Addressing the Missing Link in PPP Projects: What Constitutes the Public?

Pantaleo D. Rwelamila¹; Peter Fewings²; and Christian Henjewele, A.M.ASCE³

Abstract: Public private partnerships (PPPs), as new organizational forms, are intended to respond to societal problems previously held as intractable. In all countries, the originality of PPPs raises new questions of governance, which include the problem of sharing economic, social, and political responsibility among various segments of society in the development of the country; and the adoption of new institutional forms to enhance the efficiency of government action. These concerns are raised in both developed and developing countries, but with greater acuteness in the latter. In all cases, the central question regarding the relation between the public and private sectors is that which constitutes the public side of the partnership. This paper traces historical and contemporary developments in the need for PPPs; and current public protests against PPPs, which are perceived as impositions to the desires of the greater public. Using a principal-agent model as a lens, this paper provides a detailed understanding of what constitutes the first "P" (the public) in a PPP construct and shows how many current approaches in PPP project arrangements have failed to embrace the real public (an inclusive approach) and have instead been dominated by the artificial public agent (an exclusive approach). The paper provides an appropriate definition of the public and recommends the need for a paradigm shift from exclusion to inclusion in PPP arrangements. **DOI: 10.1061/(ASCE)ME.1943-5479.0000330.** © *2014 American Society of Civil Engineers*.

Author keywords: Defining the public; Policy; Project; Public inclusion; Public pivate partnership; Users.

Introduction

Public private partnerships (PPPs) have emerged internationally since the 1980s as a means to involve the use of private finance for public sector projects (Grimsey and Lewis 2004). The exact origin of PPPs is hard to track, but a few examples suggest that PPPs provide a way of transforming the delivery of public services to boost economic growth. In Britain between 1660 and 1860s, PPPs like concessions were granted to over 1,000 turnpike trusts, who administered approximately 30,000 mi of road in England and Wales, taking tolls at almost 8,000 toll-gates (Albert 1972) and allowing roads to be improved and maintained. This also occurred in the U.S. (U.S. DOT 2004). The use of concessions to provide public services was not limited to developed countries. The development of the Suez Canal, according to Grimsey and Lewis (2004), shows how concessions were widely used to develop major transport links such as canals, tunnels, and bridges. The role of the private sector in financing and operating public infrastructure declined during the world wars, following opposition from the overtaxed citizens, who perceived more private gains than public good (Prefontaine et al. 2000).

The changing market for public services and the need for intense involvement of the private sector in boosting the capacity of the public sector to provide more and better services have prompted the recurrence of PPPs; this has allowed for a more formal transfer of responsibilities from the state to private sector companies. PPPs bring together the public sector (client) and the private sector (supplier) in a moderate-term to long-term relationship that allows the parties to blend their special skills to serve the needs and interests of the public (Rwelamila et al. 2003; Grimsey and Lewis 2004). The private sector accepts responsibilities associated with designing, financing, constructing, and operating the facilities while allowing the public sector to perform primary functions in the delivery of services to the citizen. This also implies the transformation toward more efficient ways of delivering public services using private sector skills. Pressure from the public challenged governments to manage public properties more efficiently; to measure performance; to reduce costs and increase productivity; and to provide better services (Milakovich 2006). The public also opposed a full privatization ideology because they perceived it as a strategy to disengage from the provision of public services (Prefontaine et al. 2000).

The objectives of this paper are to provide a critical reflection on the resulting developments in PPPs and to discuss current public protests against PPP initiatives, which are perceived as a siphon rather than a solution to public needs. The paper will show how dominant approaches in PPP arrangements have failed to embrace an inclusive approach and have favored an exclusive approach. Finally, the paper redefines the public role and recommends the need for a paradigm shift from exclusion to inclusion in PPP arrangements.

First, the concern of public marginalization in PPP projects is discussed by drawing basic insights from the existing literature on challenges facing PPP in contemporary practice. Second, the paper addresses the importance of defining the public stakeholder in any PPP initiative. Third, the concern of marginalization of the public stakeholder is discussed to initiate a clear understanding of public partnering through the principal-agency theory. Fourth, it addresses PPP project practices and explains how the agency theory can be

¹Professor of Project Management; Graduate School of Business Leadership, Univ. of South Africa, P.O. Box 392, UNISA, Pretoria 0003, South Africa. E-mail: rwelapmd@unisa.ac.za

²Senior Lecturer, Dept. of Construction and Property, Univ. of the West of England, Frenchay Campus, Coldharbour Ln., Bristol BS16 1QY, U.K. E-mail: fewings@talktalk.net

³Lecturer, Faculty of Science and Technology, Anglia Ruskin Univ., Chelmsford Campus, Bishop Hall Ln., Chelmsford, Essex CM1 1SQ, U.K. (corresponding author). E-mail: Christian.Henjewele@anglia.ac.uk

Note. This manuscript was submitted on July 12, 2012; approved on June 24, 2014; published online on July 22, 2014. Discussion period open until December 22, 2014; separate discussions must be submitted for individual papers. This paper is part of the *Journal of Management in Engineering*, © ASCE, ISSN 0742-597X/04014085(10)/\$25.00.

used to distinguish between the real public (P_t) and the public agent (P_a). The emphasis is to help PPP project managers and other decision makers to embrace P_t and avoid public marginalization. Fifth, based on agency theory and practice discussion, the paper draws many implications for management and management theory regarding the governance of PPPs facing a demanding public base, and specifically the dynamics that surround the marginalization of the public. The final section of the paper suggests ways for PPP project managers and clients to work toward an appropriate partnership in project finance by allowing the public stakeholder to take their rightful place in any PPP project arrangement.

Challenges with PPP: Marginalization of the Public

One of the major challenges facing PPP arrangements is public outcry in various countries: the public that PPP projects are intending to serve is not accepting of the end results of initiatives. When the public feels marginalized by a PPP scheme, the repercussions get out of control.

Many writers have reported on PPP project failures. For example, Shan et al. (2011) mentioned 16 failed PPP projects in China. Furthermore, Majamaa et al. (2008) used a case study of six PPP projects in Finland to discuss how the public can be marginalized. The work of Papajohn et al. (2011) in the U.S. argues for more focused research on the loss of public accountability. The research of Tang et al. (2013) in Australia argued for an open and effective communication environment for both public and private sectors to adequately understand the stakeholders' requirements in the briefing, rather than depending on relayed information. The research by Rebeitz (2012) on PPP risk factors in emerging countries emphasizes the need for transparency (where the public is not marginalized) and for expeditious and reliable transactions for effective PPP projects. Focusing on participation, barriers, and opportunities in private finance initiatives (PFI) projects in the U.K., a study by Carrillo et al. (2008) found several problems, including a public that is not yet convinced about the value for money provided by the private sector. Furthermore, research by Meng et al. (2011) on critical success factors for transfer operate transfer (TOT) in urban water supply projects in China argued strongly for attention to be given to investor concerns and public welfare. Other examples include the work of Cuttaree (2008) in Bolivia and Argentina, Santoro (2003) in Argentina, All Africa (2011) in Nigeria, and Dobbin (2005) in Canada; for many others, this is a silent protest. Table 1 presents more examples from around the world to detail the extent and severity of the problem of public exclusion in major decisions made on PPP projects.

Some serious concerns are expressed on charging by public representatives:

"I have fears that if nothing is done to halt the toll collection commencement date for now, something very bad may happen. We have seen how the people have complained about the tollgates and now the contractor has said the collection will start next Monday. I cannot imagine what those living in that area will do that Monday. So, that is why I have brought this to the House so that we can do something fast" [political leader at the Lekki Toll Road Concession in Nigeria (Iyoghojie 2011)].

An antitoll memorandum from the Congress of South African Trade Unions enumerates several complains about PPP projects, including the following (DeIonno et al. 2011):

Table 1. Public Protest against PPP Projects

Country	Descriptions		
Argentina	Thousands of demonstrators blocked the roads leading to the city of Buenos Aires, protesting against a new water and sewer connection fee of US\$800, as announced by PPP project company Aguas Argentinas. Finally, the government rescinded the concession, blaming Aguas Argentinas for not complying with obligations of expansion and quality [Sources: Cuttaree (2008) and Santoro (2003)]		
Australia	Public pressure under the theme "power to the people" protested against PPPs in the New South Wales electricity sector, Sydney Ferries, and Parklea Prison becoming a PPP [Sources: Greens (2012), NSW Treasury (2006), and Parliament of New South Wales Legislation Assembly (PoNSW 2009)]		
Bolivia	No assessment of willingness to pay led to widespread public opposition to a 40-year concession for a water system in Cochabamba. In October 1998, groups gathered in protest, which led to an outbreak of violence in which the Bolivian army killed as many as nine, injured hundreds, and arrested several local leaders. Finally, Aguas del Tunari announced withdrawal from the project [Source: Cuttaree (2008)]		
Canada	The 14-hospital plan in Ontario was vigorously opposed by the Ontario Health Coalition. The plan faced extensive protest from the concerned public on the grounds that PPP programs would result in expensive and inflexible contracts, unaffordable health services, and changes in public sector ethos [Source: Dobbin (2005)]		
Denmark	The first Danish PPP in the Farum Municipality failed owing to public dissatisfaction with the relationship between the public sector and private sector organizations involved in the projects, which were linked to fraud and mismanaged financial transactions [Source: Koch and Buser (2006)]		
Greece	Local drivers outside Athens refused to pay what they viewed as extortionate charges for roads [Sources: Balezdrova (2011), Chrisafis (2011), and Smith (2011)]		
India	Protests were conducted against slum clearance for a toll road (the drives were estimated to affect the livelihoods of 500,000 people) [Sources: BBC (2006) and Ministry of State Road Transport and Highways (MoSRTH 2011)]		
New Zealand	Planned protests were conducted in the Octagon, Dunedin, against legislation change driven by the ministry of local government, leading to PPP and privatization [Sources: New Zealand Parliament (NZP 2011) and New Zealand Public Services Association (NWZPSA 2011)]		
Nigeria	The public, including 74 Lekki Estates and 18 villages, agitated against the collection of tolls by the Lekki concession company, which was granted a 30-year build operate transfer (BOT) contract to upgrade, expand, and maintain an approximately 50-km expressway and a 20-km road. They protested on grounds of unfairness, injustice, and cost affordability. As a result, the government paid over US \$25 million in compensation for the suspended toll collection [Sources: All Africa (2011) and Iyoghojie (2011)]		
South Africa	The tolls of N1, R24, and R21 to Pretoria and Johannesburg were opposed by trade unions, political parties, and other pressure groups [Source: DeJonno et al. (2011) and Zerbst (2011)]		
U.K.	The first major projects such as Skye Bridge were strongly opposed by the public on grounds of unfair tolls and superprofits for the private sector. There were also fights against the London underground PPP, a proposed 15-year concession [Source: Monbiot (2001)]		
U.S.	Between 1977 and 1991, the Arizona hazardous waste facility project experienced a series of public protests against the decision to site incinerators in Yuma County, Arizona. The reasons for opposition were centered on a lack of public consultation. As a result of the growing opposition, the state legislature placed a construction moratorium on the facility [Source: Ibitayo (2002)]		

"All the evidence indicates that the revenues from the tolls are going to be enormous and that the loans will be paid off quickly, leaving the private operator to milk the public... If more money was put into stopping fraud and corruption, government would easily have enough to fund road construction and maintenance... They will make it more expensive for the poor to travel by road, and will increase food inflation by adding to the cost of transporting goods in and out of Gauteng... Toll roads will further exclude the poor and create divisions."

In Greece (Smith 2011), when drivers began refusing to pay road tolls, it was viewed as good-natured defiance born of economic necessity; however, when the mayor of Stylida took control of a municipal bulldozer and broke his way through the barriers of a tollbooth, civil disobedience on the PPP project took on an altogether different hue. The mayor who, was arrested and charged, said:

"What I did was within the realm of my duties to defend the legal rights of citizens. I don't regret it and would do it again" (Smith 2011).

Three possible views emerge from these few examples:

- 1. The public receive poor value for money;
- The wider public have been kept in dark about conceived and constructed projects, and about how facilities will be operated, and poor communications have made matters worse; and
- Speculations of corruption strengthen the arguments against PPPs, particularly if such examples exist in the past and when interests that are against the specific PPP case motivate protests from the background.

Importance of Defining the Public Stakeholder

A PPP suggests a meritorious partnership between public and private sectors; it appears that there are two clearly defined agencies that speak for the partnership. However, "the public" may have several different meanings, which need to be clarified. With these parties defined, the management of such a partnership may become clearer and the outcomes more successful if all parties are identified and managed appropriately for mutual benefit and public satisfaction.

One concern that has emerged is whether the public wants the project. If the public is expected to ultimately pay back (through taxation or user charges) the initial financing that is invested in their name, they will also want to be assured of value for money (VFM) for what is actually provided. The public, as the ultimate beneficiary, need to be viewed as part of the agreement, rather than merely an uncontrollable risk (Shen et al. 2006). In another way, the public needs to be informed about the scope and form of the project and how these meet their expectations and needs. Because these are lacking, PPPs have been controversial; many believe that the private sector (just like the public sector) has inefficiencies that are not properly considered, or that provisions satisfy those commissioning the project more than those using the provided services.

Amidst the tug-of-war over expectations, PPP projects are also struggling to respond to relentless criticism for poor to mixed performance. Studies by Raisebeck et al. (2010) in Australia and Henjewele et al. (2011) in the U.K. showed that PPP projects may perform well in some aspects such as cost, but underperform in others such as time efficiency and variation during operations, to provide a holistic picture of public VFM. In this respect, the paper is not testing the actual VFM or efficiency of management. However, as a precursor to this, it asks the more fundamental question of who should actually approve the project and provide its objectives: the question of VFM for whom? For example, the ongoing debate in the U.K., which has forced the coalition government to seek to reform the delivery of PFIs, implies that what constitutes VFM to the procuring authority may not necessarily represent VFM to the public (UK Treasury 2011). This question can also address the appropriate scope of the project in view of its cost and utility. It may even have a bearing on the speed at which provision is needed and expected.

Because the public in PPPs can be broader than the immediate stakeholder groups, it is not easy to satisfy all: each group will have quite different and even contradictory requirements. However, more efforts can be made to engage the public if it is clearly contextualized and defined. Unfortunately, owing to a narrow contextualization of what constitutes the public, and as a consequent to the marginalization of the general public, there are perceptions that the public can be represented by the end-users of some groups and only consulted on certain issues such as social, ecological, and economic impacts (El-Gohary et al. 2006; Majamaa et al. 2008). Complaints of exclusion of the public from PPP transactions on the grounds of commercial confidentiality are rampant (Pollock et al. 2007). In many cases, this may not be deliberate, but even unconscious exclusion for commercial interests creates dissatisfaction, distrust, and conflicts between the general public and public sector institutions, which negotiate the deals on their behalf.

Outcomes from a survey by Yuan et al. (2010) involving 141 PPP stakeholders provide some reasons why the general public should be skeptical about the true incentives for PPPs. The survey showed that the public ranked the most important aspects of a PPP project in a significantly different manner than perceived by the public agent. In contrast, public agent ranking closely matched that of the private sector (Table 2).

Li and Akintoye (2003) list the benefits of PPP as enhanced government capacity to integrate solutions, facilitate creative and innovative approaches, reduce costs to implement a project, transfer certain risks to the project partner, attract larger bidders, and access skills, experience, and technology. This misses the point about the need to recognize other meanings of the public and its desires. In this case, the public will sense a betrayal of their trust to nourish the relationships between the public sector and corporations (Monbiot 2001; Shaoul 2005). As conceptualized by Shan et al. (2011), the larger the angle of divergence in the interests of the public from that of the trusted public agent, the less PPPs will succeed.

Here, the principal-agent (P-A) theory is used in an attempt to emphasize the importance of the public in PPP initiatives and to provide evidence for the need of a better definition of the public. As discussed, motives and agency culture have led to different ways of maintaining partnerships. Linder (1999) refers to six "meanings," or the motivation of the public agency in PPPs:

Table 2. Comparison	of PPP Attribute	Ranking by	Different Groups
---------------------	------------------	------------	------------------

	Ranking by different groups		
Objective performance attribute	General public	Public sector	Private sector
Acceptable quality of project	1	1	1
Quality public service	2	4	5
Provide timely and convenient service for society	3	6	7
Satisfy the need for public facilities	4	8	10
On-time or earlier project completion	5	6	3

Note: Data from Yuan et al. (2010).

- 1. Management reform: the use of PPPs intends to change the way the (bureaucratic) government functions by tapping into the discipline of the market, exposing a public sector organization to operating like a commercial enterprise.
- Problem conversion: considering PPP as a universal fix to induce collaboration by commercializing the problem of scarce resources while incentivizing private collaborators with profits.
- 3. Moral regeneration: PPP brings the government closer to the market as a deal maker to introduce new competition and to embrace market incentives for efficiency.
- 4. Risk shifting: a PPP client transfers risks to private concerns, who are perceived to have the ability to manage risk better and more efficiently, and to reduce the intensive use of public money for funding capital infrastructure projects and allowing the public sector to fund other public developmental projects.
- Restructuring public services: PPP relieves government agencies of impossible conflicting demands by transferring to partnerships who have formally agreed structures to decline, in purposefully narrow remits.
- Power sharing: to share risk, responsibility, and power to develop trust and to attain more voluntary compliance to regulation and more acceptable, less autocratic decision making.

Linder's meanings primarily refer to the motivations of the public agency for partnership. Doubtlessly, the public (as expressed by other stakeholders such as users and taxpayers) will also interpret a meaning to the partnership, which needs to be discerned by the agency for the success of the project. Partnerships built on this motivation are centered on placing the public interest in the middle of public sector efficiency requirements while moderating the profit expected by the private sector. However, this is not generally visible. For example, Sillett (2001, p. 52) questions whether the sole role of partnerships is for public efficiency or represents a kind of privatization. They believe that the current models actually dilute public sector values such as fair employment, social justice, economic, and community concerns. Sillett (2001) believes that partnerships also promote learning and collaboration, and as such, are inherently valuable; this intangible benefit should be specifically managed and factored against cost.

Prefontaine et al. (2000) locate the characteristics of citizens (the public) at the top of the critical dimensions for PPP arrangements, which supports the argument of this paper. The public, in which the PPP operates, constitutes an immediate environment of equal importance to policies, laws, regulations, procedures, and standards. This is the point, which often seems to be missed by those discussing critical factors for the success of PPP projects (Jefferies et al. 2002; Zhang 2005). The study by Li et al. (2005) on critical success factors (CSFs) for PPP projects showed that the public sector rated the importance of social support among the three least important factors, whereas the private sector also rated it last out of the 18 identified CSFs. As Fig. 1 shows, the social support for the general public is only 5% of the total weight given to clustered groups of CSFs, whereas competence of the private sector represents 20% and government commitment (public sector) represents 18%: clear evidence why the public is more or less at war with those facilitating PPP project procurement.

By implication, the acceptance of the public does not seem to count in the decision for PPP procurement. The underlying assumption is that the public will be interested with end results rather than the means to securing these results, and can happily delegate the responsibility for the economics of the transaction to actors in the public and private sectors. Such an assumption holds only when the public is represented and well informed on the process, outputs, outcomes, and impact, to avoid speculation and mistrust. Typical examples of PPP schemes that failed the general public test in Table 1 indicate that the power of the public is a significant risk and that the end results can be catastrophic to the public agent (Shen et al. 2006).

Theory and Practice of Public Partnering: Agency Theory

There is a plethora of scholarly articles on strategic partnership, including public private partnerships and contemporary writers in this area (Kogut 2000; Madhavan et al. 1998; Walker et al. 1997; Zaheer and Venkatraman 1995; Zollo et al. 2002). Many of these studies appear to consider partnerships as embedded in interorganizational networks. According to Jiménez and Pasquero (2004), most studies have addressed structural terms on PPPs, whereas very little attention has been paid to that designated by Jiménez and Pasquero (2004) as "... turbulent environments on partnerships over the long run." Furthermore, although many scholars have researched and written about PPP initiatives, few have been very specific on what really constitutes such an initiative (Joyner 2007; Domberger and Fernandez 1999; Jingfeng et al. 2009). These authors, for example, proceed from the assumption that PPPs are now a commonly adopted strategy for the delivery of public infrastructure and service; that their use is primarily attributable to the need for improved efficiency through the joint commitment of both private and public sectors for delivery and sharing of risk. Thus, the first two "Ps" in "PPP" represent public and private sectors. If this is true, then one may question the extensive protests against PPP initiatives across the world from the public. A closer look at various forms of protests against PPP projects (discussed in Table 1) strongly suggests that there is a need to revisit the components of a PPP project. At face value, it may be argued that the public sector side of a PPP setup is demonstrating against itself. The protests seem to be organized by those expected to be directly or indirectly affected by PPP projects. Communiqués from these protests seem to question the basic requirements of any sound project: concerns of affordability, government responsibility, and sustainability seem to dominate debates.

According to Rwelamila (2010), failing to manage stakeholders (especially key stakeholders) leads to the failure of most projects. In any PPP project, the key stakeholders from the public sector side are the general public. Governments and their respective institutions are agents of the general public; they need to implement the needs of the greater public. Governments and their respective organizations within countries shown in Table 1 face huge challenges. They are expected by some to play a more significant role in infrastructure provision and governance, whereas a significant group of the public expects the opposite. As clearly described previously, the best way to describe what is happening at face value is the public criticizing themselves for what they have already decided to implement. How possible is this occurrence? There should be an underlying problem to be unearthed.

One promising strand of theory to be used to answer the preceding question can be found in the application of P-A models toward understanding the performance of governments and their respective organizations based on the dynamics of delegation. This strand of theory is relevant to the theme of this paper because it addresses the dilemma experienced under the conditions of asymmetric information, which makes it difficult for PPP constructs to reconcile the differential interest between the public and private sectors.

According to Lupia and McCubbins (2000), the dynamics of delegation, when examined through the lens of modern democracies, starts from citizens delegating to elected representatives, who

J. Manage. Eng

in turn delegate to others. Legislators, for example, delegate to the authority of party leaders to form positions through many processes, which vary from one country to another and finally lead to government formation. The formed government, according to Lupia and McCubbins (2000), delegates to individual cabinet ministers the power to initiate policy proposals. The government and/or individual cabinet ministers delegate to civil servants or parastatal managers the power to implement chosen policies, which are converted to programs and projects. Therefore, a chain of delegation connects what citizens want to what the government wants. This delegating at many consecutive levels arguably dehydrates modern democracy, which is finally transformed to an oligarchy of the party leaders and their teams, or of some kind of equilibrium among different economic lobbies. Strøm (2000) argues that across countries/ democracies, chains of delegation vary; these variations are both a product and a cause of each country's unique experience with democracy.

In the abstract, Lupia and McCubbins (2000) draw general conclusions that all acts of delegation share common features, which affect the consequence of delegation in equivalent ways. Lupia and McCubbins (2000) present a simple theory of delegation, which rests on four common features. The theory is presented in the following with a closer context to a PPP environment. The first three features of the P-A model are common in the existing delegation literature (Gerth and Mills 1946; Heclo and Madsen 1987; Jensen and Meckling 1976). The fourth feature, Lupia and McCubbins (2000) stress, is less well known, but just as common in acts of delegation. It provides the separation between delegation and abdication. Four features of delegation [from Lupia and McCubbins (2000) and Brehm and Gates (1997)] lead to the following four factors:

- 1. To recognize a principal and agent, which in a PPP environment may refer to the relationship between a member of parliament and their constituents (members of the public), in which the constituents are the principals and the member is the agent.
- 2. The possibility of conflicting interests, in which an agent may drag their heels in making unpopular decisions in a PPP project by ignoring public complaints. This happens because the agent believes to be an expert in the matter and their judgement is correct. In contrary, their principal requires them to listen to public outcry before making any decision on the matter. An alternative is dissent/shirking, in which an agent does not agree with the principal (for example, the agent may base their decision on advice from specialist advisors against the desires of the public).
- 3. The possibility of asymmetric information. There are strong assumptions that principals are ignorant of their agents' activities. In a PPP environment, the agent may have, or assume to have, more or better quality information than the principal, and thus the potential to act against their principal without fear of being held accountable. For example, it is acknowledged that requesting information about VFM will be rejected under the guise of commercial sensitivity (Henjewele et al. 2011).
- 4. The principal may be able to adapt to agency problems. Principals can attempt to solve the problems of delegation in any of three ways: direct monitoring of an agent's activities; accepting without question the reports of the agent about the activities; attending to a third-party testimony about the agent's actions. Each of these options can provide a principal with valuable knowledge about their agent.

In a PPP environment, it may take years for a general citizen to understand all of the terminologies and documentation used in PPP projects. The drawback of relying on the agent's self-report is that the agent may be reluctant to reveal what they know. For example, if an agent and a principal have conflicting interests, then the agent may have no incentive to share information with the principal. In the PPP context, PPP technical experts may develop conflicting interests to the public and will have no incentives to share their secrets with principals. Third-party testimony (e.g., from the media) may be unreliable because it is incomplete or prejudiced to certain viewpoints, particularly if the shareholders of the media are at all involved in the process of managing a PPP project.

The previously described P-A theory/models provide an excellent base to understand the marginalization of the public as principals by government or public organization, and clear indications of why protests are a common phenomenon around PPP projects.

These models, according to Gutner (2005), are premised on the assumption that performance problems naturally arise when one actor (the principal) delegates to another actor (the agent) the authority to act in the interest of the former. The work of Gutner (2005) seems to be seminal and articulates the contributions of most other authors. They argue that these models seek to explain why and how the divergence of interests between the two parties may result in the agent's actions differing from the principal's expectations, and how agents may be better controlled. In other words, they argue that P-A models recognize the existence of gaps between institutional goals and actions, which are caused by these side effects of delegation that generate agency losses and other costs to the principal. They contend that these models are used to suggest measures that the principal may employ to reduce an agent's opportunistic behavior, such as the possibility of a government official developing their own preference for a small group of stakeholders and giving them more attention than others. In practice, they suggest that such measures typically include a variety of screening, contracting, and oversight mechanisms.

To establish a clear picture of the public sector dynamics in a PPP setup and to identify the issues that have led to the dissatisfaction of the would-be beneficiaries of PPPs, it is important to recognize that governments and their respective organizations are agents of the populace, which voted the political managers into the government. Using the argument of Gutner (2005), it is paramount to use the traditional P-A model to establish the dynamics of the public sector in a PPP setup.

According to Gutner (2005), the traditional models focus on one agent or set of agents engaged in opportunistic behavior with one principal or set of principals, ignoring critical factors that help to explain certain major sources of gaps between the mandates and performance of governments and allied organizations. Thus, it is important to argue from the position of Gutner (2005) that the P-A model may be usefully calibrated to more precisely explain government/public allied organization PPP performance pathologies by better recognizing problems, which they designate as antinomic delegation. Antinomic delegation is defined as delegation consisting of conflicting or complex tasks that are difficult to institutionalize and implement. Where antinomic delegation is present, performance problems may not solely reflect agency shirking, but rather are traced to more intricate challenges faced by agents (government/public allied organization) trying to implement goals that are difficult to specify and/or juggle. The broader problem of mission creep (involving specific partnership goals and activities with different interpretations) easily contributes to the specific problems of antinomic delegation.

If literature on P-A models is applied in PPP environments to governments/public allied organizations, it will automatically address only one of these two sets of P-A relationships—usually from elected political officials to the bureaucratic agent (or allied public organization, such as a parastatal)—designated as a public allied

J. Manage. Eng

organization. This means that the chain of delegation, and hence the analysis of performance, stops with the government/public allied organization and does not address implementation issues. Although governments/public allied organizations are characterized by a set of collective principals that may create opportunities for institutional autonomy, the recognition that governments/public allied organizations themselves may be usefully analyzed as principals delegating to implementation agents reveals additional opportunities for agency misinterpretation. The following subsection discusses how agency theory offers a potentially powerful tool for identifying key sources of gaps between governments/public allied organizations and the general public.

Application of Agency Theory for Identifying Gaps between the Real First "P" and Artificial First "P"

The application of agency theory in PPP projects rests on the fundamental aspects of stakeholder management, because both a principal and an agent in any project environment belong to a broader group of project stakeholders. This suggests that, in certain arrangements, they may be responsible for fulfilling their positional requirements to manage respective stakeholders' interests. Therefore, it is important to raise some concerns of stakeholder management before taking a closer look at the application of agency theory.

According to Gardiner (2005), there are often many stakeholders in a project, and dissatisfied or disillusioned stakeholders can cause a project to fail. Managing project stakeholder perceptions and expectations focuses on generating agreement and harmony between the different views and beliefs held by the stakeholders. When all stakeholders are dancing to the same tune, the project moves toward a successful outcome. Gardiner (2005) argues that, in reality, most projects have stakeholders that view the project from different perspectives and hold different expectations. A research project conducted by Newcombe (2000) found that project performance continues to be viewed in contrasting ways by different stakeholders. However, only concerns raised by the most powerful stakeholders will be taken into consideration (Mitchell et al. 1997). Bringing this argument closer to a PPP environment, and specifically examining the first "P," from which most of the challenges listed in Fig. 1 arise, it may be argued using the conclusion of Gardiner (2005) that the public side of stakeholder management is not thoroughly addressed. Taking a closer look at the public side of various PPP initiatives, the first "P" has many component arrangements, as shown in Fig. 2.

Fig. 2 represents two positions possible in practice. The artificial position (CI), in which the public, as direct users, and the great public are marginalized (peripheral); and the real position (CII), in which the public, as direct users, and the great public are afforded their rightful position as central stakeholders (principal). In CI, the government/public allied organization, $[P_{(a)}i]$, takes the position of both agent and principal and ignores (peripheral treatment) the public as the principal. Meanwhile, in CII, the government/public allied organization accepts its role as an agent and the public as the principal, $[P_{(u)}i + P_{(p)}e]$. There are strong indications to suggest that the current PPP stakeholder structure is based on the CI arrangement, in which the false assumption is that $[P_{(a)}i]$, as an agent, has full mandate from $[P_{(u)}i + P_{(p)}e]$, as principal, to address all matters of PPP arrangement. Hence, $[P_{(a)}i]$ is primarily an agent of $[P_{(u)}i + P_{(p)}e]$ by default.

Antinomic Delegation

According to Gardiner (2005), P-A models tend to find the obstacles to performance in the opportunistic behavior of $[P_{(a)}i]$

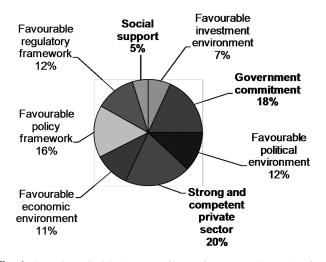
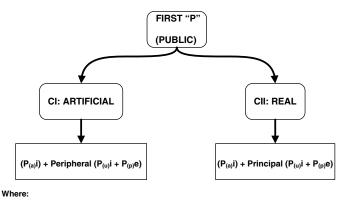


Fig. 1. Grouping of critical success factors for PPP projects (data from Li et al. 2005)

and to examine various techniques that may be used to give the agent greater incentive to pursue the $[P_{(u)}i + P_{(p)}e]$ agenda. Pursuing the principal's agenda in the context of the PPP environment means following the CII arrangement through effectively and continually using stakeholder management: the $[P_{(u)}i + P_{(p)}e]$ agenda should dominate all PPP project decisions.

The current PPP setup is primarily based on the CI arrangement, where the challenge comes from the delegation side, in the sense that the principals, $[P_{(u)}i + P_{(p)}e]$, are not given an appropriate opportunity to delegate properly. The reason that they are not managed as full-fledged PPP stakeholders initiates that designated by Gardiner (2005) as a delegation complexity. They argue that a macrolevel problem of mission creep emerges: the mushrooming of new government/public allied organization goals without a corresponding reduction in old goals. Hence, specific partnership goals are mixed with other government/public allied organization goals. In this situation, the PPP scope of the government/public allied organization changes without proper consultation with principals, $[P_{(u)}i + P_{(p)}e]$. The existence of multiple goals or changes in PPP scope does not automatically mean that $[P_{(u)}i + P_{(p)}e]$ should not be briefed and new mandates established. Thus, the second area of



P_(a)i = Government/public allied organization = agent;

- P_(u)i = Public as direct users of facility;
- $P_{(p)}^{(p)}e$ = Greater population public (non-direct users of facility); i = internal stake holders; e = external stakeholders.

Position CI: The agent, by default, assumes the role of the principal stakeholder and marginalizes other stakeholders Position CII: The agent and other stakeholders become principal stakeholders

Fig. 2. Understanding the public in a PPP environment

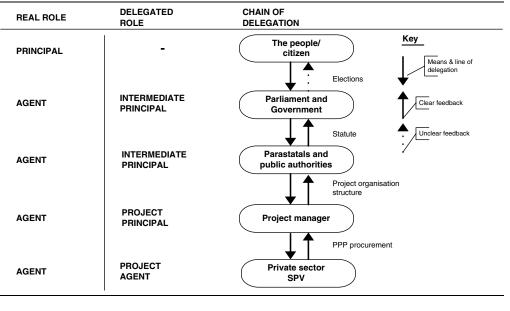


Fig. 3. Chain of delegation: real and delegated roles

complex delegation is where different goals or PPP scope changes directly conflict, making implementation inherently difficult, and consequently, making $[P_{(u)}i + P_{(p)}e]$ feel out of place because they are not consulted but only informed about what is going to happen. In other words, agency theory recognizes that government bureaucracies have multiple or collective principles (especially politicians) who push PPP implementing agencies for a variety of conflicting goals about which the greater public has no information. This is the problem of antinomic delegation.

Mission Creep

Dominant features of ineffectiveness occur when many areas require expertise and resources to produce results. The mix creates a situation in which leadership and expertise become thin on the ground across all government/public allied organizational activities, producing an absence of clear, focused mission that impacts the incentives facing government/public allied organization staff and management to do their jobs (Gutner 2005). This is a phenomenon designated as mission creep. The complex nature of PPP arrangements, coupled with the limited PPP internal expertise of the agent, $[P_{(a)}i]$, forces the appointment of many private sector technical experts. Then, the management of $[P_{(u)}i + P_{(p)}e]$ takes a peripheral position; out of frustration, the principals start blaming $[P_{(a)}i]$ for poor project leadership and not taking their interests seriously. There are strong indications to suggest that this has led to the absence of trust between $[P_{(u)}i + P_{(p)}e]$ and $[P_{(a)}i]$, to an extent that protests are considered to be the only option in participating in the PPP project by the principals.

Managing a diverse group of principals (stakeholders), which is commonly the case in PPP projects, may be a tall order. Current theory and practice literature on managing universal stakeholders is still scanty (Rwelamila and Savile 1994). However, the approach of Gardiner (2005), of following a structured method (stakeholder identification, analysis, and mapping stakeholders according to their impact on the project), may be useful in a PPP environment. The problem of mission creep illustrates a macropicture of government/ public allied organization struggles when managing PPP projects. The next section shows how a P-A framework helps to better explain the problems of defining the public PPP stakeholders.

Chain of Delegation: Hidden Components of the First "P"

According to Gutner (2005), Lupia and McCubbins (2000), and Rwelamila (2010), the broader P-A literature recognizes that principals may also be agents and vice versa, depending on the stage of the project setup under analysis. The more points at which delegation takes place, the more opportunities for agency slack or inability to manage principals or project stakeholders. However, scholars in political science literature (Roderick and McCubbins 1991) risk getting carried away by pointing out all of the different areas in which one actor is delegating to another. For example, they mention voters delegating to members of parliament, who delegate to ministers, who delegate to parastatals or public allied organization, which delegate to specific project managers—as shown in Fig. 3.

For the purpose of analytical clarity and focus on the theme of this paper, the focus is on three major levels of P-A relationships characteristic of PPP regimes:

- 1. The general public, as a set of individuals, is the true principal delegating to members of parliament, some of whom become ministers as agents;
- Ministers as principals delegating to parastatals or public allied organizations on behalf of parliament as agents; and
- 3. The parastatals become barely accountable principals delegating to the PPP project manager, who as the front line of the agency, acts autonomously as principal to the special purpose vehicle (SPV) using other experts. Their accountability to the parastatal is far removed from the public principal.

According to Gutner (2005), the tangle of P-A relationships and the difficulty of measuring certain outputs create opportunities for any party to avoid accountability. In a PPP environment, the definitions of project stakeholders become blurred because the chain of stakeholder command becomes too long and the public, which constitutes both internal and external project stakeholders, $[P_{(u)}i+P_{(p)}e]$, remain at the bottom and are forgotten.

The chain of stakeholder command ultimately leads to project managers grabbing more powers while assuming that they have full mandates from the principals to make all decisions across the PPP project life cycle. The fact that PPP client project managers are agents of the public body loses its meaning; indirectly, the parastatal agent becomes both principal and agent. This agency slack (Gutner 2005) leads to a situation in which decisions are made without $[P_{(u)}i + P_{(p)}e]$ knowledge or consent. Through media and other information dissemination, stakeholders learn of activities surrounding the PPP project and react accordingly.

Emphasizing the Public Partnership

As clearly indicated from the preceding analysis, the dynamics of a P-A model seem to have pushed the real first "P" $\{[P_{(a)}i] + Principal [P_{(u)}i + P_{(p)}e]\}$ into a back seat in which the artificial "P" (P_a) has dominated PPP projects. There is a need to revisit current PPP project management practices and embrace the real first "P" concept in stakeholder management. It is possible to address many implications for management and management theory regarding the governance of PPPs facing a demanding public base, and specifically, the dynamics surrounding the marginalization of the public.

There is sufficient evidence from the literature to suggest that the recurrence of PPPs has allowed for a more formal transfer of responsibilities from the state to private sector companies. Therefore, in principle, this supports the argument of Grimsey and Lewis (2005) that PPPs should bring together the public sector (client) and the private sector (the supplier) to allow the parties to blend their special skills to serve the needs and interests of the public (in this case, the real principal). Concisely, the central focus of any PPP initiative construct should be the public, which is represented by the first "P." Experiences of PPP initiatives in various countries, as discussed and indicated in Table 1, and specifically the work of Yuan et al. (2010) and Li et al. (2005), do not support the centrality of the public in PPP initiatives, but a distorted definition of the first "P." Distortions of the first "P" are clearly described by using agency theory as an analysis instrument.

When P-A models or agency theory are applied to a PPP project environment, it is clear that the first "P" can be examined from two distinct positions. The first position is the artificial position, in which the government or public allied organizations dominate and the general public is ignored (treated as a peripheral player). The second position is the real position, in which the opposite of the artificial position takes place: the public is considered as a real principal stakeholder, with the user of the PPP facility as internal stakeholders and the rest of the public (citizens) as external stakeholders. A reflection on the two positions strongly suggests that the dominant current scenario of PPP environments seem to concur with the artificial position (Hodge and Greve 2007; Holmes et al. 2006; Cheung and Chan 2011; Cruz and Marques 2014; Xu and Moon 2014). The four features of the agency theory, as advanced by Lupia and McCubbins (2000) and Brehm and Gates (1997), are important for promoting PPPs to the general public.

The dynamics of the four factors have pushed the position of the greater public to the periphery and governments or public sector organizations have taken positions that can be described as a "position with two hats" (as both principals and agents; or CI). This creates problems associated with antinomic delegation and mission creep, which have significantly contributed to marginalizing the public sector.

The dynamics of delegation, which are primarily based on the P-A model, are real and seem to have significantly contributed to the dilution of the first "P." If PPP initiatives are going to take a central position in the provision of infrastructure for the betterment of the public, there is only one way: embracing the CII position, in which the greater public becomes the real principal. This is possible if, and only if, the concept of stakeholder management is embraced

within the true spirit of a PPP project construct and in which CI is taboo.

Although this paper is not about PPP stakeholder management, it is fundamental to state clearly that to maintain a true definition of the first "P," the manner in which PPP stakeholders are managed will be central. Appropriate PPP stakeholder management will ensure that the P-A model challenges are overcome and that the CII (the real first "P") position is maintained.

To maintain the CII position, it is important to argue for a viable partnership with the real public and to advocate consideration of transparent communication, good dissemination, and the normal processes of efficiency. This will require the consideration of additional mechanisms of inclusiveness to ensure the role of the general public. The test for maintaining a true definition of the first "P" for any PPP initiative, as indicated previously, will be through appropriate stakeholder management, in which transparent mechanisms will be needed to address project dynamics. These include, for example, determining objectives for the public good; sustaining and maintaining these objectives, even in stringent circumstances; determining the criteria for affordability; resolving conflicting positions; and establishing accountability by measuring the success in terms of public good (real success). Existing mechanisms exist for ensuring that objectives are established and met, but if the objectives are not agreeable to the public stakeholder or this stakeholder is not cognizant of the objectives, they will flounder in their acceptance and long-term success of the project. It is proposed that additional mechanisms for the real public are added to the existing partnership mechanisms.

These mechanisms, which are outside the scope of this paper, may be developed to add to (or replace) existing structures to ensure that the real "P" is addressed. There is a need to share and confirm the initial objectives of a project with the real principal, and to continually monitor the implementation of these objectives and resolve conflict when objectives or their interpretations are different. These types of issues are sometimes addressed in stakeholder management. The question of ensuring ultimate acceptance and ownership for the project by the general public is important, otherwise full effectiveness and use of the PPP are at risk or may even render the project obsolete.

In the PPP for London transport, for example, the creation of objectives was prepared for consultation by presenting simply stated objectives, which were easily understood [National Audit Office (NAO) 2004]. These were presented by storyboards in which comments could be invited by the general public, allowing them a more fundamental part in the services provided. The monitoring of the implementation of the objectives and the visibility of the outcome by users of the service were presented on a regular monthly basis so that users became aware of the final adopted objectives and whether the expected efficiency was achieved, exceeded, or underrun. This case study indicates some efforts to gain general public satisfaction and to overcome doubts and conflict over outcomes.

Conclusions

This paper has attempted to address the missing link in PPP projects by contextualizing the role of the public as the primary beneficiaries of facilities and allied services. It is clear from the literature and analysis in this paper that the real public, represented by the first "P," is being marginalized through the dynamics of PPP transactions. The primary source of this marginalization was traced through the delegation dynamics found in the public sector environment. Because the delegation mechanisms within the public sector are influenced by the P-A theory, it is evident that the dynamics shown in the theory have significantly contributed to this marginalization. The solution lies in understanding the connection between stakeholder management and appropriate contextualization of what constitutes the real first "P."

From the foregoing, it is clear that the future success of PPP initiatives will primarily depend on how the first "P" is defined and how the stakeholder structure is formulated toward embracing the CII position. If PPP initiatives are to continue assuming a central position in the provision of infrastructure for the betterment of the public, the paper recommends that the public, as in the CII position, should be embraced within the spirit of a PPP project construct.

To embrace transparent mechanisms, the concept designated in this paper as PPP appropriate stakeholder management will be different from current stakeholder management that does not accommodate the true dynamics of PPP structures. Another paper should address approaches for PPP stakeholder management, their building blocks, and how they differ from contemporary approaches.

References

- Albert, W. (1972). *The turnpike road system in England 1663-1840*, Cambridge University Press, Cambridge, U.K.
- All Africa. (2011). Nigeria: Issues, protests against Lekki toll plazas, (http://allafrica.com/stories/201112130487.html) (Mar. 12, 2012).
- Balezdrova, A. (2011). Greek drivers refuse to pay toll fees, companies concessionaires are looking for a way to collect the lost revenues, (http://www.grreporter.info/en/greek_drivers_refuse_pay_toll_fees _companies_concessionaires_are_looking_way_collect_lost_revenues/3) (Mar. 17, 2012).
- BBC. (2006). Delhi protest toll rises to four, (http://news.bbc.co.uk/1/hi/ world/south_asia/5366948.stm) (Feb. 20, 2012).
- Brehm, J., and Gates, S. (1997). Working, shirking, and sabotage: Bureaucratic response to a democratic public, University of Michigan Press, Ann Arbor, MI.
- Carrillo, P., Robinson, H., Foale, P., Anumba, C., and Bouchlaghem, D. (2008). "Participation, barriers, and opportunities in PFI: The United Kingdom experience." *J. Manage. Eng.*, 10.1061/(ASCE)0742-597X (2008)24:3(138), 138–145.
- Cheung, E., and Chan, A. (2011). "Evaluation model for assessing the suitability of public-private partnership projects." J. Manage. Eng., 10.1061/(ASCE)ME.1943-5479.0000044, 80–89.
- Chrisafis, A. (2011). Greece debt crisis: The "we won't pay" anti-austerity revolt, (http://www.guardian.co.uk/world/2011/jul/31/greece-debt-crisis -anti-austerity) (Mar. 12, 2012).
- Cruz, C., and Marques, R. (2014). "Theoretical considerations on quantitative PPP viability analysis." J. Manage. Eng., 10.1061/(ASCE)ME .1943-5479.0000184, 122–126.
- Cuttaree, V. (2008). Successes and failures of PPP projects, World Bank Presentations–Europe and Central Asia Region, Warsaw, Poland, (http:// siteresources.worldbank.org/INTECAREGTOPTRANSPORT/Resources/ Day1_Pres2_SuccessesandFailuresPPPprojects15JUN08.ppt) (Mar. 12, 2012).
- DeIonno, P., Hazelhurst, E., Crotty, A., and Enslin-Payne, S. (2011). Gautengers unite as discord takes toll on road plan, Business Rep., (http:// www.iol.co.za/business/opinion/business-watch) (Mar. 15, 2012).
- Dobbin, M. (2005). Canada's deadly "p3" hospital boondoggles, (http:// thetyee.ca/Views/2005/10/27/HospitalBoondoggles/) (Feb. 25, 2012).
- Domberger, S., and Fernandez, P. (1999). "Public-private partnerships for service delivery." Bus. Strategy Rev., 10(4), 29–39.
- El-Gohary, N. M., Osman, H., and El-Diraby, T. E. (2006). "Stakeholder management for public private partnerships." *Int. J. Project Manage.*, 24(7), 595–604.
- Gardiner, P. D. (2005). Project management—A strategic planning approach, Palgrave Macmillan, New York.
- Gerth, H. H., and Mills, C. W., eds. (1946). From Max Weber: Essays in sociology, Oxford University Press, New York.
- Greens. (2012). NSW not for sale, (http://nsw.greens.org.au/) (Feb. 2, 2012).

- Grimsey, D., and Lewis, M. (2004). Public private partnership: The worldwide revolution in infrastructure provision and project finance, Edward Elgar Publishing, Cheltenham, U.K.
- Grimsey, D., and Lewis, M., eds. (2005). *The economics of public private* partnerships: Introduction, Edward Elgar Publishing, Cheltenham, U.K.
- Gutner, T. (2005). "Explaining the gaps between mandate and performance: Agency theory and World Bank environmental reform." *Global Environ. Politics*, 5(2), 10–37.
- Heclo, H., and Madsen, H. (1987). *Policy and politics in Sweden: Principled pragmatism*, Temple University Press, Philadelphia.
- Henjewele, C., Sun, M., and Fewings, P. (2011). "Critical parameters influencing value for money variations in PFI projects in the healthcare and transport sectors." *Constr. Manage. Econ.*, 29(8), 825–839.
- Hodge, G. A., and Greve, C. (2007). "Public-private partnerships: An international performance review." *Public Administration Rev.*, 67(3), 545–558.
- Holmes, J., Capper, G., and Hudson, G. (2006). "Public private partnerships in the provision of health care premises in the U.K." *Int. J. Project Manage.*, 24(7), 566–572.
- Ibitayo, O. (2002). "Public–private partnerships in the siting of hazardous waste facilities: The importance of trust." *Waste Manage Res*, 20(3), 212–222.
- Iyoghojie, P. (2011). Lekki tollgates: We will not surrender, LERSA Vows, (http://www.pmnewsnigeria.com/2011/02/24/lekki-tollgates-we-will-notsurrender-lersa-vows/print/) (Jul. 07, 2014).
- Jefferies, M., Gameson, R., and Rowlinson, S. (2002). "Critical success factors of the BOOT procurement system: Reflection from the stadium Australia case study." *Eng. Constr. Archit. Manage.*, 9(4), 352–361.
- Jensen, M. C., and Meckling, W. H. (1976). "Theory of the firm: Managerial behaviour, agency costs, and ownership structure." *J. Financial Econ.*, 3(4), 305–360.
- Jiménez, A., and Pasquero, J. (2004). "Explaining the endurance of a permanently challenged public-private partnership: A stakeholder approach." *Manage. Res.*, 3(1), 49–61.
- Jingfeng, Y., Alex, Y. Z., Skibniewski, M. J., and Qiming, L. (2009). "Selection of performance objectives and key performance indicators in public–private partnership projects to achieve value for money." *Constr. Manage. Econ.*, 27(3), 253–270.
- Joyner, K. (2007). "Dynamic evolution in public-private partnerships—The role of key actors in managing multiple stakeholders." *Managerial Law*, 49(5–6), 206–217.
- Koch, C., and Buser, M. (2006). "Emerging metagovernance as an institutional framework for public private partnership networks in Denmark." *Int. J. Project Manage.*, 24(7), 548–556.
- Kogut, B. (2000). "The network as knowledge: Generative rules and the emergence of structure." *Strategic Manage. J.*, 21(3), 405–425.
- Li, B., and Akintoye, A. (2003). "An overview of public private partnership." Chapter 2, *Public private partnership: Managing risks and opportunities*, A. Akintoye, C. Hardcastle, and M. Beck, eds., Blackwell, Oxford, U.K., 3–30.
- Li, B., Akintoye, A., Edwards, P. J., and Hardcastle, C. (2005). "Critical success factors for PPP/PFI projects in the U.K. construction industry." *Constr. Manage. Econ.*, 23(5), 459–471.
- Linder, S. H. (1999). "Coming to terms with public-private partnership: A grammar of multiple meanings." *Am. Behav. Sci.*, 43(1), 35–51.
- Lupia, A., and McCubbins, M. D. (2000). "Representation or abdication? How citizens use institutions to help delegation succeed." *Eur. J. Political Res.*, 37, 291–307.
- Madhavan, R., Koka, R., and Prescott, P. (1998). "Networks in transition: How industry events (re)shape inter-firm relationships." *Strategic Manage. J.*, 19(5), 439–459.
- Majamaa, W., Junnila, S., Doloi, H., and Niemistö, E. (2008). "End-user oriented public-private partnerships in real estate industry." *Int. J. Strategic Property Manage.*, 12(1), 1–17.
- Meng, X., Zhao, Q., and Shen, Q. Q. (2011). "Critical success factors for transfer-operate-transfer urban water supply projects in China." *J. Manage. Eng.*, 10.1061/(ASCE)ME.1943-5479.0000058, 243–251.
- Milakovich, M. (2006). *Improving service quality in the global economy*, CRC Press, Boca Raton, FL.

J. Manage. Eng.

- Ministry of State Road Transport and Highways (MoSRTH). (2011). Toll barriers on national highways, (http://www.indiantollways.com/ category/tolling/) (Mar. 27, 2012).
- Mitchell, R., Agle, B., and Wood, D. (1997). "Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts." *Acad. Manage. Rev.*, 22(4), 853–886.
- Monbiot, G. (2001). *Captive state: The corporate takeover of Britain*, Pan, London.
- National Audit Office (NAO). (2004). "London underground PPP: Were they good deals?" *Rep. by the Comptroller and Auditor General HC* 645 Session 2003–2004, National Audit Office, London.
- Newcombe, R. (2000). "The anatomy of two projects: A comparative analysis approach." *Int. J. Project Manage.*, 18(3), 189–199.
- New South Wales Treasury (NSW Treasury). (2006). The state infrastructure strategy [2006–2007 to 2015–2016], (http://www.treasury.nsw.gov.au/ budget_papers/Budget_Papes_2006-07/bpapers) (Mar. 21, 2012).
- New Zealand Parliament (NZP). (2011). *Petition of Penelope Mary Bright and 171 others* (http://www.parliament.nz/en-NZ/PB/Presented/ Petitions/e/d/f/49DBHOH_PET2996_1-Petition-of-Penelope-Mary-Bright -and-171-others.html) (Jul. 07,2014).
- New Zealand Public Services Association (NWZPSA). (2011). *Prison privatization—Follow the money*, (http://www.youtube.com/watch?v= zqTnbK1iClM) (Mar. 21, 2012).
- Papajohn, D., Cui, Q., and Bayraktar, M. E. (2011). "Public-private partnerships in U.S. transportation: Research overview and a path forward." *J. Manage. Eng.*, 10.1061/(ASCE)ME.1943-5479.0000050, 126–135.
- Parliament of New South Wales Legislative Assembly (PoNSW). (2009). "First session of the fifty-fourth Parliament: Questions and answers, No. 115 (13 March 2009)." *Performance in public and private sectors*, 2nd Ed., Auerbach Publications, London, (http://www.parliament.nsw.gov.au/prod/la/lapaper.nsf/0/ C41DA6F1849AAE7FCA2575780011AEA3/\$file/115-QA-S.pdf} (Mar. 21, 2012).
- Pollock, A., Price, D., and Player, S. (2007). "An examination of the U.K. Treasury's evidence base for cost and time overrun data in U.K. value-for-money policy and appraisal." *Public Money Manage.*, 27(2), 127–134.
- Prefontaine, L., Ricard, L., Sicotte, H., Turcotte, D., and Dawes, S. (2000). "New models of collaboration for public service delivery." *Draft Rep. for the Centre for Technology in Government*, (http://www.ctg.albany.edu/) (Feb. 14, 2012).
- Raisebeck, P., Duffield, C., and Xu, M. (2010). "Comparative performance of PPPs and traditional procurement in Australia." *Constr. Manage. Econ.*, 28(4), 345–359.
- Rebeitz, K. S. (2012). "Public–private partnership risk factors in emerging countries: BOOT illustrative case study." J. Manage. Eng., 10.1061/ (ASCE)ME.1943-5479.0000079, 421–428.
- Roderick, K. D., and McCubbins, M. D. (1991). *The logic of delegation: Congressional parties and the appropriations process*, University of Chicago Press, Chicago.
- Rwelamila, P. D. (2010). "Impact of procurement on stakeholder management." *Construction stakeholder management*, E. Chinyio, and P. Olomolaiye, eds., Wiley-Blackwell, U.K., 193–215.

- Rwelamila, P. D., Chege, L., and Manchidi, T. (2003). "PPP in South Africa local authorities: Risks and opportunities." *Public private partnerships: Managing risks and opportunities*, A. Akintoye, M. Beck, and C. Hardcastle, eds., Blackwell Publishing, Oxford, U.K.
- Rwelamila, P. D., and Savile, P. W. (1994). "Hybrid value engineering: The challenge of construction project management in the 1990s." *Int. J. Project Manage.*, 12(3), 157–164.
- Santoro, D. (2003). The "Aguas" tango, Centre for Public Integrity, (http:// www.globalpolicy.org) (Mar. 27, 2012).
- Shan, X., Hou, W., Ye, X., and Wu, C. (2011). "Decision-making criteria of PPP projects: Stakeholder theoretic perspective." *World Acad. Sci. Eng. Technol.*, 5(5), 631–635.
- Shaoul, J. (2005). "The private finance initiative or the public funding of private profit?" *The challenge of public private partnerships: Learning from international experience*, G. Hodge, and C. Greve, eds., Edward Elgar, London, 190–206.
- Shen, L. Y., Platten, A., and Deng, X. P. (2006). "Role of public private partnerships to manage risks in public sector projects in Hong Kong." *Int. J. Project Manage.*, 24(7), 587–594.
- Sillett, J. (2001). Public private partnership: Opening the public debate, Local Government Information Unit, Bedford, U.K.
- Smith, H. (2011). "Greek mayor arrested after bulldozing toll booth barriers." Guardian, (http://www.guardian.co.uk/) (Mar. 6, 2012).
- Strøm, K. (2000). "Delegation and accountability in parliamentary democracies." Eur. J. Political Res., 37(1), 261–289.
- Tang, L., Shen, Q., Skitmore, M., and Cheng, E. W. L. (2013). "Ranked critical factors in PPP briefing." *J. Manage. Eng.*, 10.1061/(ASCE)ME .1943-5479.0000131, 164–171.
- UK Treasury. (2011). "Private finance initiative." *17th Rep., Session 2010 12, House of Commons*, (http://www.publications.parliament.uk/pa/cm201012/cmse) (Mar. 20, 2012).
- U.S. Dept. of Transportation (U.S. DOT). (2004). Rep. to Congress on Public-Private Partnerships, (http://www.fhwa.dot.gov) (Feb. 13, 2012).
- Walker, G., Kogut, B., and Shan, W. (1997). "Social capital, structural holes and the formation of an industry network." Org. Sci., 8(2), 109–125.
- Xu, J., and Moon, S. (2014). "Stochastic revenue and cost model for determining a BOT concession period under multiple project constraints." J. Manage. Eng., 10.1061/(ASCE)ME.1943-5479.0000182, 04014011.
- Yuan, J., Skibniewski, M. J., Li, Q., and Zheng, L. (2010). "Performance objectives selection model in public-private partnership projects based on the perspective of stakeholders." *J. Manage. Eng.*, 10.1061/(ASCE) ME.1943-5479.0000011, 89–104.
- Zaheer, A., and Venkatraman, N. (1995). "Relational governance as an inter-organizational strategy: An empirical test of the role of trust in economic exchange." *Strategic Manage. J.*, 16(5), 373–392.
- Zerbst, F. (2011). "How Gauteng's toll roads will work." *Mail & Guardian*, (http://www.itssa.org.) (Mar. 27, 2012).
- Zhang, X. (2005). "Critical success factors for public–private partnerships in infrastructure development." J. Constr. Eng. Manage., 10.1061/ (ASCE)0733-9364(2005)131:1(3), 3–14.
- Zollo, M., Reuer, J., and Singh, H. (2002). "Inter-organizational routines and performance in strategic alliances." Org. Sci., 13(6), 701–713.