

Comparative analysis of the value for money factors of PPPs between the UAE and the UK

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Abstract

Public private partnerships (PPP) procurement instruments have been very popular tools for developing projects around the world. This is largely due to their success in bringing quality, efficiency, innovation, funds, experience, and most importantly risk sharing to the projects they are involved in.

This study aims to pinpoint the value for money (VFM) factors that are needed to implement PPP mechanisms in transitional economies, where the United Arab Emirates (UAE) is taken as a case study, whose findings will be contrasted to that of a UK sample, a developed economy. Relevant data was collected through a questionnaire to establish the VFM factors for each of the two countries. In this study, data was collected from 30 participants in the UAE, and 62 participants residing in the UK.

A comparative analysis between the results of both countries revealed a great deal of similarity of the significant impact of the VFM factors on the assessment of PPP. The same four factors were chosen as the most important ones by both samples out of the sixteen factors for delivering value for money outcomes. These factors were optimised risk allocation, competitive bid process, improved services to the community, and clear output specification. This study contributed to practice by highlighting to the sponsors the most important VFM factors and group of factors to consider when assessing the VFM of any potential PPP project. This study also contributed to research in the field of PPPs in the UAE and the UK. The comparative analysis between the two countries highlighted the similarities and differences in the practice and opened areas for future consideration.

Keywords— PPP, Attractive Factors, Public Procurements, Developing Countries

INTRODUCTION

Public Private Partnership (PPP) contracts have been extremely popular mechanism for procuring public work across the world particularly in the USA and the UK [1,2]. This example has induced developing countries to follow the model in order to avail its advantages of risk transfer and accessible private funds in conducting government projects. PPP contracts help accumulate experience, quality, innovation and risk sharing including private sector funds and are thus becoming popular. For these expected benefits to materialize, they must meet their success criteria. That makes it pertinent to highlight and investigate PPP implementation success factors [1].

The legislations for the implementation of PPPs in the UAE are not well defined and there is no systematic way of developing PPPs in the country, where the majority of PPPs are “unsolicited” projects. The information about the number of PPP projects developed in the country so far is unknown, however a study conducted in 2010 estimated the number to be under 10 projects [10]. The practice is in its infancy and would benefit from global best practices in the field. Many studies are being conducted on PPP implementation to propose suitable Value for Money frameworks, however very little is done to find the suitable VFM frameworks for transitional economies. Yang and others [25] stress the importance of establishing the VFM factors for the success of PPP models for economies that are transitioning in unstable environments [25]. There are a number of PPP studies, but the need is to study the different environments that are undeveloped or not controlled by efficient institutions. Further research is required owing to such local complexities and environment. There are many local factors to be highlighted when searching for different PPP environments. These include financial aspects, good governance, transparency, and political situation among others [25]. The study targets the establishment of Value for Money factors for adopting PPP in transitioning economies, where the UAE is taken as an example, to contrast such outcome with that of a developed country. The selection of the UK as a best practice country in this study was based on the classification established by the European Investment Bank [28].

LITERATURE REVIEW

PPPs have become very popular mechanisms for procuring public works around the globe due to their high success rate in bringing quality, efficiency, innovation, funds, experience, and most importantly, risk sharing to the developed projects [2]. Such a high rate of success in developed countries, such as the United States, where the concept was developed, and the

United Kingdom, where the practice was perfected, has set the example for developing countries to follow suit [1,2]. The main PPP characteristics that shall pave way for success are the life-cycle approach, innovation potential, risk transfer with balance, incentive structure, utilisation of funds and experience from the private sector, and long-term partnership that shall be under governance of contracts [6,2,4]. Transfer of services such as planning, constructing, financing and maintaining projects, to private sector investors for a set time period is the key aspect of PPPs. This allows for efficiency and a covering solution to the needs of governments. [2,3,4]. Because the conventional approach carries more risk on the public sector, and for their lack of experience and funds, developing countries are welcoming this approach [5,7]. PPPs enable governments to evade cost overruns and time delays while also enabling them to hold any funds from being paid to the private sector unless project delivery is done up to specifications as agreed and instructed. In both models, the PPP and the conventional one, the government is in the driving seat. In traditional models, the private sector is called on for designs or constructions of the project. While in PPP, the client would set a specification that shall be responded to by proposals from private sector expressing their intent to design, finance, build, and operate the required facility for a given time [6,4,7].

A source mentions that VFM in PPP projects commonly requires delivering additional merits and best cost in public service domains [8]. The public sector uses VFM as the key factor to ascertain if a particular project can perform higher under PPP instead of the traditional project procurement. Yuan, Zeng, Skibniewski and Li [9] reviewed the main objective of a PPP stating that it has to get the best value for money. Value for money in PPPs stands for the delivery of the required public services with the optimal benefits and cost [8]. It is an indicator used by the public sector to assess the value of whether to offer the project as a PPP or develop it under conventional methods. Akintoye, Beck and Kumaraswamy [8] and Henjewe, Sun, and Fewings [26] indicated that achieving value for money should be the strategic objective of PPP projects. Yuan et al. [9, pp257] explained that such strategic objective encompasses “public client’s overall strategic plan and mission objectives, private sector’s long-term development and payoff strategy, the general public’s requirements of quality public facilities and services”. Liu et al [12] cited Henjewe et al. [26] stating that “meeting client’s requirements should be considered as a core dimension in performance measurement of PPPs.” [12, pp 502]. Furthermore, Kušljčić and Marenjak [27, pp949] stated that “a PFI project can be described as successful if it delivers value for money in the form of cost effective, reliable and timely services at agreed prices and to agreed quality, as defined in the contract”.

The most cited value for money factors that contribute to the success of PPP projects include “optimized risk allocation, competitive bid process, improved services to the community, clear output specification, improved facilities to the users, optimization of assets efficiency, technical innovation, the private sector's project management skills, incentives for private parties, appropriate capital structure, long-term engagement, efficient dispute resolutions, low life cycle cost, early service delivery, reduced negative environmental impact, and low tariffs” [11]. These are the most cited and recognized VFM factors in PPP literature. [5, 11, 13, 15, 16]

METHODOLOGY

In order to establish the feasibility and viability of PPP to be used as a procurement method for all kinds of projects in the UAE, a quantitative survey was used. It also served the purpose of identifying the variation of significance of such factors in between the UK and the UAE as reported by the respondents. To participate in the questionnaire survey, practitioners from both sectors and researchers in PPP field were involved. It was necessary for them to be experienced in the field of PPPs (for the UAE) or PFI/PPP (for the UK). Convenient sampling was chosen to be the criteria of sampling. This was because the respondents' pool in the UK was difficult to get through where qualified respondents' groups were approachable only by referrals. Also, in the UAE, the pool was very scarce to draw from and the population to draw the sample out from was unknown and thus the minimum requirement for using random sampling was shackled. 30 qualified responses from the UAE and 62 from the UK were attained.

Li [11] designed questionnaire served as the format provider for the questionnaire questions. To test value for money factors the template consisted of separate components, and included 16 VFM factors. The choice of this template was based on two considerations. First, the content of template and the template itself are highly cognizable to the PPP industry [12,13,14,15,16,17]. Second the template was derived in the UK construction industry which is consistent with the UAE's construction code.

The mean score technique was used to measure the mean score of each VFM factor for PPP implementation. This method helped to establish the ranking of the importance of each factor, which made it possible to triangulate such rankings from samples of respondents from both the UAE and the UK. The Kendall's coefficient of concordance (KCC) within the SPSS program

was utilised to measure the agreement of the two groups on the assignment of significance to the factors of PPPs in their respective territory.

RESULTS AND ANALYSIS

As expected in the UAE, there was a low response. There were 126 invitations sent to a known group of PPP practitioners in the country. The 126 invitations had 30 qualifying responses. The private sector provided 70% participants. 20% of the participants comprised of public sector individuals while the remaining 10% of the participants were researchers. Among these, there were top managers who were found to be 56.7% of the respondents. 33.3% were middle managers while 10% turned out to be general staff. Experience wise, there were 50% respondents who had 11-20 years of experience. There were 26.7% people with 21 years or more of experience. 23.3% of the respondents had 6-10 years of experience.

In the UK, 200 general invitations were dispatched via a website link to potential respondents. Out of the 141 responses obtained, only 62 qualified for analysis. Here, practitioners from the private sector comprised of 59.7% of the responses while 24.7% were public practitioners. 12.9% was the ration of researchers. Here, 27.4% respondents belonged to each, the top management and the general staff. 58.1% respondents were middle managers.

Out of all the participants, 24.2% had 21 or more years of experience under their belt while 11-20 years of experience resided with 38.7% respondents. There were 27.4% who had 6-10 years of experience while the ones lesser than 6 years of experience were 9.7% of the sample. For those with less than 6 years of experience, they comprised of less than 10% of the sample.

As shown in Table 1, the Chi square value for the UAE and the UK' samples are 70.82 and 80.75 respectively. This is significantly higher than the critical Chi square value of 25.00 (degree of freedom = 15). Therefore, the null hypothesis - that there is a significant difference between the expected and the observed results - is rejected, and the rankings provided by each group on the value for money factors are established to be consistent.

Insert table 1 here

The agreement of participants on both samples was established by utilizing Kendall's coefficient of concordance, which confirmed the consistency of the rankings provided by the participants of each group. This is very important to this study, as the local sample in the UAE was relatively small and an inferential approximation would contribute to the validity of the findings. Since the number of items (N) in each scale is more than seven, it is recommended to use Chi square as the best approximation. The value of the calculated Chi square is checked

against the critical Chi square value according to the degree of freedom (N-1) in the table of Chi square distribution at a probability of 0.05 or lower [29]. As per the Kendall's utilisation requirements, the survey complies with the minimum number of variables. This allows for the establishment of the degree of consensus on each factor within each group of respondents and consensus between both groups, which indicates the validity of the questionnaires and the rankings of the value for money factors therein.

Ranking of value for money factors

Sixteen main factors influence the achievement of value for money in PPP projects (Table 2). The respondents in both countries selected the same four factors as the most important ones in shaping the value for money outcomes. These factors are optimised risk allocation, competitive bid process, improved services to the community, clear output specification; the range of their significance was between 3.94 and 4.20.

Optimised risk allocation and a competitive bid process were ranked first and second by the UAE sample and second and first by the UK respondents respectively. Improved services for the community was ranked among the most important outcomes of PPPs by both groups, who believed in their significance in achieving value for money.

Improved facilities to the users ranked fifth in the UAE and ninth in the UK. This factor is among the most important factors for achieving value for money for the UAE respondents, though not so significant for the UK's. The same could be inferred on the optimisation of assets efficiency factor as well, it ranked sixth and seventh in the UAE and the UK respectively. Technical innovation was ranked seventh and the private sector's project management skills eighth by the UAE respondents, but fifth and tenth respectively by the UK's respondents.

Incentives for the private party, appropriate capital structure, long-term engagement, efficient dispute resolutions, low life-cycle cost, early service delivery, reduced negative environmental impact, and low tariffs were ranked from ninth through sixteenth by the UAE respondents, who gave a significance range from 3.20 to 3.77. As for the UK respondents, all of these factors received low significance except for incentives for private party factor, which ranked sixth.

Insert table 2 here

UAE Value for money factors

All factors of the sixteen items of the value for money factors scale, produced through the utilisation of SPSS, had correlations with other factors since they all had partial correlations above the required 0.3 [18] (Table 3).

Insert table 3 here

The value for the Kaiser-Meyer-Olkin measure of sampling adequacy was 0.637, suggesting that the sample is factorable [18,19]. Bartlett's Test of Sphericity was large (Chi-Square =291.1, significant= 0.000); it is therefore unlikely that the correlation is an identity matrix. The Anti-image correlation of all factors was satisfactory since the MSA was greater than 0.5 for all items. This confirmed that there is no need to eliminate any factors, and factor analysis should proceed to the next step of analysis [18].

When Eigenvalue is set to be greater than one, four factors could explain 72.5% of the total variance; the remaining twelve factors collectively accounted for 27.5% of the variance (Table 4). Therefore, a structure of four factors is adequate to represent the value for money factors for adopting PPP models.

Insert table 4 here

The data was analysed by means of principal component analysis (Table 5), where factor grouping through a Varimax rotation was conducted. Six items loaded above 0.5 onto factor one without cross loading on the remaining factors.

Insert table 5 here

Financial efficiency

Factor one accounted for 24.09% of the total variance in value for money factors and consists of optimisation of assets efficiency (.880), optimised risk allocation (.735), technical innovation (.699), clear output specification (.675), low life-cycle cost (.666), and competitive bid process (.601). This factor was labelled "Financial efficiency." The highest loading was from optimization of assets efficiency.

The items loaded onto the first factor comply with the above requirements for generating value for money. The highest loading was associated with the optimization of assets efficiency. Value for money in the form of financial efficiency is expected to be obtained from optimization of asset efficiency, as this will include using technology to best manage the

assets, where the optimum exploitation of all assets to deliver the best value for the project will be an objective of the management team. The tasks will also include the integration of the asset with other assets and proactive and reactive maintenance measures to ensure the longevity of the assets.

The second variable loading onto the financial efficiency factor was optimised risk allocation. When public and private parties agree on a mechanism for sharing the risks, where they allocate the risks to the party that best manages them, this will lead to financial efficiency in the form of reduced financial implications related to mishandling of variations in the project development or the output performance of the project.

A fairly high loading is given to Technical innovation. The technologies and management systems that are employed by the private party are expected to minimise redundancy, optimise resource utilisation, integrate processes, and reduce tariffs on end users, all of which leads to cost savings and efficiency in the project.

Clear output specifications is another fairly high loading item onto financial efficiency factor. It is important for the safe completion of long-term projects, such as PPPs, to have clear output specifications rather than just inputs, as inputs are expected to change over the long duration of the project. Such actions will ensure financial efficiencies by avoiding potential variations to accommodate the services for the end users.

The last two items loading onto the first factor are Low life-cycle cost and Competitive bid process. Low life-cycle cost is possible in PPP projects since all cycles of the project such as design, construction, management, maintenance are under one contract, allowing the developer to better control cost and generate financial efficiency throughout the life stages of the project. Competitive bid process is very critical in order for the project to generate financial efficiency as well. It is very important that the public party gives ample time for this process and invites as many competent participants as possible. The pre-qualification of tenderers, bid evaluation, award criteria, negotiations, finalizing the PPP contract, and financial close are all important phases to be taken in order for the PPP project to be successful and result in cost savings to achieve the value for money criteria sought after by the implementation of PPP projects [9].

Project sustainability

Factor 2 accounted for 18.31% of the total variance and had three items loading onto it: reduced negative environmental impact (.908), efficient dispute resolutions (.855), and early service delivery (.680), all of which loaded above 0.5 and had no cross loading on other factors. Factor 2 was labelled "Project sustainability."

Reduced negative environmental impact is regarded as the most critical variable, as it loaded extremely high on the sustainability factor. This indicates that "going green" will lead to reduced environmental risks on the private party in addition to increasing the public support for the PPP project, which will minimise public risks as well as leading to attaining value for money by generating financial efficiency. The second item in the sustainability factor is Efficient dispute resolutions. Having a systematic approach for dealing with change will minimise the chances of disputes and will outlay a platform for renegotiations. Renegotiations are the best way to deal with input changes for long-term projects and ensure the sustainability of said projects. Such measures will lead to financial efficiency since renegotiations will result in mutual benefits. Early service delivery is expected to improve the sustainability of the project and lead to financial efficiency. Early delivery of the project will allow the cash inflows to be generated, providing a vital tool for the financing and repayment of debts of the PPP project, ensuring the sustainability of the project through less reliance on debt financing and the reduction of debt servicing and all other associated costs leading to financial efficiency in the project.

Optimization of private party's contribution

Three items loaded onto the third factor which accounted for 15.56% of the total variance; they are incentives for private party (.843), long-term engagement (.843), and the private sector's project management skills (.790), all of which scored above 0.5 and had no cross loading on other factors. Factor 2 was labelled "Optimization of private party's contribution."

Incentives for private parties and long-term engagement both loaded equally on the third factor. When private parties are offered incentives to participate in projects, they improve the financial efficiency expected from the PPP project. Incentives can be in the form of linking returns to performance, improved risk allocation, subsidies, off-take agreements, and guarantees. These measures are expected to maximise the performance of the private party, leading to efficiency in the project and achieving value for money. Long-term contracts are preferred by the private party because they employ its management skills to maximise the returns, as more considerations by the public party are given to completing the project, mutual

benefits are ensured. This enables the private party to gain long-term benefits from the project rather than just short-term, as happens in conventional procurement methods. The private party will opt for creative solutions, through management skills obtained from previous experience, to attain as many benefits as possible, leading to better performance of the project.

Benefits to the end users

The fourth factor accounted for 14.56% of the total variance in the value for money scale and had four items loaded onto it. These items are improved services to the community (.763), improved facilities to the users (.693), low tariffs (.672), and appropriate capital structure (.571), all of which scored above 0.5 and had no cross loading on other factors, except the last one which loaded lower on the second factor. Factor 4 was labelled "Benefits to the end users."

Improved service to the community and improved facilities to the end users were the highest loading items on the first factor. It is expected that value for money can be achieved in PPP projects since they generate benefits to the community and end users where the private party employs state of the art technologies and skills to maximise the returns of the project and where innovative ideas are introduced to the community. Innovation also leads to lower costs for the project, leading to benefits in the form of low tariffs and service charges for availing the services. Appropriate capital structuring also generates an abundance of benefits to the public, as the most viable capital structure will lead to the optimum project cost, which will determine the service charges to the public. These are all benefits that the end users are deeming as value for money for adopting the PPP models.

UK Value for money factors

The correlation matrix of the sixteen items of the value for money factors scale was produced through the utilisation of SPSS. All factors satisfied the correlation requirements since they all had partial correlations above 0.3 [18] (Table 6).

Insert table 6 here

The value for the Kaiser-Meyer-Olkin measure of sampling adequacy was 0.637, suggesting that the sample is factorable [18,19].

Insert table 7 here

Bartlett's Test of Sphericity was large (Chi-Square =631.23, significant= 0.000), therefore it is unlikely that the correlation is an identity matrix. The Anti-image correlation of all factors was satisfactory with an MSA greater than 0.5 for all items. Therefore, there was no need to eliminate any factor, and factor analysis should proceed to the next step of analysis [18]. When Eigenvalue was set to be greater than one, four factors could explain 71.3% of the total variance; the remaining twelve factors together accounted for 28.7% of the variance. Therefore, a four-factor model was adequate to represent the value for money factors for PPP models (Table 7). The data was analysed by means of principal component analysis, where factor grouping through a Varimax rotation was used (Table 8).

Insert table 8 here

Optimization of private party's contribution

Seven items loaded above 0.5 onto the first factor without cross loading on other factors. This primary factor accounted for 24.6% of total variance and included incentives for private party (.714), improved services to the community (.707), appropriate capital structure (.687), efficient dispute resolutions (.651), optimised risk allocation (.645), private sector's project management skills (.611), and long-term engagement (.557) This primary factor was labelled 'Optimization of private party's contribution.'

When the private party is offered incentives for participation in a project, it will maximise its efforts to reap the full potential of such benefits. Such incentives can be in the form of rewards for early completion, optimised services, appropriate risk sharing, guarantees for securing the funds provided by the private party, etc. These incentives are expected to optimise performance, reduce development cost, and minimise the public party's exposure to risk, all of which will increase the chances for the achievement of value for money of the developed project.

Improved services to the community had a high loading on the optimisation of the private party's contribution. By allowing the private party a buffer to introduce new technologies and innovative development ideas, improved services can be attained where efficiency in development cost are expected as well. Therefore, the community will receive better services and reduced tariffs and service charges for using such facilities and services.

Appropriate capital structuring loaded fairly high on the optimization of private party's contribution. By allowing the private party flexibility in introducing the most viable

alternatives for structuring the funding of the project and providing them access to financial institutions, the most cost effective project can be achieved leading to success for value for money objectives.

The fourth variable loading on this factor was Effective dispute resolutions. The outcome of private parties is optimised when there are clear, detailed criteria for managing such change. Prompt and realistic settlement of disputes will minimise time and cost wastage and will enforce the mutual benefit objective for the safe completion of the project, all of which will lead to efficiency in cost and time and help maximise the contribution of the private party, leading to improved chances for value for money.

Optimised risk allocation also plays a significant role in the contribution of the private party. Risk should be allocated to the party capable of managing it best. The public party should not transfer any risks that the private party that it is not interested in handling. If all risks are allocated to the right party, fewer eventualities will be expected and the private party will contribute more to the project since they will feel protected from risks that do not belong to them.

The last two items loading on the first factor are private sector's project management skills and long-term engagement. If the private party is allowed to use their management skills in delivering the project where previous experiences and exposure to the latest technologies will be employed for completing the project, value for money will be achieved in the form of time and financial efficiency. The long-term engagement gives more security to the private party, as the public party will be more inclined toward the sustainability of the project and will prefer the mutual benefits from the project. This will improve the contribution to the project and efficiency is expected to be achieved.

Project sustainability

Factor two accounted for 19.2% of total variance in value for money factors for PPP alternatives. Four items loaded above 0.5 onto factor two and had no cross loading on other factors. These items are low tariffs (.794), low life-cycle cost (.789), optimisation of assets efficiency (.781), and technical innovation (.591). The second factor was labelled 'Project sustainability.'

Low tariffs had a high loading onto the project sustainability factor, as it indicates that low tariffs are expected from the sustainability PPP projects offer. The private party involves their

skills and resources to maximise the returns on the project where cost savings are supposed to be achieved and therefore lower tariffs can be expected.

The value for money through the sustainability of the project is also more achievable from the low life-cycle cost benefit achieved by PPP models. The integration of all development phases from design ,construction, management, maintenance, finance, etc. helps avoid redundancy and utilise the resources more properly which leads to better value for money.

Optimization of assets efficiency loaded high on the project sustainability factor for value for money objectives of PPP projects. Proper optimisation of the assets through the use of technology to exploit the potential of these assets will generate additional value through efficiency and improve facilities and services for the community.

Technical innovation through the utilisation of state of the art concepts and products is expected to contribute significantly to the sustainability of the project. Such concepts and products will be integrated into the processes and operation of the project which will optimise resource management and reduce redundancy, improving the end product and ensuring the best value for money spent.

Competitive procurement

The third factor for the value for money factors for PPPs scale accounted for 14.0% of total variance and had two items loading above 0.5 onto it. These items are competitive bid process (.840) and clear output specification (.808). This factor was labelled "Competitive procurement." Competitive bid loaded high on the competitive procurement factor for achieving value for money objectives of PPP models. It indicates that a competitive bid process is critical in order for the project to deliver value for money. Due consideration must be given to all stages of the bid process from the pre-qualification to the final close to ensure that the best tenderer is awarded the project.

Clear output specifications also loaded high on the competitive procurement factor. In order for the procurement process to contribute to the value for money objectives of a PPP project, output specifications must be clearly stated in the contract rather than relying solely on input specifications. This is important because input specifications change over time and open an area for unnecessary disputes.

Benefits to the public

The fourth factor for the value for money factors for PPPs scale accounted for 13.4% of total variance and had three items loading above 0.5 onto it. These items are Reduced negative environmental impact (.750) Early service delivery (.687), and Improved facilities to the users (.593). This factor was labelled "Benefits to the public." A high loading was given to reduced negative environmental impact onto the benefits to the public factor indicating that it is a critical value for money target from the public perspective. Consideration for environmental risks are likely to reduce the financial implications associated with their occurrence and will likely gain more public support for the project.

Early service delivery is perceived as an important benefit to the public and leads to the achievement of the value for money objective. It is expected that early delivery of the project will solve certain issues related to services in demand, will expedite the cash inflows which will relieve repayment process of the debt, and reduce the cost associated with the development of the project.

Improved facilities to the users is the lowest variable that loaded onto benefits to the public factor. Value for money is achievable from the public's perspective when the PPP project leads to improved facilities for them. This is possible because PPPs bring funds which make it possible for governments to overcome the issue of budget restraints and therefore deliver the required facilities. PPPs also bring new ideas and technologies in for the development of the project, leading to creating improved facilities and more value for money.

DISCUSSION

Optimised risk allocation and a competitive bid process were ranked first and second by the UAE sample and second and first by the UK respondents respectively (Table 2). These two factors, according to the very high significance given to them by both groups, indicate their importance in achieving the value for money objectives that make the government prefer PPP models over other conventional methods. This is in line with the findings of Chou et al. [20]. Risk allocation plays a significant role in maximising the success of PPP projects. Risk should be allocated to the party that is known to manage its consequences best. When the risks are allocated properly, fewer eventualities will be expected in the project, and timely remediation of their consequences will be possible as well, leading to optimised performance and more value from the project [20, 4, 21].

A competitive bid process is so critical to the success of PPP projects and to the value they offer, as it is the process that is supposed to bring the best bidder that can deliver the

objectives of the project. This process starts right after designing the output specifications of the project and consists of the prequalification of bidders, the evaluation of bids, negotiations with qualified bidders, an award to the right bidder, and financial close. All of these steps are essential for the success of the project and the maximisation of its value for money. This is echoed by the findings of WBI [21]. Clear output specification also was a very significant factor, which concurs with the guidelines of the European PPP Expertise Centre [22]. This is because PPP contracts are long-term projects where input specifications vary over time. It is important for the developers to put the products and services back on track to correspond to the adjusted specifications. These specifications must be very clear to avoid unnecessary disputes and to ensure that the public receives the right services and facilities as highlighted by The European PPP Expertise Centre [22].

Improved services for the community was ranked among the most important outcomes of PPPs by both groups, who believed in their significance in achieving value for money. The private party, by undertaking the type of contracts that the PPPs are, seeks to maximise its returns on its investment for the full life cycle of the project. This maximisation of benefits comes through the integration of all project phases and scopes under one integrated system where all resources are utilised efficiently. In this efficient utilisation, the private party seeks state of the art technologies and innovative ideas for the development and operation of the project, all of which leads to better services and improved facilities to the community. This is confirmed by WBI [21].

Improved facilities to the users ranked fifth in the UAE and ninth in the UK. This factor is among the most important factors for achieving value for money for the UAE respondents, though not so significant for the UK's. The reason for this may be that the UAE respondents look at PPPs as providers of unique projects, especially in the areas of healthcare and infrastructure, where new technologies and innovative ideas are employed to improve the return on investment. In the UK, the services are already at the highest level of quality, as the PPP/PFI projects have been perfected over decades of practice, and the respondents did not see the added value for money in this regard. The same could be inferred on the optimisation of assets efficiency factor as well, it ranked sixth and seventh in the UAE and the UK respectively. This can be attributed to the fact that the private party would look into all alternatives to maximise the utilisation of the asset, whether a new one or an existing one, to maximise the profits, leading to more facilities and improved ones for the community as highlighted by WBI [21] and Akintoye et al. [8].

Technical innovation was ranked seventh and the private sector's project management skills eighth by the UAE respondents, but fifth and tenth respectively by the UK's respondents. Private parties involved in PPP projects employ technologies and management systems to integrate processes and optimise resource utilisation, which contributes to the sustainability of the project by reducing cost, improving efficiency, and catering for better services to the public, leading to the achievement of more value for money as highlighted in the studies of Zhang et al. [23] and Grasman et al. [24].

CONCLUSION

The findings of the local surveys, when compared to the UK sample, highlighted that the local value for money factors that must be satisfied to improve the success rates of PPP are almost similar to the ones in the UK, and therefore it could be inferred that any measures regarding the value for money factors that prove their success within the UK could have similar results in the UAE. The similarity in ranking the significance of the VFM factors between the two countries could be attributed to the fact that the majority of the local sample, due the lack of local practice, had previous international experience, which could be dominated, to a certain extent, by generic PPP standards. Furthermore, most of the local PPP projects have significant involvement of British financial, legal, and engineering firms.

There was no such detailed and empirical work for local PPP VFM factors and comparing them to a sample conducted in the UK, has been done before in the UAE. This outcome is expected to benefit the upper management of local government departments, federal ministries, and countries of transitional economies to understand the significance of value for money factors when assessing local PPPs and to help them make informed decision for what to develop as PPPs.

To the body of knowledge, this study made a contribution to research in the field of Public Private Partnerships in the UAE and the UK. The comparative analysis in between both countries highlighted the similarities in the practice currently and opened areas of any considerations in the near and far future. The same can be said for the differences between both countries.

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Private sector's project management skills	0.19	0.27	0.32	0.22	0.26	0.25	0.12	0.22	0.24	0.5	0.58	0.19	0.0
Technical innovation	0.34	0.37	0.42	0.33	0.39	0.38	0.05	0.47	0.25	0.12	0.2	0.45	0.2

Table 4: UAE Value for money factors- Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.784	36.152	36.152	5.784	36.152	36.152	3.854	24.090	24.090
2	2.533	15.831	51.983	2.533	15.831	51.983	2.930	18.312	42.402
3	1.851	11.569	63.553	1.851	11.569	63.553	2.491	15.568	57.970
4	1.437	8.984	72.537	1.437	8.984	72.537	2.331	14.566	72.537
5	.890	5.563	78.100						
6	.831	5.196	83.296						
7	.729	4.559	87.855						
8	.475	2.967	90.821						
9	.343	2.143	92.965						
10	.300	1.875	94.840						
11	.236	1.472	96.312						
12	.219	1.371	97.683						
13	.136	.851	98.534						
14	.098	.610	99.143						
15	.093	.579	99.723						
16	.044	.277	100.000						

Table 5: UAE Value for money factors- Rotated Component Matrix

	Component			
	1	2	3	4
Optimisation of assets efficiency	.880			
Optimised risk allocation	.735			
Technical innovation	.699			
Clear output specification	.675			
Low life-cycle cost	.666			
Competitive bid process	.601			
Reduced negative environmental impact		.908		
Efficient dispute resolutions		.855		
Early service delivery		.680		
Incentives for private party			.843	
Long-term engagement			.843	
Private sector's project management skills			.790	
Improved services to the				.763

14	.159	.991	98.673
15	.118	.736	99.409
16	.095	.591	100.000

Table 8: UK Value for money factors- Rotated Component Matrix

	<i>Component</i>			
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Incentives for private party</i>	.714			
<i>Improved services to the community</i>	.707			
<i>Appropriate capital structure</i>	.687			
<i>Efficient dispute resolutions</i>	.651			
<i>Optimised risk allocation</i>	.645			
<i>Private sector's project management skills</i>	.611			
<i>Long-term engagement</i>	.557			
<i>Low tariffs</i>		.794		
<i>Low life-cycle cost</i>		.789		
<i>Optimisation of assets efficiency</i>		.781		
<i>Technical innovation</i>		.591		
<i>Competitive bid process</i>			.840	
<i>Clear output specification</i>			.808	
<i>Reduced negative environmental impact</i>	.500			.750
<i>Early service delivery</i>				.687
<i>Improved facilities to the users</i>				.593