.13	Suitability of the PPP Arrangement for the Project	TF13

2.1. Feasibility & Assessment Study

Feasibility & Assessment Study				
	Frequency	Percent	Valid Percent	
Very good	12	8.0	8.0	Figure 2.1(36.7 % is below average)
Good	26	17.3	17.3	
Average	38	25.3	25.3	
Valid Below Average	55	36.7	36.7	
Average				
Poor	19	12.7	12.7	
Total	150	100.0	100.0	
Table 2.1				

2.2. Project Technical Feasibility

Project Technical Feasibility				
	Frequency	Percent	Valid Percent	
Very good	79	52.7	52.7	Figure 2.2 (52.7% is very good)
Valid Good	32	21.3	21.3	
Average	39	26.0	26.0	
Total	150	100.0	100.0	
Table 2.2				

2.3. Thorough and Realistic Cost/Benefit Assessment of the Projects Involved


Thorough and Realistic Cost/Benefit Assessment of the Projects Involved				Percent	
	Frequency	Percent	Valid Percent		
Very good	74	49.3	49.3	50	 <p>Thorough and Realistic Cost/Benefit Assessment of the Projects Involved</p>
Valid Good	51	34.0	34.0	35	
Average	25	16.7	16.7	18	
Total	150	100.0	100.0	0	

Table 2.3

Figure 2.3 (49.3 % is very good)

2.4. Clear Project Scope Definition & Documentation

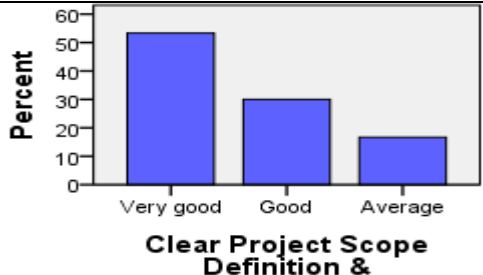
Clear Project Scope Definition & Documentation				Percent	
	Frequency	Percent	Valid Percent		
Very good	80	53.3	53.3	55	 <p>Clear Project Scope Definition & Documentation</p>
Valid Good	45	30.0	30.0	30	
Average	25	16.7	16.7	18	
Total	150	100.0	100.0	0	

Table 2.4

Figure 2.4 (53.3 % is very good)

2.5. Conservative Cost/Revenue Assumptions

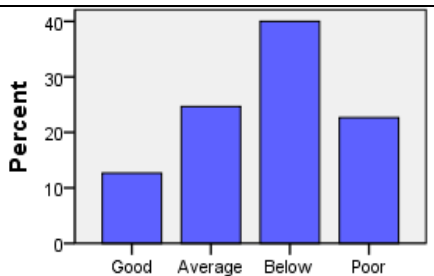
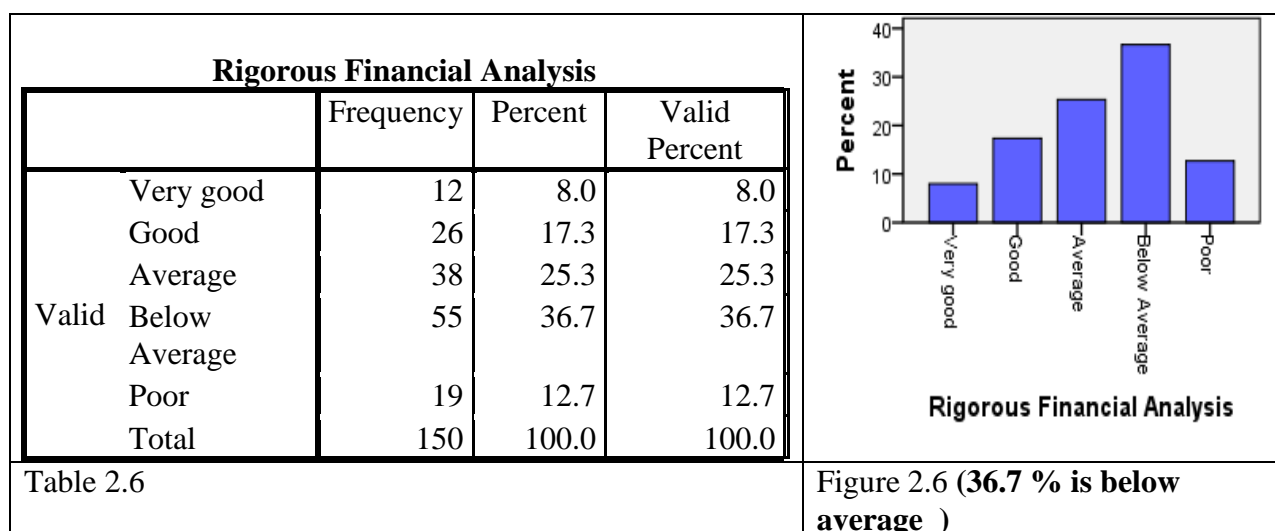
Conservative Cost/Revenue Assumptions				Percent	
	Frequency	Percent	Valid Percent		
Good	19	12.7	12.7	13	 <p>Conservative Cost/Revenue Assumptions</p>
Average	37	24.7	24.7	25	
Valid Below Average	60	40.0	40.0	40	
Poor	34	22.7	22.7	23	
Total	150	100.0	100.0	0	

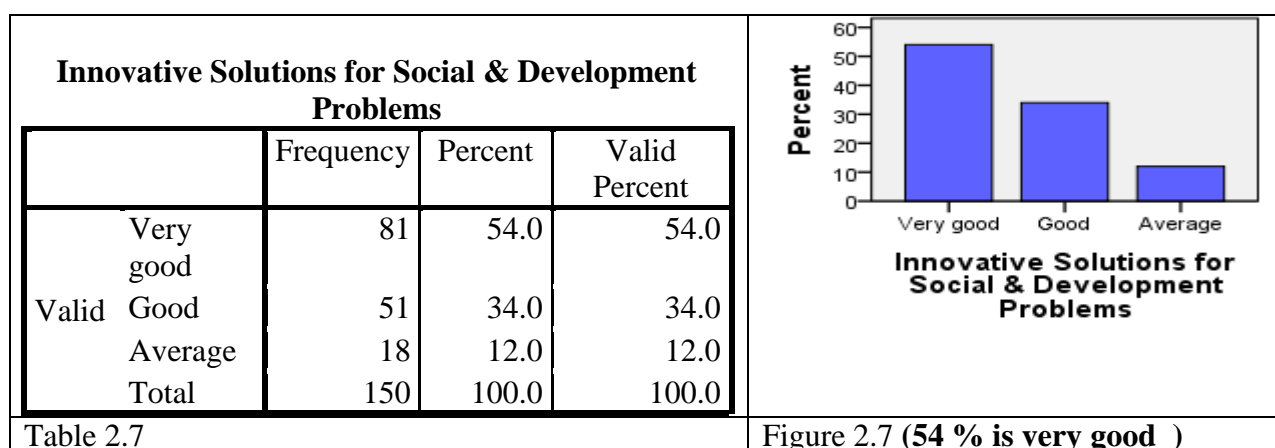
Table 2.5

Figure 2.5 (40 % is below average)

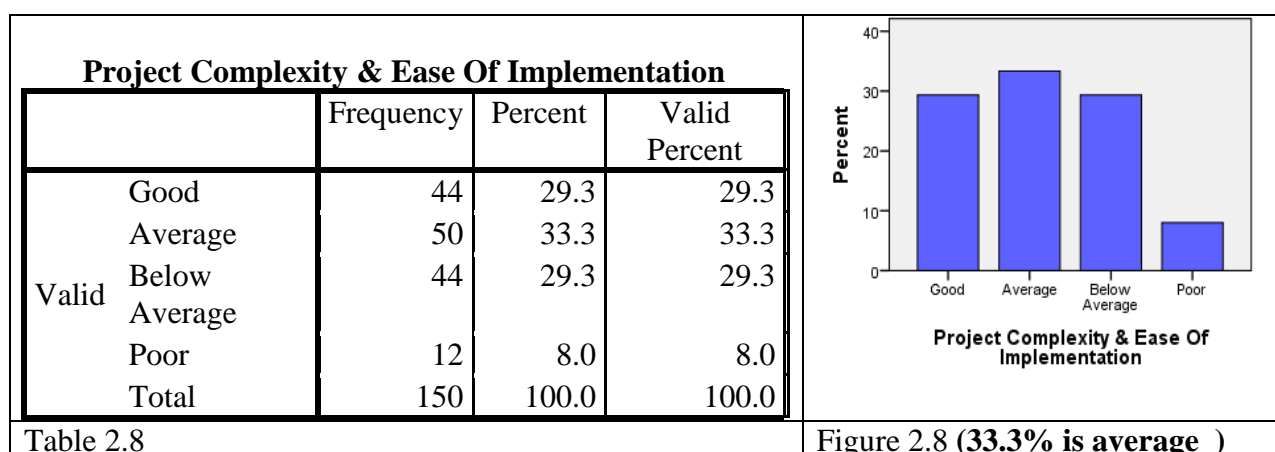
2.6. Rigorous Financial Analysis



2.7. Innovative Solutions for Social & Development Problems



2.8. Project Complexity & Ease of Implementation



2.9. Concession Period

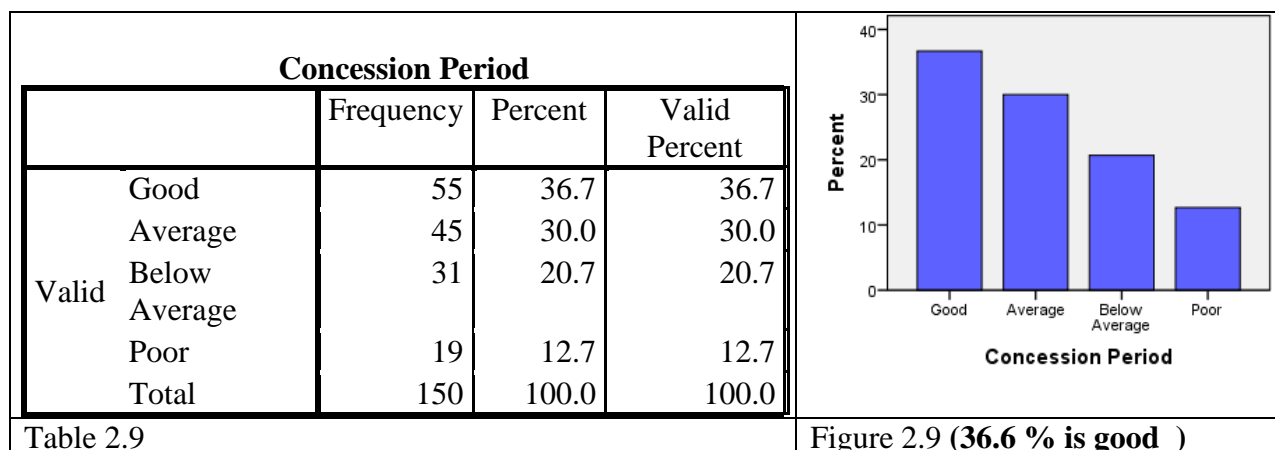


Table 2.9

2.10. Effective Technology Transfer

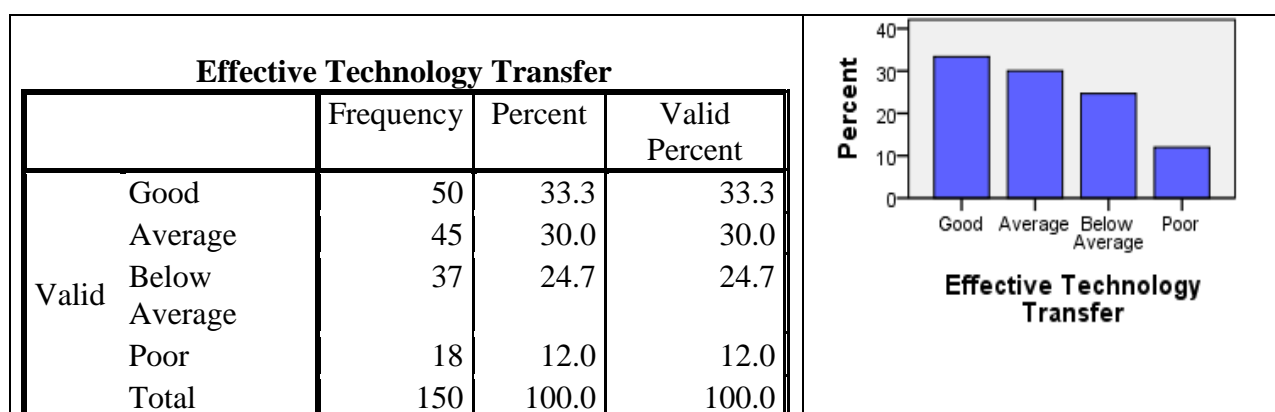


Table 2.10

2.11. Attaining International Standards

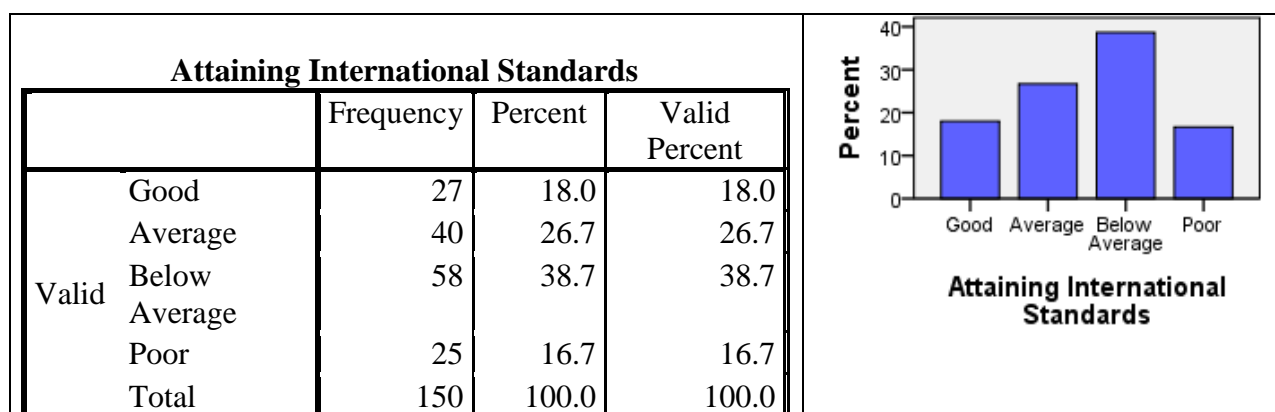
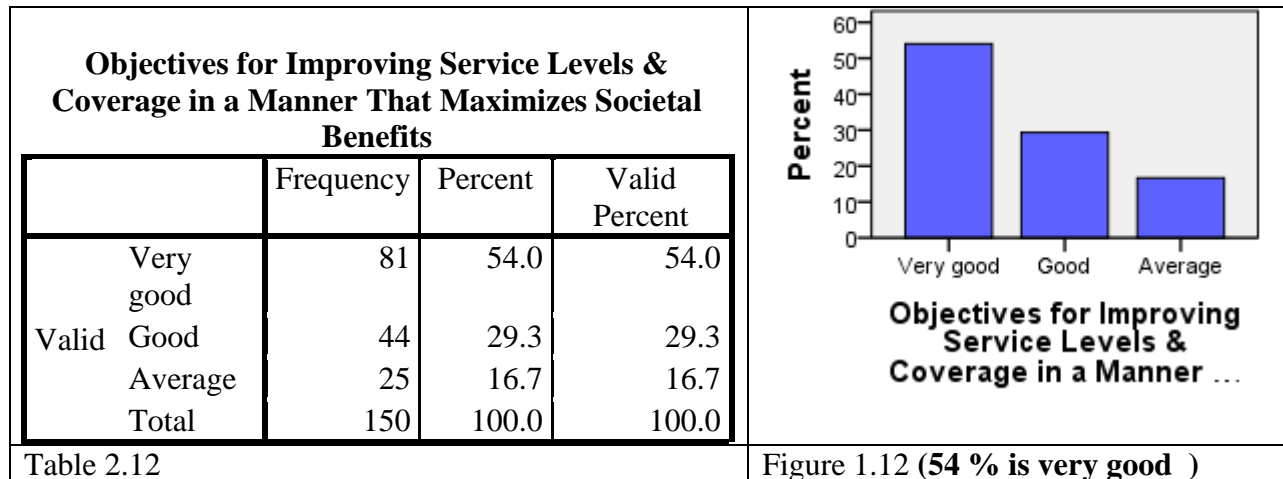


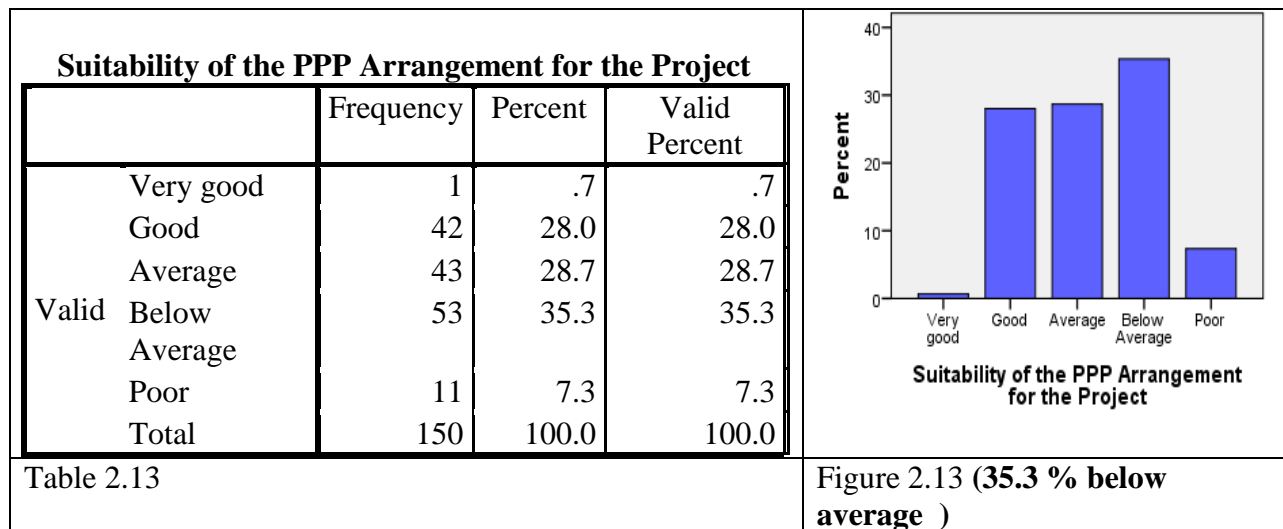
Table 2.11

Figure 2.11 (38.7 % is below average)

2.12. Objectives for Improving Service Levels & Coverage in a Manner That Maximizes Societal Benefits



2.13. Suitability of the PPP Arrangement for the Project



5.2.5 Regulatory Environmental Factors (REF)

The research further hypothesized that regulatory capabilities in the private sector were also key in facilitating the success of PPP witnessed in the country. Therefore, the respondents were asked to respond to 19 sub-questions corresponding to the main question: *“How would you rate the significance of the regulatory environment factors to increase the success of PPP projects in the country and way of leveraging them to increase the success of PPP initiatives in the UAE?”* The questions are shown in the following table.

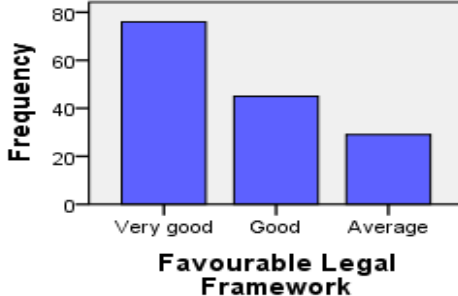
SN	3. <i>How would you rate the significance of the regulatory environment factors to increase the success of PPP projects in the Country?</i>	
3.1	Favorable Legal Framework	REF1
3.2	Clear Legal Regulator Structure	REF2
3.3	Standardization Procedure for PPP Projects	REF3

3.4	Well-Organized Public Agency	REF4
3.5	Presence of an Enabling PPP Policy	REF5
3.6	Complete PPP Guidelines	REF6
3.7	Political Support	REF7
3.8	Reasonable Government Supervision	REF8
3.9	Reasonable Control of Grant Funds	REF9
3.10	Government's Capabilities of Fulfilling the Contract	REF10
3.11	Government's Capabilities of Administrative Execution	REF11
3.12	Efficiency Gains for Government	REF12
3.13	Leveraging Private Funding	REF13
3.14	Stakeholder Acceptance and Positive Attitude Towards PPP Project Implementation	REF14
3.15	Government Willingness to Support and Freely Participate in PPP Project Implementation	REF15
3.16	Commitment of All of the Parties	REF16
3.17	Public Opinion and Satisfaction	REF17
3.18	The Level of Public Recognition of Social Needs	REF18
3.19	Strong Private Consortium	REF19

3.1. Favorable Legal Framework

Favorable Legal Framework			
	Frequency	Percent	Valid Percent
Very good	76	50.7	50.7
Valid Good	45	30.0	30.0
Average	29	19.3	19.3
Total	150	100.0	100.0

Table 3.1



Favourable Legal Framework

Category	Frequency
Very good	76
Good	45
Average	29

Figure 3.1 (50.7 % is very good)

3.2. Clear Legal Regulator Structure

Clear Legal Regulator Structure				
	Frequency	Percent	Valid Percent	
Valid	Very good	57	38.0	38.0
	Good	70	46.7	46.7
	Average	23	15.3	15.3
	Total	150	100.0	100.0

Frequency			
60			
40			
20			
0			
	Very good	Good	Average
	Clear Legal Regulator Structure		

Table 3.2

Figure 3.2 (46.7 % is good)

3.3. Standardization Procedure for PPP Projects

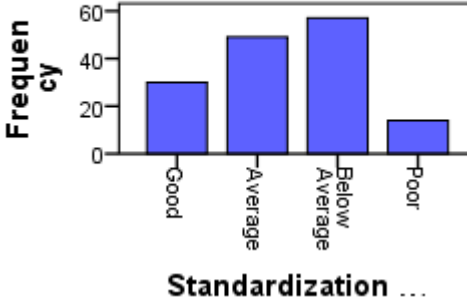
Standardization Procedure for PPP Projects				Frequency	Standardization Procedure for PPP Projects
	Frequency	Percent	Valid Percent		
Valid	Good	30	20.0	20.0	
	Average	49	32.7	32.7	
	Below Average	57	38.0	38.0	
	Poor	14	9.3	9.3	
	Total	150	100.0	100.0	

Table 3.3

Figure 3.3 (38 % below average)

3.4. Well-Organized Public Agency

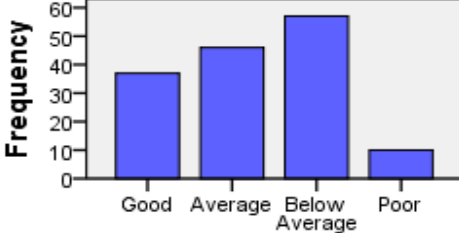
Well-Organized Public Agency				Frequency	Well-Organized Public Agency
	Frequency	Percent	Valid Percent		
Valid	Good	37	24.7	24.7	
	Average	46	30.7	30.7	
	Below Average	57	38.0	38.0	
	Poor	10	6.7	6.7	
	Total	150	100.0	100.0	

Table 3.4

Figure 3.4 (38 % is below average)

3.5. Presence of an Enabling PPP Policy


Presence of an Enabling PPP Policy				Frequency	Presence of an Enabling PPP Policy
	Frequency	Percent	Valid Percent		
Valid	Very good	83	55.3	55.3	
	Good	31	20.7	20.7	
	Average	36	24.0	24.0	
	Total	150	100.0	100.0	

Table 3.5

Figure 3.5 (55.3 % is very good)

3.6. Complete PPP Guidelines

Complete PPP Guidelines				
	Frequency	Percent	Valid Percent	
Very good	73	48.7	48.7	
Valid Good	65	43.3	43.3	
Average	12	8.0	8.0	
Total	150	100.0	100.0	

Table 3.6

Figure 3.6 (48.7 % is very good)

3.7. Political Support

Political Support				
	Frequency	Percent	Valid Percent	
Good	23	15.3	15.3	
Average	60	40.0	40.0	
Valid Below Average	53	35.3	35.3	
Poor	14	9.3	9.3	
Total	150	100.0	100.0	

Table 3.7

Figure 3.7 (40 % is average)

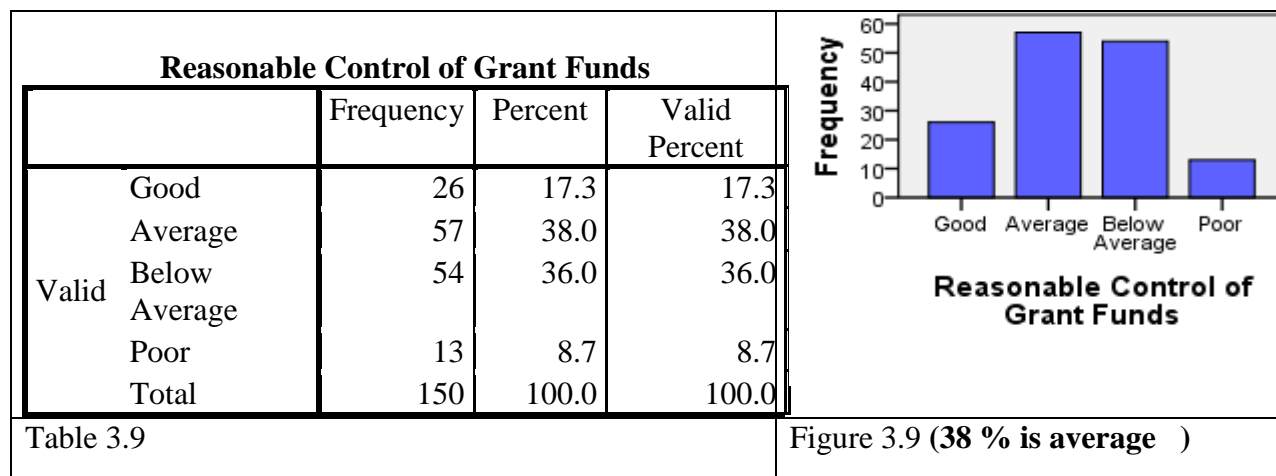
3.8. Reasonable Government Supervision

Reasonable Government Supervision				
	Frequency	Percent	Valid Percent	
Very good	87	58.0	58.0	
Valid Good	43	28.7	28.7	
Average	20	13.3	13.3	
Total	150	100.0	100.0	

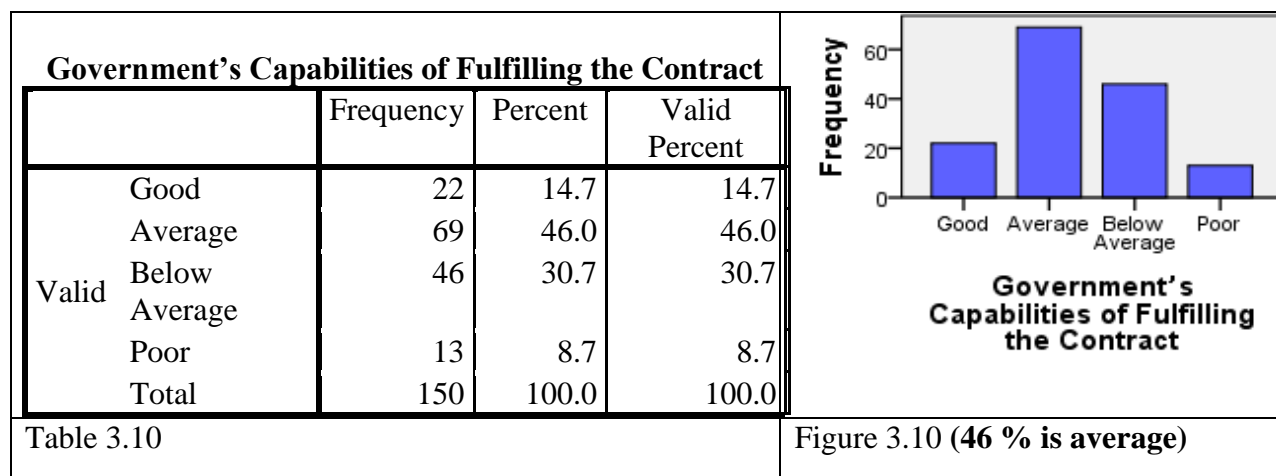
Table 3.8

Figure 3.8 (58 % is very good)

3.9. Reasonable Control of Grant Funds



3.10. Government's Capabilities of Fulfilling the Contract



3.11. Government's Capabilities of Administrative Execution

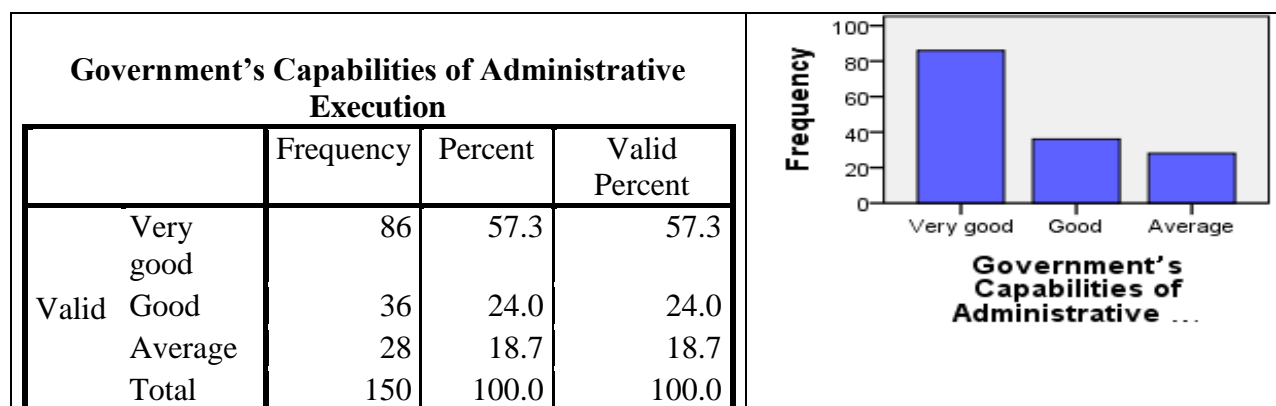
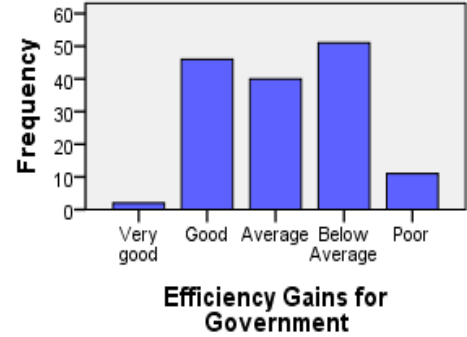


Table 3.11	Figure 3.11 (57.3 % is very good)
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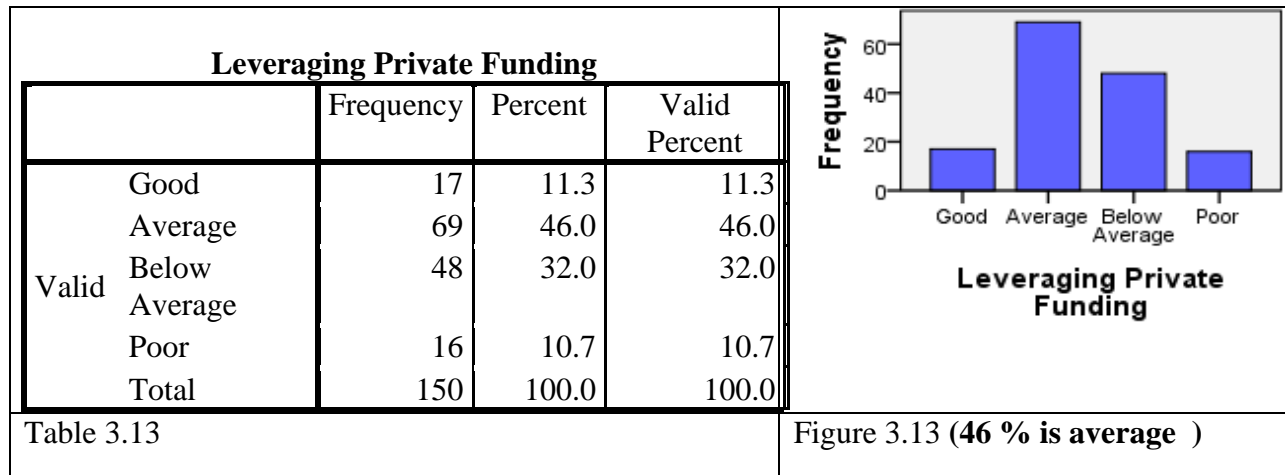
3.12. Efficiency Gains for Government

Efficiency Gains for Government				Frequency	
	Frequency	Percent	Valid Percent		
Very good	2	1.3	1.3		
Good	46	30.7	30.7		
Average	40	26.7	26.7		
Below Average	51	34.0	34.0		
Poor	11	7.3	7.3		
Total	150	100.0	100.0		

Table 3.12	Figure 3.12 (34 % is below average)
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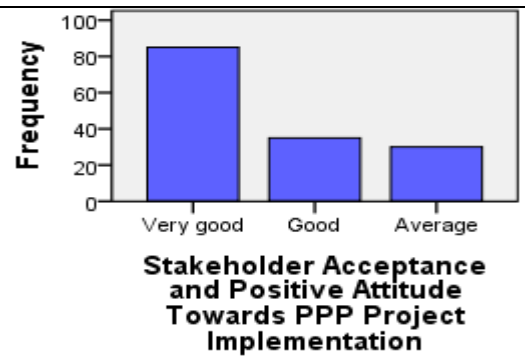
3.13. Leveraging Private Funding



3.14. Stakeholder Acceptance and Positive Attitude Towards PPP Project Implementation

Stakeholder Acceptance and Positive Attitude Towards PPP Project Implementation				Frequency	Percent	Valid Percent
	Very good	85	56.7	56.7		
Valid	Good	35	23.3	23.3		
	Average	30	20.0	20.0		
	Total	150	100.0	100.0		

Table 3.14	Figure 3.14 (56.7 % is very good)
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3.15. Government Willingness to Support and Freely Participate in PPP Project Implementation

Government Willingness to Support and Freely Participate in PPP Project Implementation				Frequency	Percent	Valid Percent
	Very good	48	32.0	32.0		
Valid	Good	85	56.7	56.7		
	Average	17	11.3	11.3		
	Total	150	100.0	100.0		

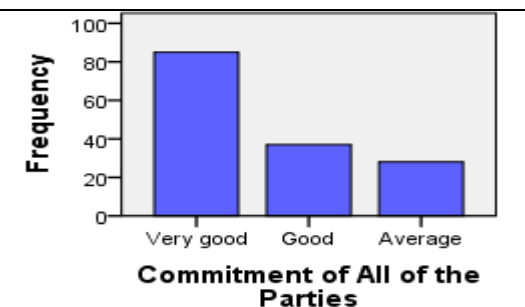
Table 3.15	Figure 3.15 (56.7 % is good)
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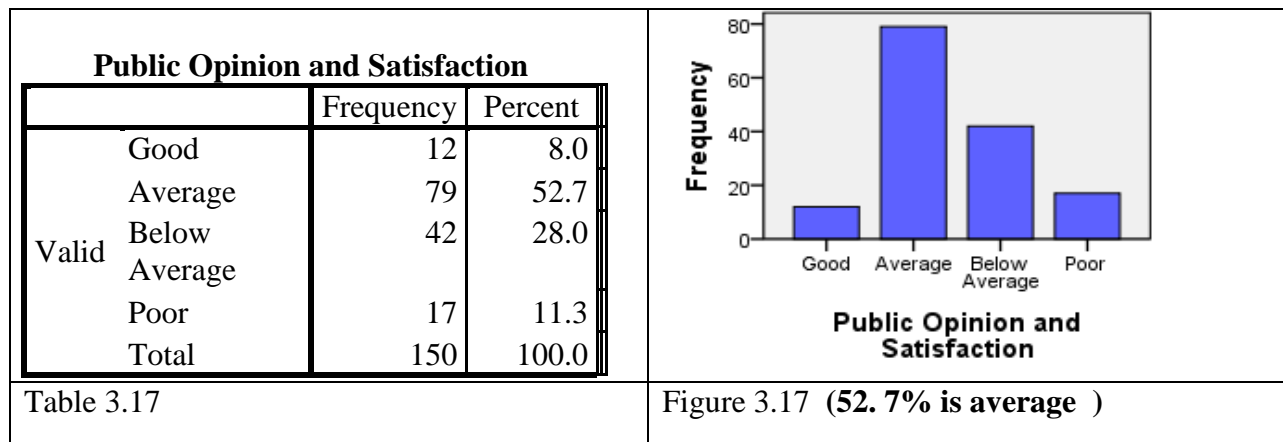
3.16. Commitment of All of the Parties

Commitment of All of the Parties				Frequency	Percent	Valid Percent
	Very good	85	56.7	56.7		
Valid	Good	37	24.7	24.7		
	Average	28	18.7	18.7		
	Total	150	100.0	100.0		

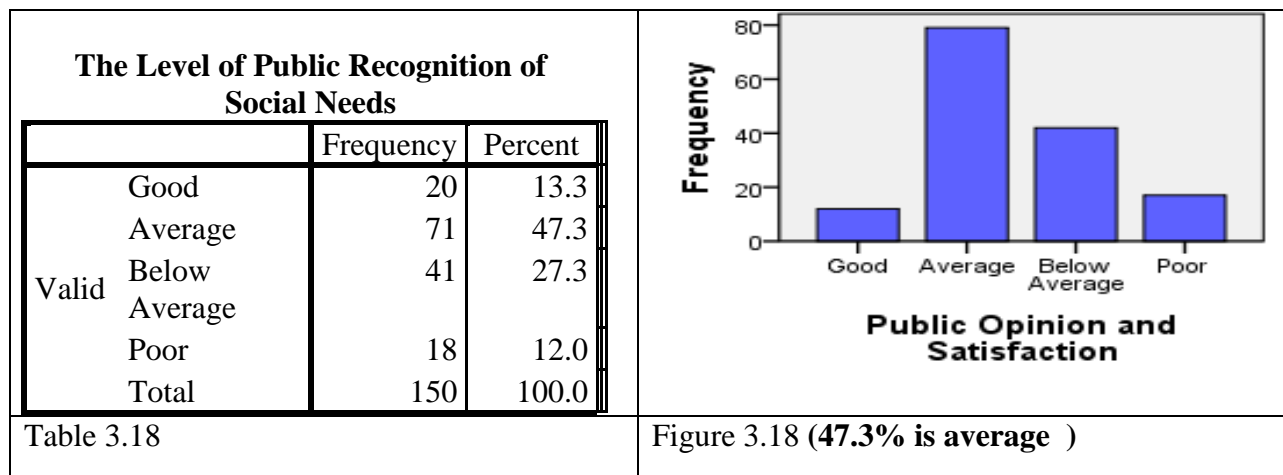
Table 3.16	Figure 3.16 (56.7% is very good)
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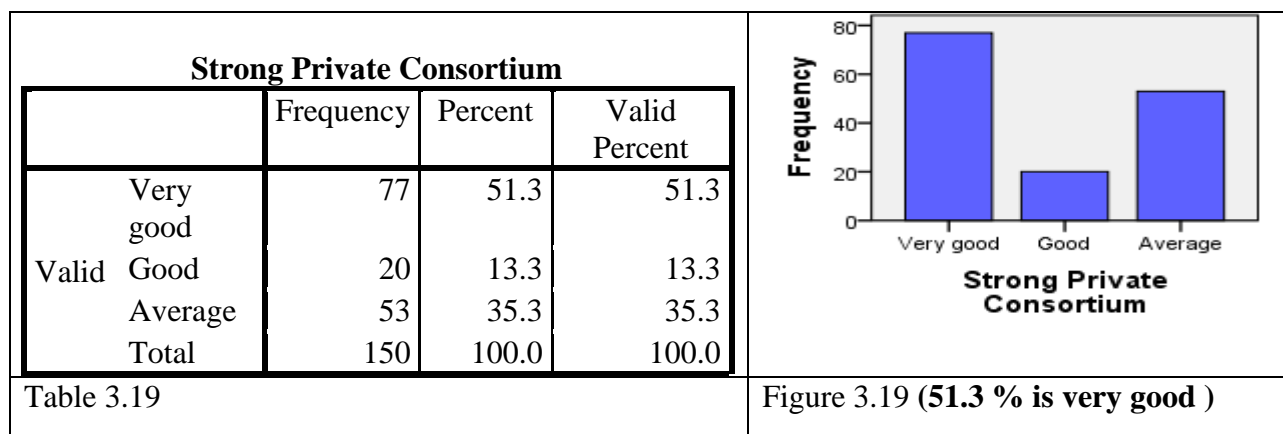
3.17. Public Opinion and Satisfaction



3.18. The Level of Public Recognition of Social Needs



3.19. Strong Private Consortium

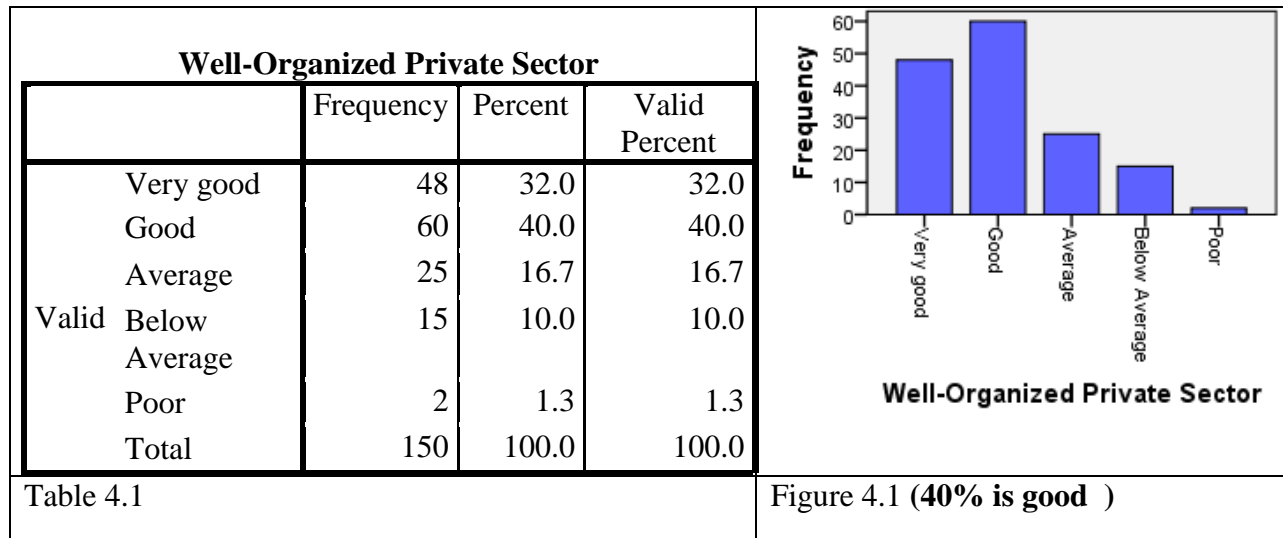


5.2.6 Managerial Factors (MF)

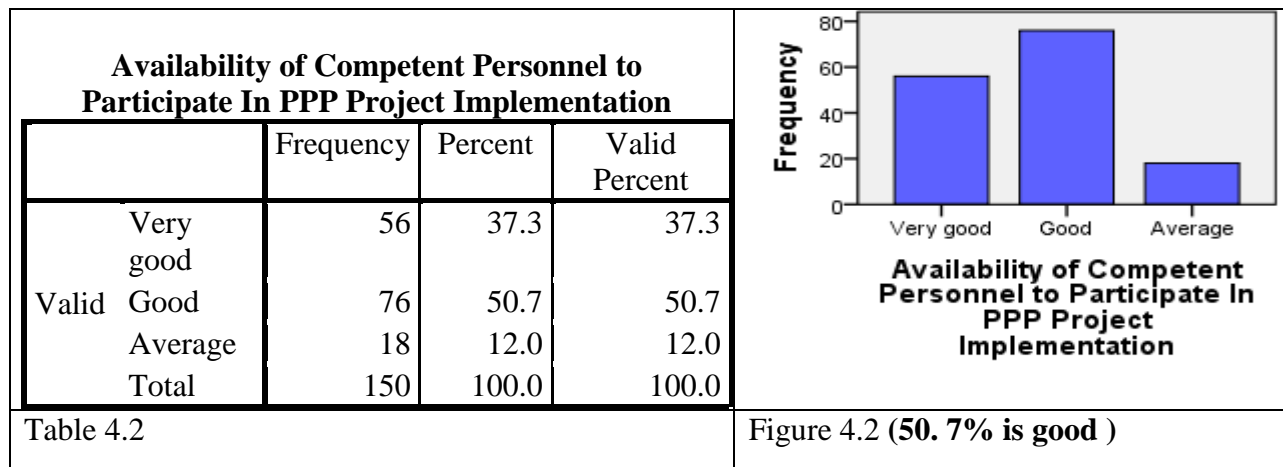
The research also postulated that the government would wish to enter into a partnership with the private sector to leverage the managerial prowess synonymous with the private sector. Consequently, the questionnaire carried the main question: “*How would you rate the significance of the managerial factors to increase the success of PPP projects in the country and way of leveraging them to increase the success of PPP initiatives in the UAE?*” A set of 18 sub-questions were developed as shown in the table below.

SN	4. <i>How would you rate the significance of the managerial factors to increase the success of PPP projects in the country?</i>	Code
4.1	Well-Organized Private Sector	MF1
4.2	Availability of Competent Personnel to Participate In PPP Project Implementation	MF2
4.3	Firm’s Technical Capabilities of Fulfilling the Contract	MF3
4.4	Firm’s Financial Abilities	MF4
4.5	Firm’s Level of Information Disclosure Reasonably & Timely	MF5
4.6	Firm’s PPP Project Experience	MF6
4.7	Firm’s Profit Expectations	MF7
4.8	Effective Management for Cost, Time & Quality	MF8
4.9	Accelerating Project Implementation	MF9
4.10	Transparent & Competitive Procurement Process	MF10
4.11	Transparency & Open Competition in the Procurement Process	MF11
4.12	Competitive Procurement Process	MF12
4.13	Effective Contract Management	MF13
4.14	Policies & Conditions for Asset Transfer	MF14
4.15	Involvement of All of the Key Parties During Project Planning	MF15
4.16	Reasonable Services Price Avoiding Undue Private Profit	MF16
4.17	Public Opinion & Satisfaction	MF17

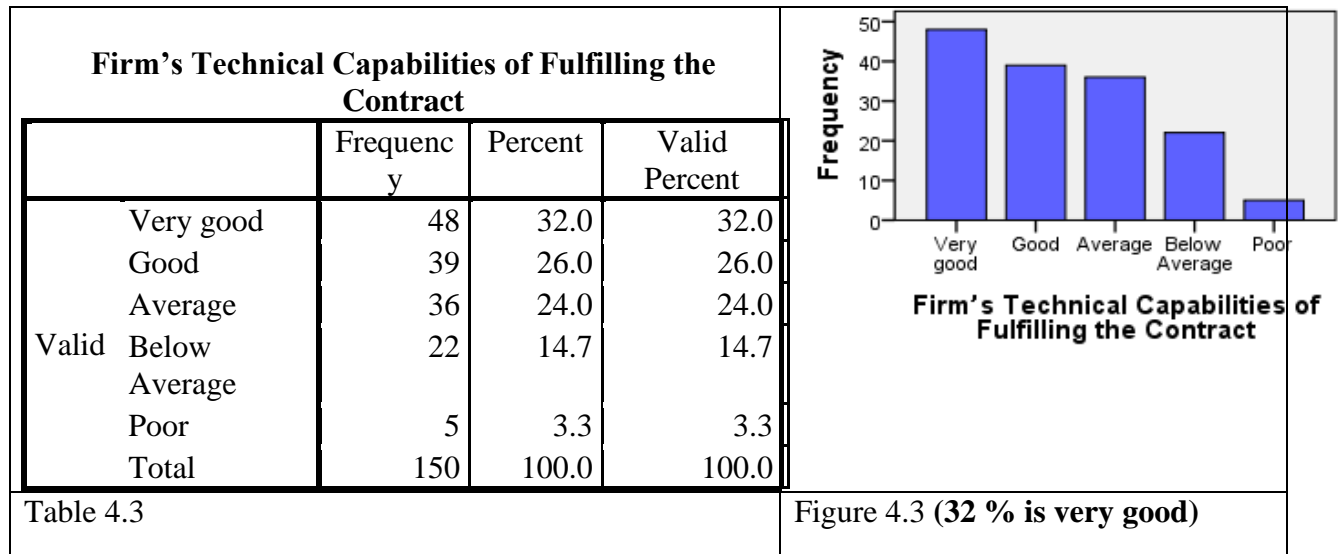
4.1. Well-Organized Private Sector



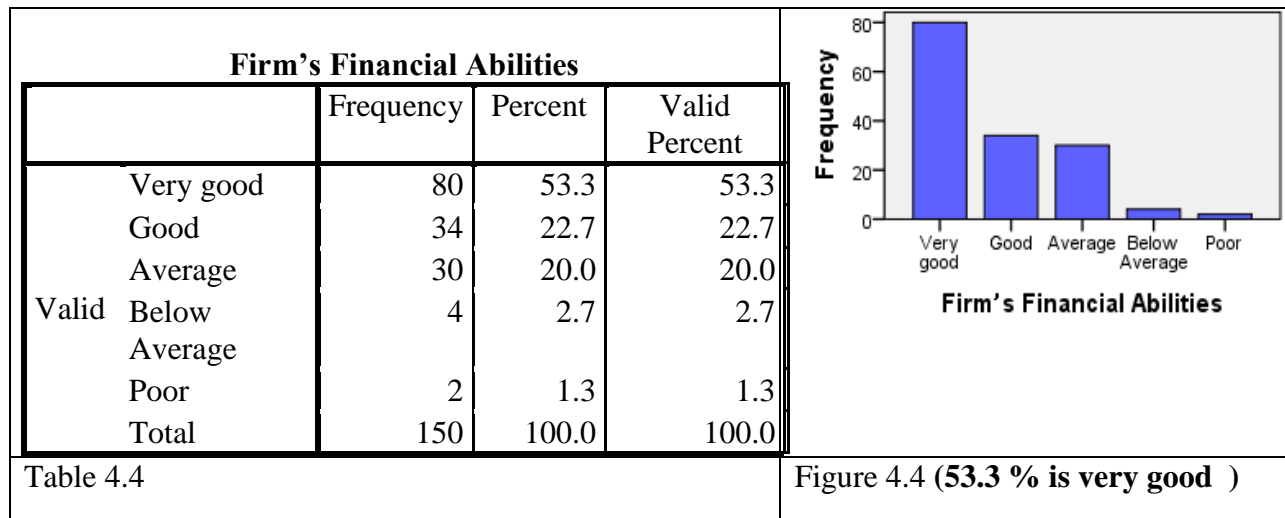
4.2. Availability of Competent Personnel to Participate In PPP Project Implementation



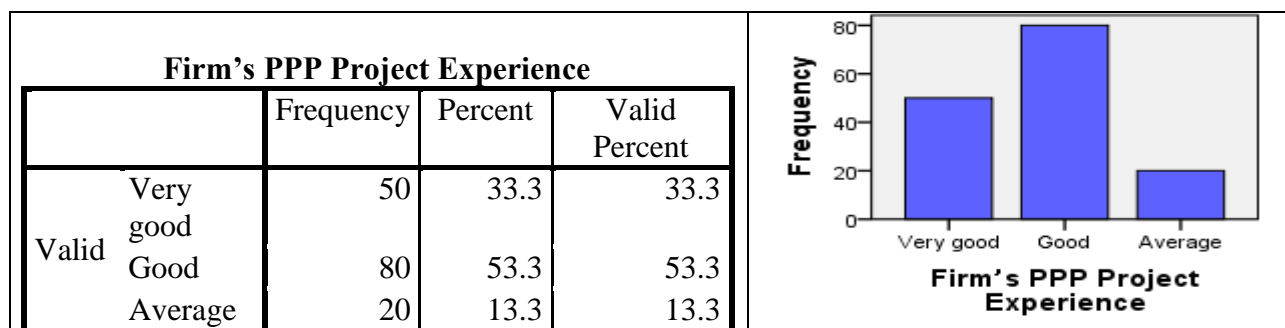
4.3. Firm's Technical Capabilities of Fulfilling the Contract



4.4. Firm's Financial Abilities



4.5. Firm's Level of Information Disclosure Reasonably & Timely



Total	150	100.0	100.0
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Table 4.5

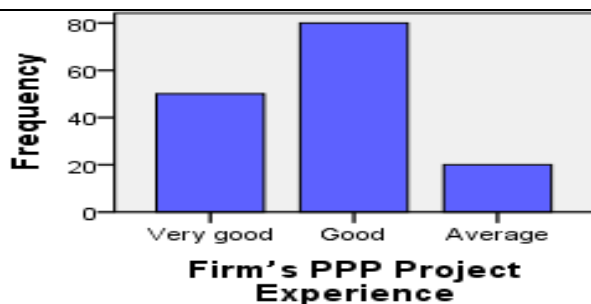
Figure 4.5 (53.3 % is good)

4.6. Firm's PPP Project Experience

Firm's PPP Project Experience		
	Frequency	Percent
Very good	50	33.3
Valid Good	80	53.3
Average	20	13.3
Total	150	100.0

Table 4.6

Figure 4.6 (53.3 % is good)



4.7. Firm's Profit Expectations


Firm's Profit Expectations				
	Frequency	Percent	Valid Percent	
Very good	40	26.7	26.7	
Good	22	14.7	14.7	
Average	15	10.0	10.0	
Valid Below Average	32	21.3	21.3	
Poor	41	27.3	27.3	
Total	150	100.0	100.0	

Table 4.7

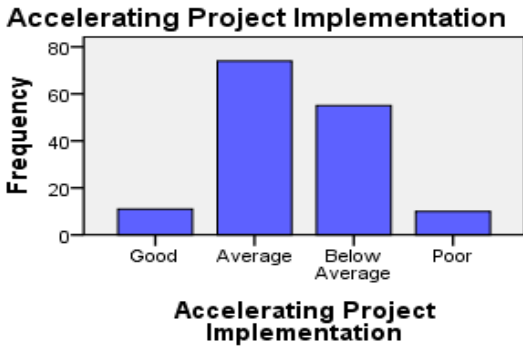
Figure 4.7 (27.3 % is poor)



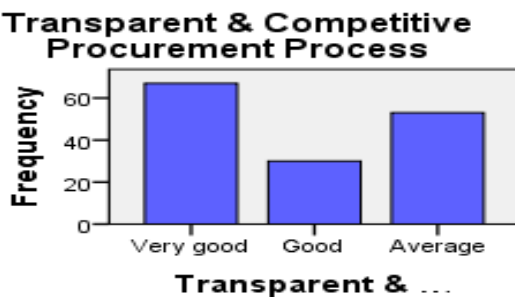
4.8. Effective Management for Cost, Time & Quality

Effective Management for Cost, Time & Quality				
	Frequency	Percent	Valid Percent	
Valid Very good	59	39.3	39.3	
Good	70	46.7	46.7	
Average	21	14.0	14.0	
Total	150	100.0	100.0	
Table 4.8				Figure 4.8 (46. 7% is good)

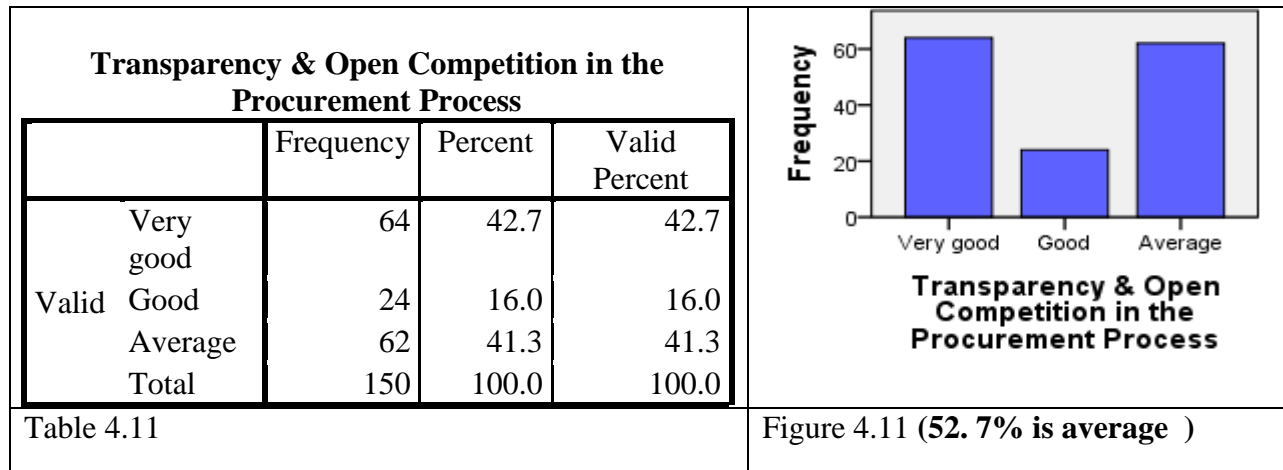
4.9. Accelerating Project Implementation

Accelerating Project Implementation				
	Frequency	Percent	Valid Percent	
Valid Good	11	7.3	7.3	
Average	74	49.3	49.3	
Below Average	55	36.7	36.7	
Poor	10	6.7	6.7	
Total	150	100.0	100.0	
Table 4.9				Figure 4.9 (49.3 % is average)

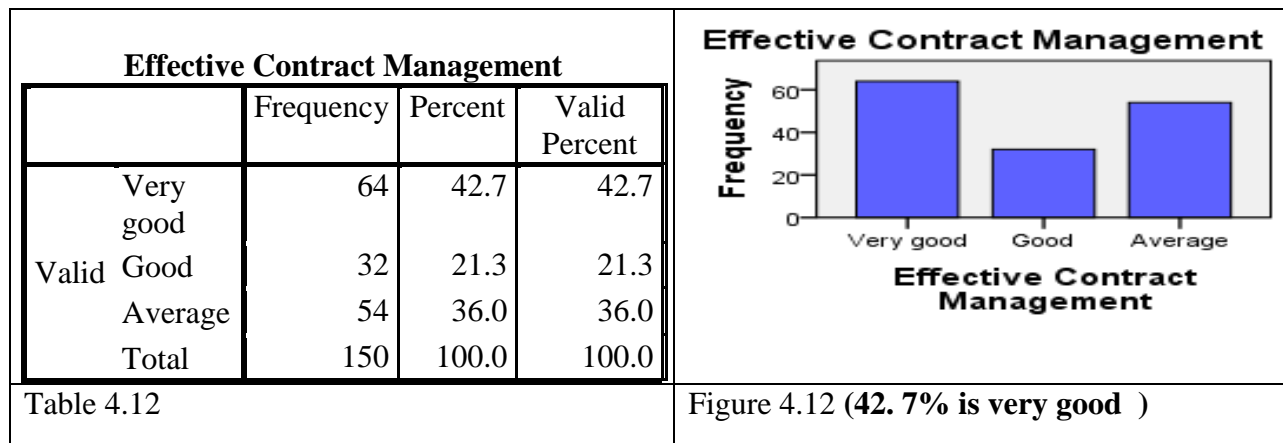
4.10. Transparent & Competitive Procurement Process

Transparent & Competitive Procurement Process				
	Frequency	Percent	Valid Percent	
Valid Very good	67	44.7	44.7	
Good	30	20.0	20.0	
Average	53	35.3	35.3	
Total	150	100.0	100.0	
Table 4.10				Figure 4.10 (44.7 % is very good)

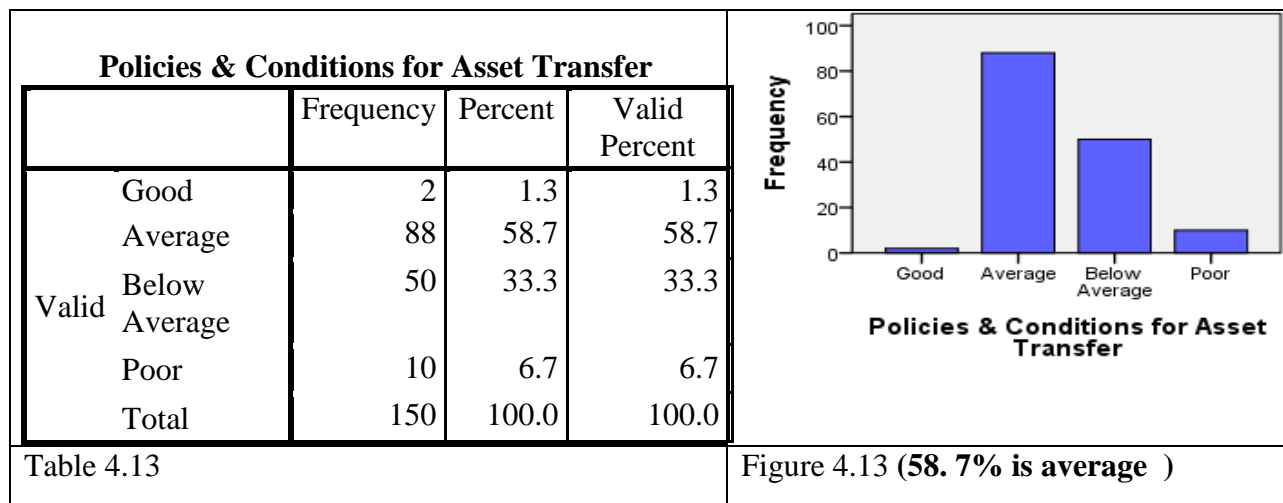
4.11. Transparency & Open Competition in the Procurement Process



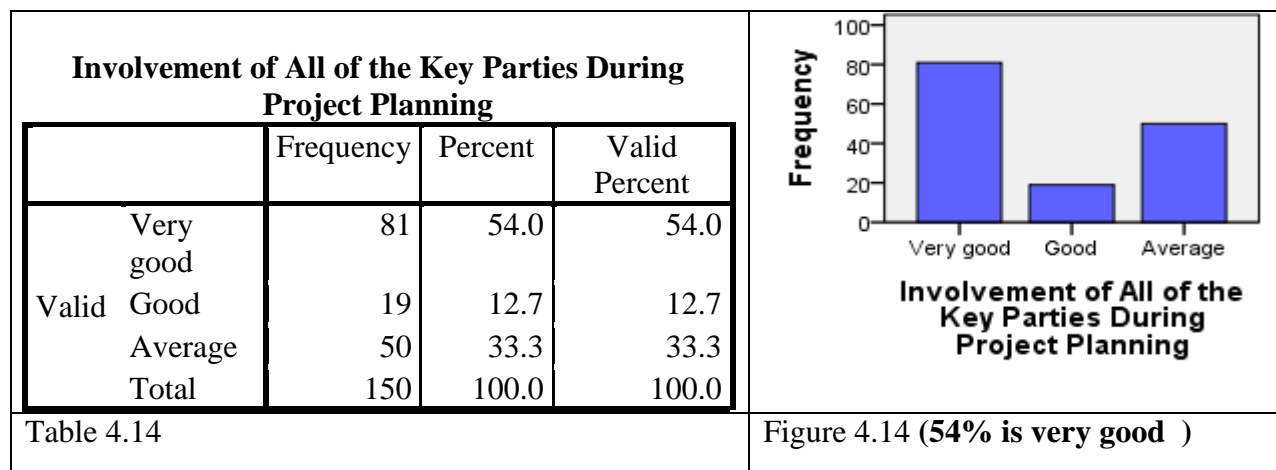
4.12. Effective Contract Management



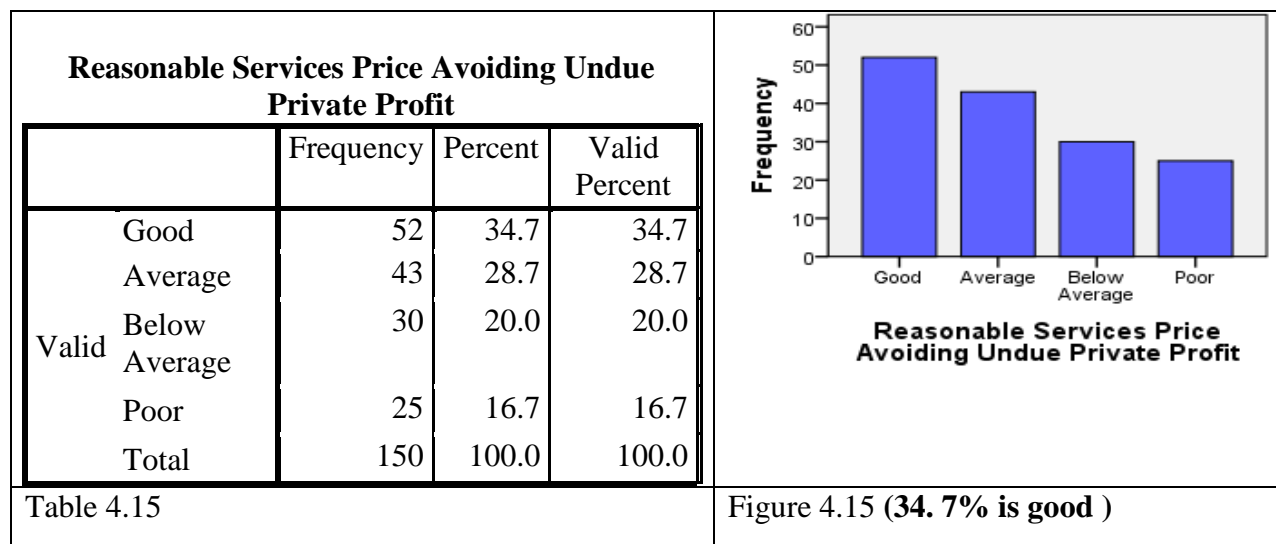
4.13. Policies & Conditions for Asset Transfer



4.14. Involvement of All of the Key Parties During Project Planning



4.15. Reasonable Services Price Avoiding Undue Private Profit



4.16. Public Opinion & Satisfaction

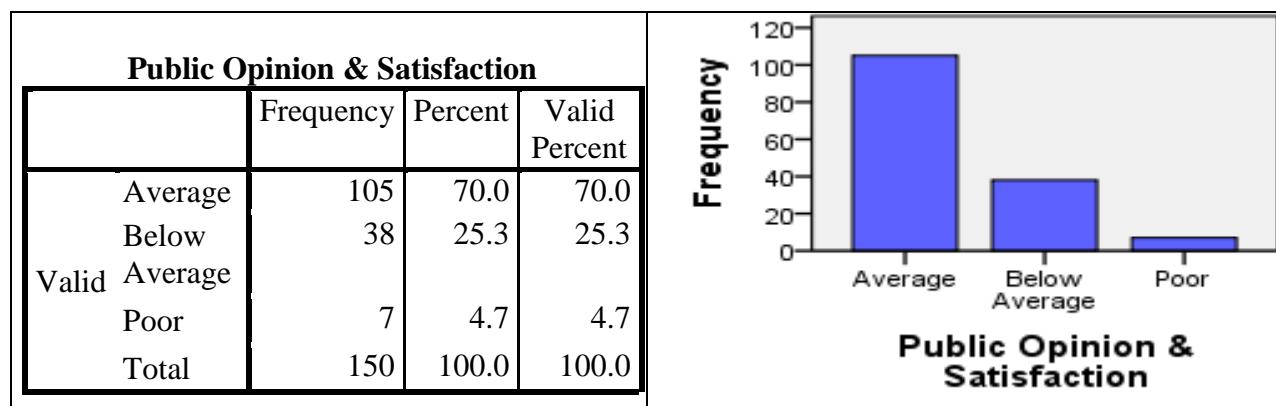


Table 4.16	Figure 4.16 (70 % is average)
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5.3 Analysis of Variance (ANOVA)

While coefficients might indicate correlations, the relationship might be spurious due to problems during the collection of data. As such, an analysis of variance (ANOVA) is essential to ascertain the viability of the correlations. The current analysis made use of one-way ANOVA to ascertain the validity of the correlations as shown in the table below.

Table 4.5: Analysis of Variance

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Financial success Factors	Between Groups	71.543	3	23.848	1.086	.357
	Within Groups	3205.950	146	21.959		
	Total	3277.493	149			
Technology Success Factors	Between Groups	16.165	3	5.388	.267	.849
	Within Groups	2941.335	146	20.146		
	Total	2957.500	149			
Environmental Success Factors	Between Groups	24.071	3	8.024	.537	.658
	Within Groups	2183.002	146	14.952		
	Total	2207.073	149			
Managment success Factors	Between Groups	96.795	3	32.265	2.979	.033
	Within Groups	1581.098	146	10.829		
	Total	1677.893	149			

Analysis of Variance shows that the significant level is beyond 0.05 threshold for technology success factors, financial success factors, and environmental success factors showing that the sample did not violate the assumption of homogeneity of variance. However, managerial

success factors did violate the assumption given that significant level is below 0.033. However, the F values show that Management success factors have a great influence in PPP adoption in the country followed by financial factors, then environmental success factors, and technology factors.

6 Chapter – 6 Discussion and Conclusion

6.1 Introduction

The chapter discusses the results and findings with respect to the reviewed literature. The current research key objective was to determine the financial, managerial, environmental, and regulatory factors that shape PPP in UAE. To this end, surveys were conducted to measure the overall feeling to key industry players on the mentioned factors in determining the direction of PPP agreements in the UAE. The current chapter seeks to review the outcome of the analysis with respect to the reviewed literature.

6.2 Type of the Organization

Mean plots from the analysis of variance confirms the findings of Collis and Hussey (2009) and Chan et al. (2010) researches that intimated that public organizations commitment is key to its success. The mean plots indicated that the mean was high for public sector organizations in every measure showing that government may wish to engage in PPP for financial, technological, regulatory, and managerial roles that the private sector excels. Due to government organization not being profit oriented, they tend to spend less on technology, regulations compliance, and improving management, therefore, their desire to reach to those levels are key in conceiving PPP and sustaining it as the private sector will keep its end of the bargain in such an agreement for financial reasons and return on its investment.

6.3 Position in the Organization

Analysis of variance on the relationship between PPP success factors and position in the organization went further to confirm the findings of Hardcastle et al. (2004), Ismail & Ajija (2011), and Zhang (2005) that concluded that senior managers and executive approval of a PPP

is instrumental for the desire by either private or public organizations desire to engage and sustain a PPP. From a financial perspective, the senior executive plays a key role on deciding to forge ahead with the project through allocating financing. However, input from the engineering team is key in determining the feasibility of the project hence engineers means rank second most high followed by that of the manager who works closely with the engineering team. The mean for the senior management is least as they only need to forward the findings of the managerial and engineering team to the executives. However, concerning environmental, technological, and managerial reasons, the executive has the highest mean in the rank followed by the senior manager showing that the two levels of management yield a huge influence on the success of PP in UAE as Hardcastle et al. (2004) observes.

6.4 Financing Success Factors

Seventeen questions under this categories were administered, data obtained and coded to measure the overall feeling in the industry regarding the impact of financing factors in shaping the outcome PPP agreements in UAE. First, most respondents felt that risk transfer was not a key reason why the government entered into PPP with the private sector with 60% of the responders rating the factor poor. The results are in tandem with Alharthi, Soetanto, & Edum-Fotwe (2014) findings whose study established that profit making was not a key driver of government projects hence did not motivate government into entering into PPP. However, regarding appropriate risk allocation and risk sharing, more than 80% percent rated the factor as either good or very good. Such is the case since Alharthi, Soetanto, & Edum-Fotwe (2014) research noted that though a government project may have little profit motivation, risk sharing with the private sector was a key motivator for both parties seeking to leverage the strengths of each other for reduced

probability of project failure. Further, project financing and cost efficiency were another key financing success factor considered during the study with more than 64% percent of the respondents intimating that it was a key driver of PPP in UAE. The results concur with Jude and Alsafran, Edum-Fotwe, and Lord (2016) result findings that concluded that government opted to enter into PPP with the private sector due to the sector's huge financial muscle to invest in long-term projects and reap returns when the project matures.

Moreover, most of the respondents were unsure of the role of financial capacity on the success of PPP in the UAE with more than 64.7% of the respondents rating the factor as either average or below average in determining the success of PPP. Such findings are in tandem with June and Chou, Tseng, Lin, & Yeh (2012) study which observed that through financial capability of the player entering into a PPP with the government may be instrumental in the nascent stages of the agreement, such capacity does not guarantee the project will be a success due to other core determining factors such as management. However, regarding growth potential, 82% of the respondents felt that it was a good or very good factor in determining the success of PPP project. Such is the case in line with Demirag, Khadaroo, Stapleton, & Stevenson (2011) noting that private sector seeks to increase their profit by engaging in a PPP with the government. As such, growth prospect of a project is key in determining their commitment and motivation towards a given that promises growth in the future. However, most respondents felt that government financial guarantee was not a key determiner of the success of the success of PPP project in UAE. Such could have been the reason due to profit needs of the private sector that cannot be catered for by financial guarantees from the government. Similar to growth potential findings, when combined with cost savings, the two success factors were highly regarded as key drivers of success in PPP projects undertaken in the UAE with 82.7% of the respondents approving their

role. Such findings are in line with those of Demirag, Khadaroo, Stapleton, & Stevenson (2011) study that intimated that desire to minimize cost in projects that require large capital outlay but have high potential to grow and gives better returns compels the private sector to enter into agreements with the government.

Concerning the role of well-developed capital markets in driving PPP success in the UAE, 84% of the respondents rated the success factor as either very good or good determiner is a success factor in the UAE. Such is the reason due to the role of the capital market in helping the private sector raise a huge amount of capital required to partner with the government in PPP agreements. Similar results were obtained for the availability of financial and capital market instruments such as bonds and shares with 57% of the respondents rating the factor as good or very good. The results match those of Geddes & Wagner (2011) who observed that PPP projects require a robust financial and capital market that would enable the private sector pool resources faster and affordable. As such, readily available financial and capital market instruments that serve as the basic sources of finance for the private sector are key in determining their ability to engage in PPPs with the government. Regarding the certainty of international grants and state funding, most of the respondents felt that it was not a key driver of PPP adoption in the UAE with 59% of the respondents rating the factor as average or below average. Such is the reason due to the advanced level of UAE economy driven by oil sales in the international market enabling most of the corporate to generate funds locally rather than rely on international grants and state funding. However, the stability of the country from an economic perspective was a key determining factor with 92.7% of the respondents rating the factor as either good or very good. Such is the case since a stable economic environment shows the ability of the government to honour its end of the bargain while the private sector has sufficient source of finance and capital

market instruments to engage in huge capital outlay project as Geddes & Wagner (2011) argues. Similar findings were obtained for sound economic policy, stable macroeconomic environment, and favorable policies with respect to lending for PPP construction projects where over 80% percent of the respondents rated the success factors as either good or very good determiner of the success of PPP projects in UAE. Such could have been the case since a sound economic policy gives the prospects of a better performing economy which has the same effect on a stable macroeconomic environment. The same applies to favorable lending policies for PPP projects which cumulatively increases the ability of the private sector to access funds to invest in PPPs.

6.5 Technology Factors

Under the technology success factors, 13 key indicators were selected, studied, and questionnaire administered to find whether the literature mirrors what is in the field. First, concerning feasibility and assessment of the study, most respondents accounting for 36% of them were unsure of the factor in determining the success of the PPP. Such could have been the case due to the complexity of the factors that only engineers had a good understanding with the rest of the sampled executives and manage to have little knowledge regarding the matter (Hwang, Zhao, & Gay, 2013). However, most of the respondents accounting for 75% of them felt that project technical feasibility was a key determiner of PPP success in UAE (Hwang, Zhao, & Gay, 2013). Such was the case with the engineering team must ascertain that a project is achievable from a technical perspective before allowing the project to proceed to other levels of agreement. Similar findings were realized for a thorough, realistic cost-benefit assessment (CBA) of the project. Such is the case since in any PPP; the private sector must realize that the project benefits exceeds its costs before committing to an agreement hence the need for a realistic CBA. Similarly, 83.3%

of the respondents intimated that clear project scope, as well as documentation, was key to determining the success of PPPs in the UAE. Such is the case since a clear project scope helps the players predict resource requirement as well as assess the returns from PPP projects. Concerning conservative cost or revenue assumptions, 40% of the respondents rated the factor as below average with 22.7% rating the factor as poor. Such is the case since the players in PPP are driven by a desire for returns hence not prone to conservative approaches while approaching PPP projects. As expected, the rigorous financial analysis was considered to be a key determining the factor of PPP success in UAE with over 50% of the respondents rating the factor as either average, good, or very good. Such is the case since in the adoption of new technology; its financial implication must be subject to rigorous financial analysis to ensure it does not impact negatively on the bottom line of the private sector players in PPP (Hwang, Zhao, & Gay, 2013).

Further, 88% of the respondents intimated that when a PPP project provides an innovative solution to social and development problems, its chances of success increased. Such is the cases due to government desire to achieve social development (Kahwajian, Baba, Amudi, & Wanos, 2014). Therefore, a project offering innovative solutions for problems the government is seeking to address will elicit more attention hence increased chances of success. Moreover, project complexity and ease of implantation emerged as a key determiner of PPP success in UAE with more than 60% of the respondents rating the factor as either very good or good. Such is the case since project complexity is directly proportional to resources to be pooled for successful implementation of a project (Kahwajian, Baba, Amudi, & Wanos, 2014). When resources are too much, the project may fail to generate interest leading to failure. Similar results were obtained for concession period, effective knowledge transfer, and objectives for improving service levels in a manner that maximizes social benefit with 67.7%, 63.7%, and 83% of the respondents rating

the factors as either good or very good. Such is the cases since concession period is key in determining the project timeline while technology transfer was key to bringing government institutions to speed regarding the current technology and its use in increasing service delivery in a manner that maximizes social benefits. Lastly, attaining international standards emerged as a less likely technological motivation facilitating PPP success in UAE with 55.4% percent of the respondents rating the factor as either poor or below average. Such is the case since UAE is in its nascent stages of building a thriving private sector currently whose current goal is to offer services locally rather than pursue international service and product delivery (Kahwajian, Baba, Amudi, & Wanos, 2014).

6.6 Regulatory Environmental Factors

Regulatory factors were also identified in determining the level of success PPP agreements in UAE while discussing literature. The literature identified that regulatory environment was key to the private sector more than it was a key concern for public sector organizations. To this end, nineteen regulatory, environmental factors were identified in the literature and surveyed in the field. First, the favorable legal framework was perceived to be of key importance in shaping the success of PP in UAE with 80.7% of the respondents rating the factor as either very good or good. Such is the case due to the importance of a conducive legal framework in giving the private sector the flexibility to do business with the government on fair grounds (Osei-Kyei, & Chan, 2015). Similar results were obtained for a clear legal, regulatory structure with 84.7% percent of the respondents reaffirming the importance of the factor as a key driver of PPP success in UAE. Such is the case since a clear regulatory framework is a key to ensuring effective and clear guidelines within which the private sector partners with the

government. Same finding were obtained for standardized procedure for PPP projects, well-organized public agency, presence of enabling PPP policy, and complete PPP guidelines were 52.7%, 55.4%, 58% of the respondents supported rated the factors as either very good or good as a factor determining the success of PPP in the UAE respectively (Osei-Kyei, & Chan, 2015). Such is the case since a well-organized public agency increases its attractiveness to the private sector while a standardized procedure of PPP projects reduced the risk of engaging in a PPP while presence of a PPP enabling policy provided a conducive environment for the private sector to engage with the government hence reducing the level of risk exposed to the private sector (Osei-Kyei, & Chan, 2015).

Political support, reasonable government supervision, reasonable control of grant funds, and government capability of fulfilling the contract are key factors that respondents rated as either good or very good determiner of success of PPP in UAE with 55.3%, 86.7%, 55.3%, and 60.7% rating them as either good or very good regulatory success factors for PPP success. Political support is key as it helps prevent undue political influence that may hamper the project while reasonable government supervision is key in reducing or eliminating corruption that may put the project into its deathbed dafter investors put a lot of money into the project (Reinhardt, 2011). Moreover, most of the respondents felt that efficiency gains for the government were a key driver of PPP success with 58.7% of the respondents rating the factor as average as well as above average similar to leveraging private funding where 89.3% percent of the respondents rated the factor above average. Such is the case since the government may seek to improve efficiency to project through utilizing the managerial capacity of the private sector as well accessing the private funding from the sector. Similar results were obtained for shareholder acceptance, government willingness, and commitment of all parties, public opinion and

satisfaction, the level of recognition and a strong private consortium where more than 70% of the respondents rated the factors as above average in determining the success of PPPs in UAE (Reinhardt, 2011).

6.7 Managerial Factors

Lastly, managerial success were identified as key drivers of PPP success in UAE as the government sought to tap the managerial strength of the private sector. To this end, literature was reviewed on the subject, and seventeen managerial factors were identified and studied in the field during the study. First, 72% percent of the respondents opined that a well-organized private sector was a key managerial factor that compelled the government to enter into PPP projects. Since most public sector organizations grapple with poor managerial problems that may jeopardize the success of high-value projects, Reinhardt (2011) observes that the government enters into PPP to lavage the managerial capability of a well-performing private sector. Secondly, availability of personnel to participate in the PPP emerged as a key driver of success for PPP in UAE with 88% of the respondents rating the factor as either good or very good. Such is expected of a PPP since there need individuals with the needed expertise to bring the stakeholders together and united them behind a common vision (Wolfs, Holt, Mufti, Luz, Khurana, & Malhotra, 2016). The Same case applies to the technical ability of the firm to fulfill the project as well as its firm financial ability with over 80% of the respondents responding to the affirmative. Such is the case since a firm's technical ability to fulfill a project shows its managerial might hence the ability to hold its end of the bargain in the contract. Concerning firm level of information disclosure as well as project experience emerged as key factors that facilitated the success of PPP in UAE with 86.3% and 86% percent respectively

observing that the factors were either good or very good. Such is the case high levels of information disclosure predicates an efficient management while experience in PPP experience increases a firm ability to leverage its prior knowledge in the current project hence increasing levels of success. Firms profit expectation is also a key driver PPP success in UAE since most private sectors are driven profit expectations hence a key determiner of their willingness to enter into PPP with the government. Moreover, concerning effective management of cost, time and quality were a strong indicator of PPP success in UAE as 86% of the respondents rated the factor as either good or very good. Such is the circumstance for a company that is able to deliver a project in the least time, within the budget, and within the desired quality is more likely to encourage the government to enter into PPP due to higher chances of success. Similar results with accelerating project implementation was a key driver of PPP success in UAE with 56.6% percent of the respondents quoting the factor as average or above average. Such is the case for much of the PPP project may have some political implication but is quite weak given the country does not engage in elective politics that may compel the government to wish to accelerate project implementation for political mileage as (Yang, Yang, & Kao (2010) observes.

Moreover, 64.7% of the respondents felt that transparency and competitiveness in the procurement process would increase the chances of PPP success in UAE showing. Such is the case since competitive bidding is likely to have the best winner given a chance to undertake project compared to selective binding where capacity may not be a key determiner of project implementation ability. Similar results were obtained for effective contract management where 64.5 percent of the respondents reported that they felt such a move during contract management would increase the chances of success for PPP undertaken in UAE (Yang, Yang, & Kao, 2010). However, most of the respondents did report that policies and conditions for asset transfer were

not a key determiner of PPP success in UAE due to little chances of asset transfer of assets during PPP and the built trust between the government and private sector that quells such fears. Lastly, involvement of all key parties to the project during planning, reasonable services price, and public opinion and satisfaction were regarded as key determiners of PPP success in UAE with over 70% of the respondents rating the factors as either good or very good. Such is the case due to the role of teamwork between the key stakeholder and fair prices by the private sector to shield the project (Yang, Yang, & Kao, 2010).

6.8 Conclusion

Key objectives of the paper were to examine the role of four key factors that influences the success of PPPs in the UAE. An in-depth review of the existing literature identified financial, managerial, regulatory environment, and technological success factors as the key drivers of PPP in UAE. However, different researchers had different points of view regarding the role of four categories of factors in determining the success of PPP in UAE. As such, the current research adopted the research onion model to conduct the data with the key objective of answering the research question. After Analysing and reporting on the results, it emerged that the different factors had more influence on some players than the others. For the government, technological and managerial success factors were the key motivation in joining PPPs. Such is the case since most government institutions are unable to keep with technology changes and have weak management structures hence the need to partners and benefit from the private sector that excels in the two factors. On the other hand, the private sector key motivation of entering into PPP was driven by the regulatory and financial consideration that have a huge impact on their ability to

operate with the needed flexibility. As such, it is the role of the private sector to improve their managerial and technological prowess whereas the government pursue fair and robust regulations and provide the needed huge capital outlay to encourage private sector partner with the government to realize the goal of improved service delivery to the people of UAE.

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9 Appendix 1- Questionnaire

QUESTIONNAIRE	
<p align="center"><i>Introduction</i></p> <p>The Public-Private Partnership (PPP) model is increasingly being deployed by countries aiming to involve the private sector in public service provision and infrastructure development that has mainly been the domain of the government. The aim of this research undertaking to bridge the gap between policy makers and implementation of PPP projects by providing greater clarity and reducing misalignments on the key elements of successful PPPs in the UAE.</p>	
<p align="center"><i>Direction</i></p> <p>Please answer all the questions</p>	
<p align="center"><i>General Questions</i></p>	
1. Experience in PPP	1. 2 years 2. 4 years 3. 6 years and above
2. Type of organization	1 Public 2 Private
3. Position in Organization	1 Senior Manager 2 Manager 3 Engineer 4 Executive
<p align="center"><i>Adoption Factors for PPP</i></p> <p>Why would a government adopt PPP?</p> 1. To access financial capabilities in the private sector 2. To access technical capabilities in the private sector 3. To access regulatory capabilities in the private sector 4. To access managerial capacity in the private sector	
<p align="center"><i>PPP in the UAE</i></p> 1. How would you rate the significance of the <u>financing factors</u> to increase the success of	

PPP projects in the country and way of leveraging them to increase the success of PPP initiatives in the UAE?

Success Factor Rating: #1 Very Likely, #2 Likely, #3 Neutral, #4 Unlikely, #5 Very Unlikely	Ratings				
	1	2	3	4	5
Risk Transfer					
Appropriate Risk Allocation & Risk Sharing					
Reward of Risk Mitigation					
Project Financing & Cost Efficiency					
Project Financial Feasibility					
Financial Capacity/Ability of the Parties					
Growth Potential					
Government Financial Guarantee					
Project Growth Potential & Cost Saving					
Compatibility of Private & Grant Financing to project Objectives					
Well-developed Capital Market					
Available Financial & Capital Market Instruments					
Certainty of International Grant & State Funding					
Economic Stability of the Country					
Sound Economic Policy					
Stable Macroeconomic Environment					
Favourable Policies with Respect to Lending for PPP Construction Projects					

2. How would you rate the significance of the **technology factors** to increase the success of PPP projects in the country and way of leveraging them to increase the success of PPP initiatives in the UAE?

Success Factor	Ratings				
	1	2	3	4	5
Rating #1 Very Likely, #2 Likely, #3 Neutral, #4 Unlikely, #5 Very Unlikely					
Feasibility & Assessment Study					
Project Technical Feasibility					
Thorough and Realistic Cost/Benefit Assessment of the Projects Involved					
Clear Project Scope Definition & Documentation					
Conservative Cost/Revenue Assumptions					
Rigorous Financial Analysis					
Innovative Solutions for Social & Development Problems					
Project Complexity & Ease Of Implementation					
Concession Period					
Effective Technology Transfer					
Attaining International Standards					
Objectives for Improving Service Levels & Coverage in a Manner That Maximizes Societal Benefits					
Suitability of the PPP Arrangement for the Project					

PPP in the UAE

3. How would you rate the significance of the **regulatory environment factors** to increase the success of PPP projects in the country and way of leveraging them to increase the success of PPP initiatives in the UAE?

Success Factor	Ratings				
	1	2	3	4	5
Rating #1 Very Likely, #2 Likely, #3 Neutral, #4 Unlikely, #5 Very Unlikely					
Favourable Legal Framework					
Clear Legal Regulator Structure					
Standardization Procedure for PPP Projects					
Well-Organized Public Agency					
Presence of an Enabling PPP Policy					
Complete PPP Guidelines					
Political Support					
Reasonable Government Supervision					
Reasonable Control of Grant Funds					
Government's Capabilities of Fulfilling the Contract					
Government's Capabilities of Administrative Execution					
Efficiency Gains for Government					
Leveraging Private Funding					
Stakeholder Acceptance and Positive Attitude Towards PPP Project Implementation					
Government Willingness to Support and Freely Participate in PPP Project Implementation					
Commitment of All of the Parties					
Public Opinion and Satisfaction					
The Level of Public Recognition of Social Needs					
Strong Private Consortium					
Well-Organized Private Sector					

Availability of Competent Personnel to Participate In PPP Project Implementation					
Firm's Technical Capabilities of Fulfilling the Contract					
Firm's Financial Abilities					
Firm's Level of Information Disclosure Reasonably & Timely					
Firm's PPP Project Experience					
Firm's Profit Expectations					
Effective Management for Cost, Time & Quality					
Accelerating Project Implementation					
Well-Organized Private Sector					
Transparent & Competitive Procurement Process					
Transparency & Open Competition in the Procurement Process					
Competitive Procurement Process					
Effective Contract Management					
Policies & Conditions for Asset Transfer					
Involvement of All of the Key Parties During Project Planning					
Reasonable Services Price Avoiding Undue Private Profit					
Public Opinion & Satisfaction					

THANK YOU FOR SHARING YOUR THOUGHTS!!!