

Public-private interaction within projects literature in IMP
A review and agenda for future research

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1. Introduction

The interaction between public and private actors is one of the most significant trends of contemporary society (Waluszewski et al., 2019). Studies have highlighted the important role of public-private interaction as the solution for tackling systemic risks and challenges (Mattsson and Andersson, 2019). The interface and interplay between the public and private sectors have become extensive and of increasing interest during the past decades (Bondeli et al., 2020). This issue has attracted growing academic and policy interest. Academic interest is shown by the growing number of articles published in recent years on this topic, by the ongoing debate on international journals (Kronlid and Baraldi, 2020), and by recent calls for a deeper understanding of the dynamics and interfaces developed in public-private interaction. Policy interest has been acknowledged by policymakers at different levels, encouraging those types of collaborations (Waluszewski et al., 2019). Empirically-based studies are mainly based on projects, traditionally involving both public and private actors. However, only a few of them explicitly consider interaction between public and private actors within projects (see Kronlid and Baraldi, 2020). We posit that public-private interaction within projects happens on different bases and with different dynamics, as projects have peculiar characteristics (i.e., temporality, discontinuity, episodic interaction, complexity, and uniqueness) and represent by definition “*time-constrained efforts aiming at clear goals*” (Baraldi and Havenvid, 2013: 2), and as highlighted in Artto and Kujala (2008: 470) “*project-based business activities are part of all private firms and public organizations*”. Thus, projects are particularly suited for investigating inter-organizational interaction involving public and private actors. In particular, projects traditionally involve public and private actors, including universities, regional governments, public research institutions, and enterprises. However, the literature on inter-organizational relationships has traditionally focused on long term-interaction or on repeated interaction episodes (Håkansson and Snehota, 1995; Håkansson et al., 2009) aimed to build mutual orientation, trust, and commitment. There is, on the other hand, a fuzzy vision of time-constrained relationships such as those occurring within projects.

While IMP has empirically kept track of both public-private interaction (Munksgaard et al., 2017; Waluszewski et al., 2019; Bondeli et al., 2020) and interaction within projects (Havenvid and Linné, 2016; Kronlid and Baraldi, 2020), it could be argued that the interaction mechanisms between public and private actors mediated by projects have only recently emerged and require further attention, due to their traits and characteristics. The conceptual treatment of public-private interaction is currently rather fragmented and presents different challenges for research. Thus, this paper aims to give a contribution in

this direction. Specifically, by reviewing IMP studies, we aim to provide an overview of how interaction between public and private actors is dealt with within projects, identify conceptual challenges, and provide an agenda for future investigations.

2. Background of the study

A preliminary study has been conducted adopting a bibliometric methodology¹, in line with recent IMP studies (e.g., Martínez-López et al., 2020; Aramo-Immonen et al., 2020). The results of this analysis were 430 valid publications, 28%, mostly concentrated in 10 journals. The annual scientific production analysis revealed a growing trend from 2009, with an annual percentage growth rate of 7.8%. The rationale for considering articles published in the last 10 years is that despite project management as a discipline exists for 60 years, research interest has been raised only in the past 20 years (Padalkar and Gopinath, 2016). A citation analysis on the top 10 most cited articles shows an increasing recognition of the relevance of public-private interaction within projects. This is due to the growing attention of researchers, governments, and academia to Public-Private Partnership (PPP) projects in traditional industries such as construction (Tang et al., 2010; Zhang, 2015; Chan, 2011; Shwayri, 2013), and to the attempt to improve the operation of these projects through the identification of success factors (Love, 2010; Zou, 2014) or measures of performance (Yuan, 2009) and identification of risks (Chan, 2011; Jin, 2011; Iyer, 2010).

3. Public-private interaction in Projects within IMP

Within the research stream of PPP, the relationship between public and private organization is perceived as a crucial success factor in projects (Zou et al., 2014), since *“poor relationship would easily lead to misunderstanding and conflict”* (Tang et al., 2010: 688). Moreover, as argued in Kronlid and Baraldi (2020), time constraints and temporality are key features that affect both public and private partners. Time represents a central concept since relationships emerge and are maintained through continuous episodes of interaction (Håkansson and Snehota, 1995). Time is also central within projects, as a project is defined as a *“temporary endeavor undertaken to create a unique product, service, or result”* (Project Management Institute), and the focal unit of interests in PPP is a temporary organizational form, *“which can be defined as a set of organizational actors working together on a complex task over a limited period of time”* (Bakker, 2010: 468)

¹ Data are extracted from Scopus and Web of Science, considering published articles with the string: ("public-private" OR "public-private interaction" OR "public private" OR "public private interaction") AND "Project*" AND ("Network*" OR "Business network*" OR "network*" OR "relationship*" OR "interaction" OR "IMP" OR "business relationship*") in the title, abstract, keywords, within the period 2009-2020. Data analysis is conducted in two stages. First, descriptive analysis is performed to synthesize research on the topic. Then, to investigate how the IMP approach contributes to the research on the subject, cited references of each selected article are extracted, and a ratio between the number of references cited in each article and the number of IMP related journals cited is constructed.

IMP and its interaction-based approach, emphasizing business relationships and the embedded nature of actors, represent a useful framework for analyzing temporary organizational form (Lundin and Söderholm, 1995) embedded in a permanent environment (Bakker, 2010). The analysis of cited references shows 9 articles with at least 9% of references related to IMP studies.

AUTHOR(S)	TITLE	JOURNAL	YEAR
Munksgaard, K. B., Evald, M. R., Clarke, A. H., & Damgaard, T. M.	What is in it for me: firms strategizing for public-private innovation	IMP Journal	2017
Howard, M., Wu, Z., Caldwell, N., Jia, F., & König, C.	Performance-based contracting in the defence industry: Exploring triadic dynamics between government, OEMs and suppliers	IMM	2016
Leite, E., & Anna, B.	A business network view on value creation and capture in public-private cooperation	IMM	2018
Kronlid, C., & Baraldi, E.	Time-constrained interactions in public-private collaboration projects. The case of ENABLE	JBIM	2020
Hadjikhani, A., Leite, E., & Pahlberg, C.	Business and socio-political interaction in international service projects: the case of Brazil	Management International Review	2019
Waluszewski, A., Hakansson, H., & Snehota, I.	The public-private partnership (PPP) disaster of a new hospital—expected political and existing business interaction patterns.	JBIM	2019
Torvinen, H., & Ulkuniemi, P.	End-user engagement within innovative public procurement practices: A case study on public-private partnership procurement	IMM	2016
Irún, B., Monferrer, D., & Moliner, M. Á.	Network market orientation as a relational governance mechanism to public-private partnerships	JBR	2020
Nissen, H. A., Evald, M. R., & Clarke, A. H.	Knowledge sharing in heterogeneous teams through collaboration and cooperation: Exemplified through Public-Private-Innovation partnerships	IMM	2014

The selected papers have been analyzed according to the following categories: nature, context setting, IMP key concepts (interaction, activities, value creations). Most of the selected articles are empirical and present qualitative case studies. The context settings in which articles are embedded are those of the health and construction industry, especially on innovation. A few studies deal with public service and education. PPP, public-private innovation, and public procurement are the key areas explored within IMP studies.

Adopting an interactive focus is crucial for understanding the business landscape and the characteristics of public-private interaction within projects. As argued by Waluszewski et al. (2019) and Munksgaard et al. (2017), the idea of content of interaction is a critical aspect to account for when dealing with public-private interaction. The content of interaction affects both sides of the exchange interface in terms of resources, activities, and actors. On this line of reasoning, it is not enough to provide the conditions to transfer commodities, but there must be an active engagement from both parties for public-private interaction to be successful. Neglecting interactivity and interdependence can lead to the failure of projects. The identification of drivers and barriers for interaction has been dealt with in several articles. There is an indication that this kind of relationship is highly challenging due to the

differences between the two spheres, such as different organizational objectives, cultures, decisional processes, organizational set-ups, and approaches (Munksgaard et al., 2017). If these differences are not considered, relationships might become challenging as the partners might have different perceptions of the project's goals and divergent interests.

Public-private relationships appear as particularly demanding and also require prioritization and preclusions of activities and actors. An additional difficulty is that projects involve starting the relationship process over and over again (Munksgaard et al., 2017). Engaging with public partners is demanding for firms in terms of resources spent on interaction and for understanding the public sector's culture and mindset. Interacting with the public side means interacting with different decision-making levels; this *"is considered unruly as firms might find themselves trapped in negotiations"* (Munksgaard et al., 2017: 83). Also, the heterogeneity within teams is a challenge that can lead to tensions and conflicts. But, at the same time, it might even be considered a driver of public-private interaction because it brings different knowledge and information (Nissen et al., 2014). Studies also highlight the benefits deriving from the interaction of the public and private spheres and identify some drivers. Building relationships with policymakers within projects is deemed a device for influencing decisions on upcoming projects and meeting new partners. Within projects, participation in various forums with different actors can allow firms to access developed relationships for discussing ideas and concepts. This also provides opportunities for adaptation based on potential partners' specific requests or for initiating contracts for developing new relationships with other potential partners in the public sector (Munksgaard et al., 2017). Even more important is using these relationships as an asset for long-term benefits and for engaging in additional projects. Interacting with the public side through projects also represents a driver for knowledge building, especially in innovation. Projects can be understood as a device for collecting information and knowledge, networking, and reputational benefits (Munksgaard et al. 2017; Leite and Bengtson, 2018). Drivers and barriers differ when considering firms without experience in business projects and experienced firms (Munksgaard et al., 2017). The latter utilizes projects as an asset for engaging in additional projects. Thus, relationships developed in one project are leveraged to access other potential public partners and create relationships.

In terms of social and economic value generated, it is argued that one of the reasons for supporting public-private interaction is because it offers opportunities for value creation and co-creation through projects. Studies conducted by Nissen et al. (2014) and Leite and Bengtson (2018) contribute to this issue, as they stress how interaction and interdependence are the prerequisites for value co-creation.

Concerning interaction mechanisms, different project coordination tools are presented (Munksgaard et al., 2017; Kronlid and Baraldi, 2020). A first distinction is between daily interactions, which are likely more intense and rigidly governed by templates – such as deadlines and flowcharts – and long-term oriented interaction, structured and managed more flexibly. The consequences of temporality and time constraints are more visible in

daily interactions. Structural interactions are characterized by moderate stability implied by the longer form of temporality (Kronlid and Baraldi, 2020). Thus, public-private interaction within projects seems to be characterized by a combination of formal and informal mechanisms. These influence the typology of knowledge shared and the project's progress. Informal mechanisms, such as close personal interaction, are crucial when dealing with tacit knowledge (Munksgaard et al., 2017; Nissen et al., 2014). Tacit knowledge sharing is related to collaboration and strong linkages, while sharing of codified knowledge is related to cooperation and taskwork performed autonomously (Nissen et al., 2014). On the formal nature of public-private interaction, studies of Torvinen and Ulkuniemi (2016) and Howard et al. (2016) characterize public-private relationships as being *"formal and contract-driven"* (Torvinen and Ulkuniemi 2016:60), as public-private interaction mostly happens in a context characterized by formal norms, regulations, and procedures.

4. Conclusions and agenda for future research

The aim of this review paper is to understand how IMP studies have dealt with public-private interaction within projects. The articles' empirical nature corroborates the assumption that only a limited conceptualization of public-private interaction within projects exists. However, the increasing interest on this theme is shown by the focus of IMP studies on themes as health, construction, public services, which confirms how the inference of public-private interaction has been gaining popularity also in areas which have traditionally been considered as *"inappropriate to expose to business involvement and economic exchange"* (Waluszewski et al., 2019: 1-2). The analysis shows how the IMP approach helps to analyze inter-organizational business relationships. Starting from the above assessment of what has already been investigated, challenges emerge, together with future lines of investigation and implications. A challenge identified concerns the relational process within projects. Existing studies suggest, on the one hand, that projects should be considered as interaction arenas, and, on the other, they characterize public-private interaction as highly regulated and formal. Thus, the complexity and formalization of procedures, and the accelerated rhythm of interaction within projects seem to hinder direct interaction and relational processes in favor of task completion (Wagrell and Baraldi, 2019; Kronlid and Baraldi, 2020). Interaction is also affected by actors' turnover of actors within projects (Kronlid and Baraldi, 2020; Nissen et al. 2014). Actors' withdrawal and entrance have an extensive impact on trust-building (Irún et al., 2020), increasing uncertainty, and speed of activities. Therefore, it seems like implementing the project's governance mechanisms should be combined with relational management mechanisms. Another challenge derives from the complexity of public-private interfaces and from the differences in intended outcomes, which imply the need for room for flexibility and adaptability, as well as the importance of prioritizing interaction at every public actor level to influence others and to secure project progress (Munksgaard et al., 2017). Thus, interaction needs to be actively organized and counterparts must engage in concrete problem-solving processes.

The interaction between public and private actors has often been investigated in PPP, public-private innovation, or public procurement. IMP studies have observed how public-private interaction should be considered beyond the stipulation of formal contracts, as interaction goes on in different stages of the partnership (Mattsson and Andersson, 2019).

Thus, on the one hand, the role of the policy measures aimed at promoting relationships between the counterparts would then deserve major attention. On the other, the managerial aspects of public-private projects are the next big challenge for scholars and professionals.

One of the limitations of this short paper derives from the methodology adopted, which excluded important contributions on the topic and articles based on the emerging research stream on industry-university interaction. Studies of Wagrell and Baraldi (2019) and Mattsson and Andersson (2019) provide a classification of the roles that public actors assume in interaction with private partners. Concerning the emerging stream on university-industry interaction, studies of Kronlid and Baraldi (2020) and Laage-Hellman et al. (2020) show the differences hindering interaction between university and industry, caused by contrasting logics and cultural distance, divergent motives, and time orientation. University-industry interaction requires further investigation as it mostly occurs through joint R&D projects and can have varying degrees of interaction between the two parties, from superficial meetings to interdependence of goals and resources.

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