Regional Stakeholder Perceptions of the Most Important PFI Skills

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Abstract: The Private Finance initiative (PFI) has emerged as the most preferred procurement strategy by governments across the globe for the provision of quality public infrastructure and services. The strategy has evolved due to fiscal constraints and the low quality of publicly provided infrastructures. However, the sojourn into PFI has not been a complete tale of success, with many major infrastructure provided through this strategy being bought back by the public sector in response to public outcry, resulting in the private provider's inability to recoup their investments and the public sector facing criticism for inefficiency or wrong choice of procurement. This paper sets out to find out from African, Australasian (a combination of Australia & Asia) and Middle East delegates to 2 PFI-Focused conferences Held in Kuala Lumpur, Malaysia about their perceptions of important skills required by the client in order to ensure success on PFI projects. It was found that stakeholder management skills, bid evaluation skills, sector-specific knowledge, contract management skills and risk identification & management skills were the most important skills which the client requires in order to achieve success in PFI projects as ranked by the various respondents.

Introduction

The Private Finance Initiative (PFI) has become the most discussed mode of public infrastructure and services procurement method. The concept stems from the current public service reform sweeping through the globe in the form of New Public Management, which is the adoption of market mechanism into the public service. In the light of this, Many economists, some finance minister in developing countries and heads of the major international development organisations advocated increased use of the market mechanism as a key instrument for promoting greater efficiency and more rapid economic growth" [1]. "Private Finance Initiative (PFI) is a PPP special case where all the finance needed for the capital funding and its basic operation is supplied by the private sector in return for a service charge" [2 p.280]. commentators on PFI have tried to differentiate between PPP and PFI, however "Such differences in definition and understanding can make accessing the international experience difficult: in the UK, the PFI is simply one type of PPP, while in some countries and regions, the PFI is the only model and therefore the terms PPP and the PFI are synonymous" [3]. The rationale for this as hyped by the proponents are that it "offers better value for money (VFM) than the traditional procurement route [4], manage the twin risks of time and costs overrun[2 p.280], provide infrastructure faster than would otherwise be possible using purely public finances, reduce the presence of government in the economy, provide services inclusive of maintenance and the failure of the public sector to efficiently deliver public services. The need for public and private partnerships has evolved gradually since the early1980s, when serious criticism emerged towards inefficient and unresponsive public service providers. Resulting

in a conservative shift in economic, social, and political thinking, two parallel reform trends evolved in the public sector. These reforms focused on the transformation of the government by (i) promoting decentralization and (ii) moving service management out of the public sector through privatization and other service mechanisms based in the private sector [5]. The PFI procurement strategy has developed in form and substance since its early use in the UK with different countries developing it to suit their local conditions. Most of the services outsourced under PFI are critical infrastructures, which are "systems or assets vital to a country that any extended incapacity or destruction of such systems would have a debilitating impact on security, the economy, national public health or safety or any combination of the above" [6]. The concept of PFI is spreading from the developed through the emerging economies to the developing countries. While the use of PPPs has spread to most EU Member States, the UK is still the largest and most diverse PPP market [7]. However, [8] argues that "the main controversy still surrounding this method of procurement is the ability or otherwise, by the proponents of PPPs to produce incontrovertible and independent proof that PPP/PFI projects deliver value for money when compared with the more traditional public sector procurement strategies". PFI schemes have allowed private investors to make huge profits from building public amenities. Scottish economists Jim and Margaret Cuthbert found that the equity investors in the Hairmyres hospital in East Kilbride, construction firm Kier and financiers Innisfree, stood to make £145m from an initial investment of £8.4m [9]. A number of high profile buyback and bail-outs schemes like the Skye toll Bridge, London underground and Metronet is creating an environment that seem to suggest that all is not well with the PFI. Only recently, the state of California in the United States which is known to be a huge supporter of private involvement in infrastructure surprisingly approved \$68billion of public funding for its proposed high-speed rail line [10] in spite of the present financial problems which has led to cuts in public spending globally. The reasons for the present caution in the adoption of the PFI has been placed at the door step of the client, who are accused of not properly assessing and evaluating the business cases for PFI while factoring in public value due to the inadequate skills that has often pervaded the public sector. Therefore, it has become pertinent to seek to find out what skills are actually required by the public sector client if the PFI is to work for all stakeholders-Government, the private sector, the public and civil societies.

Skills Set Required for Effective 'Clienting'

The involvement of the private sector in the provision of public infrastructure is not a new concept in its entirety. The public client has always hobnobbed with the private sector through appointments as design and construction consultants, as construction contractors and as financial and technical advisers. The provision of funding for projects by the private sector is also not new with the existence before now of the Turnkey form of contracting. PFI create administrative and implementation challenges for public procurement professionals that are not found in more traditional procurements [11], requiring the development of different skills set from those previously possessed by the public sector. Under the PFI, unlike the traditional procurement method, the client specifies the output requirement as against an input requirement which has been the norm under the traditional procurement. And to do this efficiently requires skills in forecasting supported by the existence of quality data to assist in the specification process. But the public client that is supposed to have superior knowledge of the demand forecast due to the resources that is available to them to acquire the relevant information are unable to do this. The result has been that "demand and benefit forecasts that are wrong by 20-70% compared with actual development are common" [12], but [13] puts this figure within the range of 20-30% thereby leading to the concessionaire's inability to meet estimated targets in terms of demand and consequently financial performance. The effect of this has been that the client either comes to the aid of the provider (London Underground & Metronet) or the project is taken back by the client with its inherent risks (Railtrack). When the National Armoury Museum PFI project in the UK could not record the

forecasted number of annual visitors leading to low fiscal performance, [14] observed that, the crisis was resolved by providing additional public funds and transferring the operational risk back to the public sector. [15] Found that in relation to the negative aspects of PFI the inexperience of the participants, the over-commercialisation of projects, and high participation cost and time, make PFI procurement less attractive. The [16] in their study found that "Public sector project management in PFI does well when it comes to client understanding, process understanding and political skills but is relatively weak in negotiating and management skills. The public sector also lacks skills in whole life cycle costing (including FM), construction, financial modelling, stakeholder management, and people skills". Projects do not just fail; projects fail often due to inadequate contract design and proper assessment of risks by both the client and the concessionaires. [17] Note that generating value from public-private partnerships requires carefully defining project scope and ensuring competition during procurement. While the concessionaires tend to produce very optimistic figures to ensure they secure the contracts, the clients on the other hand, due to information asymmetry and the more superior knowledge of the private providers, are unable to critically assess the bids to ensure that the projections are realistic. According to [12] Over-optimism can be traced to cognitive biases, that is, errors in the way the mind processes information. These biases are thought to be ubiquitous, but their effects can be tempered by simple reality checks, thus reducing the odds that people and organizations will rush blindly into unprofitable investments of money and time. In most PFI projects, the private provider seem to have the upper hand in deciding the terms of the contract, the financial model upon which the contract is based and they even go a step further to prevent the public client from divulging the details of the contract to the public in line with entrenched public service ethos. This has resulted in sacrificing democratic control to commercial confidentiality [18]. In another study by the National Audit Office (NAO) to assess the skill requirements for effective 'clienting', they observed that "the biggest skills gaps for Government are in contract management, commissioning and managing advisers, risk identification and management, and business acumen" [19]. Furthermore, for operational concessions, it is important to have capable regulators with the required skills to effectively govern the service provision. However, [20] in their study of water concession contracts in Buenos Aires, pointed out that the failures of PFI results from the presence of a weak and inexpert regulator. Regulatory failure was also cited as the reason for the failure of Cochabamba water concession in Bolivia [21]. The importance of regulatory governance played itself out in the Enron scandal, in a study by [22], he observed that during the post-Enron era, "firms used several accounting charges including special items, discontinued operations, asset write- offs and goodwill impairment charges to decrease reported income. Before political sensitivity, the majority of special items in the industry were income increasing". Another area of importance in the PFI process is stakeholder management, which was defined by [23] as individuals or organisations that are either affected by or affect the development of the project. They also went further citing [24] to point out that major PFI transport initiatives in the United States have reportedly failed due to stakeholder opposition. These failures were mainly because the public was 1) unaware of the concept of P3 b) not sufficiently educated about P3 and c) denied access to detailed information contained in the consortium's P3 proposal. The inability of the client to match up with the private provider's skills often leads to renegotiations, disputes, take-overs, buy- backs, abandonment and in extreme cases cancellation of the project. [25] in their study provided a sample of 'High-Profile Controversies Involving Private Infrastructure' according to regions, these included

East Asia

- Takeover of Bangkok Second Stage Expressway (1993)
- Cancellation of Dabhol power plant (1994)
- Renegotiation of Independent Power Producer (IPP) contracts in Indonesia, Pakistan, and the Philippines (1998)

- Abandonment of Manila water concession (2001)
- Abandonment of Manila airport concession (2004)

Latin America

- Mexican toll road bankruptcies (1995)
- Cancellation of Tucuman water concession (1996)
- Cancellation of Cochabamba water concession (2000)
- Cancellation of Arequipa electricity concession (2002)

• Argentina's economic crisis and devaluation threatens to bankrupt private utilities (2002)

Industrialized Countries

- California's electricity crisis (2000)
- Railtrack bankruptcy (2001)

When the client possesses the relevant skills, they are able to evaluate bids and identify potential areas of conflicts and resolve these with the private provider before the project starts. The effect of failure or cancellation on public infrastructure projects has far reaching consequences, not only for the government, but also the public end-users, the local economy and even workers employed by the private provider. The employees of Enron lost their life savings and pensions due to the failure of Enron. [26] observed that in order to achieve success in PFI procurement, Staff with experience in complex procurement having a strong mix of PFI/PPP, commercial, financial, technical and sector specific experience' were required and the departments/units should be able to attract and retain appropriate expertise. This problem of inadequate PFI experience is exacerbated by lack of opportunities to acquire PFI skills [16], because external consultants are often called upon to carry out most of the technical advisory works further adding to the transaction costs of PFI projects. Recognising the need for appropriate skills within the public sector, in 2009-2010 The UK government spent 275 million on learning and development [27]. Concluding [28] observed that "a well-institutionalized bureaucracy makes a vital contribution to the quality and coherence of decision-making through policy advice and the structuring of the decision making process, even though the decisions themselves are taken outside the bureaucracy. Policy capacity is indeed a crucial component of public sector capacity". And, the project sponsor is ideally placed to identify issues of concern and areas for improving management practices within the construction project management" [29].

Research Methodology

The literature review was the primary source relied upon, the basis for this is that "knowledge accumulates and one can learn from and build on what others have done in the past [30]. The identified skills were used to design a survey questionnaire which was intended to target participants at two PFI/Infrastructure conferences held in Kuala Lumpur Malaysia in the earlier part of this year. The conferences brought together heads of government infrastructure agencies across Africa, Asia, Middle East, Europe and North America. I65 questionnaires were distributed between the two different conferences, but only 42 were retrieved from the delegates. However, one of the delegates who took a questionnaire away was kind enough to fill it out, scanned and sent it to the email address on the questionnaire making the total 43 representing about 26% return rate which is comparable to [31]'s 21% achieved in the UK. The collected data were entered into SPSS statistical software version 17.0 and analysed to draw inferences.

Results and Discussion

The data were subjected to various tests including reliability test, validity test, and Spearman's rank correlation and finally the Relative Importance Index (RII) was used to rank the factors to reveal the most important skills as perceived by the respondents. The RII was used by [32] to rank Important Skills of Effective Project Leaders. The results reveal that 8 of the respondents were delegates from Africa, 26 from Australasia (a grouping of Asia and Australia), 6 from Middle East, 1 delegate from Europe and 2 delegates from North America all participated in the survey. The reliability test carried out on the data returned a Cronbach's alpha of 0.961 which shows that the instrument was 'highly' reliable using the guide provided by [33 p.231] Greater than 0.9 = Excellent; Greater than 0.8 = Good; Greater than 0.7 = Acceptable; Greater than 0.6 = Questionable; Greater than 0.5 = 0.5Poor; Less than 0.5 Unacceptable. On the validity tests, a generally accepted rule of thumb for explaining construct validity was provided by [34] who pointed out a validity test score of more than 0.90 is statistically considered excellent; 0.70 - 0.90 is high, 0.5 - 0.7 is moderate while below 0.50 indicates a low validity rate of the variables meaning that the questionnaire did not measure what it was constructed to measure. However, the validity test returned a value of 0.79 which falls within the range classified as 'High'. Spearman's rank correlation was conducted between delegates from Africa/ Australasia, between Middle East/Australasia, and between Africa/Middle East. The result from the Spearman's rank correlation showed (Africa /Australasia ?=0.31, Middle East/Australasia ?=0.36, and Africa/Middle East ?=0.38) a generally positive relationship between the regions, though the strength of the relationship fell within the moderate/medium classification by [35]. In computing the RII for the various regions, the respondents from Europe and North America were excluded for the simple reason that they were negligible in terms of number of respondents (Europe= 1 respondent, North America= 2 respondents) to make any impact neither were their responses subjected to the Spearman's Rank correlation for the same reason. Surprisingly, all delegates from the 3 regions considered 'stakeholder management skills' (Africa = 0.98, Australasia = 0.87, Middle East=0.80) as the most important skill required by the public sector to effectively prosecute successful PFI projects. Stakeholder management is crucial to the success of PFI projects, the inability to manage stakeholders properly led to the Cochabamba failure reported by [21] while it was responsible for the success reported by [36]. "Experience has shown that a positive involvement with stakeholders can be a decisive factor that can 'make or break' a project" [23]. The 2nd overall skill as perceived by the respondents is 'bid evaluation skills' (RII=0.84). The proper evaluation of submitted bids is central to any PFI project; this is because the bid documents are entirely the product of the profit-maximising private sector that are adjudged as having 'superior' expertise than the public sector. Therefore, the ability to assess bids properly is the first line of defence against failure and profiteering. The factor in question was ranked in 3rd place by Australasia and Middle East while it was ranked in the 6th place by African delegates. Having 'adequate sector knowledge' (RII=0.84) ranked 3rd place overall, this was also the position as ranked by African respondents, however, Australasia delegates ranked this factor in 11th place while middle East delegates ranked it 7th place.

It is pertinent for the public sector client to have staff with 'sector knowledge' knowledge of any particular project being embarked upon in order to be able to interact with the private provider on equitable terms rather than the current situation where there is a high level of information asymmetry between the two contracting parties. "Contract management skills" ranked 4th place overall, but was ranked by African and Australasia delegates in 2nd place while the Middle East ranked it in the 7th place. PFI projects are usually considered as incomplete contracts [37], which means they are subject to modifications and hence are not rigid in nature, however, in the absence of a skilful contract management team, the private provided can become opportunistic due to the incompleteness of the contract. The 5th ranked overall skill was 'risk identification and management skills' which was ranked in 7th place. The importance of risk management cannot be over-emphasised especially in the private sector where proper risk identification and management has been

recognised as an important element in achieving projected profits. However, the public sector over the years has not attached much importance to risk identification and management until recently.

Ranking of PFI skills perception accros Africa, Australasia and Middle East								
No Required Skills for PFI	RII for Africa	Ranking for Africa	RII for Aus/Asia	Rank for Aus/Asia	RII for M/East	Rank for M/East	Overall RII	Overall Rankings
¹ Stakeholder management skills	0.98	1	0.87	1	0.80	1	0.88	1
2Bid Evaluation skills	0.9	6	0.85	3	0.77	3	0.84	2
3Sector knowledge	0.93	3	0.82	11	0.77	7	0.84	3
4 Contract management skills	0.93	2	0.85	2	0.73	9	0.84	4
5Risk identification and mgt skills	0.88	7	0.84	7	0.77	4	0.83	5
6Business analysis skills	0.88	8	0.83	9	0.77	5	0.83	6
7Output specification skills	0.88	9	0.83	10	0.77	6	0.83	7
8Negotiation skills	0.9	4	0.82	12	0.73	13	0.82	8
9Ability to manage external advisers	0.85	10	0.8	16	0.77	8	0.81	9
10 Regulatory governace skills	0.85	11	0.85	4	0.73	10	0.81	10
11Human capital assessment skills	0.9	5	0.79	17	0.73	15	0.81	11
12Demand forecasting skills	0.83	13	0.84	8	0.73	12	0.80	12
13 Environmental/sustainability assessment skills	0.75	16	0.82	14	0.80	2	0.79	13
14Financial engineering skills	0.78	15	0.85	6	0.73	11	0.79	14
15Life-cycle costing skills	0.83	12	0.82	13	0.73	14	0.79	15
16Contract Design skills	0.78	14	0.85	5	0.70	16	0.78	16
17Design/Technical Skills	0.68	17	0.82	15	0.70	17	0.73	17

A cursory look at the table reveals a unique pattern regarding the perceptions of all the regional respondents. The way the RII works is that when all respondents favour one extreme, the values tend to be very high and closer to 1 while in cases where responses are balanced between the two extreme, the values seem to hover around the 0.60-0.70. The African delegates had a larger agreement regarding the required skills while the Middle Eastern delegates seem to be divided hence their entire ranking hovers around the 0.70 region while the Australasian delegates stood around 0.76-0.88 but not above it. A possible explanation for this trend would be that on the part of the African delegates, there has not been much activity in PFI therefore experiences of the actual workings of PFI and their attendant complexity has not been witnessed enough to understand the actual skills requirement. The Middle East too have not had enough PFI experience to understand the skill requirements as they have enough liquidity to hire experts from across the globe; hence their perception profile and rankings. Furthermore, the middle East have not engaged in PFI for the reasons other regions engage in it (shortage of public funding), rather they have engaged in PFI in order to overcome maintenance problems, consequently the nature of the values they have attached to the various skills listed. On the part of Australasian delegates, they have had a mixture of successes and failures; and as a result now understand what skills are actually required for effective PFIs. Their governments are open and somewhat more transparent that the other two regions, they carry out continuous consultations with the people with regards to major infrastructure policies. One factor whose ranking seem abnormal owing to its importance in PFI is 'Contract Design Skills', it ranked 16th place overall, but unsurprisingly, Australasian delegates ranked it in 5th place further proving their long experience with private involvement in public infrastructure has taught them that contract design stands as a major factor in determining the success or failure of a PFI project.

Conclusion

The public sector has always been criticised for their inefficiency in the delivery of public infrastructure and services. This led to the privatisation of many state-owned institutions

responsible for the provision of public services. However, the experiences with privatisation in the last two decades has not been entirely pleasant resulting in the evolution of the PFI as a solution that was thought would return some amount of control back to the government. The experiences with the PFI have now been seen to mirror what was obtainable under the much criticised privatisation with the public always at the receiving end. The diagnosis of this trend points to one clear problem, that is in both cases-privatisation and PFI-the public sector lacked the relevant skills to effectively oversee these processes, resulting in the failures being witnessed in the two strategies. Experience has shown that with proper stakeholder management, both strategies can be made effective. The result of the study has also reinforced that position, the importance of 'stakeholder management skills' to build a solid support base for a project, if success is the goal. This study reveals that overall, stakeholder management skills, bid evaluation skills, sector knowledge, contract management skills, risk identification and management skills, output specification skills and negotiation skills in that order are perceived by stakeholders/practitioners as the most important skills set required by the public sector client to ensure success on PFI projects. Therefore, it is pertinent for the public sector client to analyse its human resource capital to ensure that the required expertise is available. Where there is a shortage of the relevant skills, then a framework should be put in place to attract and retain such skills while training and improving on those available.

REFERENCES

- [1.] Todaro, M., & Smith, S. (2009). Economic Development. New York: Addison-Wesley.
- [2.] Fewings, P. (2005). *Construction Project Management: An Integrated Approach*. Abingdon: Taylor & Francis.
- [3.] CBI. (2007). *Going Global: The World of Public Private Partnerships*. UK: Confederation of British Industries.
- [4.] Parker, D., & Hartley, K. (2003). Transaction costs, Relational Contracting and Public Private Partnerships: A case study of UK Defence. *Journal of Purchasing and Supply Management*, 9, 97-108.
- [5.] Peteri, G. (2010). Public-Private Partnerships: The Good and the Bad; In Dušan Damjanovic, Tatijana Pavlovic-Križanic & Gábor Péteri (2010) Public-Private Partnerships Successes and Failures in Central and South Eastern Europe. Budapest: Open Society Foundations
- [6.] Dunn-Cavelty, M., & Suter, M. (2009). Public–Private Partnerships are no silver bullet: An expanded governance model for Critical Infrastructure Protection . *International Journal of Critical Infrastructure Protection Volume 2, (4)*, 179-187.
- [7.] Thomson, C., & Goodwin, J. (2005). *Evaluation of PPP projects financed by the EIB*. Luxembourg: European Investment Bank.
- [8.] Cartlidge, D. (2004). Procurement of Built Assets. Oxford: Elsevier Butterworth-Heinemann.
- [9.] UNISON. (2009). *Reclaiming the Initiative: Putting the Public Back into PFI*. London: UNISON.
- [10.] Lin, J. (06 07, 2012). California OKs funding for high-speed rail line. Retrieved 09 07, 2012, from U-T Sandiego News : http://www.utsandiego.com/news/2012/jul/06/california-oksfunding-for-high-speed-rail-line/
- [11.] Lawther, W. C., & Martin, L. L. (2005). Innovative Practices in Public Procurement Partnerships: The Case of the United States. *Journal of Purchasing & Supply Management*, 11, 212-220.

- [12.] Flyvbjerg, B. (2009). Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it. *Oxford Review of Economic Policy*, *25*(*3*), 344–367.
- [13.] Estache, A. (2001). Privatization and regulation of transport infrastructure in the 1990s. *The World Bank Research Observer 16 (1)*, 85–107.
- [14.] Froud, J. (2003). The Private Finance Initiative: Risk, Uncertainty and the State. *Accounting, Organizations and Society, 28*, 567–589.
- [15.] Li, B., Akintoye, A., Edwards, P., & Hardcastle, C. (2005). Perceptions of Positive and Negative factors influencing the attractiveness of PPP/PFI Procurement for Construction Projects in the UK: Findings from a questionnaire survey. *Engineeering, Construction and Architectural Management, 12 (2)*, 125-148.
- [16.] RICS Project Management Faculty. (2003). Project Management and the PFI. UK: RICS.
- [17.] KPMG. (2007). *America's Infrastructure Strategy: Drawing on History to Guide the Future* . United States: KPMG LLP.
- [18.] Mehra, N. (2005). *Flawed, Failed, Abandoned, 100 P3s: Canadian and International Evidence.* Ontario: Ontario Health Coalition.
- [19.] NAO. (2009). *Commercial skills for complex government projects*. London: National Audit Office.
- [20.] Casarin, A. A., Delfino, J. A., & Delfino, M. E. (2007). Failures in Water Reform: Lessons from the Buenos Aires's Concession. *Utilities Policy*, *15*, 234-247.
- [21.] Nickson, A., & Vargas, C. (2002). The Limitation of Water Regulation: The Failure of the Cochabamba Concession in Bolivia. *Bulletin of Latin American Research, 21(1)*, 99-120.
- [22.] Scott, W. (2009). The Enron effect in the electric services and natural gas industry on accounting choices. *Research in Accounting Regulation*, 21, 60–62.
- [23.] El-Gohary, N. M., Osman, H., & El-Diraby, T. (2006). Stakeholder Management for Public Private Partnerships. *International Journal of Project Management*, 24, 595-604.
- [24.] Levy, S. (1996). Build, Operate, Transfer. New York: Wiley.
- [25.] Gómez-Ibáñez, J. A., Lorrain, D., & Osius, M. (2004). *The Future Of Private Infrastructure* . Cambridge : Taubman Center for State and Local Government .
- [26.] NAO. (2010). From Private Finance Units to Commercial Champions: Managing complex capital investment programmes utilising private finance- A current best practice model for Departments. UK: National Audit Office/HM Treasury, P.22.
- [27.] NAO. (2011). *Identifying and meeting central Government's skills requirements*. UK: National Audit Office.
- [28.] Polidano, C. (2000). Measuring Public Sector Capacity. World Development, 28, 5,, 805±822.
- [29.] Hall, M., Holt, R., & Purchase, D. (2003). Project Sponsors under New Public Management: Lessons from the frontline. *International Journal of Project Management, 21*, 495-502.
- [30.] Webster, J., & Watson, R. T. (2002). Analyzing The Past To Prepare For The Future: Writing A Literature Review . *MIS Quarterly, 26 (2)*, xiii-xxiii.

- [31.] Proverbs, D., Holt, G., & Olomoaiye, P. (1999). European construction contractors: a productivity appraisal of in-situ concrete operations. *Journal of Construction Management and Economics*, 17(1), 221-230.
- [32.] Odusami, K. T. (2002). Perceptions of Construction Professionals Concerning Important Skills of Effective Project Leaders. *Journal of Management in Engineering*, 18, 61-67.
- [33.] George, D., & Mallery, P. (2003). SPSS for Windows step by step: A simple guide and reference. 11.0 update (4th ed.). Boston: Allyn & Bacon.
- [34.] Hinton, P., Brownlow, C., McMurray, I., & Cozens, B. (2004). *SPSS Explained*. United Kingdom: Routledge.
- [35.] Cohen, J. (1992). A Power Primer. Psychological Bulletin, 112(1), 155-159.
- [36.] Correa, P., Melo, M., Mueller, B., & Pereira, C. (2008). Regulatory governance in Brazilian infrastructure industries. *The Quarterly Review of Economics and Finance*, 48, 202–216.
- [37.] Hart, O. (2003). Incomplete Contracts And Public Ownership: Remarks, And An Application To Public-Private Partnerships. *The Economic Journal, 113*, C69-C76.