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Carla Bader

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ED SEDAM n° 73 – Lille Economie et Management

THÈSE

Pour obtenir le grade de Docteur en Sciences de Gestion délivré par
L'Université de Lille

**CRAFTING PUBLIC-PRIVATE PARTNERSHIPS IN EMERGING COUNTRIES:
A COEVOLUTION PERSPECTIVE**

**PROCESSUS DE CREATION DES PARTENARIATS PUBLIC-PRIVE DANS LES
PAYS EMERGENTS : UNE PERSPECTIVE CO-EVOLUTIONNISTE**

Soutenue publiquement par

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Le 15 Janvier 2021

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I am surely blessed with all what made this journey possible and I thank God for allowing it and guiding my steps all through it.

Abstract

This dissertation features a process research exploring the dynamics of crafting a public-private partnership (PPP) for energy distribution in Lebanon. An inductive exploration of the field revealed the co-existence of two phenomena evolving within the same sphere. In parallel to this PPP setup, the country was going through a process of PPP regulation with the aim to reform existing PPP procurement and management practices. The research examines the coevolution of these two phenomena and reveals insights on the mechanisms underlying the way PPPs as institutions emerge, operate and develop in a developing economy. The analysis allows grounded theory modelling of PPP institutionalization and contributes to our understanding of PPPs while highlighting the importance of institutional and political factors in shaping this evolution. The results show that in developing economies, the coevolution of a PPP with the setup of a regulatory framework is strongly constrained by political considerations and personal agendas. PPPs evolution path prove to be highly impacted by contextual particularities and their performance can vary significantly during the stages of this evolution; in return PPPs can induce very limited and localized forms of change to elements of the surrounding institutional environment. Finally, PPPs institutionalization in developing economies greatly depends on stakeholders' willingness and is subject to different forms of resistance.

Keywords: Public-Private Partnerships; Co-evolution; PPP Institutionalization; Crafting PPPs; PPP Regulations; Process Research; Emerging Country; MENA.

Résumé

Cette thèse présente un processus de recherche visant à explorer la dynamique de création d'un partenariat public-privé (PPP) pour la distribution de l'énergie au Liban. Une étude inductive a révélé la coexistence de deux phénomènes qui se développent simultanément dans un même contexte. En parallèle de la mise en place du PPP, le pays est engagé dans un processus de réglementation des PPP visant à réformer la démarche de leur passation ainsi que leur gestion. Une perspective co-évolutionniste de ces deux phénomènes permet de comprendre les mécanismes de création, fonctionnement et développement des PPP dans un pays en voie de développement. Les résultats de l'analyse par théorisation ancrée permettent l'élaboration d'un modèle conceptuel du processus d'institutionnalisation des PPP et contribue à enrichir la compréhension des PPP tout en soulignant l'importance des facteurs institutionnels et politiques qui façonnent cette évolution. Dans les économies en voie de développement, la co-évolution d'un PPP avec la mise en place d'un cadre réglementaire est fortement contrainte par les agendas personnels des acteurs politiques. La performance et l'efficacité des PPP s'avèrent être fortement influencées par les particularités du contexte et peuvent varier considérablement au cours des étapes de leur évolution ; en retour, les PPP pourraient induire des formes limitées et localisées de changement au niveau de certains éléments du cadre institutionnel. Enfin, l'institutionnalisation des PPP dans les économies en développement dépend de diverses parties prenantes et est sujette à différentes formes de résistance.

Mots-Clés : Partenariats public-privé, Co-évolution, Institutionnalisation des PPPs ; Recherche sur le processus ; Pays émergent.

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List of Abbreviations

AMI	Advanced Metering Infrastructure	PPIAF	Public-Private Infrastructure Advisory
BoD	Board of Directors	PPPLRC	Public-Private Partnership Legal Resource Center
BOOT	Build-Operate-Own-Transfer	PPP	Public-Private Partnerships
BOT	Build-Operate-Transfer	PV	Procès verbal
BOT	Build-Operate-Transfer	SP	Service Provider
BTO	Build-Transfer-Operate	UAE	United Arab Emirates
CEDRE	Conférence Economique pour le Développement du Liban par les Réformes et avec les Entreprises	VfM	Value for Money
CoM	Cabinet of Ministers	WB	World Bank
DBFO	Design-Build-Finance-Operate		
DBFOM	Design-Build-Finance-Operate-Maintain		
DSP	Distribution Service Providers		
EdL	Electricité du Liban		
EIB	European Investment Bank		
GDP	Gross Domestic Product		
HCP	Higher Council of Privatization and PPP		
IF/EF	Internal Factors/External Factors		
IMF	International Monetary Fund		
KPI	Key Performance Indicator		
KSA	Kingdom of Saudi Arabia		
LDC	Less Developed Countries		
LV	Low Voltage		
MENA	Middle-East and North Africa		
MoEW	Ministry of Energy and Water		
MoF	Ministry of Finance		
MoU	Memorandum of Understanding		
MV	Medium Voltage		
NPM	New Public Management		
OECD	Organization for Economic Co-operation and Development		
PFI	Private Finance Initiative		
PM	Program Manager		
PMO	Project Management Office		
PPI	Private Participation in Infrastructure		

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General Introduction

CONTEXT OF THE RESEARCH

In October 2017, a global campaign on PPPs¹ was launched with the support of nearly 150 organizations from around the world followed by an official letter signed and handed to the World Bank executive directors in April 2018, urging the international institution to stop increasing promotion of PPPs contracts. A long list of documented evidences on PPPs failed experience in developed and developing countries caused the dissatisfaction of financial auditors, infrastructure experts and civil society organizations towards PPPs shortcomings and costly failures. The other side of the coin shows a more glowing aspect of PPPs. Unlimited success stories have praised PPPs capacity to strongly improve the quality of public services and to modernize infrastructures. As an example of late achievements, a special report on PPPs has been published recently by *The Economist*² shedding the light on a PPP experiment with the Chilean education system combining benefits from both the public and the private sector through a private voucher-financed program and significantly improving Chile's educational performance by local standards. Other examples of PPPs achievements also reported strong progress in Asian countries water policies developed around PPPs arrangements³; so is the case of Australia PPPs initiatives in transportation projects⁴ and more recently US cities investing in smart grid electricity and fiber-optic communication systems⁵. On the other hand, many PPPs projects went off the rails through costly failures and poor results delivery in the public interest. The European Court of Auditors has identified inefficient spending worth 1.5 billion euros in PPPs contracts enacted between 2000 and 2014, suffering from shortcomings and limited benefits. Another example of a costly PPP failure is the London' Metronet (as part of the underground rail update in

¹ Public-Private Partnerships: Global Campaign Manifesto, *Eurodad*, October 2017.

² How Chile combines competition and public funding, *The Economist*, April 2019,

<https://www.economist.com/special-report/2019/04/11/how-chile-combines-competition-and-public-funding>

³ Public-Private Partnerships and Smart Technologies for Water Sector Development, *ADB*, July 2018.

⁴ Infrastructure and Transport PPPs and Privatisation in Australia, *Department of Infrastructure and Regional Development*, August 2017.

⁵ Connecting Microgrids with Public-Private Partnerships to Meet Critical Needs, *Lexington Institute*, September 2016.

2003-2008⁶), and the financial collapse of Sydney's Cross City Tunnel in 2013 because of toll revenue failure⁷.

There is an endless list of PPPs successes and failures, and also ongoing debates and criticism about the efficiency of their financing mechanism and their capacity to deliver social and economic value. However this did not prevent their proliferation in the last two decades and their solicitation for focused missions. Infrastructure experts still believe that PPPs can deliver strong outcomes if the appropriate contractual model is put in place under favorable political context and stable financing environments.

The involvement of multiple actors from different economic spheres in PPPs is growing in practice. Scholars and policy makers assert the evolution of the economies toward a mixture of government/market decision making with a “*blurring of the lines*” separating the sectors. PPPs are often viewed as being a contemporary of public sector development through modern infrastructure ventures. Modernized airports, ports and railroads are critical transport services and considered to be essential for economic development but are also costly and politically-sensitive activities. PPPs were put in place in various economic sectors where they were supposed to assist governments and municipalities in different activities: meeting global growing demand for electricity and renewable energy, engaging in information and communication technology global reforms, facing the increased demand for improved infrastructure services, enhancing education services and healthcare systems, and others.

Many parts of the world, at largely varying levels, already had an experience with infrastructure projects built and operated by private firms, and the global history and efficiency of PPPs differ significantly from a region to another. The general picture portraying global experiences at different times could be the one of waves of PPPs enthusiasm followed by regret in some cases, or cheerleading in others. These waves are often driven by a need to accelerate economic development/recovery or circumvent fiscal problems. For this purpose and under the umbrella of “PPP” the roles of public and private actors can be combined in different ways and shape an extensive variety of arrangements to reconstruct deteriorating utilities or revitalize social facilities. The governments have also organized and developed their PPP programs in different ways with respect to their economic environments and legal systems.

⁶ The failure of Metronet, National Audit Office, June 2009, <https://www.nao.org.uk/report/the-department-for-transport-the-failure-of-metronet/>

⁷ Assessing the global transport infrastructure market: Outlook to 2025, PwC, 2015.

Available data on PPPs do not cover evenly the different regions worldwide and there is a great heterogeneity among information on PPP projects worldwide. Systematic data on low and middle-income economies can be found in the World Bank PPI database⁸. As for advanced economies, data is scattered among different sources, without a systematic consolidation over a long period of time as for developing economies.

The latest figures on PPPs in the United States are communicated by the U.S. federal state and local government, and go back to the 2017 fiscal year mentioning a total of USD 441 billion spent on transportation and water infrastructures⁹ as local governments continue to seek infrastructure upgrades. The value of PPPs for infrastructure in the US has been on the rise for many years now as an accelerated number of projects have entered the pipeline since January 2014¹⁰. For many years PPPs in the US mostly developed in surface transportations, but recently more PPPs recent trends include a broader range of social infrastructure projects. Cities and districts engage in PPPs for various purposes, for instance: in 2015 Kentucky has built broadband networks; Columbia is modernizing their school buildings via PPPs; California closed in 2016 a USD 530 million PPP to build a new civic center; public universities in various cities are engaging into PPPs for students' housing facilities to develop parkings and turn streets into pedestrian-friendly urban hubs and build campus facilities¹¹.

The rising popularity of PPPs became particularly remarkable in Europe with the UK conservative governments through the 1980s and the introduction of the private finance initiative (PFI). More recently, other European countries have been experimenting with PPPs including Germany, Spain and Portugal, with particular expansion at the level of the French municipalities. The European commission has been investing significantly in PPPs, and Europe 2020 strategy built on innovative financing mechanisms through intensive leverage of both public and private funds. However, investments in PPPs have known a severe decrease in value and volume since the financial crisis in 2008, after a sharp expansion over the period 1990-2007. The European PPP Expertise Centre (EPEC)¹² has reported a totaled value of 9.8

⁸ Available at www.ppi.worldbank.org

⁹ Public-Private Partnerships for Transportation and Water Infrastructure, Congressional Budget Office, January 2020

¹⁰ PwC, "Public-private partnerships in the US: The state of the market and the road ahead", November 2016, <https://www.pwc.com/us/en/capital-projects-infrastructure/publications/assets/pwc-us-public-private-partnerships.pdf>

¹¹ PwC, "Public-private partnerships in the US: The state of the market and the road ahead", November 2016, <https://www.pwc.com/us/en/capital-projects-infrastructure/publications/assets/pwc-us-public-private-partnerships.pdf>

¹² Based in the Advisory Services Department of the European Investment Bank and, created in 2008 to support EU Member States in their work on PPPs.

billion euro of PPP projects reaching financial close in 2019 compared to almost 26 billion euro in 2007. Over the 1990-2016 period, the UK was leading the EU PPP investments by outweighing the rest of European countries in terms of PPP value (around 160 billion euro) and volume (over 1000 projects), followed by France then Spain with almost 40 billion euro of PPP projects value. The transport sector remains the largest in European PPPs value followed by the housing and community services sector, then the education and telecom sectors¹³. The Europe 2020 Strategy reinforces the role of PPPs in the digitizing industry. This recent vision emphasizes the need to address critical societal challenges and major EU policy objectives through an expanded scale of research and innovation efforts¹⁴.

An example of mature and steady PPP market is Australia and New Zealand. Similarly to other regions in the world, Australia has been engaged in PPPs since decades, and it has been known for some of the larger PPP projects worldwide and most importantly Australia, alongside Canada and the UK, enjoys a good reputation in delivering projects on time and within budget¹⁵. In 2019 the value of investments in PPPs has sharply increased comparing to previous years and the main reason behind this is probably the Australian' reliable investment market and the consistent national framework that offer support for the private sector and public sector to work together.

In emerging economies, PPP activities are also proliferating differently across regions. The reported figures reflect a prominent role played by PPPs in the development agendas of low- and middle-income nations. The PPI database has reported an approximate number of 7,125 projects signed for a total capital value of USD 1.772.812 million across developing regions for the period from 1990 to 2018. The table below provides a breakdown of private investment in PPP projects according to geographic regions and to sectors:

¹³ Information based on EPEC, https://www.eib.org/attachments/epec/epec_market_update_2019_en.pdf

¹⁴ Europe 2020, A European strategy for smart, sustainable and inclusive growth.

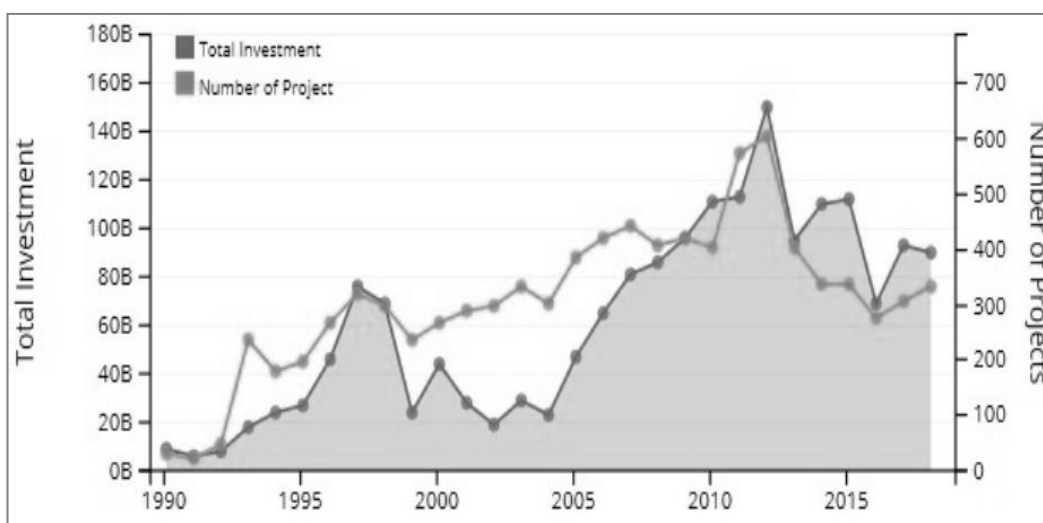
¹⁵ Reimagining Public Private Partnership, PwP, October 2017, <https://www.pwc.com.au/legal/assets/reimagining-ppps-oct17.pdf>

Private activity across infrastructure sectors in developing regions (1990-2018)

Regions ranking, 1990-2018	number of projects	investment (USD million)
East Asia and Pacific	2,295	601,722
Latin America and the Caribbean	1,900	455,427
South Asia	1,308	304,208
Europe and Central Asia	914	273,052
Sub-Saharan Africa	502	78,734
Middle East and Northern Africa	206	59,669
Primary sectors, 1990-2018	number of projects	investment (USD million)
Electricity	3,452	882,767
Roads	1,058	318,689
ICT	521	118,367
Railways	122	115,394
Airports	169	106,593
Ports	439	85,820
Water and sewerage	1,004	76,515
Natural Gas	362	69,549

Source: PPI Database, features rankings (1990 to 2018), World Bank, <https://ppi.worldbank.org/snapshots/rankings>

The trend for PPP developments since 1990's in low- and middle-income countries follows almost the same trajectory as for the rest of the world. Private investments in PPPs have known two important periods of expansion (chart below). A steady growth from USD 7 billion in 1991 to USD 91 billion in 1997 has preceded the Asian financial crisis (1997-1998) as the repercussions of this crisis on PPPs investment materialized in a contraction where investments dropped to USD 21.9 billion in 2002. A second growth phase followed and culminated in record investments of USD 158 billion in 2012 before a significant decline in 2013 when total investments decreased again to USD 93 billion. Since then, investments have been growing slowly compared to 2004-2012 periods.



Investments in PPPs and total number of projects in low- and middle income countries, 1991-2018

Source: PPI Database, World Bank, as of May 2019, <https://ppi.worldbank.org/visualization/ppi.html>

Recent trends are believed to shape the next wave of PPPs globally. In an ever-evolving environment PPPs will certainly develop, transform and shape up to “fit for the purpose”. In 2018 the United Nations Economic Commission for Europe (UNECE) launched “People-first” PPPs, based on a growing consensus that the impact of PPPs needs to be strengthened by putting people first and therefore focus on social services for education, healthcare and housing, support vulnerable members of the society and protect the environment. This initiative following the UN roadmap ‘2030 Agenda for Sustainable Development’ - launched in September 2015 - is a new perspective towards PPPs that incorporates the Sustainable Development Goals (SDGs) in order to make them fit for the purpose of promoting equity by creating local and sustainable jobs within social and economic vulnerable communities, improve environmental sustainability and engage all stakeholders in promoting social cohesion and improving the quality of life of these communities.

In order to embrace this change and enforce sustainability and resilience, the features of the first wave of PPPs, the one of the 1990s, cannot remain the same. Countries worldwide are revising their legal framework of PPPs in order to ensure better governance and establish improved enabling environments (i.e. Brazil launching new PPP law in 2006; Canada

reviewing PPP law in 2015; China's new rules on concession and PPPs in June 2015)¹⁶. This mostly concerns adopting appropriate measures to increase transparency and encourage competitive procurement, which will certainly help alleviate the constraints that prevented investors to engage in PPPs in certain markets. This task proves to be even more difficult in developing economies and puts governments of those countries under unceasing pressure to meet public services' demands while maintaining balanced leverage over spending and expenses. Furthermore, many new PPP institutional actors start to emerge; this includes the rise of PPP regional centers of excellence and PPP units, i.e. UNECE PPP Center of Excellence, the Frankfurt Healthcare PPP Center, the Afghan PPP Hub and the World Association of PPPs Practitioners.

These dynamics were an eye-opener to countries that are still at the early stages of a PPP nascent experience, which is the particular case of governments in regions that suffered lately from disrupting internal environment such as in the Middle East and in North Africa (MENA). The aftermath of this political transition is a deteriorating economy and important fiscal problems and an urgent need for the market to assist governments in alleviating these heavy repercussions through the injection of funds and the participation in public undertakings. PPPs regulatory activities started to flag recently everywhere in these countries and policy makers are actively engaged in designing regulatory frameworks to govern these activities. It is important to note though that the participation of private investors in public infrastructure activities of these countries is not new, and many PPP-like projects of various scales were implemented with various levels of success. However, scattered regulations for PPP procurements and absence of governing bodies prevail in low-middle-income countries of the MENA region. For this reason, many of these countries have recently started enacting PPPs standalone laws (i.e. Jordan in 2014, Morocco and Tunisia in 2015, Lebanon in 2017)¹⁷ and establishing PPP regulating bodies, hoping to benefit from PPPs while reducing their threats of costly repercussions on public budgets and to reinforce the governments' role to regulate in the public interest.

¹⁶ Public-Private Partnerships Laws / Concession Laws, PPPLRC, World Bank Group, <https://ppp.worldbank.org/public-private-partnership/legislation-regulation/laws/ppp-and-concession-laws#examples>

¹⁷ idem

THEORETICAL ADVANCEMENTS ON PPPs

The complexity of PPPs and the controversial nature of their outcomes have triggered the curiosity and interest of scholars and researchers. The public-private hybrid arrangements of ownership, the design, the financing mechanism and operating schemes have entailed a stream of literature that keeps on growing since the 1990's. Studies on PPPs have emerged across various disciplines, predominantly in Public Management and Economics, and more recently in Strategic Management. The composition of PPPs as collaborative arrangements mixing actors from different sectors or economic spheres over a particular economic interest has raised disparate but important questions, which advanced to a high extent our understanding of PPPs. This knowledge production witnessing a snowball effect is believed to be largely due to the high complexity and "imperfect" nature of projects and relationships entailed in PPPs (Hodge & Greve, 2007).

Studies in Public Management have recognized the importance of networking and the involvement of multiple stakeholders in public service provision and the delivery of social and public value (Brown & Potoski, 2003). Authors have also investigated public institutions' attempts to adopt strategic management practices and tools as a respond to the New Public Management assumptions and examined the applicability of strategic planning processes and strategic actions in public contexts (Carmouze, Hernandez & Serval, 2019; Hernandez, 2008; Drumaux & Goethals, 2007). And because public spending on PPP projects is significant, studies in this discipline were interested in understanding the different rationales behind nation's engagement in PPPs that ranged between achieving public policy goals in addressing societal problems (Brinkerhoff & Brinkerhoff, 2011), promoting the well-being of communities (Stoker, 2006) and achieving sustainability-related objectives (Pinz et al., 2018). Large volume of published studies focused on the comparison between PPPs and traditional forms of procurement and the evaluation of these two-ways of delivering high-quality public services at the lowest cost for citizens and taxpayers (Forrer et al., 2010; Hodge & Greve, 2009; Wettenhall, 2007). This literature has generated numerous definitions of PPPs, most of which evolve around the purposes and rationales of governments in engaging in this type of arrangements, but could not agree on a unified one (Hodge & Greve, 2008). The distinction between the particularities of the public and the private sectors and the institutional complexity entailed in joint interorganizational policy making were also important to explore because of their capacity to block the appropriate coordination between actors involved in a partnership (Teisman & Klijn, 2000). Authors also developed large set of risks to be allocated

to the party that best understands it and has control over it (Yescombe, 2007; Ham & Koppenjan, 2001).

Economics-based studies on PPPs were predominated with transaction costs and incomplete contracting theorization and studies in this perspective informed a lot about contractual issues considered to be critical for efficient public contracting through PPPs, such as: the criteria for partners' selection, tasks bundling, optimal ownership, control rights, allocation of risks among partners. Authors were concerned with identifying areas for trade-off optimization between initial investments and further maintenance and operations tasks highlighting the advantages of tasks bundling in PPPs (Iossa & Martimort, 2015; Benett & Iossa, 2006; Hart, 2003). Studies have also stressed the importance of careful planning during tendering process and provided guidance for effective selection of private partner (Saussier et al., 2009; Estache et al., 2009), but also warned about the risks of PPPs survival within a range of associated institutional determinants highly present in environments prevailed by bureaucracy, corruption, frequent political cycles and macroeconomic shocks (Guasch et al., 2008). The high rate of contractual renegotiations and the resulting transaction costs noticed in PPPs deployed in weakly institutionalized environments make them favorable to opportunistic behavior (Moszoro & Spiller, 2012; Spiller, 2008) and vulnerable to the complications; which emphasizes further the importance of regulations (Albalade et al., 2018; Geddes & Wagner, 2013).

Building on the collaborative nature of PPPs, studies in Strategic Management also had a share in PPPs literature, less important than the one of studies in Economics and Public Management though. This stream of literature revealed important insights on the interdependence of resources, governance issues as well as institutional hybridity within actors' relational processes. Studies in this direction discussed the mutual benefits that can be realized through the pooling of complementary capabilities and their importance for the performance of long-term complex collaborations like PPPs by enforcing the mission of the cooperation and satisfying partners' values (Cabral et al., 2013; Rangan et al., 2006). And in this case hybrid modes of governance are necessary in order to achieve the economic objectives of PPPs and even enable innovation (Kivleniece & Quélin, 2012). Scholars were concerned with the challenges inherent in PPPs due to institutional complexity, deriving from the interaction of actors coming from different spheres of economic activities. These differences happen to be a basis of collaborative advantage or a source of tension and conflicts (Villani et al., 2017; Jay, 2013) depending on the effectiveness of coordination

mechanisms moderating these challenges. New trends are shaping the development of PPPs during the 21st century, so does the associated literature in Strategic Management: nascent theoretical perspectives and a new set of questions are following this evolution and concepts like social value creation and appropriation started to be at the center of scholars' interests (Quélin et al., 2017) who perceive a great need to go beyond contracting partners' interests to broader notions of public and social value.

Theoretical thirst for PPPs is persistent given their expanding activities and the range of arrangements that aim to meet recent public expectations and social and environmental demand. Theoretical advancements have so far provided rich insights onto PPPs and allowed a significant understanding of many of their facets. However they are believed to be limited by different aspects that present important opportunities for further developments. The existing studies do not provide comprehensive assessment of PPPs since there is no single framework to capture and analyze the diversity of parameters interplaying in PPPs (Brinkerhoff & Brinkerhoff, 2011). In addition, studies that capture process-related aspects of the evolution of PPPs and observe the ways different components dynamically interact to support PPPs survival are scarce (Villani et al, 2017; Selsky & Parker, 2005). The rare studies observing PPP dynamics are limited to the micro-level of the partnership: the interactions of the partnering actors (Jay, 2013) or the analysis of contractual renegotiations (Le Squeren, 2016), without considering the changes in the surrounding environment that can shape to a high degree the evolution of PPPs. In addition, most of the reviewed studies address contexts where regulatory and institutional frameworks for public contracts already exist, but pay little attention at institutional dynamics in countries going into processes of building or reforming PPPs regulations.

RESEARCH QUESTION

Based on the advancements of the literature on PPPs and the identified limitations coupled with the recent market trends and latest global PPP activities, and building on the complex and dynamic character of PPPs, a set of interrogations arise around the mechanisms of a crafting experiment in countries with nascent experience with PPPs where a solid and dedicated regulatory framework is still inexistent. We are interested in a process-view on PPPs allowing us to look at PPPs as institutions: a structure that evolves around an economic activity within environmental changes and that is constructed through formal and informal constraints. We build on the approach of North (1991) who considers that institutions provide structure and order for economic exchanges and evolve with time around formal (rules,

constitutions, laws and property rights) and informal (customs, traditions, norms and codes of conduct) constraints. This entails the understanding of PPPs' emergence and development at both the partnership level and the institutional environment level.

We propose the following research question to formulate our interest:

How do PPPs emerge, operate and develop in an emerging economy, in the initial absence of a PPP dedicated regulatory framework?

The research process that will guide this question and the structure of this dissertation is explained next.

STRUCTURE OF THE RESEARCH

This dissertation follows a typical structure of dissertations based on inductive research in management studies. It is composed out of five chapters: a literature review on PPPs, the analytic framework guiding the research process, the research methodology and design settings, the empirical findings and a final chapter for the discussion of results and presentation of contributions and limits of the study.

Chapter 1 of this dissertation explores the literature on PPPs. Despite the research being inductive by design, we wanted to have a primer on PPPs before studying the empirical field. The chapter starts with a review of various definitions attributed to PPPs and the rationales behind nations for adopting this type of collaboration with the private sector. A review of major developments on PPPs are presented with the purpose to explore the aspects that interested scholars and the different questions rose around PPPs as well as conclusions drawn in this regards. Theoretical developments on PPPs are found in various scientific disciplines, mainly in Public Management, Economics and Strategic Management. A particular focus is brought to the performance of PPPs across disciplines, the ways this performance is evaluated according to the different theoretical lenses and the stream of literature questioning this performance and the adaptability of criteria used for its evaluation. The recent introduction of 'value creation' and 'value appropriation' concepts to PPPs studies was also explored in order to understand the recent trends preoccupying scholars and the latest developments in this direction. The chapter ends with a discussion of the limits of existing studies and the need to expand research on missing or underexplored elements, based on which a preliminary research question is formulated and analytical grounds are suggested to guide this question; the research question being the following: "*How are PPPs crafted in emerging economies with the initial absence of a dedicated regulatory framework?*"

Chapter 2 is written in the light of the limitations stated in the previous chapter. It is built on the dynamic character of PPPs and the identified needs to explore process-related aspects of PPPs evolution. For the purpose of exploring the process of their crafting, we suggest looking at PPPs as a form of institution that emerges and develops within the changing elements of their surrounding environment, mainly the institutional formal and informal constraints. The coevolution perspective is suggested as the analytical framework guiding the research process. The chapter explains the features of the coevolution framework making it relevant for this research and it also clarifies the properties and requirements to conduct research on coevolution. A number of empirical studies on coevolution were reviewed, with the aim to explore further the concepts allowed by this framework, its scope, the different research objects observed through this perspective and the contexts in which the coevolution perspective is particularly useful. A particular focus is drawn on studies addressing the coevolution of strategic alliances. These developments taken together allowed the reorientation and further refining of the proposed research question: *“How do PPPs emerge, operate and develop in an emerging economy, in the initial absence of a PPP dedicated regulatory framework?”*

Chapter 3 explains the methodological choices put in place for this research project. This qualitative research features an inductive exploration of the setup and evolution of a PPP for energy distribution arranged between the Lebanese electricity public utility and a consortium of three local firms. In the meantime a long awaited reform of PPPs regulations was taking place at the national level. These settings made Lebanon a typical example of countries that present the opportunity for a real-time observation of a context where PPPs as institutions are still in the making and do not exist as a stable form of organizations, and rules and conventions around PPPs are still under construction. Strategies for process research are used to observe and analyze the evolution of this phenomenon over a period of time, based on the leading works of Pettigrew (1992), Van de Ven (1992) and Langley (1999) for process research design. A systematic technique for analyzing inductive studies is also put in place, the Gioia method, chosen for its capacity to capture organizational experiences as lived and perceived by concerned individuals and to enable a social scientific theorizing about this experience. Details on the field of study and its context are richly described. The fieldwork of observation and data collection was conducted while processes of PPPs crafting and PPPs regulations were “live development” therefore capturing real-time data was enabled and allowed interesting insights on actual decisions and perceptions. A detailed description of the process of data collection and treatment is provided. This chapter also explains the approach

used to analyze this large volume of collected data. The analysis resulted in the construction of two data structures. Each data structure features an iterative process of three coding levels: 1st-order cycle coding is centered on the voices of the informants providing evidences that emerge from the inductive search; the 2nd-order codes suggest concepts and themes generated from 1st-order codes, and a third level of coding results in “*aggregate dimensions*” reflecting further conceptualization.

Chapter 4 elaborates on the empirical results revealed through data structuring and ordering. The dimensions of the first data structure represent the dynamics that articulated the process of *PPPs legislation and emergence of regulatory body*. This process emerged from urgent needs to regulate PPPs in Lebanon and materialized in the enactment of a law dedicated to PPP procurement and management as well as the establishment of a PPP national unit to regulate all PPPs activities. A political power game was at the center of this process with political actors attempting to delay the enactment of the law and declining any cooperation and consultation with the PPP national unit over the development of PPPs projects. This has constrained and limited to a high extent the activities of this national unit especially that parallel routes for PPPs procurement were still available.

The dimensions of the second data structure represent the mechanism of *crafting a PPP for energy distribution*. A detailed analysis of the setup and the evolution of this PPP revealed interesting interactions among and between partners and other categories of stakeholders. The interplay of these processes articulated an exciting journey of a PPP that did not unfold as expected and designed. Different categories of actors (a group of precarious workers, head of regional divisions and head of municipalities) perceived the private participation in public services as a threat to their actual situation (position, acquired rights, usual codes of conduct...) and tried to resist the initial setup of the PPP and impede its progress later on. In return the electricity public utility and the three private partners engaged in collective and individual efforts to address the challenging resistance of other stakeholders. Meanwhile tension and conflicts started to rise between partners because of contractual and relational issues. The coexistence of all these events imposed cycles of micro-adaptation in order to preserve the viability of the PPP.

The dimensions articulating the previous two processes were consolidated further to explain the *dynamics of PPPs emergence and development* in Lebanon. These dynamics provide insights on the different factors contesting PPPs regulation and resisting PPPs creation and evolution. But most importantly these dynamics explain the behavior of partners towards this

resistance and the strategies put in place to circumvent some of the resulting undesirable effects.

This chapter provides narrative details of actions and decisions taken by key actors, description of flows of activities and events taking place on different levels of analysis. It also provides contextual details in all their richness and complexity, as well as plenty of informants' quotes and extracts from the collected raw material.

Chapter 5 puts motion to the static picture of the data structures generated from data analysis, and proposes three conceptual models that advance our understanding of PPPs dynamics in developing countries. The first grounded conceptual model explains the process of *crafting a regulatory framework for PPPs* and the second model explains the process of *crafting PPPs as collaborations*. These two processes taken together can explain how PPPs as institutions emerge, operate and develop in developing countries and therefore articulate a third conceptual model of *PPPs institutionalization: a coevolution perspective*. In this chapter, the components of these models are discussed in the light of empirical results and existing literature on PPPs. The last part of the chapter suggests new directions to look into PPPs based on the theoretical contributions allowed by this research, and also provides recommendations to practitioners involved in the design and management of PPP activities. The challenges presented by this research are also explored along with the opportunities for future developments.

EXPECTED CONTRIBUTIONS TO RESEARCH AND PRACTICE

We build on insights from Strategic Management research and Organization Studies to address ongoing calls for the development of a comprehensive framework in studying PPPs. This research does not claim to advance an overarching theory on PPPs; however it is expected to extend this growing literature by using an integrative theoretical framework, the coevolution, to explain a process, the PPPs institutionalization which is not directly tackled by studies so far.

Studies on PPPs revealed a rising interest in understanding the dynamics of their post-formation and the mechanisms that support their effective functioning and ensure their survival (Villani et al., 2017). The need for longitudinal research to capture the evolution of PPPs was explicitly formulated by scholars who suggest addressing process-related aspects of PPPs (Kivleniece & Quélin, 2012; Slesky & Parker, 2005). This research is an empirical

study observing PPPs from a process progress perspective with the aim to understand how and why this phenomenon occurs and evolves with time.

On a different note, this research contributes in extending the scope of organizational forms observed through a coevolutionary perspective, adding by this an element to the family of objects that interested scholars engaged in studies on coevolution. PPPs are characterized by the coexistence of multiple actors from multiple organizational spheres, which displays a high hybridity in logics and governance within these arrangements (Quélin et al., 2017). In addition, the performance of PPPs is tightly conditioned by the quality of the institutional environment in which they are embedded (Spiller, 2008; Moszoro & Spiller, 2012). The coevolution framework has the capacity to incorporate elements related to the organizational dynamics and the particularities of the environment, which makes it a potentially revealing theoretical lens to use for looking into PPPs. This research is expected to develop new concepts on how the institutional environment is considered to be great determinant of a PPP evolution and performance; and in return, how the evolution of PPPs can induce changes at the institutional level.

Empirically, we contribute in enlarging the knowledge base of the way PPPs are crafted in developing countries of the MENA region. PPPs in this region remain underexplored relatively to PPPs investigated in other countries.

In regards to managerial contributions, this research is designed around the observation of processes, which gives the actors concerned the opportunity to improve and adopt their decision making as events unfold through the different stages of a PPP evolution. These practical implications help managers in setting optimal policies that are able to adapt and change while accompanying PPPs in their development; this is particularly useful for developing economies where limitations at different levels are frequently faced. Away from the economic and structural agendas of studies and research made around public policies, this research adopts a managerial perspective to take a closer look at the processes involved in the design, implementation and regulation of PPPs, in countries experiencing an important transition between pre and post-PPP regulation. This approach in looking at PPPs will provide a nuanced understanding of the context particularities which is important in enhancing the learning experience of managers of both sectors and developing strategies accordingly.

Chapter 1

Public-Private Partnerships: Theoretical Foundation

INTRODUCTION

The involvement of multiple actors from different kinds of organization in cooperations and alliances is growing in practice among societal organizations. This collaboration has taken different forms, depending on their purpose and the governance scheme adopted for the management of its mechanisms. In this chapter, we review studies on a particular type of inter-organizational collaboration - also frequently called cross-sector collaboration - the Public-Private Partnerships; and we chose to adopt the acronym “PPPs”, commonly and globally used to designate them.

In this first chapter we explore the literature developments on PPPs, in order to explore the different aspects that interested scholars, the questions raised around PPPs and conclusions drawn in their regards. We organize this literature review in three parts.

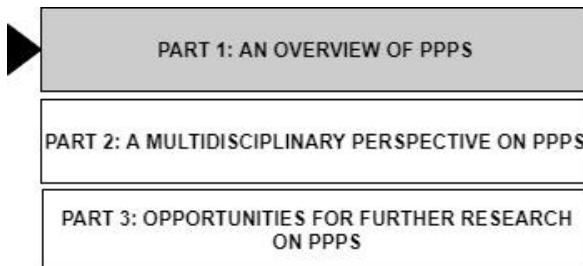
We start by giving an **overview of PPPs** in PART 1. We attempt to find a definition that incorporates the attributes of PPPs and that encompasses the different theoretical perceptions found in the literature. We provide characteristics that distinguish PPPs from other public procurement tools. We also explain the rationale of governments in engaging in PPP programs: their needs, their inputs and their expectations in regard to these partnerships and we provide a typology of the most common contractual forms governing these arrangements.

In PART 2 we uncover different aspects of PPPs as explored by the literature. We review studies and theoretical trends in three scientific disciplines that have largely explored PPPs: Public Management, Economics and Strategic Management, to have a **multidisciplinary perspective on PPPs**. Because public spending on PPPs is significant, we found it important to bring a closer look to theoretical developments on the performance of PPPs and the extent to which they actually serve their purposes and accomplished their mission.

In the last part of the chapter we reflect on the reviewed literature and identify areas that could be expanded further. We build on these **opportunities for further research on PPPs** to formulate the research question and suggest an adequate analytical framework for new theoretical developments.

The chapter ends with a conclusion and a transition introducing the theoretical framework that we propose for this research.

PART 1 – AN OVERVIEW OF PPPS



Using the words of the literature on strategic collaborations, collaborative alliances are best described as “*inter-organizational effort to address problems too complex and too protracted to be resolved by unilateral*

organizational action” (Gray & Wood, 1991, p. 4). When faced with problems, complexity, uncertainty and unclear boundaries, multiple organizations get to engage together in inclusive and collaborative decision-making by pooling their respective expertise and resources. This collaboration may also call for wider participation of cross economic range of stakeholders bringing together actors from government, non-government and private organizations so that they mutually explore their different capacities and suggest solutions that go beyond each actor’s limited possibility (Gray, 1985). Likewise, public-private partnerships are a form of these collaborative alliances between public actors and private firms, aiming to tackle a national problem. They can therefore be considered as a co-investment of both the public and private sector into development-type programs of mutual benefits. We explore in this part the different scholarly perceptions of this form of collaboration as well as the high interest of governments in adopting them to address socio-economic problems.

1. DEFINITIONS OF PPPS

In the 1980’s, economies have known a remarkable praise for PPPs, in both scholarly and official circles. Soon after the term “PPP” has started to appear in the discourses of political actors as a policy tool for infrastructure public procurement, a myriad of descriptions emerged to designate this new – back then – cooperative scheme between governments and private businesses. Interorganizational literature distinguishes a lengthy list of usages for the term “*public-private partnership*”; certain authors cluster under the term “*cross-sector partnerships*” several types of multilateral collectives depending on the nature of the partnering actors or the mission of the partnership, the latter being a cause-based partnership, a social collaborative alliance, a multi stakeholders collaborative, a business-community partnership or a public-private partnership (Koschmann et al., 2012) .

At some point confusion started to be common between privatization, contracting-out and PPPs, and using the three terms interchangeably was prevalent before PPPs are officially hailed as an alternative to privatization (Hodge & Greve, 2007; Chong et al., 2006), and also

a qualitative jump ahead in the domain of collaboration between both the private and the public sectors, inducing further complexity but innovative mix of markets' entrepreneurial spirit and public monitoring (Wettenhall, 2003). While partnerships promote relationships based on mutual trust, cooperation and joint-decision making, contracting-out implies a sort of principle-agent relationship where the role of the private actor is reduced to the implementer of solutions to a problem as planned and defined by the public actor (Klijn & Teisman, 2000). PPPs is therefore perceived as a middle path between state capitalism and full privatization or a way for governments to engage with the private sector and benefit from its performance without selling public-held assets to private owners (Grimsey & Lewis, 2002). Interesting scholarly debates consider the confusion around notions of PPPs as a "language game" where governments start speaking of partnerships instead of privatization or contracting-out driven by the need to "*renew the buzzwords*" or "*re-label existing policies under a more catchy name*" (Hodge & Greve, 2007, p. 547). In this vein, some authors acknowledged that using expressions such as "public-private partnerships" give governments a new legitimacy and enable further private participation into public services provision whereas terms like "contracting-out" and "privatization" provoke opposition and fuels debates across both private and public sectors (Savas & Savas, 2000; Teisman & Klijn 2002). Undoubtedly, PPPs have become a dominant slogan in the 19th century discourse of policymakers (Wettenhall, 2003).

Despite the rising number of academic publications in different disciplines on PPPs since the early 1990's, it is impressive how difficult it is to find a unique and common definition adopted by all, or even the majority of scholars interested in this area of research. Clearly, this type of public-private collaboration lacks conceptual consensus and clarity (Hodge & Greve, 2007; Weihe, 2006; Marsilio, 2011). In almost every paper that has been written on PPPs, there is a section related to defining PPPs and explaining the rationale behind governments adopting this structure for private participation in public services. The literature has generated a glossary of terms originating from the academic discipline of the authors, the geopolitical contexts concerned and the intended purpose and significance of the partnership.

This review of PPPs literature also revealed that definitions are often influenced by the disciplines' scientific assumptions and paradigms. In Economics for instance, scholars view PPPs as long-term contractual arrangements for the procurement of infrastructure projects, designed around bundling activities with the aim to reduce future costs of running the related service (Iossa & Martimort, 2012; Martimort & Pouyet, 2008). Studies in Public

Management define PPPs as organizational and financial arrangements that promise an innovative governance mode between public and private actors to jointly produce public services (Hodge & Greve, 2007; Weihe, 2006) or instruments in which the public and private parties share the risks, responsibilities, costs and benefits of planning, construction and exploitation of infrastructure facilities (Koppenjan, 2005). From a Strategic Management perspective, PPPs are cross-sector strategic alliances that engage partnering actors in mutual problem solving to address socio-economic issues, while willingly sharing resources and competencies (Villani et al., 2017; Koschmann et al., 2012). We cluster in Table 1.1 few studies on PPPs according to common arguments and alternative views that scholars in different disciplines had of these collaborative arrangements.

The literature has frequently distinguished between the different forms of public procurement, mainly: traditional procurement (or public contracts), concession and PPPs, to compare the potential benefits for governments in adopting a particular form of public procurement in the provision of services and infrastructure. Despite overlapping issues and features between the three forms of public procurement, especially between PPP contracts and concession contracts, it is important to draw on the characteristics that differentiate these contracts. While traditional forms of public procurement can include a wide range of contractual arrangements to perform separate tasks like design, supervision, or construction, PPPs contracts are rather global and imply the bundling of several tasks (construction, operation, management) over lengthier periods of time (Saussier & Triole, 2015; Araújo & Sutherland, 2010). In concession contracts the private operator is usually not involved in the construction of the assets but finances and operates it; in such contracts it is the concessionaire that pays the public authority the right to operate the asset (Araújo & Sutherland, 2010). In regards to risk-sharing, the level of the demand risk transferred to the private actor is more important in concessions than in a PPP contracts, and users pay the contractor for the service while in PPPs the private partner is paid by the public procuring authority on a deferred-payment basis (Saussier & Triole, 2015). This deferred payment or periodic payment in PPPs is often based on private actor's performance in accordance with contractual terms and conditions, and failure in meeting the contracted performance standards may incur penalties (Farquharson et al., 2011). This is not the case with concessions or traditional procurement where the private actor is allowed a single payment. In terms of financing, traditional procurement contracts involve public financing whereas in PPPs the private actor is also responsible of financing the long-term investment in infrastructure (Blanc-Brude et al., 2006; Araújo & Sutherland, 2010). Public contracts for infrastructure

procurement are often concluded on a short-time basis, whereas concessions and PPPs are respectively medium-to-long term and long term contracts (Saussier & Triole, 2015).

Based on the above findings, the unlimited definitions attributed to PPPs by the literature and in official documentation throughout the last two decades revolve around main elements that are partly or entirely stated in each definition: 1) a public-private partnership is an arrangement between a public authority and a private partner designed to deliver a public infrastructure project and/or service under a long-term contract; 2) this contract offers an opportunity of sharing significant risks and management responsibilities between both partners; the private partner bears significant risks and management responsibilities; 3) The public authority makes deferred performance-based payments to the private partner for the provision of the service; 4) private finance is usually involved in a PPPs; and 5) this arrangement concerns global contracts featuring a bundle of activities or functions for every stage of the project.

Regardless of the terminology used in particular economies, jurisdictions or official publications and while no internationally accepted definition for PPPs exists yet, we adopt a broad definition attributed by strategic management disciplines, which kept the essential characteristics of PPPs as “*long-term collaborative relationships between one or more private actors and public bodies that combine public sector management or oversight with a private partner’s resources and competencies for a direct provision of a public good or service*” (Kivleniece & Quélin, 2012, p. 273). This definition outlines some of the key characteristics of PPPs: a collaborative structure managed and supervised by a public body, shared competencies and resources with private actors, the provision of public goods and services as a main objective.

Beyond this conceptual struggle and the usage of an array of synonyms and terms to define this participation, the most important remains to determine what needs to be achieved through PPPs. It is therefore necessary to be very clear about *why* the public sector is looking to partner with actors from the private sector, *what* form of PPP could serve best the aim of the project and *how* the structure of this complex concept should be articulated. These interrogations are addresses in the following sections.

Table 1.1

Alternative views of PPPs

PUBLIC ADMINISTRATION	
<i>Most common arguments: A management reform and a restructuring to improve public service delivery and improve urban growth and community development; a cooperation for joint production and risk sharing</i>	
Osborne (2002)	The chance to reform local public services and make them more accessible to local community and more responsive to their needs. PPPs are “essential to combat social exclusion, to enhance local-community development and to implement significant social policies, such as the regeneration of urban areas and the struggle to combat youth unemployment”.
Linder (1999)	“Risk shifting assigns the supporting role, not to government, but to commercial interests...the purposes remain public, even though the resources are eventually mixed.”
Klijn & Teisman (2002)	Commitments between public and private actors of some durability, in which partners develop products together and share risks, costs and revenues
ECONOMICS	
<i>Most common arguments: Long-term infrastructure contracts; financial instrument for cost-savings</i>	
Hart 2003	Contractual arrangement of service provision or building provision
Hodge & Greve (2007)	A mechanism which emphasize tight specification of outputs in long-term legal contracts
Martimort & Pouyet (2008)	Contractual arrangement delegating to a private partner the tasks of designing, financing and managing a project over the whole duration of the contract
Saussier et al. (2009)	Long-term agreements between a public authority and a private entity over the delivery of public services in which part of the risks and investments are transferred to the private partner.
Estache et al. (2009)	Contractual arrangements for complex infrastructure projects seeking to attain various complex objectives
Iossa & Martimort (2015)	A long-term contract lasting typically 20 to 35 years, for delivery of services and involving a greater transfer of risks to the supplier who is responsible of building, financing and maintaining a facility
Buso et al. (2017)	The use of PPPs to realize and operate public infrastructures is associated with fiscal-circumventing motivations... financial difficulties often lead to a preference for PPPs instead of traditional form of procurement.

STRATEGIC MANAGEMENT

Most common arguments: Alliances designed and managed for generating innovation and value creation and appropriation

Rangan et al. (2006)	Strategic alliances between private firms and public actors enabling creative and innovative strategies
Kivleniece & Quélin. (2012)	Long-term voluntary collaborative relationships between one or more private actors and public bodies, combining public sector management private resources and capacities for a provision of public good or service.
Villani et al. (2017)	Project-based organizations involving collaborators from the public and the private sector, sharing resources and capabilities for improving the value of public goods.

2. NATIONS' RATIONALE FOR DEVELOPING AND OPERATING PPPs

The import of market managerial processes and business practices into public organizations has been at the heart of the reform associated with the New Public Management (NPM) where this private participation was promoted as a key element of this reform and a main tool of public policies (Osborne, 2000). Private participation in public capital using PPPs structures concerned initially infrastructure projects and constituted an opportunity to build, operate and maintain facilities while bringing in innovative resources and developing cost-efficient ways to provide local services that meet social needs (Brinkerhoff & Brinkerhoff, 2011; Osborne, 2000). In the course of time and within contexts of divergent particularities, this participation evolved and took different forms to serve various purposes and most importantly called for multiple actors' involvement from the government, business and civil society spheres. Increasingly this cross-sector collaboration became essential to address complex social issues through information sharing, mutual problem solving and resources allocation in the sectors of health care, housing and education. Governments saw in PPPs growing opportunities to address social and economic pressing needs and various motives stand behind governments' decisions to invite private firms to enter into long-term contractual arrangements. At the time of their introduction the center arguments dominating some of the discussions on rearrangements and new forms of governance in public domains were finances-centered, aiming to improve and expand public facilities while reducing public budget deficit through private financing (Klijn & Teisman, 2000). In fact, the UK conservative government introduced in 1992 the Private Finance Initiative (PFI) as a form of PPPs arrangements and part of a wide financing program to increase accountability and efficiency in public spending. From this financial perspective, PPPs are designed on the basis of global project financing, consisting of a bundle of activities assigned to private actors from the early stages of the project conception throughout the different stages of a long-term contract. In such a context, private partners are in charge of reducing cost overruns and delays, allowing innovation at early stages of the project's conception in order to reduce costs and enhance service quality during operational stages (Iossa & Martimort, 2012; Saussier & Tran, 2013). In the meantime, public actors remain able to control the project's execution while holding its assets' property rights, but also transfer key risks related to design, construction and finance to the private party to manage; an option that is not made possible under privatization or other types of public procurement. Scholars often recall the objectives of government in achieving "value for money" (VfM) through PPPs, in the sense that public

funds are effectively used in return of private sector innovation skills and/or transfer of important risks to the private sector to manage (Grimsey & Lewis, 2002). More recent studies investigate the capacity of PPPs to close a financial gap by hiding part of public debts off the balance sheet (Buso et al., 2017). Therefore public actors tend to choose PPPs over traditional procurement projects when they face financial constraints and spending limits, for the reason that PPPs allow deferred payments through the different stages of a long-term contract.

PPPs' special attributes made them suitable for certain projects that provide tangible benefits in public infrastructure development as well as in communities' empowerment. Infrastructure development and reforms in sectors like energy, water, sanitary services and telecommunication, and to construct and/or operate projects in transportation sector, drive public actors to partner with private firms in several developed countries as well as in developing economies. For instance, studies have reported information on PPPs' desirability and popularity in the Chinese and the US transportation sectors which have particularly attracted PPP projects for building and maintaining highways and railways (Zhang et al., 2015; Levin & Tadelis, 2010). In Europe, PPPs were particularly popular for roads construction and the water sector (Blanc-Brude et al., 2006). Developing economies also put in place PPPs projects in various sectors. At a community level, important gains are also realized through PPPs by integrating private businesses and voluntary groups to help reforming public services in local communities; in countries like the US, PPPs are considered as appropriate structures, initiated at a national or state level, to regenerate local urban communities (Osborne, 2000). Local communities have also intensively used agreements with private agents to invest in education, healthcare, energy water and waste disposal (Levin & Tadelis, 2010). Urban developments are also enabled with the implementation of PPPs in infrastructural structures in India and agriculture activities in South Africa. The improvement of the Brazilian healthcare system was largely due to PPPs implementation. New trends in PPPs are also believed to shape their implementation in the coming years and enlarge the spectrum of sectors attracting private investment in renewable energies, ICT backbones and other projects that meet the needs of the Sustainable Development Goals.

In addition to these general rationales attributed to the adoption of PPP mechanism, and according to authors who investigated the differences between private firms and public agencies, governments may seek to partner with private actors for both instrumental and normative aims; *“from an instrumental perspective, partnering with the private sector can afford government access to technical expertise and established networks for complementary*

resource sharing” and from a normative belief “*the private sector is inherently ‘better’ at management than the public sector*” (Brinkerhoff & Brinkerhoff, 2011, p. 5). In public policy, the recurring theme of private sector participation in services provision on behalf of a public sector entity has its roots since even before the expansion of the NPM movement in the 1980’s, but was reinforced through this reform program. However critics of NPM have argued that public and private organizations are essentially unlike and therefore adopting management practices in public institutions is likely to be counterproductive (Boyne, 2002). Many studies, supported with empirical evidences, have critically examined the differences in management strategies and practices between public and private organizations in regards to their distinctive environments, goals, structures and values that highly impacts their actors’ behaviors and strategic choices (Drumaux & Goethals, 2007; Boyne, 2002; Ring & Perry, 1985; Murray, 1975;). Theoretical arguments were developed based on lessons drawn from both sectors, and propositions were presented in an ongoing attempt to bridge both worlds through mutual influences, certainly with cautious considerations for the particularities of each sector. The literature has reported a number of empirical evidences of public institutions’ attempts to adopt strategic management practices and tools as a respond to the New Public Management assumptions, and scholars examined these processes to draw remarks on the applicability of strategic actions in public contexts. For instance, Drumaux and Goethals (2007) confronted the outcomes of a reform process in Belgian federal administration with initial strategic intentions to point out the possible divergence between intentional strategy and the actual emergent strategies formulated according to the particularities of the context. In the same vein, strategic planning taking place in the French local public administration was investigated within the range of reforms reinforcing the region-metropole coupling (Carmouze et al., 2019) and the results confirm that local strategic planning is influenced by New Public Management and New Public Governance paradigms. However, the cohabitation between public service values and the new management practices can result in high tension and heavy pressures accentuated by inappropriate management system in public services undergoing major reorganization and reorientation (Hernandez, 2008). Judging the public sector performance according to practices of strategic management designed for the private sector is therefore inappropriate and this normative perception may have reduced governments’ capacity to effectively ensure citizens’ demands due to constraining factors like bureaucracy, weak commitment, ill-definition of policy directives (Ring & Perry, 1985), effects of political authority, structures’ complexity, instability and absence of competitive pressure (Boyne, 2002); which grants legitimacy to PPPs’ capacity in

alleviating these perceived deficiencies. Cross-sector partnerships are supposed to mobilize resources from both the public and private spheres and develop cost-efficient ways to reform public services (Osborne, 2000). From the public actor perspective, governments seek to achieve effective and efficient use of public funds on a capital project, financed, designed and operated by private sector skills and competences; from the private actor perspective the firm seeks return on risk capital and revenues on operations, capitalizing on the commercial and long-termed viability of the project (Grimsey & Lewis, 2002). Furthermore, the design of partnerships allows *ex ante* competition among bidders which gives them an incentive to lower their costs while offering higher quality, being innovative and taking advantage of their competencies and economies of scale when executing PPP projects that involve strong complementarities between tasks and activities designed. Scholars used the expression “surplus value” to design the extra revenues or additional returns that could result from cooperation between a public entity and a private firm and that would not be possible without the setting of the PPPs (Klijn & Teisman, 2005; Van Ham & Koppenjan, 2001). In developing countries, where mistrust in government performance prevails (Jamali, 2004), partnering with the private sector over various projects is important as much as it helps to compensate or alleviate the perceived weaknesses and deficiencies of the public performance and enforce the trust of citizens in public activities.

Dependencies and exchange of resources are necessary in environments where organizations do not possess the sufficient expertise to deliver the required quality of product and services, therefore significant decrease in within the hierarches is being replaced by an increase in horizontal relations among networks of organizations (Powell, 1990). Following this rationale, there is a global growing trend towards the public sector partnering with companies from the private sector to solve socio-economic problems, with increasing tendency to include the civil society and social groups in these partnerships. For the public party, PPPs are the opportunity to benefit from the input of private market experience to increase the efficiency of public services and create surplus value through innovative projects; as for the private party, engaging in PPPs provide them with new investment opportunities in new markets and reduce long-term uncertainties (Van Ham & Koppenjan, 2001).

3. PPPs CONTRACTS TYPOLOGY

Different typologies were suggested for the participation of a private actor in the delivery of public services based on the contract design that allocates different roles to each partner, in particular at the level of financing, assets ownership and governance mode. Whether the PPP

concerns new or existing assets, the nature of the tasks composing the bundle addressed by the contract, the degree of involvement of each partner, the financing scheme, the risk sharing responsibilities as well as the payment mechanisms, are all essential elements for defining the contract type (Delmon, 2010; Yescombe, 2011; Farquharson et al., 2011). The level of involvement of the private sector may range from simple provision of a service, up to full ownership of public facilities with operations and management of associated services; PPPs are placed somewhere along this complex continuum, in the middle between a full privatization from one end and a public ownership on the other. Furthermore, PPP labeling may differ depending on the institutional rules and the jurisdictions of each country, but mainly PPP contractual agreements define the degree of involvement and the risk taken by the private partner. This involvement may take different forms and is mainly defined by roles allocation and tasks or transactions assigned to the private firm. These tasks are usually a bundle of activities grouping the design, finance, execution, construction and management operations of new (greenfield projects) or existing assets (brownfield projects). In addition to scientific and academic research, numerous official sources have provided rich, detailed and complementary information and explanatory notes about the types of contracts governing PPP projects, such as the WB PPIAF database. According to these sources, the name of the contract usually captures the functions transferred to the private partner; the range of these PPP contracts mainly includes:

- A set of contracts where the private partner is assigned a bundle of all tasks: *design, building, finance, operate* and/or *maintain* a new infrastructure, are usually described as: DBFOM for Design-Build-Finance-Operate-Maintain or DBFO for Design-Build-Finance-Operate.
- Contracts that address the legal ownership and control over the new project's assets and the way their handover to the public party is managed at the end of the contract: BOT for Build-Operate-Transfer, BOOT for Build-Operate-Own-Transfer or BTO for Build-Transfer-Operate.
- Contracts that address the rehabilitation of existing infrastructure: ROT for Rehabilitate-Operate-Transfer.
- Long-term Operations and Maintenance contracts, O&M, for existing assets.

The majority of these contractual forms distinguish three generic phases of a typical PPP project: procurement/bidding phase (bidder selection, contract negotiation and design), construction phase and operation phase (Zheng et al., 2008). Although each stage is crucial

for the successful development of a PPP, literature on PPPs has brought particular interest on the phase of tendering and negotiation. This initial phase concerning partners' selection and contract design is believed to be a baseline for upcoming stages, and further developments on this argument will follow in Part 2 of this chapter.

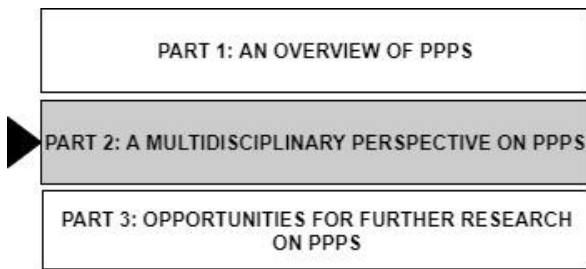
The classification of public-private arrangements has been investigated further by scholarly studies. For instance, Saussier et al. (2009) advance a contractual perspective on cross-sectoral partnerships and suggests the use of the concept 'public-private agreements' (PPAs) to designate the wide-range of contractual agreements between a public and a private partner. The authors established a clear distinction between PPPs, concerned with the bundling of tasks design and the partial transfer of risks and investments to the private actor, and other forms of contractual arrangements, or public-private contracts-PPCs, governed by a simple contract that delegates the private operator the responsibility to perform only one task and that is very similar to traditional procurement. Also in this vein, studies have investigated a particular form of PPPs, the PFI which is the private finance initiative introduced by the UK then largely adopted in Australia as a mean for public projects financing (Nisar, 2007).

Since the first wave of PPPs launched in the 1990s, the consensus around this scheme for private participation in public services is growing, especially in developing economies where governments lack appropriate resources to manage these projects. At the time they were introduced, PPPs were particularly attractive to countries that accumulated a long history of public sector deterioration. For many governments, partnering with private firms in economic reforms was expected to contribute to fiscal stabilization and growth, increase investments, and improve efficiency and governance, among others (Estache, 2006). The adoption of PPPs can derive from governments' desire in improving areas like public policy, service delivery, infrastructures, capacity building, and economic development (Brinkerhoff & Brinkerhoff, 2011).

Sectors concerned by these joined efforts were initially concentrated on transportation, energy and water, healthcare, education and prisons facilities, and are recently oriented towards ICT backbones, renewable energy, waste management, SMEs inclusion in PPPs, street lighting projects, and others. These growth cycles reflecting the large expansion and growing demand on private participation in infrastructure prove once again the ability of this participation to narrow infrastructure gap and improve the efficiency of public services delivery despite their controversial nature and the believes of their antagonists. Clearly, the accumulated experience with cross-sector partnerships invites us to question the extent to

which the promises of PPPs are met, and whether or not there was a reverse for the reform medal. This remains to be discussed throughout the upcoming parts of the reviewed PPP literature.

PART 2 – A MULTIDISCIPLINARY PERSPECTIVE ON PPPS



As PPPs grew in popularity, their evolution started to take various contracting forms adjusted and adapted to the context where the partnership is established as well as the needs they are designed to serve. From a theoretical

perspective, these inter-organizational arrangements, also recognized as multi-actor collaborative arrangements, bringing together actors from the public, the private and the social spheres of economic activities (Mahoney et al., 2009) in order to serve mixed social and economic interest, have raised important questions in several disciplinary fields and literature streams on their economic, organizational, management and strategy implications and different theoretical lenses were used to look into these questions.

While these studies have revealed important insights regarding the performance of PPPs, their success or failure in delivering the objectives they were initially set for, these evidences remained mixed (Iossa & Martimort, 2015) and scattered among disparate literature streams (Quélin et al., 2017). Theoretical debates have greatly advanced our understanding of PPPs, and most importantly the identification of parameters that drive PPPs efficiency – or inefficiency – but this dimension remains a debatable topic and the determinants conditioning this performance are highly controversial. In this sense, we identify in this part the main elements that interested scholars in various disciplines and the main questions raised by them, building on the different perceptions of Public Management, Economics and Strategic Management literatures.

1. PPPS IN PUBLIC MANAGEMENT

Given that the main aspect of PPPs is their public side, streams of literature in the discipline of Public Management have largely explored these networked governed mechanisms. Scholars recognize the importance to steer the public administration practices towards networked and collaborative approaches in governance and sharing power (Kettl, 2002). Within the emergence of networked governance, recent Public Management paradigms recognize further the legitimate role of a range of stakeholders in the conception and delivery of social and public value, contracting with private firms being one of these delivery modes, as well as the importance of collaboration that goes beyond the narrow focus on a contract to looking for sustainable long-term relationships (Stoker, 2006). Public Management literature

enlightened the particularities of PPPs and brought further precisions about their nature, the diversity of their forms and the differences between traditional procurement and procurement through partnerships. This literature also emphasized the desirability of public policies in adopting PPPs, the purpose and rationale behind it, and the governance modes allowing their proper administration.

Besides the normative view looking at PPPs as instruments of collaboration between the public sector and private firms to achieve public policy goals and find solutions to pressing societal problems (Brinkerhoff & Brinkerhoff, 2011) working with other stakeholders across different sectors is a central mechanism for promoting community well-being (Stoker, 2006) and more recently achieving sustainability-related objectives (Pinz et al., 2018). These recent Public Management paradigms suggest that “*people are motivated by their involvement in networks and partnerships, that is, their relationships with others formed in the context of mutual respect and shared learning*” (Stoker, 2006, p. 56), and the management needs to support this principle.

The main purpose of governments from seeking collaboration with markets is their search for surplus value either in the form of simple cost savings or substantive improvement and innovative products (Klijn & Teisman, 2005), and this surplus value can come from different forms of public contracting with private firms. In his sense, many publications contrast PPPs with concessions, outsourcing, traditional procurement or even privatization, emphasizing the role of the private actor and the timing of his intervention in the process of the needs’ assessment and project design. Moreover, scholars point out the principle-agent relationship inherent in traditional public procurement modes while the idea of partnership delineates horizontal relationships through shared responsibilities, joint decision-making and mutual accountability (Wettenhall, 2007; Forrer et al., 2010). The adoption of a unique definition for PPPs in Public Management studies is almost nonexistent (Hodge & Greve, 2010); however studies build on each other’s to provide further precisions of the different aspects of PPPs. Some studies recall a purpose or function-oriented definition of PPPs focusing on the domains or areas where PPPs are most needed such as the provision, construction and planning of infrastructures (Koppenjan, 2005; Grimsey & Lewis, 2002). Other studies attribute a more conceptualized definition underlying key features of PPPs as being a mutual commitment, a long-term cooperation involving intensive interactions, joint-decision making and assumption of risks (Brinkerhoff & Brinkerhoff, 2011; Forrer et al., 2010; Klijn & Teisman, 2005).

Of course the high interest of governments in adopting PPPs to realize joint products, design better policies and more efficient outcomes does not prevent the existence of the challenges inherent in long-term contracting. Despite the numerous advantages made available through partnering with private firms, public managers are also aware of the complexity and ambiguities entailed by collaboration, especially with the absence of important dimensions like trust, reciprocity, pursuing collective goals and adherence to agreed-upon rules (Thomson & Perry, 2006). In joint interorganizational policy making, partners do not easily comply with the idea of becoming mutually dependent. In this sense numerous studies have discussed the distinction between the private and the public sector advancing that this distinction challenges to a high degree the implementation of new governance schemes that imply mutual adjustments and joining resources for combined undertakings within coexisting different perceptions, behaviors, rules, control and policy-making procedures (Teisman & Klijn., 2002). For an effective PPP it seems necessary for governments and public administrations to shift their focus from their own internal procedures towards interorganizational processes. Following the seminal works of Powell (1990) and the expansion of the concept of network society where the borders between the private and public sectors are blurring and their interdependency is sharpening, institutional challenges became evident and can therefore strongly shape any type of cooperation between these two sectors. Institutional complexity implied in PPPs is the natural result of the diversity of actors involved in this type of arrangement, and therefore the variety of backgrounds and differing rules makes the interaction patterns laborious (Klijn & Teisman, 2005).

These discrepancies between actors engaged in collaborative processes raise concerns related to trust and transparency. Scholars have investigated governance and management challenges to administer long-term contracts as well as the importance of overseeing and monitoring these contracts for accountability and transparency issues, conditions without which PPPs commitments are not viable. Questions related to public accountability in PPPs have also intrigued scholars. Forrer et al. (2010) believe that *“enthusiasm for PPPs can give rise to hastily crafted partnerships that trigger public opposition and unclear expectations of the partners thus reducing the potential for the effective exercise of public accountability”* (p. 479), so in order to maintain effective accountability in PPPs the authors suggested a set of dimensions to manage including risk sharing, reliability, timeliness, stakeholders participation and transparency.

Besides the distinguishing characteristics of the public and the private worlds, scholars suggest that the performance and applicability of PPPs remain constrained by practical impediments such as and the risk of unforeseeable and uncontrollable circumstances in long-term contracting (Bloomfield, 2006). Another key aspect of PPPs that was largely addressed by scholars is the identification of risks and strategies for their allocation among partners (Albalade et al., 2015; Yescombe, 2011; Van Ham & Koppenjan, 2001). The point behind risks allocation is the assignment of a risk to the party that best understands it and has control over it. With an attempt to develop a typology of risks involved in PPPs, Yescombe (2011) could depict typical risks in infrastructure PPPs and appoint the responsibilities among public and private actors. In this sense, risks related to political and legal issues are held by the public sector whereas those related to construction and operations are allocated to the private actor and *force majeure* risks are to be shared by both partners. In the same vein and through a broad-based investigation of PPP/PFI construction projects Bing et al. (2005) suggest a three-level classification of these risks: *micro* level risks associated with the relationships between partners, *meso* level risks concerned with factors related to the nature of the project and *macro* level risks having their origin beyond the system boundaries of the project.

2. PPPS IN NEW INSTITUTIONAL ECONOMICS

PPPs are designed according to a large variety of contractual forms, therefore understanding the role of contractual ties in their heterogeneous nature is crucial. These contractual considerations along with institutional dimensions of local environments have conditioned to a high degree the performance of PPP projects, knowing that different ways were used to evaluate this performance and various limitations were encountered in these assessment methods (questions related to PPP performance are tackled later in this part). The predominant theoretical lenses associated to these studies were transaction cost economics and incomplete contract theory, with most studies focusing mainly on uncertainties inherent in PPPs and associated exchange hazards. In this part, we will be reviewing contractual issues and institutional determinants that have preoccupied scholars and were considered to be critical for the optimal conditions of public contracting efficiency through PPPs, such as : selection of partners, tasks bundling, optimal ownership, control rights, allocation of risks among partners, corruption, governance, contracts renegotiations and regulations.

Costs and benefits of PPPs were largely investigated (Hart, 2003; Iossa & Martimort, 2012). The fact that PPPs are often designed as a bundle of activities or tasks assigned in their integrity to a private actor, over a medium-to-long period of time, drives the private partner to

control, to a certain degree, costs overrun and delays during early stages with the aim to enhance quality and optimize exploitation at operational stages. This scheme of activities bundling is one of the main incentives for private investors to engage in PPPs, because of the possible tradeoff between construction costs and operational and maintenance costs at later stages. During the construction phase, the investments incurred by the private actor may enable him to reduce his operations costs during operating stage when running the service (Hart, 2003), which is one of advantages of bundling tasks. But this is not always possible and other scenarios are to be considered. In incomplete contracting the inefficiencies are like to arise because uncertainties are hard to foresee. Bundling is beneficial when demand risk is low. However, under asymmetric information, remunerating the private partner for risks beyond his control becomes more complex and the private firm might benefit from undue advantages. In this case, when uncertainties are unlimited and operational risks are high unbundling may be preferred (Iossa & Martimort, 2012). Authors suggest that PPPs are particularly beneficial when the demand for the service is rather stable or easy to anticipate, and when the quality of the infrastructure can reduce operational and maintenance costs (Iossa & Martimort, 2015).

The preparation phase, including the activities of tendering and negotiation has particularly gained the interest of PPP scholars. This initial phase that concerns partners' selection constitutes a solid baseline for a PPP project and any deficiency taking place at this level, might have heavy and negative impact on the project execution, and therefore on its performance (Saussier et al., 2009). Studies have stressed the importance of carefully planning PPP projects and integrating all stakeholders in this planning. The tendering procedure is very critical - the same way 'planning of a marriage is vital' - and constitutes a pivotal step in the smooth survival of the partnership. Proper planning stresses the importance of being vigilant to the different types of risks and their proper allocation during the primarily stages of the contract design and tendering process; which is also believed to comfort private investors, especially in contexts prevailed by asymmetric information and favorable for incomplete contracts. The tendering process is costly and the selection process is complex and both cannot be dissociated from the institutional settings in which the partnership is made (Saussier et al., 2009; Guasch et al., 2008). The selection criteria of the private actor are therefore to be considered carefully, because after the contract is awarded and due to the complexity of the partnership and the difficulty to specify all the inherent risks *ex-ante*, "*considerable discrepancies between the lowest winning bid and the final costs leading to costly and uncertain ex post adaptations and renegotiations*" (Saussier et al., 2009, p. 9) are

likely to happen. Private bidders may for instance unintentionally or strategically underestimate production costs and related risks just for the purpose of winning the deal, which also raised lots of questions in the literature around the opportunistic behavior of partnering actors (discussed later in this part). From an economic perspective, and according to the same authors, Saussier et al. (2009), the winning bidders of PPPs are mostly selected based on multi-dimensional selection criteria like quality, cost-effectiveness, completion date, functional and technical characteristics, labelled as “*the most economically advantageous tender*” criteria. Although these criteria provide a more comprehensive and effective approach to selection process than the “lowest-price” criterion taken solely, studies have shown that it may also affect the probability of renegotiations of PPPs contracts (Estache et al., 2009).

The complexity of PPP projects, the long duration of contracts associated to them as well as the contextual particularities of the environments in which they are embedded make them highly vulnerable to moral hazards and exposed to a myriad of risks, whether at the awarding stage or afterwards. Such agreements tend to face serious difficulties when the contract duration is relatively long and when the contract involves a bundle of several tasks to be performed in the course of time. Since these limits are not all predictable and cannot be anticipated during the initial phases of project design, PPPs are typically subject to contract incompleteness (Hart, 2003). Important questions were raised in the literature regarding numerous exogenous and endogenous types of risks implied in PPPs and the way contract incompleteness has significantly impacted the way they perform. Scholars were interested in understanding the uncertainties and hazards associated to those risks since considerable financial, technical and operational issues are concerned. Certainly risks cannot be completely eliminated or even entirely identified and addressed in public contracting this is why it is necessary for a PPP contract to explicit the various sources of risks identified at the time when the contract is established and optimally allocate responsibilities between partnering actors. While scholars of Public Management have pointed the main risks associated to PPP projects (refer to the previous section), economic studies have focused further on the contracting costs entailed by these risks and anticipated contingent clauses that can lower these costs (Iossa & Martimort, 2015). To emphasize the context-related and project-related characters of PPPs risks, scholars have reported interesting facts on risks allocation in PPPs in different contexts based on empirical evidences of different types of PPP projects. As an example, Iossa and Martimort (2015) have analyzed the construction and management of highways through PPPs and explained that: while the World Bank

recommends that risks related to traffic are to be borne entirely by the private contractor, countries have different practices in this regards; in India for instance risks are borne by the private contractor unless the traffic variations are caused by changing macroeconomic conditions, while in the UK, a “risk matrix” is usually appended to the contract as per the HM Treasury’ standardization of PFI contracts; and in Italy, risk allocation remains rather vague and contract highly incomplete. Interestingly, risk management can be a trigger for innovation when the public partner defines the project’s activities and the private partner decides how to deliver them drawing on their own expertise and capacity to innovate, which gives the private sector incentives and enough room to develop innovative ways to meet public requirements while circumventing or preventing risks (Bennett & Iossa, 2006). Adopting a whole-life cost approach to the PPP projects can relate efficiency gains to the effective transfer of risks to the private contractor during design, construction and operation phases, because this transfer “*provides incentives for keeping project costs down and efficiently providing the service*” (Iossa & Martimort, 2015, p. 23).

The institutional environment in which a PPP project operates is believed to significantly affect the functioning and performance of the partnership. Following Levy & Spiller (1994), we define ‘institutional environment’ as being the rules of the game that structure players’ organizational behavior. The authors precise that the institutional environment of a nation comprises five elements: the legislative and executive institutions, the judicial institutions, the customs and other informal but broadly accepted social norms, the character of the contending social interests within a society, and finally the administrative capabilities of a nation. We will adopt this broad definition of ‘institutional environment’ – provided by Levy & Spiller (1994) who mainly followed North (1990) in this – to refer all through the dissertation to the different elements of the institutional environment that have an impact on PPPs. Scholars have examined the performance of PPPs within their coexistence with these elements and studies revealed strong interrelation between institutional variables and their individual or collective influence on PPPs. If not recognized and addressed properly, these institutional dimensions can constitute barriers that block or at least limit the performance of the partnership and the quality of institutions greatly impact the outcomes of these arrangements as weak institutional settings may result in partnerships inefficiency and inability to accomplish their goals (Saussier et al., 2009). Indeed a common argument for attracting private investment is for a country to have favorable and stable macroeconomic conditions away from volatility and unpredictability of key macroeconomic indicators. Studies in this direction have revealed complementary results, agreeing on a well pre-defined

regulatory and a clear institutional framework within which PPPs operate as a main factor for successful PPPs (Saussier et al., 2009). Difficulties in maintaining the survival of cross-sector partnerships are obvious if we take into consideration the influence of institutional determinants on PPPs viability or failure and renegotiation of PPPs contracts is likely to occur in environments characterized by institutional bureaucracy, corruption, frequent political cycles and macroeconomic shocks (Guasch et al., 2008). In fact, scholars describe PPPs as asymmetrical cross-sector partnerships building on the fact that besides operating mostly under incompatible institutional logics of partnering actors, they are surrounded by numerous institutional elements that infuse these partnerships and induce difficulties over their life-cycle. It is therefore necessary to establish a well-defined independent institutional framework within which a PPP should operate in order to prevent or limit what scholars identified in public contracting as governmental opportunism (Spiller, 2008), private contractor opportunism inherent from contract renegotiations (Guasch et al., 2008) and third-party opportunism (Moszoro & Spiller, 2012) and to guarantee the achievement of satisfactory results out of this partnership. From a similar perspective, Spiller (2008), perceived the inefficiency of public contracting as a simple result of rigidity in contracts: “*An unadjusted contract may lead to unproductive actions or even default, generating unnecessary social losses*” (Spiller, 2008, p. 23). The author reflected on two fundamental types of hazards plaguing public contracting: third party opportunism and governmental opportunism. Spiller advanced that governments are able to change the rules of the game by using governmental power (for instance through the use of regulatory decisions, legislative acts and executive decrees...), which may increase the grant of benefits to the state but lowers the efficiency and quality levels of the public contract outcomes. When the institutional strength allows the public party to hold a unilateral power to control the rules of the game, uncertainties will rise and the efficiency of the partnership is significantly affected (Saussier et al., 2009); this is what Spiller (2008) labelled as government opportunistic behavior. In their analysis of the way regulatory opportunism can affect contract design and incentives, Iossa and Martimort (2015) noted a significant risk of “unilateral changes of contract terms by governments” in developing countries where quality of institutions is weak and also in developed countries that are subject to the political risk generated by electoral uncertainty. Furthermore, and while contract adaptation becomes a necessity, non-formal renegotiation and the absence of independent consultants will increase the risk of third party opportunism and perhaps regulations and institutions play a key role in deterring opportunistic renegotiations (Spiller, 2008; Moszoro & Spiller, 2012).

Given all these risks and the incomplete nature prevailing on PPP contracts, renegotiations and delays in project completion are likely to happen; in this sense leading studies presented evidences of PPPs contract renegotiations which became pervasive (Iossa & Martimort, 2012; Engel et al., 2009; Guasch et al., 2008, 2007; Guasch & Straub, 2009). A large database of PPP contracts were examined in different regions mainly in Latin America (Guasch, 2004) and PFIs in the UK (Iossa & Martimort, 2012). These studies revealed high rate of PPPs contracts renegotiation which intrigued scholars who started raising questions on the efficiency and viability of PPP design, governance and implementation, especially in developing countries (Guasch et al., 2008; Estache & Lewis, 2009). Long-term contracts are naturally exposed to unforeseen changing circumstances that emerge over the duration of the contract, and revision of PPPs contractual terms on a regular basis becomes a sure thing, but of course not without a cost for incomplete contracts or adaptation cost. Hence, the evolution and adaptation of contracts becomes a must, *“public and private parties may then either attempt to write a “complete” contingent contract from the outset, or to establish a review process periodically to evaluate and change prices. In any cases, a long-term contract has to evolve through time in order to fit with changing circumstances, and this adaptation is costly”* (Saussier et al., 2009, p. 8). Also measures that may *“reduce the probability of renegotiation through improving the quality of contracting, increasing predictability and improving the governance environment reducing arbitrariness and reducing corruption in regulatory decisions”* (Guasch et al., 2008, p. 436) should be considered.

Incompleteness also makes PPP contracts vulnerable to the influence of political implications in organizations' decisions which can also be another reason for contract renegotiations. This argument was supported by evidences in studies addressing corruption and widespread PPPs post-contractual renegotiations especially in developing countries like in Latin America (Guasch & Straub, 2009) and Chile (Engel et al., 2009). The complex and sophisticated contract design of PPPs coupled with weak institutions quality and the incapacity of public authorities to ensure credibility of commitments encourage corruption and favoritism to a high degree (Guasch & Straub, 2009). Corruption does not only have an *ex post* role at the renegotiation stage but also a significant *ex ante* role at the contract design stage where contract incompleteness is likely to prevail in less institutionalized environments (Iossa & Martimort, 2015). Evidences have also showed that political motives can explain the will of officials to engage in PPP contracts renegotiations to increase their chances of being re-elected (Guasch & Straub, 2006). During their re-election campaigns, central or local governments usually promote investment and expand spending in public works with the

promise to create new jobs and boost by this the economy and this is why they would to engage in PPP contracts re-negotiations (Engel et al., 2006).

Complexities of PPP structures as well as their surrounding environment have made it difficult for nations, especially developing ones, to adopt successfully these types of arrangements without major complications. Based on numerous PPP failures reported in the literature, scholars agreed on the importance of the presence of regulatory agencies for efficient governance, better outcomes of the partnership and limited likelihood of contractual renegotiations (Guasch et al., 2008; Estache et al., 2009). In a trial to make PPPs an attractive investment for a private partner governed by a public party, international agencies like the World Bank, the OECD, the European Commission and others have played a crucial role in assisting the public sector in its engagement with the private sector. One aspect of this role is providing guidelines, tools and principles for developing successful PPPs. These tools have the particularity to take into account the diversity of markets, especially the emerging ones, and their different legal considerations. Case studies from around the world were gathered to confirm a number of key principles and success factors that should govern PPP development, implementation and evaluation.

In a IMF working paper Yehoue et al. (2006) advanced the importance of macroeconomics stability for PPPs survival and good performance associated with the quality of institutional environment where less corruption and effective rule of laws prevail. In fact, authors built their study on a dataset for developing countries retrieved from the World Banks's PPI, to channel the determining factors of PPPs into: government constraints, political environment, market conditions, macroeconomic stability, institutional quality, the legal system and the country's history with PPP experience. The authors advanced that the secured sustainability of PPPs *"depends critically on the regulatory environment, which in turn is shaped by the quality of institutions. Weak institutions create uncertainties about the quality of regulations and therefore increase country risk. High country risk decreases the incentives for investors to join in PPPs"* (Yehoue et al., 2006, p. 8). Consequently, PPPs foster and perform better in environments with strong and effective legal institutions, where legal codes better protect investor's rights. In the same vein, Estache and Lewis (2009), drawing on Laffont's (2005) leading research on the development of a regulatory theory specific to LDCs (less developed countries), attempted to address the *"risk of mismatch between imported regulation and local regulatory needs"* (Estache & Lewis, 2009, p. 731) and therefore an understanding of the particularities of the institutional context is crucial for the design of a regulatory framework

for developing countries. The authors grouped the key aspects of institutional failure into four main limitations: limited regulatory capacity, limited commitment, limited accountability, and limited fiscal efficiency (Estache & Lewis, 2009).

Given the complexity of PPPs mechanisms and their relative novelty in some contexts, many governments have enacted PPP standalone laws and dedicated PPP units which mainly concentrate on promoting and facilitating PPPs and in some cases take a prominent role as the main or exclusive procuring authority. In his sense, scholars have reflected on the extent to which PPP legislations encourage or discourage private investment in public infrastructures (Zhang et al., 2015; Geddes et al., 2013). Studies on US states have revealed that given more states are seeking to expand the role of private investors in constructing and operating their facilities, PPP enabling legislation are considered to be important prerequisite for this participation (Albalade et al., 2018; Geddes et al., 2013). These laws can bring further precisions to crucial issues that may expose PPP projects to conflicts hard to resolve, i.e. mixing public and private financing, the use of PPPs on brown or green projects, sharing toll revenues with local governments.... Authors also advance that the favorability of PPP laws are mainly driven by demand-side factors and political perspectives. In countries where weak institutions prevail and the experience with PPP projects is still nascent, establishing a sound legal system to regulate PPP programs is urgently needed as a part of enhancing the institutional environment and regulating the behavior of governmental departments. In China for instance, the absence of PPP unified regulations as well as the complexity and ambiguity of relationships in public administrations has caused a high rate of projects failures (Zhang et al., 2015).

On a practical level, the world is equally giving PPP regulation greater interest through the guidance of practitioners and policy makers. This materializes in the continuous efforts of international bodies that support and promote good governance in PPPs trying by this to address the various limitations of the governments, in terms of regulatory capacity and other institutional weaknesses. International organizations and multilateral development banks joined their efforts to empower governments, advisors and practitioners to design and deliver PPPs. Relevant resources (technical, financial and management facilities) are gathered by these organizations (Asian Development Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank, the Islamic Development Bank, and the World Bank Group, with the support from the PP Infrastructure Advisory Facility) to

launch the PPP Knowledge Lab who recently adopted the slogan “*The knowledge to innovate for smarter public-private partnerships*” to best describe its mission.

A special attention was given by international agencies towards emerging markets through assistance in financing and operating PPP programs, diffusion of best practices and principles and the publication of guides on how to engage with PPPs in terms of setting a clear framework, establishing criteria for selecting projects, optimizing ways to finance PPP projects, managing the procurement phase and also evaluating and assessing these partnerships. Countries where weak institutions prevail have also constituted a rich material for a diversity of empirical studies on how different types of PPPs are performing in these regions. These studies are scattered among different regions, unevenly covering countries of the developing world, with a particular concentration on countries of Latin America and the Caribbean, less on countries of East Asia and Pacific, and least on countries of Sub-Saharan Africa which is in fact the region with the lowest PPP activity and high cancellation rates, according to the World Bank. Over the past two decades authors have reported number of critical success factors for PPPs in different markets and for different sectors; but the works of Guasch and his co-authors (2006, 2008, 2009 and 2014) were particularly influential to understand the determinants and main reasons behind the high incidence of renegotiation in infrastructure concession contracts, especially in Latin America. These studies show that during the 1900-2013 period, almost 68% of PPP contracts in Latin America were subject to renegotiation within the first three years of the project’s financial closure. In those countries, where weak institutions prevail, the main issues reported to stand behind this significant renegotiation rate are disputes and differences in interpreting contracts, poor planning and lack of effective monitoring and control (Guasch et al., 2014). In order to alleviate the undesirable impact of these renegotiations, countries in Latin America have attempted to improve their regulatory framework and their PPP legislation by introducing new instituting rules aiming for instance to clarify the risks allocation matrix among partners and improve the compensation scheme of the private actor. Case studies from different countries of Sub-Saharan Africa, where the development of PPPs has been relatively slow compared to other regions of the developing world, were recently reported by Yescombe (2018) with the intention to give policymakers in the region insights on what the author labelled as “*the real world of PPPs in the region*”. The fact that PPPs in Sub-Saharan Africa have been much less explored by the literature is mainly due to nascent experiences of countries of this region with PPPs as well as the scarcity of data published in this regards. Some of the reported projects

were completed and ready to operate at the date the report was published, and some others relate to projects that already reached financial closure but had interestingly long and complex development path. Results reported are diversified and each case study reveals unique feature and interesting issues. A prevailing observation among reported cases is the high-level political commitment to PPP programs in countries of Sub-Saharan Africa, and the lack of PPPs knowledge limiting governments' capacity building process and incurring inevitable mistakes and cost overruns.

A recent publication of the World Bank (2018)¹⁸ assessing governments' capacity to prepare, procure and manage PPPs in 135 economies according to the three main stages of a PPP cycle: preparation, procurement and contract management has revealed several trends and different results according to regions. PPPs performance in the high-income countries of the OECD and the Latin American and Caribbean regions is at or above the average in all three assessed areas, whereas Sub-Saharan Africa and the East Asia and Pacific region scored the lowest in assessed areas. An interesting trend has also emerged concerning the regulatory trends across regions: while the majority of OECD high-income countries regulate PPPs under their general procurement law, most countries in Europe and Central Asia and Latin America and the Caribbean (95% and 83%, respectively) have adopted standalone PPP laws and so is the case of countries of the MENA region but with a much lesser percentage (just 58%). In this sense the literature can still benefit a lot from empirical works of under-explored PPPs programs .

3. PPPs IN STRATEGIC MANAGEMENT

The field of strategic management has recently shown interest in investigating PPPs. In comparison to the substantial studies in economics literature and the extensive contribution of economic theories in understanding the functioning of PPPs, theories in strategy and management questioned PPPs to a much lesser extent. Although this discipline has produced a vast literature on collaborations and strategic alliances, the share of studies attributed to this particular form of collaboration, public-private partnerships, remains scarce and selective. The main focus of literature on collaborations was largely on private firms engaging in networks or alliances. The few studies targeting PPPs in particular drew on similarities

¹⁸ Procuring Infrastructure Public-Private Partnership Report – Assessing government capability to prepare, procure, and manage PPPs (2018)

between PPPs and strategic alliances among firms (B2B alliances) considering that PPPs are a type of alliance where partners come from different sectors (cross-sector alliances), and therefore adopting insights from the extensive literature on interorganizational collaboration and exploring their implications on PPPs is relevant (Rufin & Rivera-Santos, 2012; Koschmann et al., 2012). For this purpose, the emerging stream of literature relies mainly on theories commonly used to look into strategic alliances: agency theory, transaction cost and resource-based theories to examine how these conceptualizations apply to PPPs mechanisms. Predominant aspects observed in studies on PPPs are: coordination mechanisms, managerial capabilities; resources interdependence and more recently hybridity and value creation.

Examining the role of resources in strategic alliances from a resource-based view has interested collaboration scholars in the sense that - along with minimizing transaction costs – the access to resources is the main rationale behind setting up alliances, and the portfolio of resources of the partners is highly determinant in the formation of these alliances. The heterogeneity in resources and capabilities constitutes a basic foundation for strategic alliances and the role of resources complementarity has long been underlined in related literature. Studies on collaborations have shown that patterns of resources exchange and interdependencies among partners based on self or collective interests eventually draw the path for success/failure of the collaboration (Gray & Wood, 1991). Furthermore, partners' collective efforts are directly affected by the alignment of their resources and pooling these resources together has a strong value-creating potential that contributes to the alliance's performance (Das & Teng, 2000). Resources sharing may include, but not restricted to: physical assets, intellectual properties, people, capital and organizational capabilities.

The management field builds on the strong interdependence of public and private interests, and scholars believe that research agendas on private and public economic spheres should be partially merged for a full understanding of these interests (Mahoney et al., 2009). Consequently, drawing insights from resource-based theories has contributed significantly in addressing public and private interests. Authors interested in PPPs have approached the idea of mutual benefit from the cooperation between the public and private sectors through the differences and complementarity of resources that can help each sector to accomplish things, otherwise not feasible: “appreciation of diversity”, “interdependent interaction”, “complementary capabilities” and “heterogeneous capabilities and learning” are considered to be important collaboration operating principles (Cabral et al. 2013; Rangan et al., 2006) and have an important effect on performance in public-private interactions. In long-term and

complex partnerships like PPPs, the actors can increase the scale of their activities by combining complementary competences; which finally enforces the mission of the cooperation and satisfies partners' values and beliefs. However in order to realize this economic potential, both resource heterogeneity and governance mode need to be considered. Within PPPs, resources and governance are interrelated (Cabral et al. 2013; Rangan et al., 2006). Theoretical developments advanced that in economic transactions, resources (as the object of exchange) and governance (as the enabler of exchange) are tightly interrelated since “*every economic transaction involves a dyad composed, on the one hand, of resources and, on the other, of governance*” (Rangan et al., 2006, p. 739). For this reason the ‘governance’ dimension took an equal attention in PPPs literature. According to the authors, when an economic opportunity is in sight, and neither public actors have the specific resources required for this transaction nor the private actors can afford governance costs of contracting, coordinating and enforcing, public-private alliances – labelled as *constructive alliances* by the authors - become necessary and can enable creative strategies. In the same line of thought, and building on empirical evidences from penitentiary services, Cabral et al. (2013) advanced that the hybrid modes of governance in PPPs can contribute to higher quality and lower costs in the delivery of public services. By ‘hybrid mode’ the authors investigate activities where public supervisors work closely on-site with private actors. In this type of arrangement showing interdependence of actions, the “complementarity” dimension of capabilities developed between private entrepreneurs and public actors enables the creation of new solutions and configurations that can leverage the initially existing heterogeneous capabilities (Cabral et al., 2013).

The management and strategy literature view PPPs as a pool of mixed capabilities. In this sense, PPPs allow the creation of new resources combinations from the public and the private since the capabilities of both sectors are complementary instead of being totally independent. In this vein, Kivleniece & Quélin (2012) state that “*private actors are likely to add value by complementing existing public sector competencies and capabilities with unique private expertise areas, as well as by creating novel public and private resource combinations.*” (p. 281). This dependence is believed to enable creative strategies and constitute a mechanism for value creation (Rangan et al., 2006; Kivleniece & Quélin, 2012). Authors invite strategists and managers to properly orchestrate complementary activities within a constructive strategy to allow novel, creative and successful responses to new challenges in a “*world that is increasingly specialized and interdependent*” (Rangan et al., 2006, p. 750). As private sector resource advantages can enable important public and social benefits and improvement of

service quality, likewise, private actors may access a range of public resources promising important private benefits such as entering new markets; at this level the governance scheme adapted in each partnership may differ significantly depending on the nature and the holder of the underlying resources (Kivleniece & Quélin, 2012).

The various resources and capabilities pulled into collaborations in general and PPPs in particular bring along a set of diverse organizational and institutional differences getting them to operate within the same structure which becomes the ultimate example of a hybrid organization. This institutional complexity, deriving from the interaction of actors coming from different spheres of economic activities – public administrations, construction companies, engineering firms, financial institutions, consultancies and others - can either be a basis of collaborative advantage or a source of tension and conflicts (Villani et al., 2017; Jay, 2013). A proliferating stream of literature addressing PPPs as hybrid organizations is interested in understanding the mechanisms that moderate the challenges of institutional complexity and support the effective functioning of PPPs.

It is important to precise at this stage the two different theoretical approaches to hybridity, as explained by Quélin et al., (2017). The first approach to understanding hybridity builds on contractual theories (transaction, incomplete contracting and agency theories) to focus on the organizing modes of a hybrid arrangement, which includes the pooling of resources and coordination mechanisms, and this concerns a governance-based notion of hybridity. While the second approach builds on sociology-based literature focusing on hybridity in institutional logics underlying organizational assumptions, believes, values and rules and dictating individual/organizational behaviors and actions. In this sense, hybrid arrangements blend the social logics of collaborating actors.

Also in reference to the discussion of Quélin *et al* (2017), PPPs are a form of collaboration displaying a combination of high hybridity in governance and logics, since they consist of a complex multiple stakeholders network with mixed social and economic demand. Various studies have built on institutional-perspective to examine the way this complexity is managed within PPPs dynamics and coordination processes (Villani et al., 2017; Caldwell et al., 2017), the impact of institutional logics on the stability and survival of PPPs (Ashraf et al., 2017) and their capacity to generate innovative solutions (Jay, 2013). Scholars explained the influence of relational coordination on social value creation in PPPs (Caldwell et al., 2017) and suggested ways to mitigate the challenges posed by these incompatible institutional logics through the degree of resources dependency (Ashraf et al., 2017). Studies

also revealed that divergent institutional logics may generate ambiguity about the nature of the partnership outcomes: whether they represent failure or success (Jay, 2013).

4. PPPS PERFORMANCE ACROSS DISCIPLINES

The remarkable shift away of some public activities to private firms in the last two decades has evoked a vital yet controversial discussion concerning PPPs. A new concern has started to interest scholars in mid-2000's warning actors and policy makers about PPP risks which are hidden behind their promises and suggesting to partners a careful "Look before you Leap" in this long-term kind of engagement. Certainly, the assessment often depended on the particularities of the project itself as well as those of the country or the region and also on the way the entire process was handled. Pros and cons have been extensively analyzed and lessons to be learned from successful and failed PPP experiences were formulated. PPPs promises are appealing, but only how well the lessons are learned can determine the fate of a PPP: a *wedding* or a *divorce* (Estache, 2006). To engage in a partnership with private firms for assisting the public sector in various infrastructural projects and services over a relatively long period of time has many promises. How well these promises are delivered or if they were even kept, this is worth considering. Studies in this regards show complementary results rather than conclusive ones, and the assessment of performance remains highly subjective and lacks well-defined basis. Results advanced by scholars in regard to the performance and the viability of a PPP project do not serve to settle a closing statement about this performance. Away from cheerleaders and PPP advocates, there is a large and growing body of literature that questioned their ability to create value. In early 2000's, scholars have started investigating the actual accomplishments of PPPs compared to their "promises" as well as "factors that account for the gap between dream and reality" (Teisman & Klijn, 2002). Likewise, Bloomfield (2006) challenged the applicability of PPP model to most of commercial transactions between government and business and explored some impediments to achieving effective performance in those long-term innovative contracts, such as the risk of uncontrollable circumstances, the impact of local resources constraints and barriers to transparency. We would probably think that the best way to evaluate the performance of a project is to associate its estimated promises to its achieved outcomes. Following the same logic, PPP promises are numerous and evaluating them against their actual outcomes is a complex task to achieve. Among these various promises, we recall few that were repeatedly mentioned in the literature: a reduced public sector debt levels through private financing, a reduced pressure on public budget, a better value for money for taxpayers, better

accountability, better on-time and within-budget delivery, and a greater innovation. Therefore, identifying what to measure exactly and how to do it in order to demonstrate value, is tough.

The concept of performance could mean different thing to different people but mainly relies on the actual outcomes of a given process comparing to stakeholders estimated expectations. Same thing applies to assessing PPPs performance; it is tightly related to what they concretely offer, their outcomes, in relation to what they were initially designed to deliver. Criteria for the assessment of those outcomes have been subject to debates among scholars and practitioners and different approaches were suggested for putting in place quantitative models and qualitative frameworks, depending on the discipline's paradigms or the perception of policymakers. Performance of PPPs turned out to be a complex function of numerous weighted variables including efficiency, effectiveness, service quality, accountability, and probably others; which makes a fair assessment of PPPs' efficiency and performance pretty subjective. The selection of indicators or methods for a fair assessment also depends on the aim behind PPPs performance evaluation as well as the criteria used to best inform us about their efficiency.

Jointly taken, the previous independent but complementary research streams in PPP literature provide an understanding of PPPs with a particular focus on the ability of these structures to realize their objectives. Studies and publications in this regards are diversified ranging from general philosophical guidance and conceptual advancements, to project analysis, statistical reviews, financial indicators and accounting considerations. These studies all acknowledge that it is difficult to agree on common criteria or standards for this evaluation. It can also differ from a discipline to another which can be a major challenge for an accurate and reliable performance evaluation. In this sense, law studies raising interest in PPPs will build their evaluation based on national laws governing the contract as well as the local/regional accounting principles applied; economists will study the efficiency of PPPs through their social impact and capacity to reduce transaction costs; engineers and project managers will be concerned with feasibility studies, tasks planning and forecasted outcomes; research in Public Management will judge PPPs based on their capacity to innovate in the provision of public services or infrastructure construction; and studies in Strategy and management will probably consider that the distinctive source of success for cross-sector partnerships is the relational aspects among partnering actors. The extent to which these studies have succeeded in

converting the performance and efficiency of PPPs into conclusive, measurable and relevant results remains contentious.

In fact a limited number of statistical reviews and almost no meta-analysis of PPP performance and assessments have been outlined in the literature. Hodge & Greve (2009) have reported a wide variety of evidences from evaluation examples published in international literature, with a focus on ten primary objectives and promises of PPP delivery to evaluate their performance: increasing the public sector borrowing requirement, reducing public debt, providing better services for taxpayers, better accountability, better on-time and on-budget delivery, encouraging innovation at the public sector level, and boosting the sales of PPP services abroad. The authors agreed on the difficulty of evaluating the degree to which many promises of PPPs are met and the mixed results of the reviewed studies reflect a poor design of evaluation features. Estache (2006) provided an overview of basic documented facts and quantitative data in an attempt to argue the steady drop of private participation in infrastructure between 1997 and 2003 as a strong indication that the partnership is turning unsatisfactory. This research explored a set of reasons behind the possible tension between partners in PPPs and showed that the appropriate evaluation of these reasons is a multidimensional problem and that factors of success/failure of these partnerships may vary across regions and across sectors as well. The also author noticed that while governments put high hopes on PPPs to alleviate infrastructure deficiencies, help in fiscal stabilization, increase private investments, contribute to growth and improve governance in public administrations, the actual recorded achievements of PPPs were quite mixed and highly contextual (Estache, 2006).

All these studies did not proliferate into conclusive results on PPPs performance neither on ways or criteria to properly evaluate this performance. At this level, it is worth noting that many authors have used the term “Rhetoric” (Teisman & Klijn, 2002; Wettenhall, 2003) in either the title of their paper, or at least once in its body. We think that by doing so, the authors wanted to keep readers away from getting caught in the trap of fashionable concepts in public policy discourses on PPPs, and remain vigilant and sober to prevent a poor evaluation of their actual results. In this sense, Bloomfield (2006) noted the messages conveyed by PPPs advocates in conference presentations, in the media and through legislative hearings: *“Through innovative, long-term public – private partnerships, cash-strapped local governments can save money by applying private sector discipline to the delivery of public services and construction”* (Bloomfield, 2006, p. 400). However the

practical challenges posed by long-term commitments, in the words of the author, “*can undermine local governments’ efforts to capture the hoped-for benefits of these arrangements*” (Bloomfield, 2006, p. 400).

Is the performance of PPPs conceived in terms of economic/efficiency gains? Is it shown through better quality of services delivery and satisfaction of certain societal needs? What would be valuable from public manager’s perspectives, is it the ability of PPPs to pursue their political agenda? Are contracts’ renegotiations a sign of weak performance? To what extent the imperfect monitoring of the performance of the private actor impacts the performance of the partnership? Is the perception of performance commonly shared among actors or is it perceived differently? What is considered to be a valid criterion against which PPP performance is judged? Are PPPs better than tradition procurement in delivering on-time and on-budget projects?.... Scholars have raised these sets of questions and could report empirical evidences on PPP failures, or success, in different contexts. And answers to PPP underperformance came scattered among various criteria: biased selection of partners at the level of the tendering process, higher prices than traditional procurement, renegotiation and cost overruns, adverse institutional conditions and high transaction costs incurred (Iossa & Martimort, 2015; Estache & Saussier, 2014; Guasch et al. 2008). The literature revealed a discrepancy often existing between the prevalence of cross-sectors partnerships and evidence of their ability to produce value in relation to problems they were initially designed to address (Koschmann et al., 2012) or between the outcomes promised by policy makers to citizens to be delivered through PPPs and the actual achievements realized by those PPPs (Hodge & Greve, 2009).

Authors invited us for sober reflection on these promises made by long-term infrastructure type of PPPs and most importantly to watch out for the way these partnerships are evaluated. Nevertheless, a consensus prevailed on these reviews: the different criteria for performance evaluation do not take into consideration the life-cycle performance of PPPs over the longer term and data used lead to mixed assumptions which can nurture further debates. Analysis that focuses solely on one cost component, without quantifying its impact on PPP life-cycle costs and benefits, do not allow normative conclusions about the preference of PPPs over traditional methods of procurement (Blanc-Brude et al., 2006). Oddly, we quote a witty metaphor from a report published by the European Investment Bank (EIB) in 2006 of a comparative study between PPPs and traditional procurement: “*the comparison of cost overruns in PPPs and traditional public procurement is arguably a comparison of apples and*

oranges”, because value for money is a function of other sources as well and can be maximized over the project’s lifecycle of a PPP. More recently, Iossa and Martimort (2015) have reported mixed results on PPP performance in different contexts and economic sectors. For instance, PPP arrangements are more beneficial in sectors like water and transportations where infrastructure quality is key and the demand is relatively stable and foreseeable; however PPPs are less likely to be efficient in domains like nursing, schooling or IT services where service quality is a variable of human capital investment and/or the demand is likely to evolve rapidly with time. While satisfactory results in terms of completion time and cost of delivery have been noted in PFI projects in the UK, higher water prices than traditional procurement were reported for PPPs in France. In this vein, scholars keep on raising questions related to the efficiency of PPPs in the context of recent environmental changes; in this sense, Martimort and Straub (2016) considered the extent to which PPP will perform in sectors that are exposed to climate change-related hazards and how these conditions of global warming would affect long-term contractual arrangements. Results show that the unbundling of tasks provide flexibility to better cope with these types of hazards, whereas task bundling has always been a distinctive feature of PPPs.

Literature in project management disciplines also had an interesting input in debates on evaluating the performance of PPPs as a project (Osei-Kyei, Chan, 2015; Zhang et al.; 2015) and suggested several conceptual frameworks for an effective project performance measurement. These frameworks represent performance objectives either through key performance indicators (KPI), best value contributing factors, key success factors, and others. Besides quantitative indicators prevailing in projects performance evaluation, the proposed systems consider qualitative aspects such as the best value approach, verifiable standards and appropriate contractual arrangements in the procurement of public services (Akintoye et al., 2003; Zhang, 2006).

All these studies were very useful in identifying major sources of PPPs inefficiencies, but once again “*PPPs efficiency thus remains an open question*” (Saussier et al., 2009, p. 6); the elaboration of a valid and unified performance evaluation scheme could never be conceived and “*ongoing questions remain about how to design, manage and assess PPPs*” (Brinkerhoff & Brinkerhoff, 2011, p. 2).

Focusing solely on *ex post* evaluation of a project’s outcomes has its downfalls. The project’s processes and evolution in this case are not taken into consideration although they have crucial impact in shaping PPP performance. Nevertheless the suggested models provide

static product-based measures while the phenomenon observed is a dynamic one and a real-time monitoring and control process is required. In addition the particularities of each project are not considered in the proposed evaluations, although this could be a challenging task given the wide spectrum of PPP diversity. We recognize that the complex nature of PPPs does not make their evaluation and performance measurement a simple task. This was seconded by a USAID report (2010)¹⁹ which stated that parties involved in PPP alliances, governmental agencies and international donors are all struggling “*to measure not only how well a partnership is executed, but also how the alliance contributes to each partner’s desired impact*”. More recently, scholars in strategic management attempted to link performance evaluation and strategic actions through a study on the effect of outcomes-based contracts, or what scholars named as “governance by targets” (Alonso & Andrews, 2019), examining whether this kind of contract governance could be an effective strategic tool for enhancing value creation by cross-sector partnerships; according to the authors, the advantage of performance targets is to “*positively influence the decisions and behavior of partners*”.

In sum, evaluating the extent to which PPPs have kept their promises is not an easy task given the span of different possible contract arrangements and the absence of a common and universal assessment framework. The central question facing public policymakers will always concern the optimal design of public and private partnering over a project to maximize public value. “Did PPPs deliver?” is a question raised in a 2012 World Bank Group report²⁰ trying to shed the light on the actual results of PPPs at that time and the effectiveness of international institutional support to PPPs transactions. The report also states that PPPs assessment is multifaceted, but the scarcity and imprecision of available data make this assessment very challenging. One thing is sure; there is no one-size-fits-all design for every situation. The gap between PPP promises and actual outcomes is a sure thing (Selsky & Parker, 2005) and evaluating this gap is as complex as the nature of public-private arrangements. What is actually missing at this level is a comprehensive performance measurement system to be incorporated at different levels of PPP activities. Common practices in performance evaluation focus on few components of the project and tend to disregard other components; some performance measurement systems are concerned with inputs while others tend to overlook outputs. This constitutes deficiencies in current systems and calls for a dynamic and flexible approach to performance measurement that is capable of

¹⁹ (Re)Valuing Public-Private Alliances: An Outcomes-based Solution, *United States Agency for International Development*, 2010.

²⁰ World Bank Group Support to Public-Private Partnerships: Lessons from experience in client countries. *Independent Evaluation Group (WB, IFC, MIGA)*, 2012.

reflecting the evolving nature of some public services which requirements are likely to change over time. This goes in line with what Liu et al. (2014) labelled as “dynamic process-based measurement” to control and monitor the performance through the life-cycle of the partnership.

5. RECENT THEORETICAL TRENDS ADDRESSING PPPs

Governments’ engagement in cross-sector partnerships has been observed among several public activities that have a significant social impact like charter schools, defense and prisons (Cabral et al., 2013). This engagement tends lately to be oriented towards people-focused activities with an increasing subscription of private actors and financial institutions with governments in strategies incorporating Sustainable Development Goals, materialized in social services for healthcare, housing and education. This is reflected in the emergence of new research ideas taking theoretical conceptualization on PPPs to a new level; defining new dimensions for the performance of these arrangements and highlighting further their “humane” features.

At some point, literature on cross sector partnerships has been criticized for weakly taking into its consideration social issues (Selsky & Parker, 2005) while gaps between public expectations and the actual performance of public institutions are expanding. In a respond to this expansion and in order to address this underexplored aspect that is growing in importance, a special issue of the *Journal of Management Studies* (2017)²¹ has recently addressed hybridity embedded in inter-organizational arrangements and how it can lead to economic and social value in PPPs, followed by another special issue of *Strategic Management Journal* (2019)²² addressing the different dilemmas related to both private and public value creation. Contributing authors base their work on the consensus that the hybrid nature of PPPs implies great interdependencies between public, private and social actors and the complexity of their interactions increases the challenges for designing effective arrangements. In addition, the efficiency, effectiveness or even performance of these partnerships is a function of dimensions that are not exclusively defined through financial and economic indicators, and not even through contractual terms. Cross-sector partnerships have the ability to produce value with respect to the socio-economic problems they were designed to address, which makes their performance difficult to understand and not simple to assess

²¹ *Public-Private Collaboration, Hybrid Organizational Design and Social Value*, Vol 54, Issue 6, pp. 763-959, September 2017

²² *Value Creation and Value Appropriation in the context of Public and Non-Profit Organizations*, Vol 40, Issue 4, pp. 463-710, April 2019

because it needs to be related to the overall value they create in this regards. These thoughts were behind the recent introduction of “value creation” and “value appropriation” as a new way for PPPs performance evaluation. Furthermore, what makes the studies published in contemporary issues of leading journals particularly engaging is the authors’ contribution in combining different theoretical approaches from both economics and management scholars’ perspectives, in the aim to understand the extent to which PPPs can be a mechanism for social value delivery and therefore a phenomenon to be observed through conceptual underpinnings in organization studies. Authors are convinced that they “*still have much to learn about their [PPPs] management and about what underpins their ability to create value for stakeholders*” (Villani et al., 2017, p. 877) and are also driven by the need to “*move beyond PPPs contractual considerations to accommodate broader organizational, relational and contextual factors that may promote social value*” (Quélin et al., 2017, p. 765). In a gripping attempt to build links between the disparate streams of PPP literature and with the absence of a comprehensive theoretical framework that integrates different insights on public-private interactions within a partnerships, authors tried to connect perceptions from both Strategic Management and Public Management to illustrate how this type of collaboration can span beyond contracting partners’ interests to broader notions of public and social value (Quélin et al., 2017) and to benefit from a greater understanding of the progress of these interactions (Cabral et al., 2019). Similarly, authors agreed on the fact that public contracting can still benefit a lot from contribution coming from strategic management academics and organization studies with the aim to provide new insights on the relationship between public policies and strategic actors.

This call for bridging theories in PPP literature is not recent, predecessors of this trend agreed that this approach promises to reveal new insights on public-private interactions within a partnership because the real value of this partnership lays in considering it a distinct organizational form beyond the sum of its individual members (Cabral et al., 2013; Kivleniece & Quélin, 2012; Koschmann et al., 2012; Mahoney et al. 2009). In their quest on how heterogeneous capabilities and learning can explain interactions (feasibility and performance) between public actors and private entrepreneurs, Cabral et al. (2013) suggested an expanded theory combining insights from contractual and capability perspectives to better understand the dynamic interaction between actors of the partnership and its effect on the performance of complex public services. Mahoney et al. (2009) in their turn suggested a research agenda, at multiple levels of analysis, which considers bridging theories within organization sciences with the aim to extend existing theories and/or generate new constructs,

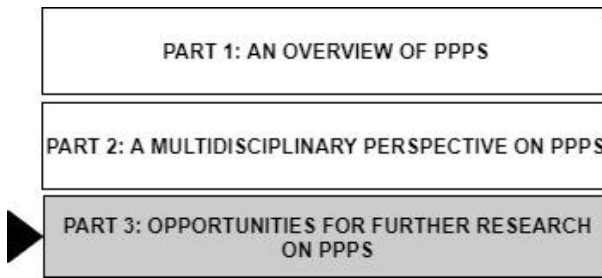
concepts and theories for investigating interrelations between public and private interests in partnership arrangements. Authors' main focus through this agenda is a global sustainable value creation as an outcome of public-private interaction. Similarly, Koschmann et al. (2012) advanced that research on cross-sector partnerships have been mostly driven by resource dependence and transaction cost theories that define value economically while ignoring or underestimating the value-lade aspect of sociocultural factors that influence organizational behavior, therefore the partnership should be assessed at the partnership or the network level instead of their outcomes. PPPs undertaken by governments and firms are believed to have the ability to create additional value; the institutional complexity they integrate as a result of the configuration of collaboration "*may be leveraged by partners as a source of value creation for stakeholders and society instead of being considered only as a source of conflict and additional management costs*" (Villani et al., 2017, p. 901).

Although the agenda proposed by these studies is particularly stimulating, very few scholars engaged in it, and even those who proposed criteria for PPP performance evaluation, stopped short of developing systematic framework through which public-private partnerships' performance can be evaluated. In the publication of the two above mentioned special issues on value creation and appropriation in PPPs, authors agreed overall on the fact that, taken jointly, the independent yet complementary research streams in Economics, Public Management and Strategic Management, have all served in understanding hybrid arrangements between public, private and social actors, yet did not succeed in capturing the essence of value created by PPPs. Authors in strategic management argued that PPPs "*cannot rely on 'ready-to-wear' model for their design and on-going management*" (Villani et al., 2017, p. 880) because the institutional complexity involved in the incorporation of different elements from government, market and sometimes civil society, may prevent PPPs from achieving specific goals and creating value if not managed properly and may also threaten their growth and survival. For this purpose and in order to enable partners to manage PPP institutional complexity, Villani et al. (2017) designed a PPP business model which they considered "*the key element to value creation in PPPs*", placing governance at the center of this model and highlighting the theoretical relations among governance components, assets and processes involved in the design phase, building phase and operations and maintenance phase of a PPP. A In this way, authors would have made use of a strategic frame, the business model design, in order to bridge institutional complexity and value creation mechanisms.

Quélin et al. (2017) have built on previous theoretical frameworks from Organizational Economics and Public Management to point on the social value delivery aspect of hybrid arrangements that is still underexplored in PPP literature. The authors offer a conceptual and integrative framework for the assessment of mechanisms of social and economic value creation. The idea of value creation is probably not new to the PPP literature whatsoever; previous studies have advanced concepts like “collaborative advantage” or “surplus value” raised from PPPs in the form of cost savings, substantive improvement and innovation, but this argument did not benefit from further development.

In sum, a new challenge for PPP performance is now materializing in the current evolution and latest developments of social needs and environmental changes; new trends are now believed to shape their implementation in the coming years in response to the pressing needs of the environment, namely climate change, frail economies, poverty, safety and security. This will definitely enlarge the spectrum of sectors attracting private investment in infrastructure (i.e. renewable energies, ICT backbones...). We therefore witness the emergence of new models of combined efforts among expanded arrays of actors and across sectors of education, agribusiness, health, sustainability and others. These forms of projects are designed around the intersection of various economic activities, gathering by this, actors from the public, social and private environments, and creating broader social value to be perceived further on the economic performance of a private actor and the improvement of public services. New forms of performance evaluation will therefore be imposed and this entails further development in organization sciences and management studies to better escort this new tendency in cross-sectors partnerships, and probably new theoretical lenses to look into PPPs.

PART 3 – OPPORTUNITIES FOR FURTHER RESEARCH ON PPPS



The reviewed literature has highlighted PPPs special attributes behind the proliferation of studies in different scientific disciplines of organization science. Scholars were curious to understand the functioning of PPPs given

the high level of complexity they entail, whether at the contractual level, the institutional determinants, as well as the relational dimension. The difficulties in designing almost complete contracts, the inherent hybridity in resources governance and partners' logics as well as the challenges imposed by the surrounding contextual environment made of PPPs a challenging multi-facets domain to explore, and the actual theoretical developments are far from being comprehensive and inclusive.

In this last part of the chapter we reflect on the elements that went missing or underexplored by the PPP literature, looking for opportunities for further developments. We also formulate the research question that expresses our interests and sets the direction for this dissertation.

1. LIMITS OF EXISTING STUDIES

Would the assumption of “no single theoretical foundation can serve as a general theory for PPPs” be refuted? Academic interest in PPPs is rising since the latter are showing more promises for addressing emergent demands such as solving societal problems and help achieving adequate solutions for sustainable development goals. This provides interesting and favorable research settings and inspires creative new conceptual contributions.

The studies reviewed so far are spread across numerous research streams and provide irrefutable evidence about multidisciplinary interests in PPPs. Once again, this is fundamentally due to the complex nature they inherited from being a hybrid arrangement between governments and the business world. PPPs literature is most concentrated: on economics theories that studied contract incompleteness and asymmetric information leading to frequent renegotiations and high transaction costs; on institutional theories that helped understanding the way political incentives and institutional determinants can impact the efficiency of a PPP; on managerial capabilities and strategic resources pooled by the actors engaged in this collaboration; and on highlighting the public accountability of the project and most importantly the efficiency of PPPs in accomplishing public goals.

Nevertheless, this large literature “*suffers from conceptual imprecision, and is weakly integrated*” (Brinkerhoff & Brinkerhoff, 2011, p. 2). Back in 2005, Selsky and Parker call for consolidating this multidisciplinary literature in order to help management and strategy research in advancing the research agenda on cross-sectoral partnerships within organization studies. This is seconded, in an anecdotal way, by Wettenhall (2003) assumption: “*Having considered several developing nodes of interest in PPPs, I have to say that I am amazed that there has been so little cross-fertilization between them*” (p. 84). We think that this theoretical thirst still persist today more than ever since PPPs in practice are expanding greatly and their array of applications comprises a range of arrangements that differ by size, purpose, scope and partnering actors in order to meet the evolution of public expectations and social and environmental demand. Many authors attempted to offer conceptual frameworks on PPPs (Koschmann et al. 2012; Kivleniece & Quélin, 2012; Brinkerhoff & Brinkerhoff, 2011) intersecting multiple concepts implied in public-private ties and greatly contributing to the theoretical debate on mechanisms embedded in public-private agreements. However, these works were particularly constrained by the heterogeneous constitution of PPPs that limits the universal applicability of any set of assumptions. The studies also did not exclude the necessity for further conceptual and empirical research to capture a holistic view of PPPs

Certainly in the reviewed literature, numerous aspects of PPPs were examined thoroughly, and highlights on important characteristics were revealed. Findings have increasingly contributed to theoretical advancements in PPP understanding and brought new insights for practitioners and policy makers to improve future implementation of PPP projects, by providing basic criteria for a successful PPP as well as recommendations for an appropriate institutional environment, increasing by this their efficiency. However, “*research on cross-sector partnerships has been driven primarily by resource dependence and transaction cost theories, where value tends to be defined economically and from the perspective of a focal firm*” (Koschmann et al., 2012, p. 333). This implies a need for moving the scope of analysis forward to span the multiparty partnership or even to cover more than one level, instead of focusing on a dyadic relation between particular constituents or determinants of the partnership, for instance: corruption and PPP efficiency, regulation and PPP performance, contract design and risk transfer, resource dependence and role allocation, weak institutions and contract renegotiation.... As a matter of fact, the overall value of PPPs is not limited to their economic efficiencies and there is an uncertainty around the capacity of existing studies to provide a comprehensive assessment of those PPPs, since “*no single analytic framework*

can capture the diversity, relevant parameters, and qualities of PPPs” (Brinkerhoff & Brinkerhoff, 2011, p. 5).

A motivating question drawn from the discussion of Koschmann et al. (2012) - citing Selsky and Parker (2005) - on how to improve and assess the value of cross-sector partnership through communication practice, has particularly inspired us: *“How should we understand cross-sector organizing in order to capture the messiness of partnership practice and provide more theoretical precision?”* (p. 350). Indeed, the authors perceived PPPs as distinct entities and a particular type of organizational form, a messy one, and called for the development of organizational theories capable of explaining these forms and helping them achieve their goals. They clearly stated that *“any assessment of XSP [cross-sector partnership] - value should consider XSPs as distinct organizational forms, beyond the total sum of their individual members; unfortunately, this level of analysis has not been the focus of most XSP research to date”* (Koschmann et al., 2012, p. 333).

In addition, much of the research to date are based on retrospective histories case studies, surveys, quantitative models, comparative studies and secondary data mostly conducted for an *ex-post* evaluation after the projects’ outcomes are known or after the contract governing the partnership has reached its term. We noticed that empirical papers addressing the evaluation of PPPs in certain markets rely either on accessible datasets, whenever the archives of data related to the concerned market are available, or on *ex-post* outcomes of these partnerships in comparison to *ex-ante* expectations. In terms of empirical contexts, PPP studies have proliferated in both developed and emerging economies, however these regions were not attributed equal attention from scholars. In relation to developing economies, Latin America and South Africa were favored regions and little attention was given to other emerging countries, for instance the ones of the MENA region.

If we would to condense the main ideas behind the studies we reviewed on PPPs in a one-sentence summary, we would put it this way:

Building on an input-output perspective of PPPs, most studies examine the determinants of the input stage namely elements of the preparation stage (tendering, selection of partners), the contract design (resources pooled in the partnership and the governance mode), the actors’ relational mechanisms and the implied risks, and finally the outcomes of the partnership in terms of realization of objectives, social and economic value creation or proper application of contractual terms and conditions.

What we actually believe is missing in these studies is a processual evolutionary perspective on PPPs: the actual process leading the transformation of elements in input to elements of the

output. In other terms, we estimate essential to have a dynamic look at PPPs in order to understand how different actors involved along with influencing environmental factors, interact all together to shape the evolutionary path of this complex type of arrangement. Empirical studies that observe a PPP from a process progress perspective, in order to understand how and why this phenomenon occurs and evolves with time, remain scarce. This indicates a need to understand the evolution of a PPP project, in real-time, within its surrounding dynamic environment and this supposes the observation of the history of a partnership to depict elements responsible for its success/failure. In his review on PPPs, Wettenhall (2003) suggests to expand questioning about partnerships and include the back history of these arrangements and what this may tell us about successes and failures, instead of simple reporting of success or failures. Authors interested in understanding how value creation is enabled in PPPs have recently raised their concern in regards to a complete understanding of the effective functioning of PPPs. Villani et al. (2017) argued that they *“have a limited understanding of the mechanisms that support effective functioning, avoid inefficiencies, and ensure survival during and after the establishment of a PPP”* (p. 877). Therefore this raises an interest for knowing more about the internal processes that allow PPPs to create value or to function effectively. Furthermore, while most studies focus on how PPPs function when they operate in a ‘steady state’, far little attention is given to how the different stages of their lifespan have been managed to cope with environmental dynamism and complexity.

On a different note, most of the reviewed studies are addressing contexts where regulatory and institutional frameworks for public contracts and/or for PPPs already exist prior to the date of the study, and results varied depending on whether or not countries object of the study have weak or solid legal systems. Literature pays little attention at institutional dynamics where countries are going into processes for reforming existing regulations or of the construction of a dedicated regulatory framework (laws and regulating bodies). It would be interesting to know how the different constituents of these referrals have evolved to set up a regulatory context for PPP projects and what the key considerations in designing this context are especially in developing economies looking at PPPs as the main tool for redressing their frail economy. While some researchers and policy makers are reconsidering the efficiency of PPPs by investigating their “promises” and questioning their real capacity in hiding part of public debts off the balance sheet rather than closing a real financial gap (Buso et al., 2017), countries witnessing frail contexts are still active in developing basic policies for PPP projects hoping through this to close possible gaps in different existing sectoral laws adopted

so far and creating a favorable environment for private investment in their infrastructure projects. International agencies, in their mission to assist countries in setting their PPPs regulations and policies, have started to promote the importance of establishing a PPP unit at the national level of each country as part of the PPP regulatory process. The World Bank for instance attributes a crucial role to PPP units in ensuring quality criteria to attract PPP projects and manage the multiple PPP transactions. However the role and importance of these units are also not investigated yet by the literature.

Besides, PPPs have been portrayed in the literature as collaborative arrangements between partners to execute a specific mission in a given period of time, but very rarely, or almost never were they approached as institutions. Among the different paradigms in social sciences that explained institutions, we follow the neoinstitutionalist approach of North (1991) who considers that institutions are stable structures created by constrained human behavior and promoting efficiency by reducing uncertainties and transaction costs per exchange. These humanly conceived constraints that structure interactions are both formal (rules, constitutions, laws and property rights) and informal (customs, traditions, norms and codes of conduct) (North, 1991). PPPs can therefore be regarded as institutions, constrained by interactions of both formal and informal rules, providing structure and order to a form of public procurement with the aim to achieve economic and social development goals.

We commend through this discussion what scholars suggest as future research directions on cross-sectoral partnerships: using institutional and complexity models to challenge prevailing PPPs input-output models and explore processes of non-linear emergence in and around these partnerships (Selsky & Parker, 2005). The authors reported that conceptualized models of cross sector partnerships simply identify useful functional dimensions of these partnerships and causal factors affecting their outcomes, whereas new lights on strategic issues may be drawn by focusing on more dynamic perspectives that can identify feedback loops among elements of the systems in which the partnership is embedded. *“The need for more longitudinal research to capture the evolution, coevolution, development and demise”* of PPPs, was explicitly formulated by Slesky and Parker (2005, p. 866), and supported by Kivleniece and Quélin (2012) suggestion for future studies to address *“process-related aspects of public-private collaboration”* (p. 295) in order to capture value in public-private ties.

We sum up our observations on the reviewed studies in the following non-exhaustive list of potential further developments in Strategic Management and Organization Studies where PPPs studies are still scarce:

- Designing PPP regulations and the role and importance of PPPs regulatory bodies may provide further insights on PPPs regulatory processes
- A process view on PPPs with the aim to pursue their evolution and how different constituents dynamically evolve and adapt to determine the partnership efficiency and its capacity for value creation, is still lacking.
- An approach to PPPs as institutions rather than a collaborative arrangement.

2. RESEARCH QUESTION AND PROPOSED ANALYTICAL FRAMEWORK

The reviewed theoretical developments invite us to explore further the opportunities for a better understanding of PPPs as they expand into more sophisticated business models so they can embrace the environmental evolution. We build on these opportunities to propose an agenda for the current research. As theories and practices have been explored in international contexts and a number of interesting cases were reported, the global ambition of expanding the volume of the heterogeneous PPP literature is to reflect on existing theoretical and practical approaches to PPPs and consider their impact on the management of PPPs across the world. The aim is not to suggest a theoretical synthesis or a unified perspective on PPPs, and in our opinion this is due to the complex nature of this phenomenon and the diversity of issues surrounding it. Most authors elaborated upon their own perception and the lens they estimated convenient to observe PPPs, study a case or advance assumptions and premises and suggest a number of observations on the analytical and practical attributes of PPPs. This massive volume of studies and the generated knowledge has tremendously contributed in informing us on this challenging domain. In a review of Osborne' seminal works on PPPs "Public-private partnerships. Theory and practice in international perspective", Lars Engberg (2002) highlighted the controversial nature of PPPs:

Being fueled by synergy and collaborative advantage, PPPs have the potential to improve service quality, to reduce costs and to constitute social laboratories for creative learning, organizational innovation and the production of social capital. However, PPPs per se, embody collective action problems that manifest themselves as governance dilemmas, and suffering from various asymmetries they

necessitate pragmatic and strategic trade-offs between collaboration and exploitation. Still, subject to critical analysis, PPPs have potentials of improvements through better design and a strengthened emphasis upon reflexive governance strategies. (Engberg, 2002, p. 601)

Almost two decades have passed since Engberg's review, yet his assumption still hold up. This gives officials and academics further opportunities for PPPs improvement and research advancement.

From a theoretical perspective, these increasingly popular and distinct forms of hybrid cross-sector collaboration have raised important questions in regards to their different aspects, namely their organizational design, governance and performance, as well as questions in relation to the context where they are established: adaptation with environmental conditions and integration with the environment constituents, institutional framework within which they operate, considerations relative to stakeholders and to society. These aspects were examined separately at the level of different stages of a PPP project (initiation, implementation, execution) and through the lenses of different theories mobilized most of the time, individually depending on the aim and the scope of the study. In addition, research observing specific PPPs projects are in their large majority based on case studies in their retrospective histories and conducted after the outcomes of the project are known or after the contract governing the partnership has reached its term. Clearly, these research have missed the observation of a PPP from a process progress perspective, in order to understand how this phenomenon occurs and evolves with time. In an attempt to fill this gap, we propose a process research for the establishment and the evolution of a PPP project, to be observed in its integrity. We believe that the observation of the continuity, change and adaptation in individuals and organizations involved in a PPP project on a real-time basis may highlight new insights on the collaboration and exchange aspects between public and private actors as well as their interaction with their surrounding environment. By doing so, it will be possible to "paint a picture" illustrating a view that is rather holistic of the entire phenomenon of a PPP establishment, unveiling elements of this dynamic setup and building critical links between disparate streams of literature previously addressing PPPs. We believe that an observation of the process dynamics of establishment and evolution in time of such arrangements can reveal key developmental concepts taking part of this process and pursue their evolution (order and sequence) in time. These concepts, revealed in the wider picture, may go unseen from a single theoretical lens study on PPPs. Interrogations on the dynamics

of the PPP establishment remain highly pertinent to the proposed observation, particularly as this type of arrangement is still a novel form of hybrid collaboration in many countries, especially developing ones. The understanding of a PPP crafting and the dynamics of their set up can be advanced by the understanding of the mechanisms underlying their evolution, and by considering the contextual elements influencing the progress through each of these developmental phases.

The objective is to push the frontier of theoretical understanding of PPPs by expanding existing findings and probably challenging them. This proposed process research conducted on a PPP phenomenon can delineate what is meant to be accomplished through this PPP, how it is planned to be accomplished, how the design was put in place, and how this phenomenon in its integrity has evolved and performed with time in a particularly influencing environment. Our concern tilts towards elements of the phenomenon of evolution, that is: time, dynamism, action, development, performance and outcomes (Pettigrew, 1992). In simpler words, the research consists of looking into a PPP as a process to understand how it is crafted, and therefore to answer the research question:

How are PPPs crafted in developing economies with the initial absence of a dedicated regulatory framework?

A range of preliminary questions are raised at this level:

How do multi-actors and multi-layers relationships in public-private collaboration affect its evolution and performance? How do the determinants of the contextual environment affect the performance of a PPP? What are the mechanisms of monitoring, coordination and design governing this collaboration? How do actors taking part of this PPP react or adapt to changes in environmental factors? How do institutional constraints evolve with the PPP evolution? How can PPPs implement appropriate management and strategic practices in order to cope with environmental complexity?

Our interest in this research has two main dimensions: from a strategic management perspective, how do partners in a PPP regulate their behaviors throughout the partnership life-cycle so they can adapt to change and ought to achieve the collective gains of the partnership? From an institutional perspective, how do PPPs interact with the surrounding institutional environment? Do they adjust to institutional constraints or they challenge these constraints? By attempting to answer these questions, it will be possible to “paint a picture” illustrating a view that is rather holistic of the entire phenomenon of a PPP, revealing insights of this dynamic process, pursuing their evolution in time (order and sequence) and

building through the critical links between disparate streams of literature previously addressing PPPs.

Countries that have nascent experience in PPPs and witnessing regulatory transitions between pre- and post-PPP legislation may be the best empirical context that can help in answering the research question. We noted that the developing economies, in particular those of the MENA region, were left with far too little attention and a smaller share of research on PPPs, which is one of the reasons that makes this field interesting to explore. In addition, the region has been active during the current decade in establishing jurisdictions in regards to PPP policies and regulations and a number of countries have recently enacted standalone PPP laws and some of them have even established PPP national units. These countries are the perfect illustration of a context struggling in political and economic instability since many years now, and trying to “craft” infrastructure projects through private partnerships, in an attempt to alleviate the heavy impact of increasing public spending and deficiency in public services provided.

At this stage, we perceive a need to define an analytical framework that guides our reflection, and orients the research design and aftermath analysis. This analytical framework needs to allow dynamic modeling for process exploration. Crafting PPPs implies examining the dynamics of a process through which PPPs emerge and evolve with time and therefore, an adaptable methodological approach and analytical lens supporting dynamism and complexity are required. Hence, a refined and more focused formulation of the above proposed research question is necessary for a better understanding of this crafting process. We therefore decide to look at the research problem through the lenses of the coevolutionary theory, for we believe that this perspective can guide best the investigation and indicate the direction to take throughout the research. Properties of the coevolutionary framework and empirical studies mobilizing it constitute the subject of discussion of the next chapter. In the best possible way, we hope that this research takes the understanding of PPP to a new level that goes beyond the focused-level examination and the fragmentation explanatory paradigms of organizational and management theories. We do not pretend developing a theory on PPPs, but rather a holistic perspective through developing a “middle-range theory”, that may explain behavior and processes in the dynamic evolutionary path of PPPs.

SYNTHESIS AND TRANSITION

The aim of reviewing existing studies on PPPs is to identify the different aspects that interested scholars, the theoretical lenses put in place to look into these aspects and the insights revealed through this examination, as well as the traits that remained underexplored. The complex and multi-dimensional nature of PPPs have attracted scholars from multiple disciplines and different research methodologies were adopted for the purpose of both empirical and non-empirical studies, addressing a range of questions on the different aspects of PPPs. Although a universal definition of PPPs is hard to find in the papers reviewed, the insights revealed by all disciplines taken together give a comprehensive idea of the various characteristics of PPPs. We provide hereafter a synthesis of different elements in this chapter.

Definitions attributed to PPPs are discipline-specific. In Public Management, PPPs are a joint-production and risk-sharing mechanism for the reconstruction and modernization of public infrastructure and services with the aim to improve growth at both the national and community levels. In Economics, PPPs are viewed as long-term global contracts for the construction, operation and maintenance of major infrastructure projects. Studies in Strategic Management adopt a more contemporary look at PPPs with considering them as cross-sector strategic alliances designed to generate innovation and create value in public activities.

Up until the early 2000's, advancements on PPPs were predominated by insights from Public Management and Economics. Studies in Public Management have proliferated with discussions on the distinction between management practices in the public and the private sector, exploring the contextual implications and constraints of this division and most importantly shedding the light on the advantages but also the complications of importing strategic and managerial practices from the private sector into public administrations. These studies were also concerned with the public accountability of PPPs and their capacity to realize cost benefits and generate innovation through shared responsibilities and joint decision-making. Research in New Institutional Economics focused on the contractual ties in PPPs, considering that contractual considerations along with institutional dimensions of local environments condition to a high degree the performance of PPP projects. Transaction cost economics and incomplete contracting were the predominant theoretical lenses associated to studies in this discipline. Authors mainly looked at the uncertainties inherent in PPP contracts and the associated exchange hazards at the stage of the partnership formation (selection of

partners, tasks bundling, optimal ownership, control rights, allocation of risks among partners) as well as at the level of contract execution, renegotiations and regulations (political implications in renegotiations, corruption, opportunistic behavior). Interests in PPPs in the domain of Strategic Management have recently emerged and the developments in this direction were built on previous findings in other disciplines as well as on insights brought by management theories into strategic alliances. Studies addressing PPPs as an independent form of interorganizational collaboration are still scarce. The management literature has so far addressed PPPs as a form of cross-sector type of collaboration, or hybrid collaboration, gathering stakeholders from different economic spheres (private, public and civil society). Theoretical developments in this direction mainly concerned the mutual dependence of partners on shared resources and capabilities and the associated mode of governance, as well as relational aspects such as coordination mechanism and institutional hybridity as explanatory factors of the alliance performance and efficiency. More recently, studies started investigating the capacity of PPPs to create and sustain social value.

A particular focus on how the different streams of the PPP literature look at their performance and efficiency. We found that there is no theoretical consensus on the modes of evaluation of this performance. Criteria for judging the efficiency of PPPs are scattered in the literature and do not form a comprehensive, unified and inclusive framework to be universally adopted. But the common thing among all these criteria is that they are based on the final outcome of the PPP and therefore do not allow a process evaluation of the partnership.

We found that very little of this large and still growing literature is providing insights into the management of this form of inter-organizational collaboration. Overall, the existing literature is concerned with examining PPPs at only the broad social or organizational level, thus providing few insights into the ongoing micro-managerial life of a PPP. Although static snapshots of PPPs were captured by different studies, a dynamic view of the entire evolution covering the preconditions, processes and outcomes of these partnerships in challenging contexts is still missing. The remarks issued from the review of literature yield promising directions for future research. We therefore build on PPPs institutional complex and dynamic character to advance the argument that interactions in a PPP are never linear and the need for a dynamic process approach to explore PPPs can reveal a lot about their evolution within the natural environment where they are embedded. Pursuing this investigative agenda of research to better understand the evolution of PPPs, the choice of an appropriate theoretical framework

guiding the process of this research becomes a necessity. This will be the object of discussion of the next chapter.

Chapter 2

New Lens on PPPs: a Coevolutionary Perspective

INTRODUCTION

This chapter is written in the light of insights provided from reviewing literature on PPPs, particularly with regards to the areas of potential exploration identified at the end of the literature review. We build on calls for research on the crafting, evolution and development of PPPs and we suggest doing so through the analytical framework of coevolution.

PART 1 of this chapter reviews the main attributes of **PPP dynamism and complexity** drawn from the literature, with a particular focus on PPPs regulatory frameworks which are considered an evolving aspect and highly impacting the performance of PPPs. We base our discussion on the limitations of PPP studies addressed in the previous part, in particular the need to develop a dynamic model exploring ways in which PPP policies can evolve and change over time to accompany contextual changes. Inspired by countries witnessing a regulatory transition between pre-PPP and post-PPP stages, namely developing economies of the MENA region, we give a particular attention to the construction and evolution of PPPs' institutional elements in these environments. We then advance that more longitudinal, process-focused research is needed to understand how PPPs are crafted in the settings of these countries. We suggest looking into the evolution of PPPs through a process research approach using a theoretical framework that integrates different levels of analysis and that investigates the way organizational forms adapt over time to an evolving environment.

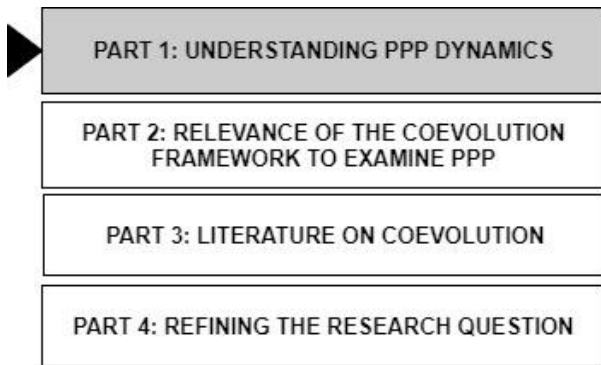
In PART 2 we suggest the **coevolution theoretical framework** to be a guiding framework to this research because we believe that it can bring new insights on PPPs' process development especially when the latter are embedded in relatively unstable environments. The importance of this framework is its capacity to integrate strategy and organization theories within a holistic framework with the aim to observe organizational change over time and how organization adaptations display intertwined and interdependent processes. We then reflect on the essential features, properties and research requirements for studies mobilizing the coevolution framework in order to understand the “how” of conducting coevolution research.

PART 3 of this chapter presents a concise review of the **literature on coevolution** in this direction. We estimate crucial to discover the findings highlighted in previous studies through mobilizing the framework of coevolution and the importance of their contribution in the advancement of understanding organizational evolution over time and its interdependence with strategic adaptation of management practices. A particular focus was set on

coevolutionary designs inquiring strategic alliances as organizational forms that coevolve with the firm's strategy, and within the institutional, organizational and competitive environment. PPPs are considered a hybrid form of strategic alliances and therefore studying their evolution joins somehow the evolution of other types of strategic alliances.

Finally, we refine in PART 4 the previously **suggested research question**. We elaborate a new set of questions that can be explored through the observation of the creation, emergence and development of PPPs. By answering these questions we hope to be able to “paint a picture” that is rather holistic and more inclusive of the dynamics of PPP formation, unveiling elements of this dynamism that remain, so far, veiled under a single-lens view of PPPs.

PART 1 - UNDERSTANDING PPP DYNAMICS



In the literature review on PPPs we noted a number of dimensions that were recurrent and pervasive, namely: the multidisciplinary perspectives on PPPs, their complexity (Hodge & Greve, 2007), the uncertainty they entail (Saussier et al., 2009) as well as their dynamism and unclear boundaries (Selsky &

Parker, 2005). These dimensions retained our attention and curiosity not only because they remain underexplored, but also because we estimate that they play a crucial role in the performance of any PPP arrangement. We believe that these aspects are interesting to examine but not easy to capture through the so-far mobilized fragmented organizational theories. At the end of the previous chapter, we pointed the opportunities for further developments and the potential of a process research approach in revealing details about the evolution of PPPs within their natural environment where constituents of this environment can either allow - or refrain - PPP efficiency and performance. In this section we discuss considerations of PPPs' dynamism and evolution which we believe are critical for crafting strategies, as in Mintzberg's perception of crafting strategies, and for understanding key determinants of the efficiency of these strategies.

1. PPP'S PERCEIVED COMPLEXITY

The proliferating studies on PPPs have surely highlighted theoretical and practical aspects that led to theoretical debates and fruitful empirical investigations, without whatsoever the possibility of building a comprehensive theory on this particular type of arrangement. "*The literature on PPPs is enormous, yet it remains confused and inconclusive. Among the reasons are conceptual vagueness, multiplicity of definitions, ideologically-based advocacy (both pro and con), and separate research traditions*", this statement by Brinkerhoff and Brinkerhoff (2011, p.3) - citing as well influential authors and seminal works in the Public Management literature on PPPs: Wettenhall (2003), Weihe (2006) and Hodge and Greve (2008) - is a compilation that sums up all the others.

The scientific curiosity in various disciplines proliferates even further due to the challenging nature of these arrangements that induces complexity at different levels. This complexity is a natural result of multiple-actors assembly gathering organizations from different sectors and

socio-economic spheres: for profit companies, private non-profit organizations and public sector non-profit organizations. This combination implies different levels and types of conflicts as well as different ethical responsibilities that will dictate the organizational behavior of partners (Wettenhall, 2003). The multiple forms that PPPs can take as well as the multiplicity of their broad societal and economic objectives, emphasize further their complex character, and render the task of their valuation quite challenging for those who are interested in the assessment of their worth, value and success (Hodge & Greve, 2017). The complexity in PPP ties is also observed at the contractual level of the partnership. Due to the uncertainty surrounding PPPs, the incomplete nature of their governing contracts, and the impossibility to control potential opportunistic behaviors, partners tend to compensate with more complex contracts (Rufin & Rivera-Santos, 2012).

PPPs can be seen as a network society where the constellation of interacting components in a blended arrangement of different mentalities, values, and institutional beliefs are all tied by interdependency and struggling to set rules in order to achieve agreed-on objectives. Selsky and Parker (2005) identified several practical challenges to forming cross-sector partnership due to differences among both sectors in goal orientations, culture, language, and other factors as well. This is seconded by Kivleniece and Quélin (2012) who also perceived complexity in the triangular relation in PPPs among public agents (as the delegating body on behalf of the public), the private actor (as the service provider), and other social constituents (such as users, taxpayers, voters and others), and considered this complexity as the main reason standing behind the heterogeneity of “*self-interested objectives and value claims in the public-private milieu*” (p. 277). Teisman and Klijn (2000) advanced that performant PPPs are the ones that succeed to deal with complexity, which is, according to the authors, the result of multiple interplays between partners who have unique perceptions and strategies that may be conflicting with each other.

In addition, complexity can also come from the institutional environment within which partnerships are embedded. Failures reported in PPPs reflect the difficulties in managing such arrangements because of the many institutional reasons and differences identified in the literature; in fact, the collaboration outcomes is directly shaped by the wide and diversified spectrum of institutional norms governing public contracting and making by this the partnership vulnerable to litigations and weak incentives (Spiller, 2008). This emphasizes further how institutional determinants can be key variables in PPP performance and determinants of efficiency in this case are complex to comprehend. Scholars’ debates around

PPP performance and efficiency revealed that the evaluation of these dimensions goes beyond the economic/financial valuation or the partial/complete achievement of the objectives the partnership was initially set up for.

Building on this complex nature, many scholars have suggested a process management approach for the development of management strategies that achieve creative solutions for projects at the heart of a complex network constitution (like in PPPs). The aim behind proposing process management is to preserve flexibility and openness in the cooperative effort while the partnership is evolving through long-term interactions and shaping up over and over again. A number of elements are to be considered in PPP process management: the dynamics, actors, structures, related processes and institutional environment (Teisman & Klijn, 2000; Brinkerhoff & Brinkerhoff, 2011). In order to address these elements that are in continuous and enormous permutations, there is a need for multi-level dynamics studies targeting PPPs as collaborative forms as they progress in their surrounding environment. This perspective in examining PPPs goes “*above and beyond the principal-agent dynamic of contractual relationship*” (Brinkerhoff & Brinkerhoff, 2011, p. 3). Scholars expressed repeatedly the importance of “*capturing the messiness of partnership practice*” in order to provide further theoretical precision in understanding complex models of cross-sector organizing (Selsky & Parker, 2005; Koschmann et al., 2012).

Several limitations were reached in viewing PPPs from the perspective of a static approach - or a single theoretical perspective - and PPP knowledge base will gain more from dynamic considerations of the partnership evolution. In fact, authors of literature on collaborations have acknowledged the importance of sociological, dynamic and evolutionary aspects in collaboration processes (Ariño & de la Torre, 1998) and we believe this importance is alike when it comes to collaborative arrangements between the public and private sectors. This is to endorse the main purpose behind this research which is the understanding of a PPP crafting and the dynamics of their set up. This can be advanced by the understanding of: 1) their different developmental phases, and 2) by considering the contextual variables influencing the progress through each developmental phase. Simultaneous interactions and nonlinear effects of several variables can greatly impact the outcomes of each stage and therefore the overall performance of the PPP. These reflections lead us to search for a model that can support the complex process evolution of PPPs in challenging environments.

2. PPPs REGULATIONS: AN EVOLVING DOMAIN

In the last 30 years, the proliferation of collaborative activities, especially project-based ones that address social and economic challenges as identified within a public policy agenda, have become considerably extensive in the arenas of business, non-profit and government sectors and has resulted in “*stunning evolutionary change in institutional forms of governance since the 1980s*” (Alter & Hage, 1993, as cited in Selsky & Parker, 2005, p. 849). PPPs dynamism and complexity are attributes empirically enforced by the experience of countries recently investing in PPPs regulatory developments. Institutional complexity inherent in public-private exchanges with the environment has been a subject of debate among scholars who agreed that institutional and coercive issues prevail this type of partnership, unlike other types of alliances between private firms where ties are less procedural compliant (Moszoro & Spiller, 2012). In this case, the design of governance mechanisms capable to support value creation through these partnerships becomes more complex (Quélin et al., 2017). This is particularly challenging for policy makers and regulatory institutions in developing countries that have a nascent experience in PPP design. These nations are into PPP-crafting strategies and are also witnessing frequent reforms in regards to PPP regulations. Developing countries of the MENA region are a typical illustrative example. This region has been active during the current decade in establishing jurisdictions in regards to PPP policies and regulations: a number of countries have recently enacted a standalone PPP law (Egypt in 2010, Jordan in 2014, Morocco and Tunisia, 2015, Lebanon in 2017...), and some of them have even established a PPP national unit. In these countries craft-like PPPs are dominant and we believe that these institutional transformations tend to affect the way PPPs are shaped and established.

At a global level, this domain is in constant evolution as well. New agencies and institutional actors are starting to emerge, for instance, the World Association of PPP Units and Professionals. The activities of these networks maximize the collective impact of the community of PPP practitioners and spread the adoption of best practices. This emphasizes further the importance of the role attributed to PPP units at national levels, as an important component of the PPP regulatory framework. International and regional institutions are having an active role at this level, continuously developing their policies in order to encourage private participation in public services provision and infrastructure developments and assist nations in the implementation of these policies, taking into account the diversity of environmental considerations especially in developing nations. For instance, the World Bank

PPP knowledge lab is continuously introducing new tools in order to assist governments of developing countries, in evaluating their readiness for PPPs at different levels, especially in areas covering regulatory and institutional matters, preparation, procurement, contract management, budgetary provision and others, supporting by this governments' experience with this process. A myriad of resources, references and publications on PPPs are now available in different languages and accessible on a central platform of comprehensive information. Other regional and international agencies (i.e. OECD, ESCAP, GIH...)²³, as well as financial institutions (i.e. ADB, EBRD, AfDB...)²⁴ are also consolidating their efforts in order to assist countries willing to invest in PPPs. Benchmarking and examples of good practices are also promoted and shared among countries showing regional and socioeconomic similarities.

This busy environment and continuous evolution of important institutional and regulatory constituents of PPPs raises a set of questions among interested scholars. Research studies in organization science found opportunities for further conceptual development in public-private interactions while considering the sources and dynamics of change in this institutional environment (Mahoney, 2009). In addition, most of the studies reported on PPPs address contexts where regulatory and institutional frameworks for public contracts and/or for PPPs already exist prior to the date of the study, and results varied depending on whether or not countries object of the study have weak or solid legal systems. Commonly, a PPP project is established following the development of a reference: the enactment of a law on public procurement, a PPP law or a sector regulation. Yet, it would be interesting to know how the different constituents of these references have evolved to set up a regulatory context for PPP projects and what the key considerations are in designing this context. Moreover, the understanding of the dynamics of PPP setup, taking place in parallel to the dynamic reform of a regulatory framework, is in a way, an exciting and particular empirical context to explore.

Commonly, institutional transformations tend to affect the way PPPs are shaped and established in particular contexts; we believe that a broader scan at this level is able to produce valuable insights about the evolution of such type of collaboration. Therefore it is interesting to have a closer look on how different constituents of the institutional environment and PPP projects are interacting and feeding upon each other's. We therefore advance that

²³ Organization of Economic Cooperation and Development (OECD), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), The Global Infrastructure Hub (GIH)

²⁴ Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), the African Development Bank (AfDB)

more longitudinal, process-focused research is necessary to understand settings where PPPs are crafted in parallel to the establishment of their regulatory framework. In his questioning about individual differences and how common interests are formed within the interplay between private and public interests, Mahoney et al. (2009) stated that “*Recent advances in organization science consider the sources and dynamics of change in the institutional environment [...] because private and public interests evolve over time*” (p. 1040). This evolution thoroughly implies changes in those interests in complex ways, and the necessity to align, and re-align, these interests is crucial for promoting local – and global – value creation through public and private interactions. Previous studies on PPPs have addressed the importance of the quality of institutional environments in impacting the performance of these structures, however, investigations on how changes in the institutional environment can influence the dynamics of interactions among PPPs actors and stakeholders, and whether these dynamics can influence in return these environmental mutations, remain underexplored.

3. PROCESS-BASED RESEARCH APPROACH TO UNDERSTAND PPP DYNAMICS

The ongoing life-cycle of a PPP, the view as a PPP progresses through its various establishments stages and the different actions/reactions/interactions involving the actors is not directly addressed by studies on PPPs. The dynamic role of actors involved in the management of this form of cross-sector collaboration and therefore a micro-management stage-specific analysis is still missing. So far scholars have adopted a rather static view of PPPs, while an evolutionary view of these forms of collaboration is long overdue. We still ignore the PPPs stage-specific managerial particularities, although we estimate important to understand the roles of managers (of both the public and the private sector) as a PPP unfolds through its relatively long life-cycle duration. Also the impact of changing environmental circumstances and the ability of PPPs to learn and adapt, as well as to reciprocally influence back these circumstances, remain unknown. As in Mintzberg’ perception of crafting strategies, “*the crafting image better captures the process by which effective strategies come to be*” (1987, p. 66), therefore in order to understand how PPPs are crafted, we need to approach them as processes rather than a static object to analyze. We believe that process-related aspects can be significantly revelatory.

In this sense Mahoney et al. (2009) calls for bridging theories within organizational sciences, bringing in new problems from other fields, extending established theories and developing

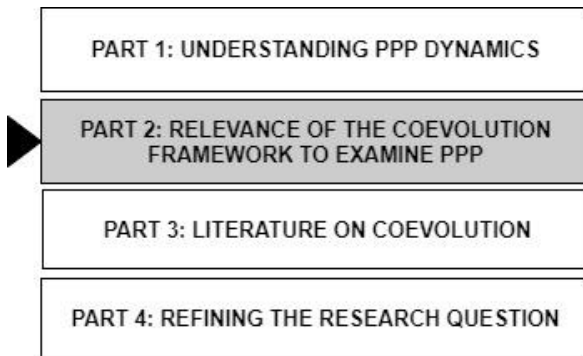
new theory and concepts. The authors also advocate these developments for generating new insights in interpreting relationships between private and public interests through the application of multilevel analysis. More recently, this was endorsed by research streams in strategic management emphasizing on the necessity to explore management processes and practices in order to understand the sustainability of long-term interactions between stakeholders of hybrid partnerships (Caldwell et al., 2017) as well as the dynamic adaptation of PPPs that can enhance their capacity for value creation (Quélin et al., 2017). Following Kivleniece & Quélin (2012), we believe that micro-level analyses are capable of providing insights on “*process-related aspects of public-private interaction, such as bargaining and negotiation, coordination, conflict resolution, learning, and adaptation*” (p. 295) and therefore a process-oriented research would certainly unfold process-related issues in PPPs. In this vein, a remarkable work done by Jay (2013) describing the change process of a PPP, the Cambridge energy alliance, through a temporal analysis of longitudinal data that led the author to develop an “*iterative process model of change in hybrid organizations, showcasing the value of process-oriented research and theorizing*” (p. 155). This suggested model interpreted the mechanisms through which stakeholders involved in a PPP are expected to take innovative actions at the center of multiple institutional logics. Up to our knowledge, there were no other notable works on PPPs that used a process-perspective research approach, however scholars do realize the importance of such approach and keep calling for empirical studies in this perspective (Caldwell et al., 2017; Quélin et al., 2017).

The existing literature also tends to underexplore the evolution of the institutional framework within which a PPP progress and operate, and little or none of this literature is concerned with the coevolution of a PPP in its natural environment focusing on the interaction between its components and those of its surrounding environment. Selsky and Parker (2005) claim that “*there is little attention paid on the underlying institutional dynamics, including power, that set the stage for the way social issues are defined and worked on*” (p. 867) and that cross-sector partnerships have a political dimension that remains underexplored in terms of conceptual development. Thus, rich opportunities still exist in more longitudinal, process-focused studies to understand how PPP are crafted in different settings and uncover complex emergent processes (Selsky & Parker, 2005). Scholars also believe that the back history of PPPs can say a lot about their successes or failures (Wettenhall, 2003) which is a direct assumption that the performance of PPPs is highly related to the path it followed and therefore looking into the dynamics of its evolution can inform us a lot about its efficiency and its ability to realize the objectives it was initially set for.

The perceived research needs all converge towards having a more inclusive and holistic approach to view PPPs. We therefore suggest a process examination of the life cycle of these structures through process research strategies. The literature on process research informs us a lot about studies in the discipline of strategy and management related to developmental sequence of events that describes how things change over time (Van de Ven, 1992; Pettigrew, 1992). This view of processes provides a historical development perspective focusing on the sequences of incidents, activities and actions as they unfold over time in their natural field setting. Scholars also advance that evolutionary theories are the most appropriate and useful to provide rich explanation of a process and provide indicators and guidance that enable the researcher to identify its key developmental constructs (Van de Ven, 1992). These features match to a high degree the requirements for a better understanding of the dynamics of PPPs evolution.

A process research approach, if applied to PPPs, may be able to delineate many elements that are determinants of what is meant to be accomplished through this PPP, how it is planned to be accomplished, how the design was put in place, and how this phenomenon has evolved and performed with time in a particularly influencing environment. These reflections converge towards generating number of statements that explain the “*how* and *why*” of formation-implementation-outcomes linkages of a PPP phenomenon as institutions within a country develop.

PART 2 - RELEVANCE OF THE COEVOLUTION FRAMEWORK TO EXAMINE PPPS



Although “*the need for more longitudinal research to capture the evolution, coevolution, development and demise*” of cross sector partnerships, was explicitly introduced by Selsky and Parker (2005, p. 866), and supported later on by calls for process-related aspects of public-private interaction

(Kivleniece & Quélin, 2012; Mahoney, 2009), the review of the literature did not reveal any study on coevolutionary processes that primarily look at PPPs coevolving with elements of its surrounding environment. We introduce this section based on the assumption that strategic alliances in their different forms (joint ventures, partnerships...) “*co-evolve with the firms’ strategy, the institutional, organizational, and competitive environment, and with management intent for the alliance*” (Koza & Lewin, 1998, p. 261). With the aim to refine this quest on crafting PPPs, we propose in this section to look at the dynamics of formation and setup of these structures through the lenses of the coevolution theory. We believe this perspective to be an appropriate and relevant one because it responds to a high degree to the needs expressed above. We explore hereby the features and properties of a coevolutionary perspective that stand behind its capacity to unveil elements of PPPs dynamics and try to fill by this the gap pointed by the literature. We base the discussion in this section on the fundamental conceptual developments of Lewin, Long and Carrol (1999), Lewin and Volberda (1999) and Volberda and Lewin (2003). We also review influential empirical studies that laid their foundations on the basis and principles of coevolution research to explore their contributions in this area.

1. NEED FOR CHANNELING RESEARCH ON PPPS

In their outline on coevolution perspective as a framework for research on strategic alliances, Koza and Lewin (1998) compiled the collection of works which led to the advancement of a coevolutionary perspective, just before Lewin and Volberda (1999) institutionalized it as “*a new lens for research in organization studies and for reintegrating organization theory and strategy*” (p. 520). The literature reported that the evolution of organizations cannot be dissociated from the one of the environment and organizations try to adapt increasingly at

different levels; which results in the emergence of new forms of organizations and new industries (Lewin et al., 1999). Scholars interested in evolutionary observations also noted the importance of studying organizations with a historical perspective and over long periods of time, emphasizing on firms' capabilities of selection and adaptation to evolving industry market activities (Koza & Lewin, 1998). This ties in with the latest scholarly advancements on PPPs where researchers are increasingly calling for research consolidation across diverse academic disciplines and disparate literature streams, namely between organization theory and strategy, because of the increased complexity of the needs they address, their significant impact on both local and global levels and also their important implications for organizational learning (Selsky & Parker, 2005; Quélin et al., 2017). In addition, scholars who addressed governance issues in PPPs also stopped short of providing a systematic framework for alternative mechanisms through which the collaboration between the public and the private sector can be organized in a way that alleviates exchange hazards (Rangan et al., 2006; Rufin & Rivera-Santos, 2010).

Hybrid arrangements are considered to be “*embedded in institutional environments with regulatory or normative features that can either facilitate or derail the functioning of underlying organizations*” (Quélin et al., 2017, p. 784). This is how institutional particularities in different contexts where PPPs are embedded, highly impact their performance and efficiency; argument agreed upon among public administration, economics and strategic management scholars (Klijn & Teisman, 2000; Saussier et al., 2009). It is therefore crucial to join an institutional dimension in the proposed conceptual model for understanding PPP dynamics.

Back to scholars' perceiving a necessity to consolidate different theoretical streams for better understanding of the numerous dimensions of strategy and adaptation research, Volberda and Lewin (2003) integrated in the same conceptual model the different theories of adaptation and change informing different levels of analysis and conveying a coevolutionary nature to the system where they coexist. The authors believed that literature on adaptation-selection is fragmented and if taken collectively, these theories can inform a multivariate, multi-level, co-evolutionary view of adaptation and change (Volberda & Lewin, 2003).

For the purpose of this research, and following the various presumptions that achieving a theoretical integration across distinct literatures can advance to a high degree the understanding of the examined object of study, we propose a coevolution framework for research on PPPs, which in the best possible way would take the understanding of PPPs to a

new level that goes beyond the focused-level examination of organizational, management and economic theories. We also build our assumption that a coevolution perspective can advance research on PPPs based on scholars' arguments that this perspective has the potential to inform and redirect research on strategic alliances (Koza & Lewin, 1998; Lewin et al., 1999). Given the similarities between PPPs and strategic alliances in the sense that both are voluntary arrangements involved in the exchange and sharing of products or services developments, and "*PPPs have been viewed as alliances between a firm and a government agency*" (Rufin & Rivera-Santos, 2012, p. 1635), the coevolution has also the potential to redirect research on PPPs.

Consequently, we propose the examination of PPPs as a particular type of collaborative alliances and their coevolution with the constituents of the institutional system in unstable contexts; which will also give insights on how PPPs emerge and evolve while constrained by interactions of both formal and informal rules, as well as other constituents of the surrounding environment. Up to our knowledge, there are no previous studies that used a coevolutionary perspective to examine PPPs and this research could have a double benefit: first, it can extend the scope of objects looked into using coevolution, and second, it is a kind of undertaking and a first step to unpack the evolution of PPPs.

We resume our reflection started earlier in Chapter 1 on how to craft PPPs, and we suggest that in order to understand the processes by which PPP dynamics and institutional rules are crafted - established and evolve - we need to examine: 1) how the trajectory of the PPP shapes up through mutual influences and interactions with elements of the institutional surrounding context, 2) how strategies and choices of different players involved justify this evolution, and 3) how formal and informal rules influence and are being influenced by this evolution. In his discussion on crafting strategies, Mintzberg advanced that "*Strategies grow like weeds in a garden. They take root in all kinds of places, wherever people have the capacity to learn (because they are in touch with the situation) and the resources to support that capacity*" (Mintzberg, 1987, p. 70). Learning, selection and adaptation capacities are critical strategic dimensions that escort the coevolution of organizational forms. In addition to an important aspect of crafting strategies which is the ability of the actors to form and formulate strategies, namely in response to an evolving situation: "*strategies can form as well as be formulated. A realized strategy can emerge in response to an evolving situation*" (Mintzberg, 1987, p. 68).

Through observing the continuity and adaptation of different actors and determinants of a PPP project and the interaction of these determinants with elements of the surrounding environment in general and of the institutional environment in particular, we may get new insights on the collaboration and exchange aspects between public and private actors as well as their mutual interaction with their surrounding environment. At this level, a refined and more focused formulation of the above proposed research question is necessary for a better understanding of the crafting process of PPPs in developing economies. We chose a new type of glasses to wear while exploring the research question and we believe that the coevolutionary perspective can guide this investigation, indicate the proper direction for data collection and later on for data analysis and interpretation of results.

2. COEVOLUTION: FEATURES AND CONCEPTUAL DEVELOPMENT

Special highlights on conceptual foundations for empirical research using the coevolutionary perspective were made in one of the issues of *Organization Science* published in 1999²⁵. In this issue scholars gathered their efforts to reveal important aspects of organizational development through observing the coevolution of new organizational forms, the development of organizational capacities (absorptive, learning, selection and adaptation), the management logics and management decisions and also the setup and evolution of network alliances. In this same issue, Lewin and Volberda (1999) set the essential foundations for coevolution research through their seminal article *Prolegomena on Coevolution: A Framework for Research on Strategy and New Organizational Forms*. In this discursive introduction on coevolution as a framework for research that integrate strategy and organization theory, authors reassured the necessity to span multiple levels of analysis and involve selection/adaptation in order to inform any research in organization studies that targets evolution in the course of time. One of the most important features of coevolution theory is its capacity to integrate micro and macro evolution within a unifying framework that incorporates multiple levels of analysis and contingent effects which, according to the authors can lead to the development of new insights and theoretical developments (Lewin & Volberda, 1999). The authors also posit that the coevolutionary approach assumes that change may occur in all interacting elements of the population of organizations and this change may also be driven by feedback from the rest of the system. Therefore the change is not considered as an outcome of either the managerial adaptation or environmental selection, but as a joint outcome of management intentionality and environment effects. Indeed, the

²⁵Organization Science, Volume 10, Issue 5, September-October 1999, p. 519-690.

main purpose of Lewin and Volberda (1999) as explained in their seminal work is to understand how firms coevolve with each other and with a changing environment. As put by the authors, coevolution is “*the joint outcome of managerial intentionality, environment, and institutional effects*” (Lewin and Volberda, 1999, p. 523). This approach allows unpacking complex processes that explain how new industries along with their institutional rules and competitive dynamics emerge and change scholars to unpack complex processes (Jones, 2001). For this, the authors compiled fundamental elements to set basic requirements and dimensions for research on coevolution.

The work of Lewin and Volberda (1999) on coevolution as a framework for research on strategy and new organizational forms was accompanied by an equally important study by Lewin et al. (1999) as part of the same issue of Organization Science that links organizations adaptation strategies to changes at the population level introducing the mediating role of various institutional systems within which firms are embedded. In this paper the authors develop a conceptual model of organization-environment coevolution “*linking firm-level exploration and exploitation adaptations to changes in the population of organizations*” (Lewin et al., 1999, p. 535). This model named by authors “Coevolution of Firm, Its Industry, and Environment” (Figure 2.1 below), has guided many research on strategic and organizational adaptations, mutations and also emergence of new organizational forms. The model considers that the population of organizations and their environment are interdependent outcomes of managerial actions, institutional influences, and extra-institutional changes (other macro-environmental factors: technological, sociopolitical...). The authors put it this way:

“The basic theses of this paper are that firm strategic and organization adaptations coevolve with changes in the environment (competitive dynamics, technological, and institutional) and organization population and forms, and that new organizational forms can mutate and emerge from the existing population of organizations” (Lewin et al., 1999, p. 535).

This discussion is fundamentally rooted in historical debates on how organizations evolve and adapt to changes in their environment contrasting strategic management perspectives and population ecology perspectives. In brief, strategic management theories are mainly concerned with individual organizational behavior and performance, sources of competitive advantage, and the role of managerial intentionality. While population ecology theorists are more interested in understanding the variation and selection processes at the population level

rather than the individual level. The comprehensive theory of organization-environment coevolution has developed through connecting these two perspectives in an attempt to integrate “*the interplay between the adaptation of individual organizations, their competitive dynamics, and the dynamics of the institutional systems within which firms and industries are embedded*” (Lewin et al., 1999, 536). The thesis advanced by this theory is that organizations, industries and environments coevolve interdependently in a non-linear way, and the model shaping up this thesis exhibits the following constituents:

- At the firm-level (the *micro-level*) highlighting the focus of strategic management research: Managerial actions, strategic intent, organization adaptation, performance, mediating factors (history of adaptation, firm’s legacy, management logics).
- At the industry level (the *meso-level*) highlighting the competitive dynamics of the industry within which the firm competes.
- At the country level (the *macro-level*) introducing the different institutional constraints – regulatory, rule making, capital market, education system, employment relationship, government structure... - as well as the effects of extra institutional factors (social, technological, macroeconomic and political) - technological innovations, demographics, social movements, new entrants.

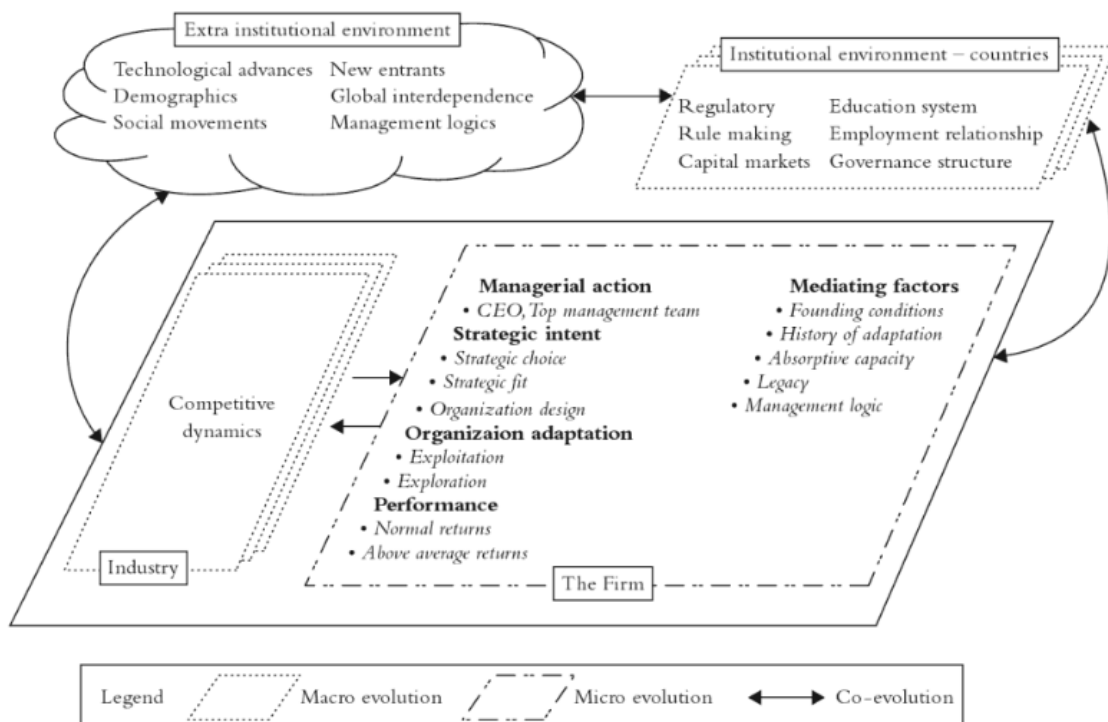


Figure 2.1 Coevolution of Firm, Its industry and Environment.

Source: Lewin et al., 1999.

According to the authors, it will be possible through this integrative coevolutionary model to inform theorizing and empirical studies by highlighting the historical context of organizations, multidirectional effects and multidirectional causalities taking place between the different constituents of the system, restricting and enabling constraints of organization path dependence, contingent effects such as nation-state institutional arrangements, extra-institutional influences, such as geopolitical, economic, and natural environmental changes, as well as social movements affecting deeply the market competition. Further conceptual developments and empirical research advanced our understanding of organizational adaptation and coevolutionary dynamics with a Special Research Symposium entitled “*Beyond Adaptation vs. Selection Research: Organizing Self-Renewal in Co-evolving Environments*” published in the Journal of Management Studies (2003)²⁶. In this special issue authors favored research that address the interrelation and joint outcomes of managerial adaptation and environmental effects.

These developments seem to be particularly interesting to advance the understanding of PPPs in developing economies, being recent PPP policy adopters. In the dynamic environment of a developing country, the ability of PPPs as an ongoing process to respond to environmental changes and the determinants of this response have not been investigated in the PPP literature. Using a coevolution approach we explore the dynamics of the setup of a PPP in parallel to the changes implied by this setup at the country level.

3. PROPERTIES AND REQUIREMENTS FOR RESEARCH ON COEVOLUTION

Scholars believe in the capacity of studies on coevolution to take into account both the drivers of corporate evolution and evolutionary processes *per se* (Rodrigues & Child, 2009). In order to best satisfy the requirements of these studies, Lewin and Volberda (1999) outlined essential properties of a research that mobilizes the coevolution as a theoretical framework in Strategic Management and Organization Studies. These properties were drawn from a collection of previous studies - McKelvey (1997), Baum and Singh (1994), among other papers cited in Lewin and Volberda (1999) – using the coevolution perspective that “*requires that sets of co-acting organizations and their environments be the object of study*” (Lewin & Volberda, 1999, p. 527) and leading to scattered results in this field. We review hereafter these properties in order to examine at a later stage their implications on the dynamic evolution of public-private partnerships, as the object of study:

²⁶ Journal of Management Studies, Volume 40, Issue 8, p. 1891 – 2217, December 2003.

- Multilevelness/Embeddedness: scholars made a distinction between different levels where coevolution exists arguing that the coevolution takes place at multiple levels in the system. The coevolution can take place at the micro level within the firms “*focusing on resources, capabilities, culture, and internal politics*” (Lewin & Volberda, 1999, p. 526). It also exists at the macro level or between the populations of firms within their competitive context. And finally coevolution exists at the environmental level focusing on economic, political, social and institutional factors.
- Multidirectional causalities: studies confirm that relationships in organizational environments are complex and the different elements of a system do not evolve independently, but they coevolve with each other. “*Changes may occur in all interacting populations of organizations, permitting change to be driven by mutual direct interactions and by feedback from the rest of the system*” (Lewin & Volberda, 1999, p. 527). Therefore organizations evolve in response to broader changes in different variables of the system, and in this case talking about relationships, dependent-independent variable distinctions, becomes less significant.
- Nonlinearity: coevolution assumes that feedback paths among interacting variables do not obey to the rule of simple cause-effect logic and linear relationships between these variables. Nonlinear feedback is complex to determinate because in fact changes in interacting organizations can result not only from “*direct interactions between pairs of organizations, but also by indirect feedback through the rest of the system*” (Lewin & Volberda, 1999, p. 527).
- Positive feedback: in organizational environments interacting elements feed on each other’s in recursive interactions resulting in interdependencies and circular causality among organizations; “*each firm influencing the other and in turn being influenced by the behavior of the other*” (Lewin & Volberda, 1999, p. 527). A coevolutionary perspective assumes that organizations systematically influence elements (including other organizations) of their surrounding environment, and are in turn influenced by changes in these elements.
- Path and history dependence: “*Adaptation in a coevolutionary process is path- or history – dependent.*” (Lewin & Volberda, 1999, p. 527), that means the decisions a firm has made at earlier points in time following a set of past events, can greatly limit its current adaptation decisions. With path dependence, past events have significant

effects on the outcomes of a firm's strategy at some point and therefore firms adaptation is not only related to variation in the environment or in external conditions, it is rather a result of the evolutionary process own history and initial conditions which continues to shape organizational adaptation decisions.

In addition, authors of this same issue of *Organization Science* (September-October 1999) have suggested a set of dimensions considered as requirements for research on coevolution. These dimensions comprise: the study of organizations adaptation over long periods of time by using longitudinal data and examining these adaptations within a historical context, considering multidimensional causalities between and across different levels of the coevolution as well as different elements of the system, the identification of non-linear effects – mutual, simultaneous, lagged and/or nested effects – when changes in one variable produces counterintuitive change in another variable, considering path dependence, including evolution that occurs at the level of the institutional system within which organizations are embedded and incorporating the effects of economic, social and political macrovariables (Lewin & Volberda, 1999).

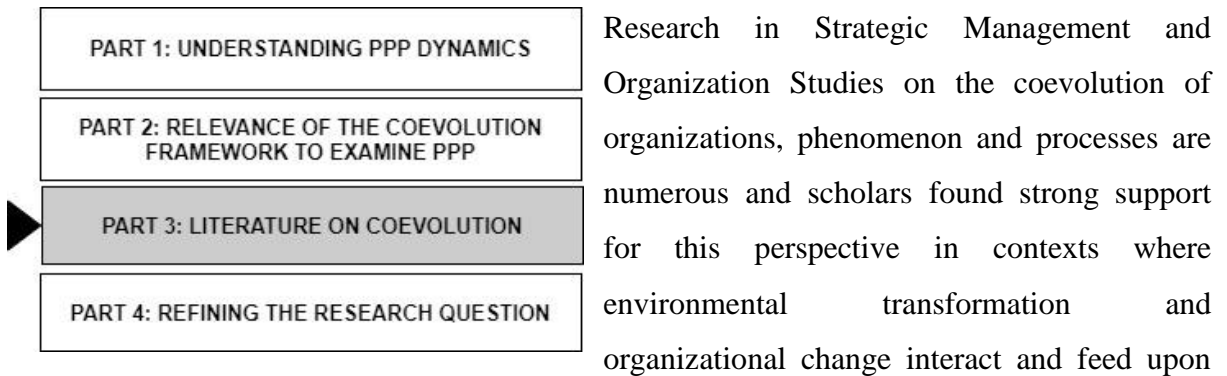
In line with these assumptions and in the context of this research agenda we adopt a set of dimensions for an observation through a coevolutionary perspective, which we tried to incorporate in the research design:

- We study the PPP phenomenon in its environment over a relatively long period of time through longitudinal data gathering and analysis.
- We consider multi-directional causalities between and across different interacting elements of the system.
- We incorporate different types of effects as a consequence of feedback flows and interacting variables.
- We look for changes at the level of different elements of the environment and how they may - or may not - affect the PPP phenomenon and influence the dynamics of its evolution.

The reviewed properties attributed to the coevolution perspective and the dimensions suggested by the authors for a proper application of a coevolution perspective, relate to a high degree with the assumptions advanced by Pettigrew (1992) and Van de Ven (1992) in supporting theoretical and empirical investigations in a process research. By examining sequences of events, a research can find answers to how and why changes occur (Van de Ven, 1992) and also reveals links and associations among context and actors' actions

(Pettigrew, 1992). Similarly, coevolutionary processes are strategy processes that can be described through “detailed, comparative and longitudinal data” with a “tilt” towards historical methods in order to trace environmental and organizational changes and the relations between them. This emphasizes the great alignment between research approaches for studying coevolutionary processes as advanced by Lewin & Volberda (1999) and the foundations of research design and analysis to observe strategy processes as proposed by Van de Ven (1992) and Pettigrew (1992). In fact, authors of coevolution studies call for process research methods for a micro-examination of processes, sequences of actions and reactions, shifts in institutional rules and competitive dynamics, allowing research to track the relationship between both organizational and environmental changes. In the next section, we explore some of the results revealed by previous studies on the coevolution of firms, industries and alliances.

PART 3 - LITERATURE ON COEVOLUTION



each other with the passage of time (Djelic & Ainamo, 1999; Lewin et al., 1999, Koza & Lewin, 1999; Helfat and Raubitschek, 2000; Jones, 2001; Child & Tsai, 2005; Child & Rodrigues, 2012) highlighting different concepts allowed by this framework. In this section we review few of these studies on coevolution to have a better idea about the scope of this framework, the different objects of analysis explored by scholars and the purpose for which they decided to use the coevolution theory. We also explore the different contexts in which the coevolution perspective was particularly useful or influential, and what were the limitations and challenges faced by the authors of these studies. In particular, we favor in this review studies that used the coevolutionary perspective to understand important aspects of strategic alliances, mainly the sequence of events leading to the success/failure of these alliances. Our interest in strategic alliances derives directly from the nature of our object of analysis, the PPPs, which are a particular and complex type of strategic alliances bringing together two divergent worlds - markets and hierarchies - and getting them to collaborate over valuable economic and social objectives. Rufin and Rivera-Santos (2012) believe that literature on alliances between private firms (designated by the authors as B2B alliance literature) can inform a lot about PPPs understanding, because, according to the authors, “*B2B alliances and PPPs constitute similar interorganizational arrangements, suggesting that their comparison can add to our understanding of such arrangements in important ways*” (p. 1635). We hereby present few influential studies on the coevolution of organizational forms, industries as well as of strategic alliances highlighting the different contributions they provided to this literature.

1. EMPIRICAL STUDIES USING THE FRAMEWORK OF COEVOLUTION

The luxury fashion industry was one industry that attracted the interest of coevolutionary scholars. Djelic and Ainamo (1999) adopted a historical and comparative perspective to

explore the connection between environmental challenges and organizational transformation in luxury fashion industry in three different countries, France, Italy and the United States. Through their study the authors pointed to a number of global trends affecting all luxury fashion companies across national boundaries, and presented the different responses of these companies to environmental transformations. In fact, the authors found that increasingly turbulent and ambiguous environmental conditions have shaped to a high degree the paths or trajectories that the organizations of the luxury fashion industry followed with time. During the process of evolution, the authors noted the emergence of network forms of flexible organizations, labelled as organizational modularity, in response to this environmental turbulence and shaped by historical legacies and the particularities of national institutional contexts. The weight of these organizational legacies and their institutionalized practices is particularly significant in some countries creating constraints and refraining change among haute couture houses. While in other countries players turned global challenges into opportunities to redefine the rule of the game and make important progress in the industry.

Helfat and Raubitschek (2000) could develop a dynamic conceptual model of product sequencing that enables tracking how knowledge, capabilities, activities and products coevolve over time and across markets and related their findings to other literatures including the resource-based view, knowledge management, dynamic capabilities, organizational learning and firm and industry evolution. The model has the ability to explicate how specific types of knowledge and learning were behind the expansion in scale and scope of specific products over the course of business history. This also relates to the analysis of dynamic capabilities enabling organizations to adapt to changes in technologies and markets and therefore to innovate accordingly. A coevolutionary perspective integrated with insights from institutional and resource-based theories was also used to understand the processes of entrepreneurial careers – their strategies and choices - institutional rules and competitive dynamics of the emergence and change over time of the American film industry between 1895 and 1920 (Jones, 2001). Using this perspective, the author could unpack complex processes and explain how the American film industry shifted “*from being technology-driven to content-driven*” (Jones, 2001, p. 913) as basis for competitive advantage. The author brought new insights into coevolutionary processes of the origins of the film industry over the 25 years through their rich description, highlighting several aspects of coevolution such as nested phenomena and cross-levels interactions characterizing these processes.

The works of John Child, in collaboration with other authors, were particularly influential in this research area. The author has a number of publications on the coevolution of corporations within environmental and institutional constraints through extensive longitudinal studies made on the transformation of large state-owned companies (i.e. Telemig, the Brazilian telecommunication company and a port development in China) as well as strongly rooted MNEs (i.e. Cadbury, the British confectionary company). Along with Rodrigues, Child explored the effect of political dimensions in the way organizations evolve and are transformed into new forms; indeed, both authors strongly believe that the decision making processes of firms embedded in highly regulated sectors, is highly impacted by the surrounding institutional environment (Rodrigues & Child, 2003, 2009). The authors argued that it is “insufficient simply to refer to institutional policies or corporate strategies taken in isolation” (Child & Tsai, 2005, p.96) to understand the dynamics of engagement and interaction between institutions and firms. Within the sphere of interrogations on the coevolution of MNEs and their institutional environment, Cantwell et al. (2011) study the international business activities of MNE’s within a rising global economic interconnectedness and argued that evolution of MNEs structure towards an open network model of interrelated entities is a source of flexibility allowing MNEs to engage in cross-border activities in uncertain or unfamiliar environments.

Likewise, a longitudinal historical case study by Alvarez et al. (2015) examining the origins and context of the emerging processes of co-creation between opportunities and institutions over time interestingly revealed that profit-seeker entrepreneurs can create opportunities and influence the industry’s standards and regulations. These entrepreneurs may have no prior institutional affiliation; however they can bring about institutional changes through innovative actions and practices as a way to advance their social interest. In the same vein, the coevolution perspective highlights further the role of each constituent within the firm-environment ecosystem. Social movement organizations for instance can have great influence on institutions and the path of emerging industries. A study by Paheco et al. (2014) highlights this influence in the industry of wind energy. Authors found that social movements can induce institutional changes in the growth of wind energy industry through the deployment of new capabilities, goals, knowledge and strategies. In return, the growth of this industry motivates the participation of specialists and experts in social movements, stimulating by this the diversity within such movements.

The range of objects examined through the framework of coevolution is large and disparate, contributing to the enrichment of organization studies literature as well as strategic management. Next, we explore these contributions to the literature of alliances and inter-organizational forms of collaboration.

2. FOCUS ON STRATEGIC ALLIANCES

A common approach is adopted in the empirical and conceptual papers we reviewed on coevolution, which is to examine the process by which organizational forms or industries emerge and change, revealing interesting insights on how competitive dynamics are shaped in these industries within a well-defined timespan and in a given context. We also noted that the research field concerned with inter-firms collaboration has also benefited a lot from studies on coevolution studies. Number of authors examined the coevolution of strategic alliances and important highlights were revealed through observing the formation and evolution of these alliances and collaborative ventures from a coevolutionary perspective (Doz, 1996; Ariño & de la Torre, 1998; Koza & Lewin, 1998, 2000; Reuer et al., 2002; Inkpen & Currall, 2004). For this purpose, longitudinal case studies were reported revealing series of events that occurred in the course of the evolution tracing the relationships between partners as well as the impact of external factors on their interactions. In a 1998 issue of *Organization Sciences*²⁷, a collection of papers served to inform different dimensions of a coevolutionary perspective, its relevance and challenges for research on alliances using this conceptual lens. Scholars perceived a necessity to escort this evolution at many levels and strategic alliances in their different forms (joint ventures, partnerships...) need to be understood in the context of the adaptation choices of the partnering firms and organizations. As part of the strategic portfolio of a firm, alliances coevolve with the strategy of the firm and in the light of changes in the regulatory and institutional environment.

In their influential article on the coevolution of strategic alliances, Koza and Lewin (1998) highlighted the coevolution of direction, structure and practices within strategic alliances jointly with the partnering firms, industry and society, arguing that the alliance initial intent may coevolve with changes in strategy, managerial choices and environmental cognition. In this view, the authors advanced that, with the passage of time, strategic alliances “*co-evolve with the firm's strategy, the institutional, organizational, and competitive environment, and with management strategic intent for the alliance*” (Koza & Lewin, 1998, p. 261). Starting

²⁷ *Organization Sciences*, Volume 9, Issue 3, May-June 1998, p. 255-433.

from the initial motivation of a firm to enter an alliance, the authors distinguish between the will of the firm to exploit an existing capability or its drive to explore new opportunities. Therefore, an alliance tends to produce performance outcomes if partnering firms have greater exploitation intent, and it produces learning objectives if partnering firms are rather driven by exploration intent. Many authors advanced that alliances persist and survive if the firms entering them have prior experiences with such alliances (Koza & Lewin, 1998; Reuer et al., 2002), contrary to alliances engaging firms primarily on the basis of isomorphic-mimic considerations (Koza & Lewin, 1998). These initial conditions and motivations founding the formation of an alliance are equally important in their ability to influence the learning process of partners. This learning process, taking place through interactions and joint activities can serve as performance leverage for the alliance, through which partners can monitor and re-evaluate its efficiency as well as each other's equity and adaptability (Ariño & de la Torre, 1998). Through tracking the series of events of a joint-venture existence, and observing the interaction of partners that took place in the course of their relationship as well as the impact of external shocks on their perception of efficiency and equity, studies advanced that changes in the environment or strategic context in which the alliance develops can be a trigger for its efficiency and a determinant in its success or failure: an alliance is not "*an isolated dyadic relationship. Rather, it is embedded in a space where other organizations will affect its relative value to each partner.*" (Ariño & de la Torre, 1998, p. 322). In this sense, the authors found that positive feedback loops of relational quality are critical to the evolution of the alliance as they can constitute both an input to the success of the alliance and an output of interactions between partnering firms.

Further contributions on the evolution of strategic alliances, and in particular on post-formation dynamics, advance that firms' prior experiences with collaborative projects in similar areas make the alliance less likely exposed to post-formation governance adjustments (Reuer et al., 2002). Although these contributions constitute a great insight on practical and theoretical challenges accompanying the post-formation changes in strategic alliances, however, these insights were limited to adjustments established at the governance level through contract alterations, board changes or changes in monitoring schemes, while other dimensions of a coevolutionary framework were merely, if not at all, addressed. Obviously, Reuer et al. (2002) focused their study on the alliance' micro-environment. They noted that path dependency illustrating the firms' accumulation of experiences with alliances provides the firms with different types of expertise in managing the evolution of alliances. But

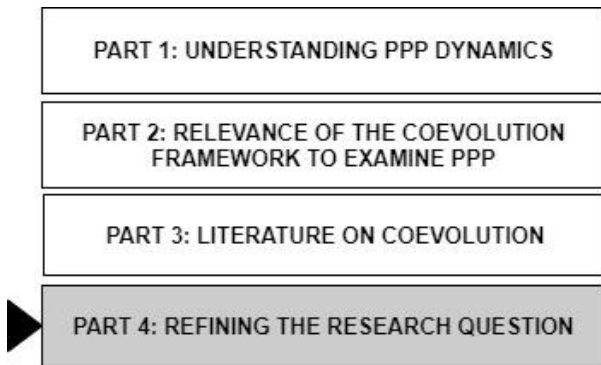
elements of the institutional and extra-institutional environments were not part of the authors' suggested model and developed hypotheses.

We believe that the coevolution of organizational forms as well as inter-organizational alliances can still benefit a lot from empirical studies and the possibility to extend the scope of objects observed through this perspective. Nearly all studies on strategic alliances viewed under the coevolutionary perspective concern for-profit inter-firm alliances. Whereas hybrid forms of alliances, getting multiple organizations to collaborate over complex social and economic development issues across different sectors or different socio-economic spheres remain underexplored by the theory of coevolution. An exception – that is not very influential though²⁸ - is the work by Lerroux and Berro (2010) who studied the emergence of coevolution of strategies adopted by firms and institutions plagued by divergent interests in the context of bioclusters. According to the authors, the coevolution approach allowed a dynamic analysis of the different phases of strategies and negotiation of actors in situations of uncertainty within a biocluster. The results of this research show that firms adjust their negotiation strategies based on uncertainty and the perception they have on gains likely to be generated collectively and that local authorities play a regulatory role in this regards. This research also emphasized the role of public institutions in generating cooperation and innovation within bioclusters.

As stated earlier and in-line with the assumptions made by management scholars Rangan et al. (2006) and Rufin and Rivera-Santos (2012), alliance literature can be appropriate to explore PPPs, given the similarities presented by both a business-to-business alliance and a public-private partnership. For this reason we would like to explore PPPs under the lens of a coevolutionary perspective, in an optimistic attempt to reveal theoretical and managerial elements that remain veiled so far.

²⁸ Although published in a leading journal in the discipline of management sciences, *M@n@gement*, this study uses a methodology that is still underexploited in this field. The authors have set up a simulation via the “Artificial life” methodology, institutionalized by Christopher Langton in 1989 as being “*the study of artificial systems that exhibit behavior characteristic of natural living systems*”, through computational simulations of processes occurring on social and evolutionary scales.

PART 4 - REFINING THE RESEARCH QUESTION



The reviewed features and findings as illustrated in the previous section, contribute to emphasize the interpretative and explanatory capacity of coevolutionary perspective and the “*the absence of co-evolutionary modeling and empirical studies is indicative of new directions that research*

on alliances might take” (Koza & Lewin, 1998, p. 261). In our opinion, PPPs can be one of these directions not yet explored through the coevolutionary model and can constitute an extension to the line of inquiries using this perspective, which in turn will most likely highlight new aspects of these hybrid types of structure between governments and firms. In fact, little progress in understanding the evolution and adaptation of hybrid forms of collaboration in general, and ongoing PPPs in particular, has been made, and nearly no recent case-based studies or conceptual process models were reported. We reflect on the dynamics of PPPs and their coevolution within unstable environments. In this case, we treat PPPs as adaptive systems that have to match the complexity of these environments or as influencing systems that may induce changes in these environments.

Clearly, the coevolution framework was particularly helpful in understanding ways through which “*firms and environments develop interactively over time. It draws attention to the dynamic interaction of forces in an organization’s environment with the capacity of its leadership to respond to these forces, as well as intentionally to shape aspects of the environment*” (Child et al., 2012, p. 1246). In this research we seek to enlighten our understanding of how PPPs and environments coevolve and interact over time. Although the research concerns an object that hasn’t been explored through coevolution so far, yet it translates promising benefits from channeling different theories into a single holistic organization perspective: selection/adaptation at the micro-level and institutional insights at the macro-level of a dynamic environment. At this point we recall once again Mintzberg’s thesis on crafting strategies through his statement “*crafting strategies, like managing craft, requires a natural synthesis of the future, present and past*” (1987, p. 73), to emphasize the importance of understanding how organizations make sense of the past so they get to know their capabilities and potential to manage and shape the future.

This greatly joins the idea behind coevolution and makes us think of a new set of interrogations that emerge from the initial research question, but that develop and shape in the light of developments on coevolution as a research framework on strategy and new organizational forms. This last section is organized into two main parts suggesting a reorientation of the research question and putting forward the expected contributions of this research study at both the managerial and theoretical level.

1. RE-ORIENTED RESEARCH QUESTION

In view of the limitations of previous academic studies on PPPs, taken in conjuncture with the argument that a phenomenon coevolves with its surrounding and therefore influences its environment and is influenced by it, the drive is strong for conducting a research study on the coevolution of PPPs. Our interest is to observe a PPP through its set-up and implementation stages along with changes in its institutional context mainly driven by the establishment of new rules and legislations regulating PPPs, and the unstable conditions prevailing over environments of developing economies. As stated earlier in Part 3 of the previous chapter, this approach to PPPs implies that PPPs can be viewed as institutions: structures that can provide order for economic exchanges, as per North' (1991) definition of institutions. In fact, PPPs aim to achieve economic and social development goals, can provide structure and order to a form of public procurement and are constrained by the interaction of formal and informal rules. An evolutionist approach to institutions was also advanced by North (1991) who argues that institutions evolve incrementally with time, and shape through their evolution the growth, stagnation or decline of economic change.

We channel these insights to advance that the evolution of PPPs as institutions, their development, maintenance or decline is made through mechanisms that are still underexplored by the literature. Accordingly, we re-orient the main research question proposed earlier in order to investigate the following:

How do PPPs emerge, operate and develop in an emerging economy, in the initial absence of a PPP dedicated regulatory framework?

This entails the understanding of interactions and interplay between the different constituents of the environment that articulate the co-construction of a PPP, the setup of a formal regulatory framework and the development of informal constraints and environmental changes.

In this case, using a coevolution perspective will allow us to view PPPs as institutional structures that emerge, operate and develop according to:

- 1) The behavior of partners and the alignment of governance and structures with transactions taking place within a PPP: the *micro-level* of the analysis;
- 2) The formal mechanisms of making laws and regulations for PPPs as well the informal and broadly accepted norms, customs, codes of conduct that also constraint the evolution and performance of PPPs: the *macro-level* of the analysis.

We believe that the answer to this question will provide an understanding of the different struggles and determinants of PPPs institutionalization in a developing country, and the extent to which PPPs at the industry level can induce changes in the environment instead of just adjusting to them. The study becomes even more interesting when this country is witnessing a major regulatory transition period between a pre-PPP stage and a post-PPP stage corresponding to periods before and after the regulatory reform addressing PPP procurement and management; which is the case of most countries on the MENA region in the last few years. The underlying issues concerned with the extent to which PPPs have the capacity to impact and shape their environment give rise to a myriad of interrogations. We could think of a number of questions deriving from this main research question, some of them are inspired from the initial set of questions suggested in Chapter 1, and others emerged from re-orienting our perspective towards a dynamic approach to PPPs:

To what extent the evolution of a PPP can impact the environment in which it is embedded? How does a PPP adapt with institutional transformation at the macro-level? How do multi-actor and multi-layer relationships in public-private collaboration affect the progress and performance of this collaboration? How, and at what levels, is mutual influence between a PPP and its environment exerted? How do actors taking part of this PPP react or adapt to changes in environmental factors? How can the features of the institutional environment influence the creation of economic and social value through a PPP?

2. EXPECTED MANAGERIAL AND THEORETICAL CONTRIBUTIONS

The primary aim for this research is a deep understanding of the emergence of PPPs as institutions in developing economies. This process of PPPs institutionalization was not addressed by the PPP literature developed so far. As stated earlier, studies observing PPP dynamics are very rare and the few existing ones in strategic management are limited to the level of the partnership itself: the interactions of the partnering actors (Jay, 2013) or the

analysis of contractual renegotiations (Le Squeren, 2016), without considering the coevolution with processes of the surrounding environment. We tend to represent this organizational phenomenon as accurately and simply as possible using a methodology mechanism that is convenient to this kind of observation. As twofold scope is expected from scientific research, theoretical and practical usefulness, this dissertation follows assumptions on what would be considered as a scientific contribution: the one that moves theoretical conceptualization forward in the field and/or indicates new theoretical linkages that have rich potential for theorization in the field, and also provides suggestions for problem-solving in organizational situations.

In terms of theoretical contributions we emphasize the need to advance knowledge in PPPs domain, moving the thinking in this area of research forward and offering original ideas and concepts as we adopt an innovative way to look into this phenomenon. These new insights are developed in the light of what empirical and conceptual works on coevolution have revealed. We do not claim to develop a new theory on PPPs, however we expect to develop a conceptual model explaining PPPs institutionalization in the particular context of developing economies. We contribute through this in the extension of the scope of organizational forms observed through a coevolutionary perspective: first, we develop new concepts on how the institutional environment is considered to be great determinant of a PPP evolution and performance; in return a PPP evolution can also shape changes at the institutional level; and second, we add an element to the family of objects observed through a coevolutionary framework.

On the managerial side, a process-related observation of a PPP evolution gives the key actors the opportunity to improve their decision making process through the adoption of an appropriate adaptation/selection decision in the light of the evolution of a PPP in its different stages and the influencing events as they unfold over time. These conceptual developments have practical implications in setting optimal policies that are able to adapt and change as institutions within a country develop; this is particularly useful for developing countries where key institutional limitations are frequently faced. Away from the structural agendas of economics and public politics in studies made around public contracting, this research adopts a managerial perspective to look closely at the process of setting up a PPP project, in countries experiencing important transition between pre- and post-PPP regulation.

SYNTHESIS AND TRANSITION

Scholars found great opportunities in developing new constructs and advancing theories currently established on public-private ties through the analysis of micro-management behaviors and stage-specific analysis (Mahoney et al., 2009). The literature review on PPPs reveals a dominance of theoretical approaches examining PPPs with little insights into the ongoing life of a PPP. The variety of contextual settings, the diversity of industries in which PPPs were established and the myriad contractual forms governing PPPs, make concluding abstractions and generally applied results particularly challenging for research interested in this field. Studies on PPPs have particularly endorsed the interdependence between their performance and the context in which they are embedded.

For the purpose of this research, we suggest an analytical framework that is comprehensive in the sense that will allow the understanding of processes by which PPPs and institutional rules coevolve and feed upon each other's shaping up their paths through mutual influences and interactions with elements of the surrounding context.

We reviewed studies on organizations using the perspective of coevolution and found that they remain few and have generally looked into one or few dimensions at a time (Rodrigues & Child, 2003; Volberda & Lewin, 2003). These studies have spanned different organizational forms – firms within their competitive dynamism, industries and strategic alliances – but nearly never addressed the evolution of PPPs as institutions within the context where they are embedded.

By adopting the coevolution as an analytical framework, this research would result in a conceptual model on PPPs revealing the dynamics of their coevolution and their interactions with the different elements of their ecosystem. These developments will provide important insights on the evolution of PPPs as institutions: structured and ordered forms evolving gradually around informal constraints and formal rules. This research is expected to have a double benefit: first, it can extend the scope of objects looked into using coevolution, and second, it is a kind of undertaking and a first step towards unpacking the institutionalization of PPPs.

The chapter that follows will explain the setup of a qualitative research design based on the methodological requirements for research on coevolution, with the purpose to interpret and understand a typical case study of PPP dynamic evolution.

Chapter 3

Research Methodology & Design

INTRODUCTION

This chapter explains the research methodology and design adopted in organizing this research activity and the various strategies put in place for collecting and analyzing data. In this chapter we explain the methodological choices and strategies put in place to collect and analyze data.

PART 1 explains the **research design** to adopt. This research features a single case that we explore inductively, of a PPP coevolving with the elements of the environment in which it is embedded. Strategies for process research are used to observe the evolution of this phenomenon over a period of time, and a systematic technique for inductive studies is used to analyze this process based on the assumptions of the Gioia method.

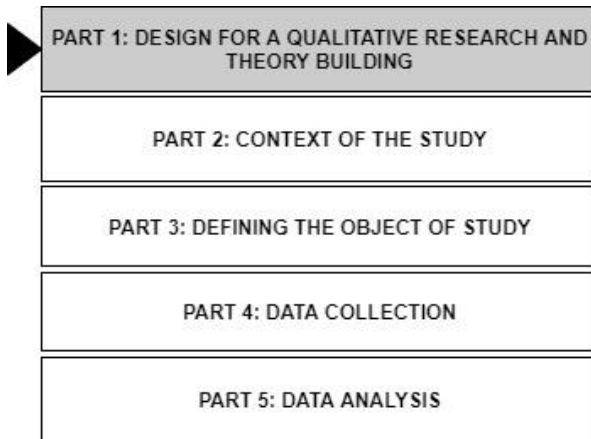
In PART 2 we expose the **context of the study**. We chose a PPP for energy distribution being setup at the Lebanese energy sector, evolving in the context of a struggling economy where institutions are trying to establish different types of reforms; a regulatory framework dedicated for PPPs being one aspect of these reforms. We present an overview of the economic, political and institutional environment in which this PPP is embedded to clarify the details and particularities of the context during the period of observation.

In PART 3 we **define the object of study**. We explain the relevance of our choice based on methodological assumptions for single case study design, considerations of studies on coevolution and criteria for defining a PPP. We precise further the object of study, its different components as well as the different levels of analysis concerned.

PART 4 is dedicated to **data collection**, where details are provided to explain how the field was approached in order to gather the data relevant to answer the research question. The dynamics of data collection are explained: the choice of the participants, the access to the organizations, as well the type and sources used to collect data.

Finally, PART 5 elaborates on the strategy for **data analysis**. Collected data in its raw form goes through a process of sorting and categorization. Documents as well as interviews are considered to be of equal relevance and importance as sources of information. Details about this processing are revealed in order to prepare data for the coding process.

PART 1- DESIGN FOR A QUALITATIVE RESEARCH AND THEORY BUILDING



We recall once again that our research study seeks to answer the following question: *How do PPPs emerge, operate and develop in an emerging economy, in the initial absence of a PPP dedicated regulatory framework?*

Several methodological choices can coexist in qualitative research. One thing is compulsory though: the maintenance of coherence and

scientific rigor. In this part we explain our methodological choices to explore a single-case study on the coevolution of a PPP with elements of the surrounding environment. We chose a single case study design for its richness and revelatory potential that we explore inductively without any prior formulated hypotheses or assumptions. We start by justifying the choices through our position as a researcher towards his research. Strategies for process research design and process analysis are inspired from fundamental works on process analysis (Langley, 1999) and grounded models theorization (Gioia et al., 2012).

1. PHILOSOPHICAL ASSUMPTION UNDERNEATH THE RESEARCH

We were initially intrigued by the underperformance and the weaknesses in the functioning of public administrations in countries of the MENA region, despite various attempts and measures of reform taken over several decades, the participation of the market and the civil society in the form of partnership being one of these reforms. We were particularly interested by the social aspect of this problem rather than facts and figures of economic or financial indicators related to each situation. Questions that guided the early stages of our reflexion evolve around structures, procedures, practices, people behavior...and those questions could only be answered partially by statistical reports and econometric models featuring time series, percentages, variances or relative and absolute values. The nature of the qualitative investigation goes towards understanding the actions, thoughts, beliefs and perceptions of the actors; in sum we try to make sense of the social reality of a phenomenon and we try to interpret what individuals are doing.

Social scientists often attempt to clarify the epistemological foundations of their inquiries according to philosophical persuasions called paradigms (whether in the sense of Kuhn or in the sense of Popper) that define the nature of knowledge and the way it is built. Through this research we are not tempted to construct tables of comparisons opposing variances of positivism and constructivism, and listing their features in terms of ontology, object of the study, methodology design and criteria of validity. The reason behind this is that we simply do not have any contribution in epistemology as such through this research. Our main concern is rather oriented towards ensuring consistency through the research approach, in a way that the adopted methodological design is rigorous, coherent and appropriate to the nature of the research question.

Building on Dumez (2010, 2011), and in order to answer inquiries regarding the epistemological posture underneath this research, we combine different elements provided by the three established philosophical assumptions, called paradigms, the positivism, the constructivism and the interpretativism, guided by a single concern: preserving coherence and rigor and linking the literature gap, the research question, the choice of the analytical framework to the methodological implications and design. However, when we decided to observe the dynamics of PPPs through their coevolution in the particularly challenging context of developing economies, we wanted to understand the lived experience from the perception and point of view of those who lived it. We wished to understand how the complex constellation of various elements has shaped this process of evolution, by getting closer to the actors involved to give them voice to express their own point of view and how they make sense of what is happening around them. We did not want to rely on numbers (financial indicators, percentage of contribution in public debts, total investment, or others) to judge the performance of a PPP (whether it is a success or a failure). We wanted to dig beyond measurable outcomes and final results to get into the live experience of social actors involved in setting up a PPP and escorting its progress over time. This could be highly assimilated to a process of interpreting interactions and social contexts, in the sense of Schwandt (1994) on situation-specific meanings, that is: *“particular actors, in particular places, at particular times, fashion meaning out of events and phenomena through prolonged, complex processes of social interaction involving history, language and action.”* (p. 118). The meaning attributed by actors in relation to a particular action, can be subject to the researcher rational interpretation (Dumez, 2010) and this is how a qualitative research can be interpretivist.

In the same line of thought, many scholars have this subscription to multiple epistemological assumptions. When asked about the place that grounded theory holds in qualitative research, Charmaz (1996) advanced that methods related to grounded theory can “*bridge interpretative analyses with traditional positivist assumptions because they are used to discover research participants' meanings; they assume an empirical enterprise, and they provide a set of procedures to follow*” (1996, p. 31).

This being said, we cannot but recall that management researchers who advocate single cases study, contextualist research and grounded theories come in general from an interpretive perspective (Pettigrew, 1985; Yin, 2009; Gioia et al., 2012), whereas those who advocate multiple cases study fit more with a positivist epistemology that develops testable hypotheses and theory that could be generalized across settings (Eisenhardt, 1989). After all, whether in a positivist or interpretive approach, “*part of the challenge of doing qualitative research lies in writing it up to communicate its insights in a credible way*” (Langley & Abdallah, 2011, p. 107).

2. INDUCTIVE REASONING FOR A SINGLE CASE STUDY: IN-DEPTH LOOK AT PPPS

Qualitative research in social sciences aim to understand the actors' behaviors and interactions within a well-defined context or situation (Dumez, 2011); the focus in qualitative research is on actors rather than on variables and values attributed to these variables. “*The main task is to describe the ways people in particular settings come to understand, account for, take action, and otherwise manage their day-to-day situations*” (Miles, Huberman, Saldaña, 2014, p. 9).

Qualitative methods are so many, ranging from ethnography, phenomenology, grounded theory, to case study and others. For some scholars case theory is considered to be “*the diamond standard of research*” (Gummesson, 2017, p. 142) and case studies are the most preferred method when “*how*” or “*why*” questions are being raised and when the focus is on a phenomenon taking place within a real-life context (Yin, 2009). This method answers these questions by providing rich and insightful explanations and descriptions. Defining the case, which is the unit of analysis, is the heart of the study, and can be any of the following: an organization, a community, a space and environment, episodes or encounters, an event, a process, a culture...(Miles et al., 2014). The current research features a single-case study from a country representing a small economy in the MENA region, Lebanon, with the aim to

discover new concepts allowing theory building on the way PPPs are crafted in the impactful environment of a developing nation.

The literature does not present so far a conceptual model for PPP dynamics, neither a processual model of their coevolution with their surrounding environments. Certainly, the literature has revealed a lot on environmental factors impacting the performance of PPPs through various methods of study, as observed in Chapter 1. And it is also certain that the literature mobilizing the coevolutionary theory to observe partnerships and alliances has also revealed a lot about their evolution and the mutual impact exerted with their environment, as in Chapter 2. However there is no theory or conceptual model developed on PPP dynamics that seems to be applicable to different contexts; similarly there is a very limited extent on the understanding of PPPs coevolution with their surrounding environments. These elements have led this research that we chose to conduct inductively and ‘let reality tell its story’. We chose to approach the field of study with the attitude of “*willful suspension of belief concerning previous theorizing*”, as Gioia puts it in Gehman et al. (2018, p. 291).

According to Yin (2009, p. 18), “*A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident*”. Unlike replicated sets of experiments used in scientific studies, case studies cannot be generalized to populations and universes, but their goal is to expand and generalize theories. In-depth interpretive case studies are appropriate to examine relationships between the components within a single case.

As Harrison and Corley (2011) explain, “*interpretative case studies are best suited for providing local (i.e., realistic and precise) interpretations of a phenomenon, which the researcher then places within a theoretical frame to provide the wherewithal for extension or advancement of current theory*” (p. 19). Our intention through this research is to provide an interpretation of a unique experience in PPP crafting in a challenging environment, where institutions are in constant battle between enforcing regulations and reforms while remaining bounded by political implications. The degree of generalizability of our contribution remains to be determined.

3. PROCESS RESEARCH FOR A RICH EXPLORATION OF A CASE STUDY

Important features were pointed by scholars on locally grounded data, as they emerge from “*naturally occurring ordinary events in natural settings*”, reflecting by this what “real life” is

like (Miles et al., 2014, p. 11). The fact that this data is ingrained in a real context makes it rich, holistic and truthful in providing “thick descriptions” of people’s lived experiences. In the same vein, qualitative data that is collected over sustained periods have great potential for studying process evolution.

For scholars of strategy process, social reality is a dynamic process that occurs rather than a social reality that is steady and just exists; and social process is constructed by individuals through their actions (Pettigrew, 1992). Process studies are the most popular among scholars who are interested in organizational changes (Pettigrew, 1990; Van de Ven & Huber, 1998; Van de Ven and Poole, 2005, Langley et al., 2013), and different approaches and methods were considered to conduct such research. However, other dynamic organizational aspects were also concerned by process studies, for instance innovation development (Van de Ven & Poole, 1990, 2005; Van de Ven et al., 2000), mechanisms underlying firms’ restructuring and how they are regulated (Schmidt et al., 2012; Beaujolin-Bellet & Schmidt, 2012) ; strategic decision-making (Lyon et al., 2000; Elbanna, 2006), transformation processes (Holm, 1995), organizational learning processes (Lichtenthaler, 2009) and organizational cultures and identity (Clark et al., 2010). What interest us most for the purpose of this research are studies on evolutionary processes. In the Chapter 2 we explained the relevance of a process-research as a methodological requirement for conducting coevolutionary observations. We note a significant alignment between research approaches for studying coevolutionary processes as advanced by Lewin & Volberda (1999) and the foundations of research design and analysis to observe strategy processes as proposed by notable scholars in the domain, namely Van de Ven (1992), Pettigrew (1992) and Langley (1999). We adopt the fundamentals advanced by these works on process research to set our research design and strategies for sensemaking.

The literature indicates different uses of the term ‘process’. In some contexts, as in variance theory, a process may be the logic explanation of causal relationship between variables. Another frequent use of process is to designate a category of concepts (or variables) referring to actions of individuals or organizational actions. A widespread usage of the term “process” is identified in the literature. In order to reduce the confusion resulting from this use Van de Ven (1992) clarifies the three meanings attributed to “process” depending on the different usages of this term: (1) a logic that explains a causal relationship between independent and dependent variables, (2) a category of concepts or variables that refers to actions of individuals or organizations, and (3) a developmental sequence of events that describes how things change over time. Of these three approaches Pettigrew (1992) considers

the third one as being the most appropriate to observe processes in action and therefore the only one eligible to describe how entities and issues develop and change in time. This view of processes has the characteristic of being a historical development perspective focusing on the sequences of incidents, activities and actions as they unfold over time in their natural field setting. We retain this definition attributed to which Pettigrew (1992) adds an important dimension considering that different processes may take place at different levels of analysis and the variations and interrelation of these processes may affect the trajectories of their development and impact their outcomes. In fact, coevolution studies call for process research methods that examine processes at the micro level of their sequences of actions and reactions, as well as at other levels involving shifts in institutional rules, competitive dynamics, changes in socio-economic variables and political influences, allowing research to track the relationship between both organizational and environmental changes. Scholars of qualitative methodologies agreed that there is no single design or analytical strategy adopted to theorize processes, taking into consideration the complexity and diversity of collected data. For the purpose of this research, we follow the suggestions of seminal works in this domain: Pettigrew (1992), Van de Ven (1992) and Langley (1999).

Van de Ven (1992) explicits a design for process empirical research by suggesting a set of four theories that differ in implications, scope of analysis, object of analysis and potential outcomes. These theories are 1) the life cycle process theory 2) the teleology process theory, 3) the dialectical theory and 4) the evolutionary process theory. The author advances that dialectical and evolutionary theories are the most appropriate and useful to provide rich explanation of a process when this latter is viewed according to the third definition of “process” mentioned earlier, and provide criteria that enable the researcher to identify its key developmental constructs.

The temporal and contextual references are important determinants to understand the events that led up to the present process being investigated. Retrospective case studies are recurrent in process studies. However scholars warned of the risks induced by retrospective case histories conducted after the outcomes of a process are known: the prior knowledge of the process outcomes, success or failure, frequently biases the findings of the study (Van de Ven, 1992). So combining a historical study in strategy development with real-time observations of current events and activities is important to understand the formulation, implementation and progress of organizational changes and strategic developments. “*Social processes are inherently discontinuous, open ended and full of surprises*” (Pettigrew, 1992, p. 8), therefore

the study of sequence of events composing a social process is crucial not only for the purpose of telling a story but more importantly for its analysis and the search for underlying logics.

Process studies may also encompass the analysis of a single process to understand a constellation of entangled processes shaped by interacting elements. These characteristics led scholars to advance the following set of assumptions guiding theoretical and empirical studies on processes (Pettigrew, 1992): 1) embeddedness and multi-levels process analysis; 2) temporal interconnectedness; 3) considering context and actions; 4) holistic explanation of the process rather than linear; and 5) linking process analysis to explain outcomes. These assumptions join to a high degree the requirements of research on coevolution. In accordance with the dimensions considered for process research, research on coevolution also take into consideration multilevelness and embeddedness effects, studying organizations over a long period of time within a historical context which requires longitudinal analyses, considering the set of co-acting organizations and their environment to be the object of the study and therefore look for a holistic explanation of the process evolution. These insights emphasize further the similitude and coherence of methodological assumptions between process research and studies on coevolution.

“Process data are messy. Making sense of them is a constant challenge”, advanced Langley (1999, p. 691) before suggesting a number of alternative strategies for sensemaking and theorizing from process data. The author describes process data as being difficult to analyse and manipulate because of their nature. Process data deal with *events*, which are difficult to delimit, unlike *variables*, which can be categorized as dependent or independent. In complex phenomena, it is even more difficult to separate data clearly in space and time, especially when you are dealing with multiple levels of analysis and temporal ambiguity separating events. Furthermore, process data are eclectic revealing thoughts, emotions and interpretations in addition to featuring events. The challenge lies in moving from *“shapeless data spaghetti”* towards theoretical understanding without jeopardizing the richness and the dynamism of the data (Langley, 1999).

We chose for this research to follow an inductive reasoning focusing on the processes in the aim to create new concepts (Gioia et al., 2012) for better understanding of PPP dynamics in particularly influencing environments. We estimate this research methodology settings appropriate for the proposed research due to its ability to provide rich explanation of a dynamic process in its real-life context (Yin, 2003), to highlight the sequence of events that describes how things change over time (Van de Ven, 1992) and explain the observed

phenomenon in relation of its evolution with other environmental elements (Lewin & Volberda, 1999). The use of the process research for this research lies in its capacity to explain how the elements composing a PPP structure (actors, governance, performance...) evolve in time, and how this evolution relates with the evolution of elements of the surrounding institutional and political environment (legal framework, business environment, public capabilities, political instability...). In addition, and always in compliance with the requirements of research on coevolution, Pettigrew (1992) advises that one must be totally aware of the enabling and constraining influences of the inner and outer contexts of the process under study. The author drew our attention to the fact that there must be different processes taking place at different levels of analysis and a crucial source of change impacting the rates and trajectories of these processes may exist at any of the focal level of analysis. Research designs should then be able to test and understand “*how and why variations in context and process shape outcomes*” (Pettigrew, 1992, p. 7). From a coevolution perspective, organizational structures have the dual character of shaping and being shaped, and events can be both initiators and products. Therefore, it is important that the research design suggested study and the methodological choices be able to address this double challenge.

4. GIOIA METHODOLOGY: A SYSTEMATIC TECHNIQUE FOR DATA ANALYSIS IN INDUCTIVE RESEARCH

In a chapter discussing how to study and theorize about strategy processes using qualitative methods, Langley and Abdallah (2011) assess two “*well-established templates for doing qualitative research*” that have highly influential contributions to strategy process, the Eisenhardt method and the Gioia method. The authors focus on the logical structure of each method, their different epistemological assumptions and the rhetoric of the writing. Coming from a post-positivist assumption and destined to develop theory in the form of testable propositions, the Eisenhardt method is designed to maximize credible novelty through multiple cases study, cross-case comparison and contrasting findings with previous research. For in-depth interpretive case studies the Gioia method is particularly influencing qualitative research that search for informants’ understandings of organizational events. Featuring single case study chosen for its revelatory potential and richness of data, Gioia method design relies on real-time interviews and observation with the purpose to capture and model informants’ meanings. Gioia method is institutionalized as a grounded theory inspired method in the

paper “*Seeking qualitative rigor in inductive research: Notes on the Gioia Methodology*”, by Gioia, Corley and Hamilton (2012).

The Gioia methodology assumes that the organizational world is mainly socially constructed by the informants who are considered to be “knowledgeable agents”. Gioia (in a discussion among prominent scholars on the different approaches to theory building in qualitative research, that took the form of an article by Gehman et al. in 2018,) considers that people in organizations are the best placed to “*explain to us quite knowledgeably what their thoughts, emotions, intentions and actions are*” (p. 291). To defend his thesis, the author insists on the importance of studying the world through both the meaning given by people who are living the experience and the social scientific theorizing about these experiences:

“...studying this world requires an approach that captures the organizational experience in terms that are adequate at the levels of (a) meaning for the people living that experience and (b) social scientific theorizing about that experience” (p. 286)

We elaborate further on Gioia method as a systematic technique for analyzing inductive research, because we think that it is particularly interesting and plausible to closely know how actors taking part in the observed PPP crafting process, perceive this experience. For the author, this is what constitute the essence of understanding organizational experience and especially processes.

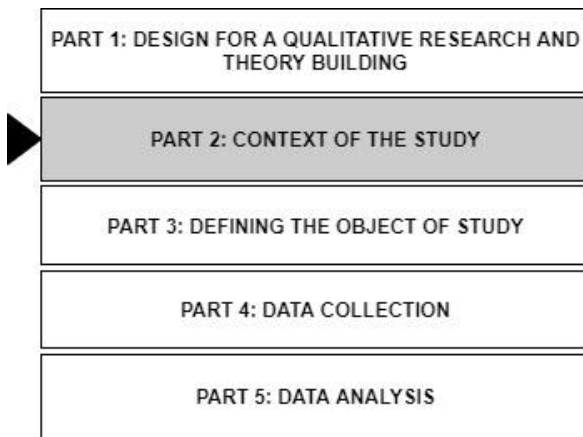
The fundamental assumptions of the Gioia method is to guide the construct of a research in a way to show the interconnectedness among inductively gathered data, emerging concepts and the resulting grounded conceptual model, while preserving scientific rigour through the entire analysis process. The approach consists of building a data structure that represents two coding levels: a 1st-order analysis using informant-centric terms and 2nd-order analysis using research-centric. Taken in tandem, these two levels representing both voices, the informant and the researcher, demonstrate the strong link between the data and the emergence of new concepts. The 2nd-order concepts are condensed further into “aggregate dimensions”, which represent an additional level of abstraction. The full set of 1st-order codes, 2nd-order concepts and thematic aggregated dimensions serve as basis to build the data-structure.

Next, the static picture revealed by the data structure is transformed into a motion picture where dynamic relationships among emerged concepts describe the phenomenon observed. This is made possible through the use of arrows to connect dimensions. The resulting model is in fact a dynamic inductive grounded model revealing clearly the data-to-theory

connections and illustrating the relational dynamics among the concepts/themes/dimensions of the data structure. The authors used a biological metaphor to illustrate the transformation of the static data structure into the dynamic grounded model: “*If the data structure is the anatomy of the coming theory, then the grounded model is the physiology of that theory*” (Gioia et al., 2012, p. 24).

This is how the Gioia method founders could incorporate a grounded articulation of new concepts development and scientific qualitative rigor to conduct inductive research.

PART 2 - CONTEXT OF THE STUDY



As explained in the previous part, we use a process research approach to describe and analyze the PPP crafting process and its coevolution within the elements of the surrounding environment. It is important at this stage to delimit the context as well as the duration of our observation. In this part, we provide a description of PPPs context during

the last two decades in the MENA region in general and in Lebanon in particular, being an example of developing economies in the region that presents the opportunity to observe a process of PPP institutionalization. The observation is limited to the time bracket 2000-2019, period during which economies in this region have been engaging in a recent wave of PPPs activities. It is a transition into new modes for PPPs governance through developing dedicated standalone PPP regulatory framework, replacing or complementing by this their previous ways of regulating PPP procurement processes.

We start with a brief overview of PPP regulatory and institutional developments in the MENA region, then we draw a particular attention on Lebanon, which we consider an example of countries in transition between pre-PPP and post-PPP regulation. We explain the context that led the Lebanese governments to develop a PPP national policy. It happens that during the same period, 2000-2019, the energy sector, a sector that has always been a challenge for the Lebanese economy, is also undergoing a major reform that involves the participation of the private sector in the form of a real partnership.

1. PPPS IN THE MENA REGION AND FOCUS ON THE LEBANESE ECONOMY

Infrastructure is a key component of the MENA region business environment; while this region is in need of private investment in its infrastructure, this investment is not proliferating, mainly because of high political uncertainty, tight banking requirements, little transparency and accountability, disrupting internal environment and unfavorable business environment prevailing in this region and badly affecting economic atmospheres²⁹. Therefore,

²⁹ Unless for countries members of the GCC-Gulf Cooperation Council: these countries form a subcategory of the MENA countries showing particular similarities at different levels, namely the relative stability in their political system based on monarchy, economic diversification and policies encouraging free trade and capital

comprehensive governance reform programs became a must to reinforce institutions, build capacities and modernize legal frameworks³⁰. Over the last decade MENA governments, driven by their need to attract investments and support their economic growth, have been making efforts at many levels, especially on reforming their public governance. Lebanon, Iraq, Tunisia, Algeria and Egypt are typical examples of these countries where variables such as political system, culture and ideologies of political leaders, coupled with a long history of suffering economy and an extremely high rate of public debts for some of them, make it difficult to attract external investors. Reform strategies undergone by MENA countries are naturally different but they all emphasize, among others, on improving the management of human resources in the public sector, improving the management of public finances, fostering integrity in the public sector and ensuring the efficient use of PPPs³¹.

The PPI database of the World Bank³² reporting highlights of private participation in infrastructure projects in the MENA region over the last two decades, announces that a total of 190 projects have reached financial closure in 2019 with a total amount of USD 48,931 million invested primarily in airports, electricity, information and communication technology, natural gas, ports, railways and treatment disposal, against 701 projects in Europe and Central Asia totaling USD 266,250 million and 1,546 projects in Latin American and the Caribbean with a total investment of USD 442,312 million. Top projects were concentrated mainly in Morocco, Tunisia, Jordan, Algeria and Iraq, with top sponsoring companies located in France, Denmark, Korean Republic, Spain, the UAE and the KSA.

The main issues facing PPP development in the MENA region, as reported repeatedly by international institutions (i.e. OECD, EIB, PPIAF) supporting developing economies in their PPP investments evolve mainly around the following: weak government technical and managerial capacity, transparency and confidence especially in bidding processes where credibility is highly crucial to attract private investors, sectoral reforms in order to increase countries readiness for PPPs, and mostly regulatory developments to ensure a solid framework for PPP policies. Despite these challenges, governments in these countries have showed increased interest in PPPs and have reached different levels in PPP development and approaches to regulate their implementation. The World Bank has reported in 2018 that 58%

movement, huge natural oil and gaz reserves, favorable business environment indicators (according to 2018 Ranking on ease of doing business) with continuous reforms to improve business climate.

³⁰ *Progress in Public Management in the Middle East and North Africa, case studies on public reform*. OECD, 2010.

³¹ *idem*

³² Private Participation in Infrastructure – World Bank,

<https://ppi.worldbank.org/en/snapshots/region/middle-east-and-north-africa>, accessed on 26/03/2020.

of countries of the MENA region have standalone PPP laws and regulations (i.e. Egypt, Jordan, Morocco, Syria, Tunisia, Lebanon), while 42% regulate PPPs in general procurement laws (unlike countries in Europe and Central Asia and countries of Latin America where PPP standalone laws prevail with respectively 95% and 83%)³³. Governments in these countries decide to enact PPP laws for various reasons but mainly to establish a clear regulatory framework for an open and fair procurement process and insure a successful implementation of PPP projects. PPP laws also close possible gaps in different sectoral laws by taking priority over these laws. These laws are now enacted in some MENA countries, whereas many other countries remain without a legal framework for this particular type of project. It is worth mentioning that although having a PPP standalone law does not guarantee the success of PPP projects, however its presence is part of economic reforms that most of the MENA regions developing economies have launched in the last decade. Among various regulatory arrangements to support PPP development, the creation of a PPP unit became a “trend” in some countries. Generally speaking, the role of a PPP unit, is to drive forward PPP programs and policies and centralize PPP expertise in a single government entity. However this role took different forms in countries of the MENA region: they can act as advisories to the line ministries or local authorities on technical aspect of the PPP project; they can manage the procurement process and even initiate projects; and most importantly they can play a vital role in the dissemination of good practices. Before the official establishment of PPP units, more than one advisory body used to have overlapping roles and practices and relevant documentations did not used to be standardized³⁴.

Policy makers in countries of the MENA region “have got a lot on their plate”. As stated earlier, PPPs in this region do not exist as stable organizational forms, and the field is very promising for exploring PPP institutionalization. Lebanon is a typical example of a developing economy in the MENA region that has been actively investing in different forms of PPPs for long years now but with no dedicated PPP regulations, which presents a great opportunity to explore a PPP institutionalization process. Numerous national projects involving the participation of private actors - either through concession or privatization - took place since the 1960’s. However, the country went into a devastating civil war in 1975-1990 that damaged enormously its infrastructure and deteriorated its economy. Further infrastructure destructions and human losses were caused by the Israeli invasion in 2006.

³³ Procuring Infrastructure Public-Private Partnerships, World Bank, 2018.

³⁴ Study on PPP Legal and Financial Frameworks in the Mediterranean Partner Countries, European Investment Bank, 2011.

Since then, Lebanon was left with a frail economy, and lack of sustainable public services in all basic sectors like electricity, health, transportation and education. The growth of this weakened economy was made even more difficult due to the inability of successive governments to revive it.

Multiple attempts for reconstruction and rehabilitation took place in the last two decades, and the participation of private actors in these reforms was remarkable. We review in this section the national context of these reforms by exploring the elements of the economic, political, and institutional environment that contributed to the outcomes of these developments. We start by providing an overview of the country socio-economic background as well as the prevailing political and institutional environment. We then focus on the procedures put in place for public procurement through concession, privatization and PPP. We choose to emphasize our research on the forms of private participation in the Lebanese energy sector because of the importance of this sector as a major and persisting source of social and economic distress to the country.

1.1. Lebanon's socio-economic background

The Lebanese economy is a small economy of upper-middle-income status, relying primarily on service and trade, the banking sector and the tourism being the main growth sectors. Foreign investment is highly appreciated since Lebanon has a free-market economy, however the country ranked 143 in the “Ease of Doing Business” according to the latest WB ratings, a deterioration of 40 positions since 2008 when its rating was 103³⁵. This reflects an increasingly suffering investment climate. The main factors behind this unfavorable investment climate are: the excessive bureaucracy, high taxes, fees and tariffs, an archaic legislation, very high corruption perception index (28/100 in 2018)³⁶, and inadequate attribution of licensing and intellectual property rights. During the period of 1975-1990 a multifaceted civil war has seriously devastated Lebanon's economy and infrastructure, and rebuilding a beaten economy and a shattered infrastructure remains a challenge for all successive governments after the end of the civil war. Lebanon has signed up to heavy borrowings which saddled the country with huge fiscal debts burden that have been increasing significantly to reach the equivalent of 137% of the country's GDP in 2010, rising to 137% in 2015 and 151% in 2018, making it the third highest debts-to-GDP ratio in the

³⁵ Ease of Doing Business in Lebanon, Trade Economics, <https://tradingeconomics.com/lebanon/ease-of-doing-business>, Accessed on March 3, 2020.

³⁶ Corruption Perception Index 2018, <https://www.transparency.org/cpi2018>, Accessed on March 3, 2020.

world³⁷. Meanwhile, promises of economic and financial reforms have been made through a succession of three international donor conferences convened in Paris: Paris I in February 2001, Paris II in November 2002 and Paris III in January 2007 (held after another devastating Israeli-Lebanese war in 2006 which added up more infrastructures, industrial and archeological damages). A bundle of grants and soft loans were attributed to the Lebanese government during these conferences in order to commit to an economic and administrative reform program. One major element of this program was the privatization of electricity and mobile phone sectors.

For years, economic and institutional reforms in this country have been on the cards and the agendas of succeeding governments but even the best-laid plans have never been implemented. Although more than two decades have passed since the end of the civil war, and a decade after the set of three Paris conferences, Lebanon's infrastructure and the level of basic public services remain below standards. This is reflected with long hours of daily power shortages, failure to provide continuous purified water supply, slow internet connection speed which remains one of the slowest in the region, high pay for mobile usage, outdated road infrastructure and no sustainable waste treatment.

A decade after Paris III, in April 2018, once again France hosted a fourth international conference, CEDRE -Conférence Economique pour le Développement du Liban par les Réformes et avec les Entreprises - to support Lebanon in its economic and financial reforms, rallying the international community and planning concessional financing, grants and debts fiscal restructuring. Nevertheless CEDRE resolutions were conditioned upon the Lebanese government's engagement to serious economic, legal and financial reforms that were so-far long-delayed, especially in regards to fiscal management, electricity tariffs, transparent public procurement, and others.

Meanwhile, the influx of nearly 1.3 million Syrian refugees into the Lebanese territory starting 2011, displaced to neighbor countries because of the Syrian civil war, had serious socio-economic repercussions on Lebanon's previously drained economy. Lebanon's "Open Border Policy" favored this unregulated process, and in less than four years, Lebanon's population has grown by more than one fourth making the country one of the highest per capita concentration of refugees worldwide³⁸. Urgent challenges started to rise especially

³⁷ Lebanon Government Debt to GDP, Trading Economics, <https://tradingeconomics.com/lebanon/government-debt-to-gdp> , Accessed on March 3, 2020.

³⁸ MoEW & UNDP, 2017.

with the deterioration of basic service delivery and the growing domestic competition for low-skilled jobs. Refugees were mainly concentrated in some of the country's poorest areas increasing by this the vulnerability of those areas and exposing them to security threats.

A struggling environment of low growth has dominated the last two decades in Lebanon. Between 2000 and 2006 the percentage of GDP growth oscillated between 1.3% and 6.2%, to reach a peak of 10% in 2009 and rapidly retreat by 2011-2018 to reach 0.4% in 2018³⁹. This weak economic growth has naturally limited tax revenue while government spending continued to raise reaching 23% of GDP in 2018 with the largest expenditures on: debts payments and debt interest payments, salaries for public workers and subsidizing the electricity sector, leaving very little amount for other aging infrastructure. According to the World Bank (2016), *“this performance masks the impact of many domestic, international, political, and confessional shocks during this period”*⁴⁰.

1.2. The Lebanese institutional environment, legal system and public administration

Lebanon has adopted a form of democracy where people rule through representatives who are the elected members of the Chamber of Deputies. The Chamber of Deputies has fundamental power related to the enactment of legislations and the monitoring of the work of the executive power represented by the Council of Ministers. The laws adopted by the Chamber of Deputies (the Parliament) are promulgated by the President of the Republic and shall be published in the official gazette within 15 days from the date of its promulgation.

Lebanon is frequently referred to as the example of “consociational democracy in the Middle East”. It is a multisectarian nation, a state with 18 confessional groups, and this religious division found its way easily into the political life by granting each confession a wide range of political rights. Although the political confessionalism was established to maintain balance between confessional groups however it had serious negative effects on the civil, political, and social life of the Lebanese people. According to the Constitution, it is the President who designates a Prime Minister and in tandem they form the Cabinet of Ministers. Seats in the parliament are shared proportionally among the country's 18 religious confessions, so does the government's shares. Public sector jobs are also divided among the different sects,

³⁹ GDP growth (annual %) - DataBank, World Bank, <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=LB> , Accessed on March 12, 2020.

⁴⁰ *Lebanon Promoting Poverty Reduction and Shared Prosperity – Systematic Country Diagnosis*, World Bank, 2016.

confessions and even political parties. Since the 2009 legislative elections, the country has been witnessing successive governments' resignations where a resigned cabinet acts as a provisional government until a new government is appointed by the regular political process. "Deep divisions mean agreeing on anything takes time" (The Economist, 2018), that includes agreeing on governments formation, and the Lebanese sectarian political system is behind this problem. The country has known long periods of political deadlock and presidential vacancy that contributed further to the delay of approving reform policies, promulgating new laws and putting on hold many vital projects that remained unlisted on government agendas for too long. The main reason delaying governments' formation was always political and concerned the allocation of ministerial positions to the different political forces in order to reconcile various political blocs in a government of national unity. Cabinet selection in Lebanon has always been more about political representation than considerations related to technocratic performance. As an example, on a timeline between 2009 and 2019, the country witnessed the equivalence of almost 4.6 years (all cumulative) of stalemate periods over the formation of new governments or election of a new president (Table 3.1).

Table 3.1
Stalemate periods and political deadlock

From	Till	Political stalemate
June , 2009	November 2009	5-months transition period following parliamentary elections
January 25 th , 2011	June 13 th , 2011	152-days transition period following government collapse
March 22 nd , 2013	15 February 2014	329-days transition period following government resignation
April 23 rd , 2014	31 October 2016	2.5-years of political deadlock due to presidential vacancy
November 1 st , 2016	18 December	45-days transition period following the election of a new president
May 2018	February 2019	8-months transition period following parliamentary elections

Source: Author's compilation of online archived data of two local newspapers: The Daily Star Lebanon and L'Orient-Le Jour.

Lebanese public administration has always suffered from long-term deterioration due to political and economic mismanagement, a paralysis in decision making and lack of commitment with respect to implementation of reform programs, especially those suggested by the three above mentioned conferences Paris I, II and III. The country's administrative structure is also prone to sectarian influence. To start with, the recruitment of civil servants is highly influenced by sectarian practices encouraging nepotism and patronage, despite the presence of regulations created to organize civil service grades (i.e. competitive examination for high grade civil servants recruitment). The shortage of experienced staff in public

institutions, inadequate remuneration, lack of information technology, corruption and weak administrative systems contributed a great deal in reducing the chances to go through with any reform program. Bureaucracy and excessive administrative burdens have always increased transaction costs in the market and therefore limited private initiatives to participate in public works. Measures at different levels were put in place to support administrative simplification, and e-government. Private participation in this administrative reform also existed: LibanPost, a joint venture between a Lebanese and a Canadian partner created initially to improve Lebanese postal services, became the facilitator for the exchange of official documents between Lebanese citizens/enterprises and public administrations. Although the country has been active in the last decade in designing programs to modernize its public administration through streamlining administrative procedures, reducing paperwork and initiating e-government, however the administrative experience in certain entities remain significantly heavy and complicated.

All this has its negative implications on PPPs investment in the country. In a recent assessment of the state of infrastructure PPPs in countries affected by fragility, conflict or weak institutions, Lebanon was listed among the countries where weak policies and institutions prevail and where the refugees represent more than 10% of total population⁴¹. These indicators are believed to be critical to investments in PPPs given the high costs and risks faced by investors (World Bank, 2018).

1.3. Regulatory framework for public procurement

Since 1963, procurement in Lebanon is governed by the Public Accounting Law 14696 which sets up a framework for public procurement and used to apply to PPP projects as well. This law is considered to be the principal public procurement legislation. But there are also various legislations and different procedures to regulate public procurement made at the level municipalities and autonomous public institutions. These laws regulate the principles of bids: the procurement process and invitation to tenders, the provisions related to public bids, the preparation of tender documents and awarding the contract to the best offer (usually the lowest bidder). The Tenders Board is the body in charge of performing procurements related to all public administrations (with exception of the administrations of security forces), and this board has always been centralized in the office of the Central Inspection. In terms of

⁴¹ *The State of Infrastructure Public-Private Partnerships | Countries affected by Fragility, Conflict or Weak Institutions*, World Bank Group, PPIAF, April 2018.

public funds auditing related to public procurement budgeting, financial transactions and monitoring mechanisms, these relate to the Ministry of Finance and the Court of Audit⁴².

In Lebanon, as well as in most MENA countries, line ministries identify PPP projects and bid for their budgets, especially the ones for large national-level projects, and this budget should be approved by the Ministry of Finance (naturally because large projects commit the country to huge and long term payments). Projects may also be originated from municipalities or regional public authorities through local initiatives, but should be supported and sometimes funded by the line ministry.

The principles of this procurement law prevent favoritism by obtaining the best offers at the lowest price. However, the public procurement process, the way it is designed, presents various deficiencies that resulted into several poorly planned PPP projects, limited funds and transparency issues, which all justified the need for reforming the public procurement. With time, several legislations enacted by different governments ended up having a public procurement system that is governed by fragmented and scattered legal frameworks.

Under this procurement system, Lebanon has succeeded historically in implementing many projects with the participation of private companies since 1958, under different types of contractual arrangements mainly: management contract, concession, BOT and lease (APPENDIX A – Lebanon’s history of utilizing PPPs-like forms provides further information about these projects). However the absence of a unified legislation and a regulating body to manage this private participation in infrastructure has led to the failure of many of these projects due to an unsuccessful implementation, the tension prevailing the relationship between different actors, the absence of proper consultation, the non-transparency of the tendering process and many others. Lebanon’s history in setting PPP-like projects was mainly a set of concessions contractual agreements.

In 2000 the government enacted a privatization law (228/2000) and established the Higher Council for Privatization (HCP), which is an entity directly attached to the Prime Minister Office. Back then, the HCP was assigned with the task of planning and implementing all privatization programs taking place in the country. In fact, the privatization of certain public assets was a pre-requisite condition to Paris I, II and III aid conventions. HCP focused its privatization program on the telecommunication sector and the power sector (mainly the

⁴² *Review of the Public Procurement Legal Framework in Lebanon*, Institut des Finances Basil Fuleihan, Ministry of Finance, https://civilsociety-centre.org/sites/default/files/resources/APD%20Eng_report.pdf, Accessed on March 26, 2020.

production of electricity). Law 228/2000 pointed out the organization of HCP, its scope of work, as well as the establishment of privatization processes. Many agencies were called to assist Lebanon in privatization projects. The OECD for instance elaborated technical and regulatory frameworks for private participation in improving water infrastructure⁴³ following the multiple government initiatives since 2000 to undertake important reform steps in this regards. The latest regulatory reform consists of the PPP legislation, through the enactment of a PPP Law in 2017 (No. 42/2017). Meanwhile, the Public Accounting Law 14696/1963 still apply along with a set of coexisting applicable laws to govern public procurements. The PPPLRC page lists the following applicable laws for PPP and concessions in Lebanon⁴⁴.

- PPP Law No. 42/2017
- Investment Law No. 360/2001
- The Public Accounting Law issued by Decree No. 14969 of 1963
- The Tenders Regulation issued by Decree No. 2866-1959
- Privatization Framework Law No. 228/2000
- Telecommunications Law No. 431/2002
- Regulation of the Electricity Sector 462/2002 (which was never implemented)

2. STATE OF THE ART OF THE LEBANESE ENERGY SECTOR

The energy sector in Lebanon has always faced serious and chronic multi-fold issues. A proper power delivery to households and industries has always been an uncompleted and challenging task. In 2013, The World Energy Council places Lebanon on the 109th place out of 129 countries on the Energy Sustainability Index that evaluates three essential aspects of energy quality: security, equity and environmental sustainability⁴⁵. Electricité du Liban (EdL) is the public entity of the Ministry of Energy and Water (MoEW) founded in 1964 by Decree No. 16878 and mandated of the generation, transmission and distribution of electric power in Lebanon, as well as bill issuance and collection. EdL is currently responsible for the production, transmission and distribution of electric power on almost 90% of the Lebanese territory. Concessions with external participants are in charge of the power generation and distribution to the remaining 10% of the territory. As Lebanon's economy is recovering from

⁴³ *Framework conditions for Private Participation in Water Infrastructure in Lebanon*, OECD & EUWI, October 2010.

⁴⁴ Public-Private Partnerships Laws / Concession Laws, PPPLRC, World Bank, <https://ppp.worldbank.org/public-private-partnership/legislation-regulation/laws/ppp-and-concession-laws>, Accessed on March 26, 2020.

⁴⁵ *Lebanon: Challenges of the Energy Sector*, BlomInvest Bank, December 2013, <https://www.blominvestbank.com/>

the civil war and struggling against all socio-political odds, demand grew significantly and surpassed current energy network capacity. We provide in this part insights on three main challenging aspects that have been impacting the overall performance of the sector for several decades: first, the technical challenges, second the financial difficulties and third a complex institutional and legal aspect. We also present the different restructuring initiatives and reforms that were suggested at different levels during the last two decades.

1.1. Technical challenges

According to EdL, the power generation capacity can actually reach 3016 MW through thermal (2764MW) and hydraulic (252MW) power plants located in different areas of Lebanon. EdL relies mainly on costly imported oil to fuel its production utilities, since power generation is mainly based on thermal power generation while hydraulic power plants do not exceed 10% of the total generation capacity⁴⁶. However most of these power plants operate with low efficiency and below capacity due to their aging facilities and the very low public spending in their rehabilitation and maintenance. This results in an actual combined produced capacity not exceeding 1800MW while the demand was evaluated at approximately 2220MW in 2009, surpassed 2600MW in 2012 and even exceeded 3366W in peak times in 2016⁴⁷. The gap in generation capacity is almost the equivalence of 9 hours of daily rationing in most of the Lebanese cities and even more in rural areas. This has encouraged the spread of the private power generation phenomenon and made it a proliferated market on the entire Lebanese territory. Moreover, the demand on electric power has increased over the last decades, coming from individuals' use rather than from industrials, and also as a result of the population growth and the influx of displaced Syrians who reached 1.3 million persons during the period from 2011-2015 (as mentioned earlier in 'Lebanon's socio-economic background'), in addition to the 4 million residents on the Lebanese territory, which required an additional power generation of almost 480MW⁴⁸. The transmission of the produced energy is made through a network of two categories of power lines: overhead lines (a total of 1362 Km) and underground cables (a total of 178Km) of different voltage levels. The network consists as well of 68 major substations converting power from high to medium voltage. But the grid is subject to various problems: a high percentage of technical losses, a high

⁴⁶ Council for Development and Reconstruction, October 2016, <https://www.cdr.gov.lb/>

⁴⁷ Council for Development and Reconstruction, October 2009, October 2012, October 2016
<https://www.cdr.gov.lb/>

⁴⁸ *The impact of the Syrian Crisis of the Lebanese Power Sector and Priority Recommendations*, Ministry of Energy and Water and UNDP, 2017, <https://www.lb.undp.org/>

frequency and voltage deviations, due to the deficiency in maintenance operations, the low public spending for its rehabilitation, and also the shortage in technical expertise. Furthermore, the incompleteness of infrastructure works related to the 220kV transmission network is also compromising the efficiency of the grid operations. Those technical losses are estimated at approximately 15% of the produced electricity, a high percentage compared to 8-10% of technical losses in efficient grids of developed countries.

At the distribution level the problems are not fewer. Non-technical losses are mainly caused by electricity consumed through illegal connections, meter manipulations and shortcomings in the billing system. In 2010, EdL estimated the total losses on its system at about 40% among which 15% are technical losses, 25% non-technical losses. Technical losses are directly related to the archaic electricity grid which is subject to power dissipation at the level of transmission and distribution lines. While non-technical losses are mainly due to uncollected bills, electricity theft, and errors in accounting and record keeping. The non-technical losses differ from a region to another and vary from 15% up to 78%. Similarly the collection rates can vary from 83% to 97% in provinces and cities and from 62% to 97.5% within the regions⁴⁹.

All these factors have contributed to render the quality of the flow of electricity unreliable, with the prevalence of long rationing hours, low citizens' confidence in the utility services, high technical losses, inadequate cost-recovery and an everlasting deficient budget.

1.2. A financial perspective

EdL relies significantly on government subventions to reduce its budget deficit. Although these subventions date back to the civil war, however they became systematic in frequency and value in the last two decades. The main component of the government expenditures transferred to EdL goes to the reimbursement of oil and gas suppliers invoices. As mentioned earlier, these expenditures constitute the third largest part of the government spending (after the payment of interests and public personnel salaries) and this trend kept going upward over the last two decades, starting with 6% in 2001 to reach 14.4% in 2018, with an average of 13.62% during the period 2001-2009 and 17.13% during the last decade (2010-2018). Table 3.2 below represents a yearly breakdown of treasury transfers to state owned EdL, the

⁴⁹ All figures stated in this paragraph are provided by the Ministry of Energy of Water through the Policy Paper for Electricity Sector, 2010

contribution of EdL out of its expenditures and the percentage out of primary public expenditures since 2001 until 2018:

Table 3.2
Treasury transfer to EdL and share of EdL from government expenditures

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Treasury transfer to EdL (USD billion)	0.189	0.203	0.28	0.328	0.555	0.913	0.986	1.62	1.506
EdL contribution out of the total oil bill and other expenditures %	NA	NA	NA	NA	NA	18.6	13	4.7	8.3
Share from government primary expenditures in %	6	6	7	8	12	19	19	25.2	20.4
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Treasury transfer to EdL (USD billion)	1.198	1.07	2.27	2.04	2.1	1.14	0.93	1.33	1.765
EdL contribution out of the total oil bill and other expenditures %	12.9	5.4	3.8	3.5	1.9	4.7	5.6	2	0.3
Share from government primary expenditures in %	16.59	22.7	23	21	21.3	12.8	9.4	13	14.4

Source: Author's compilation of online published data at the Lebanese Ministry of Finance, Treasury transfer to EdL, <http://www.finance.gov.lb/en-us/Finance/Rep-Pub/DRI-MOF>

The treasury transfers to EdL are allocated in their major part to pay the massive bills of fuel purchases, since EdL energy production depends mostly on oil imports (this is the main reason behind the peak in 2008 and the drop in 2016, showing correlation with the variation of oil prices worldwide). The revenues generated by EdL coming from bills collection are insufficient to cover these costs. The main reasons behind EdL's decline in financial returns and the continuous need for the national treasury to cover almost 90% of its oil bills are: the tariff and billing structure which hasn't been reconsidered since more than 20 years now, the continuous aggressions and illegal connections on the energy network and also the incomplete collection of bills.

The end-result of all these issues is an unreliable electricity power, long hours of rationing, low consumer confidence in the government services, financial shortage and high system losses.

1.3. Institutional and administrative considerations at the energy sector

The main applicable legislation governing the energy sector is Decree 16878/1964 which founded EdL as an autonomous state-owned power utility under the control of the MoEW, and EdL is still functioning in compliance with this decree. Lebanon is divided into three territorial / administrative levels: first level, consisting of 8 governorates (or regions), themselves divided into a second administrative level which consists of 25 districts (or departments), further subdivided into a third administrative level, municipalities, each enclosing a group of villages or cities.

Based on these levels (and other technical and geographical considerations), EdL has adopted a subdivision of the Lebanese electric network into 15 zones or divisions illustrated in Table 3.3 below:

Table 3.3
EdL subdivision of the Lebanese electric network

Geographic region	Administrative divisions into Governorates (total = 8)	Nb. of administrative divisions into Districts (total = 25)	Nb of EdL divisions (total = 15)
<i>Capital</i>	Beirut	1	1
<i>Beirut suburbs</i>	Mont-Liban	6	5
<i>Northern Lebanon</i>	Akkar	1	2
	Liban Nord	6	
<i>Beqaa valley</i>	Baalbeck-Hermel	1	3
	Beqaa	3	
<i>Southern Lebanon</i>	Nabatiyeh	4	4
	Liban-Sud	3	

The Head of divisions represent regional EdL authority and serve as intermediaries between the territories constituting the division and EdL headquarters.

The electricity crisis in Lebanon has always had regional and political implications with heavy social repercussions. As a natural response to this shortage in filling the national demand, the households and the market have responded with customized and innovative solutions to compensate the poor quality of the national energy and the long hours of blackout. The emergence of private generators is one common alternative that is popular and that spread rapidly across the territory. The acquisition of energy through a private generator can be either individual, collective or through a membership (which is the most common). Yet, not the entire population is financially capable to afford a private generator membership; in poor areas, this ‘privilege’ became prohibited.

The private generators phenomenon is not without negative implications. First private generators remain unregulated and their tariffs uncontrolled. Bills from private generators are more than double the ones of EdL. In addition, their ecological footprint and pollution capacity is yet to be considered. The electricity became therefore another symbol of wide gaps between regions, social classes and confessions. Municipalities were invited to play an important role in regulating prices, and some do so. But some others are less concerned because their presidents (or members of municipal Councils) benefit directly or indirectly from this trade. In many regions some generators owners are said to be members of municipal councils. In other regions, the owner of generators would largely finance the electoral campaigns.

On another hand, the absence (almost total absence) of the state authority in some regions has led to the development of massive fraud. Power hacking mainly by illegal connections on the network. This is technically labelled as ‘non-technical losses’. The development of fraudulent consumption and hacking practices have contributed further to the degradation of the network and increased electrical overvoltage.

Furthermore, EdL lacks young and specialized human capital. The utility is overstaffed with administrators who earn very high salaries, whereas technical specialization is restricted to a category of daily workers. EdL employs more than 2000 daily workers. The integration of new staff in some of the Lebanese public administration is a practice that is been made mostly through the hiring of precarious workers paid on daily basis. Progressively, the “externalization” of daily workers to subcontracting companies became largely adopted by some Lebanese public utilities like in EdL; this led to an important percentage of daily-workers in public administrations working with private companies. The number of daily workers at EdL has increased enormously between 1995 and 2011 and the utility could never reach a consensus regarding their full integration as permanent workers. This struggle has caused various protest movements that had financial repercussions on EdL and necessitated political interventions to find a final solution for this issue.

These were some of the main factors causing a long-lasting hassle for the energy sector crisis in Lebanon, and justifying the urgent need for a drastic and comprehensive reform.

1.4. Solutions and successive reform plans

During the 2002-2018 time span the country has known many manifestations and riots, due to long rationing hours, in regions outside Beirut. While the capital was privileged with 21

hours of continuous power supply, the rationing in the suburbs could reach 10 hours daily, and 12 hours in rural areas. Back to 2002, and following the recommendations of the World Bank to restructure the electricity sector and increase the participation of the private sector through partnerships or privatization, the electricity Law 462 was passed. This law was meant to regulate the new restructured sector by replacing the existing legal system that grants EdL the monopoly of generation, transmission and distribution activities. The law proposes to unbundle the sector's activities and partially privatize them. And also oversees the creation of the National Electricity Regulatory Authority (NERA) as a legal mandated regulator of the energy sector. However, this law was never implemented.

The liberalization of the energy sector has always been a subject of debate between political classes. Among many other major repercussions on political interests, reforming the electricity sector would surely jeopardize the rents cashed by owners of generators. The unbundling of EdL activities and their progressive privatization or concession have never reached political consensus, despite the different scenarios and reform plans that were suggested by the ministers of energy and water. The political sectarian fragmentation of the country is also a territorial fragmentation that implies carrying out reforms within a geographical area must take into account the local political actor or political elites of the area.

These prevailing and persisting issues in the energy sector have generated number of initiatives involving official, experts, national and international organizations, all joining efforts to alleviate the serious and heavy effects of the energy crisis. Back to Paris III in 2007, nearly 30% of the total budget support was allocated to implementing reforms in the telecommunication and the energy sector⁵⁰.

Other technical suggested solutions coming from officials and experts in the domain: wind power farms and photovoltaic solar plants implemented across different parts of the country would generate the equivalent of almost 1200MW. But this project has faced repeated delays, and was expected to take place in 2020⁵¹. An additional production of 800MW would come from temporary facilities, namely electricity barges, but still, the demand would not be entirely satisfied to maintain a regular 24/7 power supply on the entire territory. In addition political polemics on how to lease these barges ended up with the rent of only 440MW generation capacity barges.

Law 462 was supposed to regulate and organize the electricity sector but this never happened.

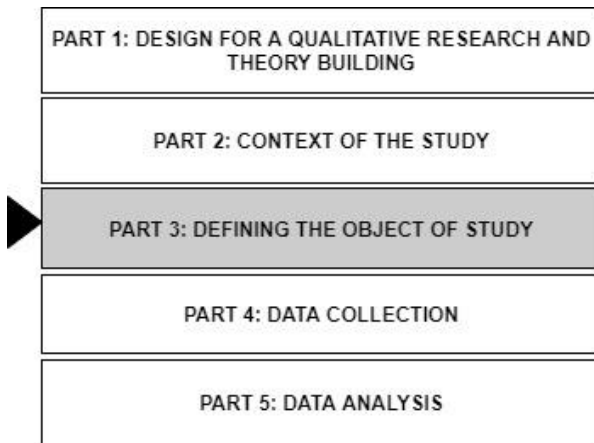
⁵⁰ *Public-Private Partnership in Lebanon*, Credit Libanais Economic Research Unit, November 2011.

⁵¹ The National Energy Efficiency Action Plan for Lebanon 2011-2015.

A comprehensive strategy for the energy sector in all its stages, and eventually ratification of modern laws, has become a mandatory and urgent national policy. The latest reform plan was through the Policy Paper for the Electricity sector by the MoEW in 2010 providing a set of strategic initiatives to remedy the accumulated problems throughout the history of a suffering power sector. In addition to generate additional capacity (favoring natural gas and renewable energies) to cover the existing gap, and improve the operability of the transmission and distribution system, the policy also foresees an innovative aspect through the establishment of a smart grid using meters that allow remote control operated on the grid. In this sense, the policy suggests the participation of private actors in power distribution infrastructure and services through a PPP.

Under the name of Distribution Service Providers (DSP), the setup and the evolution of this PPP, along with its national and sectoral context will constitute the object of this research.

PART 3 - DEFINING THE OBJECT OF STUDY



To address the research question we examine an example of public-private collaboration in Lebanon, where the government seeks to construct a modernized system of rules and institutions to regulate its PPP projects. The empirical context has revealed the existence of a project, the Distribution Service Providers (DSP), taking place at the

Lebanese energy sector with the participation of three private companies. Besides, the empirical context has also revealed that, within the same time span, a long-awaited PPP-law is in the making, and this process naturally involves multiple political actors and decision makers.

We provide in the following section the details on the DSP project and the characteristics that make this case study an exemplary case study of a PPP crafting experience in a developing economy. We then contextualize our research question with concrete elements revealed so far in order to precise further our unit of analysis as well as the different levels of analysis and elements to include in each level. The object of study is therefore chosen based on the research question, the proposed analytical framework and the elements of the empirical context.

1. EXPLORATORY STUDY

The choice of the object of study came shortly after a rapid screening of projects that were currently taking place at the national level. This task was a bit complicated though since there is no unified and updated database in Lebanon, neither a centralized unit that provides details on PPP projects. Information in this domain are scattered among different sources: the PPPKnowledgeLab (of the World Bank), the HCP, and reports published by research units at different Lebanese local financial institutions... Furthermore information found is often incomplete. We started our quest, in July 2016, with visiting the HCP, as the unit in charge of projects involving private participation at the national level (this is when we were informed about the PPP Law that was nearly ten years in the making at that time). A financial consultant at the HCP, who became later one of our key informants in regards to the PPP

Lebanese institutional and regulatory framework evolution, reoriented us to people in charge of PPP-like projects in telecommunication, infrastructure and transportation.

Below is a short-list of the projects retained from different sectors for the selection of our sample. For this purpose five interviews were conducted (two face-to-face and three phone interviews) with persons in charge or representatives of these projects:

Table 3.4
Preliminary interviews for project selection

Project	Sector	Interview Date	Details
Sodetel	Telecommunication	Aug-2016	Phone interview with the Technical Manager
Highway construction	Infrastructure	Aug-2016	Face-to-face interview with an engineer who is the President of the committee in charge of the roads projects at the Council for Development and Reconstruction (CDR)
Mecanique	Transportation	Sep-2016	Phone interview with the Managing Director
LibanPost	Telecommunication	Sep-2016	face-to-face interview with the Financial Manager (arranged by the CEO after a phone interview)
DSP	Electricity	Jan-2017	Face-to-face interview with President of the DSP Project Manager Committee (arranged one of by EdL middle-managers)

We briefly present the results of our exploratory discussions:

“Sodetel” was operating through a shared-revenue management contract with the Lebanese government, and does not present the characteristics of a real partnership. So this project was not retained. All infrastructure construction projects managed by the CDR, including highway, roads and bridges constructions, are concluded through traditional procurement contracts, which is not interesting for the current research. The “Mecanique” project was at that time undergoing negotiations with the Lebanese government and tension was reigning over extended bidding process; although the managing director is known to have an interesting background and strong opinions in his experience with the government, we could sense that he was not ready to share information about the project at this stage. “LibanPost” is considered to be a “success story” of a BOT for managing national postal services, however we rapidly realized that many articles were already published on its history and the different challenges the project went through since 1998 before becoming a multi-services operator for the government. Finally, our phone interview with the President of the DSP Project Manager Committee in January 2017, revealed interesting PPP characteristics of the project, and the

informant was open to share information for the purpose of this research and invited us for a face-to-face meeting.

An official PPP database does not exist in Lebanon so far. Information about these projects are scattered among different official and unofficial sources. Even the data posted on PPP Knowledge Lab or the PPI World Bank databases are not updated or complete. A comprehensive documentation on a PPP project initiation, implementation and performance is hardly available, not easily accessible, usually centralized at the procuring body and surely not published openly on websites or in public archives. This exploratory study had to be complemented with a review on cases previously reported in the literature. Several contracting-out projects, concessions, and even privatized projects, have frequently been labelled as “PPPs” in scientific studies and published reports, even in the absence of a recognized PPP regulatory system in the country. Documentations have revealed interesting information about infrastructure projects joining both the public and private sector, favoring speaking about “partnerships” in order to avoid using the term ‘privatisation’ or ‘contracting out’. Some of these projects have proven their success, in terms of social and economic value creation, especially in the sector of tourism, however many of these projects have shown important deficiencies that either prevented them from reaching financial closure or contributed to enlarge the portfolio of failed PPP stories in the region. In regards to scientific work, literature and empirical studies, very few have explored these PPP-like projects in Lebanon. These few studies were based on retrospective investigations that shed the light on some aspects of public-private arrangements, mainly their success and failure mechanisms, policy lessons and critical assessment. However these studies are neither recent enough to reflect the latest developments in regards to PPPs in Lebanon, nor comprehensive in their scope to give better insights on how PPPs are actually evolving with the remaining constituents of the environment in which they are embedded.

A comparative assessment of two case studies for solid waste collection services in the two largest cities in Lebanon, one managed by the municipality and the other by a private actor, revealed that, in terms of performance efficiency and environmental protection, the quality of solid waste collection through a private participation outweighs the one handled by the public sector. But so does the corresponding cost. The study reveals that the main reason behind cost overruns of a private participation in public utilities is the inadequate PPP policy within the broader national policy framework and the absence of a legal framework, non-competitive tendering process and lack of transparency with regards to financial accountability (Massoud

et al., 2003). In the Lebanese telecom sector, a case of a failed PPP was reported by Jamali (2004) who examined the reasons behind this failure. Although in terms of quantitative indicators, the participation of the private sector in the management of telecommunications services and utilities has increased the number of subscribers as well as the revenues, only on the short run, however this was not the case at the relational level between partnering actors. The ineffective communication and the organizational and interpersonal differences between partnering actors contributed greatly to the failure of this partnership. Also poor preparation and feasibility study for each project as well as a solid regulatory framework are pre-necessary conditions for the success of a PPP. While most of the literature in developing countries has focused on institutional aspects for PPPs, the water management in the second biggest city in Lebanon, Tripoli, delegated to a private actor, brought back politics into the analysis (Allès, 2012). A subsidiary of a multinational company was contracted to manage the drinking water and modernize its administration. And the introduction of the private sector has deeply affected clientelist behavior characterizing the interactions between private firms and local elites.

Although important highlights were revealed concerning the cases published in official reports and documentations or in the literature, the MENA context in general and the Lebanese one in particular still have lots of insights to disclose on PPP dynamics and their coevolution with the elements of the surrounding environment.

2. THE DSP: CHOICE AND RELEVANCE OF THE CASE

As mentioned earlier, the DSP is part of a national policy reform, and which scope extends to the entire Lebanese territory. We believe the choice of this case is of a great relevance to this research for the following reasons: the DSP is one of the recent projects taking place at the national level and related to the distribution activity of the national energy power, which is a natural monopoly, and no other project performing the same activity will be taking place in parallel (at least not in the same spatial and temporal context). This project is also the first among previously accomplished ones to show characteristics of a real partnership, At this level, it is important to refer to the literature to recall the features that distinguish a PPP from other types of public procurement (Saussier & Triole, 2015; Araújo & Sutherland, 2010; Farquharson et al., 2011), and that are presented at the DSP project and clearly stated in its contract's General Conditions. Accordingly, the DSP features the following characteristics:

- The bundling of activities: the DSP is a contract to design, implement, operate and maintain a distribution network.
- The allocation of risks: these risks are stipulated and allocated among partnering actors according to a dedicated section of the contract (Article 9, General Conditions) under “Liability and Risk Distribution”.
- Deferred remuneration based on performance standards and compensation: the contract of the DSP has provided a framework of performance monitoring and compensation detailing the procedures of performance monitoring and performance compensation calculations. The contract clearly stipulates that the amount earned by the private party shall be determined by the extent to which the private partner achieves the performance criteria set out in the contract. The payments are done on a quarterly basis.
- PPP contracts are concluded on long-term basis: this is the only criteria that is not respected in the DSP contract. The time completion is set for 48 months which is relatively short for a PPP contract. However, we knew later during the investigation that political considerations stand behind setting such a short period of time. In fact the 4-years duration corresponds to the term length of a Cabinet in Lebanon, and the Minister in charge of the energy sector at that time wanted to guarantee that the project is accomplished during his mandate. This never happened; the DSP project started in 2012, was renewed and is still in progress at the time of the writing.

In addition to his features as a PPP, the DSP presents the following characteristics that make of it an interesting case to observe: First, the DSP is evolving in an environment where institutions, with the help of international agencies, are busy trying to figure out how to reform a weakened economy, which makes its context a rich one. Second, the DSP is still in progress; the project has been renewed and did not yet reached its financial closure which gives us the possibility to observe its progress in real-time settings, and meet the actors while they are still involved in the process and have access to both retrospective and real-time data. Third, the DSP has a great potential of filling an empirical gap given its national scope, its relatively important size (USD 800 Million), and its role in the reform of a suffering energy sector.

Even though case studies in the energy sector of developing economies might have been previously observed and reported, however each single-case study has its own prevalent interesting insights that will remain unveiled if not investigated. For Yin (2009), a case study

is significant when it is of general public interest, when it underlies issues that are nationally important and when it implies policy and practical terms.

We provide hereafter information an overview of the DSP project explaining the regulatory framework of its setting, details on the partnering actors, the mode of governance of this project as well as main components of the contractual terms and conditions.

2.1. Project Overview and Governing Law

The Policy Paper for the energy sector reform dated June 2010 covers a program on short, medium and long term actions to take in order to improve the sector's infrastructure (generation, transmission and distribution), regulate the supply and demand (fuel sourcing, renewable energies, tariffs...) and set regulatory norms and standards for the provision of electric services. This policy seeks to guarantee a proper transition phase that will lead at a later stage to the establishment of a permanent and stable situation for the sector.

The policy reform anticipated the needs of Electricité du Liban (EdL) which is the public entity within the MoEW in charge of the generation, transmission and distribution of electrical energy on the Lebanese territory) in terms of improving distribution services. These needs can be summarized as follows:

- Upgrade and rehabilitation of the distribution grid, facilities and system.
- Reduction of energy inefficiency by reducing non-technical losses (energy theft and uncollected bills).
- Improving bill collection.
- Developing smart monitoring centers.
- Introducing new services for consumers and payment facilities, and adopting new tariff structures.

The 'Policy Paper' anticipated a bidding process financed by the Lebanese government to select specialized private companies as service providers (SPs) with the responsibility to provide improved distribution services that would help EdL satisfy its needs and increase its revenues. A company for consultancy, from the private sector, shall assist EdL with managing this program. The financing of this program, namely the upgrade, rehabilitation and modernization of the distribution network facilities, shall be provided by the partnering private companies.

The so-called DSP (for Distribution Service Providers) contract with three private companies is a USD 800 million worth Build-Operate-Transfer (BOT) partnership between a public entity designed in the contract as “Project’s Owner”, which is EdL, and three private national companies, the “Service Providers” (SP) for design, implementation, operation and maintenance of the electricity distribution network. The contract was signed on January 19th, 2012, and the project started operating in April 2012. The main objectives of the project are to increase the electrification of the country and improve the quality and reliability of power supply. The DSP prequalification documents stipulate: “*ensure proper investment planning, effective execution of network extension, network operation and maintenance, metering and billing activities with full correlation of energy distributed, billed and collected to minimize and eliminate losses*”⁵². The three companies retained their independence while they went in for this partnership. The duration of the contract is 48-months since its operating start date.

As stated earlier, EdL is still functioning as the exclusive authority in the generation, transmission and distribution of energy, in compliance with decrees #16878/1964 and #4517/1972. In fact, a legal framework for privatization, liberalization and unbundling of the sector’s activities is set through Law 462/2002, but was never implemented. In the initial absence of a national standalone-law governing PPPs the DSP project was established under existing sectoral laws and the following regulations mainly applied:

- 1) The Public Accounting Law, issued by Decree No. 14969 of 1963;
- 2) The Tenders Regulation issued by Decree No. 2866/1959;
- 3) Law 288/2014 for the establishment of the Electricity Regulatory Authority (issued at a later stage during the project execution)

It is worth mentioning that, at the time the contract was established the Lebanese legislation allows any government entity (including, ministries, public institutions, municipalities, and federation of municipalities) in accordance with the Lebanese laws to procure PPP projects. However, the approval of the PPP project before launching the procurement process shall be provided by the procuring authority, the Ministry of Finance (MoF) or Central Budgetary Authority and the Council of Ministers (CoM).

⁵² DSP Prequalification Documents – Bidding Documents, p. 4.

2.2. Project Organizational Structure and Partnering Actors

The hierarchical arrangement of lines of authorities, rights and duties within the DSP determines how roles and responsibilities are assigned within this structure. In this paragraph we provide details on the identity of each actor, and explain how these actors communicate together and coordinate their activities within the partnership. Figure 3.1 below illustrates this organizational structure.

In regards to the Owner's roles and obligations, the General Conditions of the contract stipulate that the Owner shall make reasonable efforts to provide SPs with work permits and all necessary documents to perform the services and issue to officials and owner regional representatives all instructions necessary for the prompt and effective implementation of the services⁵³. The Owner is represented by an executive committee, the 'Project Committee', which is assigned with the role of administering the project execution and handling all communications with project stakeholders. The president of the Project Committee shall be a member of EdL Board of Directors (BoD). In order to assist the Project Committee with its mission, and for the sake of the contract administration and supervision during the execution period, EdL shall appoint a 'Program Manager' (PM), who's roles and responsibilities are detailed in section 1.3. below "Consultancy and Project Management". Together, the PM and the 'Project Committee' form the entity named 'Program Manager' in charge of the governance of the PPP.

For the mission of PM, two consultancy firms took turn at managing the DSP project. The first company, 'NEEDS', with prior local and regional experience in the domain, was appointed in 2010 by the government as a consultant for the project. This company was one of the main pillars in the DSP contract design. The second company, 'MVVdecon' took over the "Program Manager" responsibilities starting April 2016, after the first company has refrained to renew the consultancy contract with the government. Details on these two companies and their roles as PM are the object of the following section. The contract was signed in 2010 and its execution started in April 2012. Its initial duration was set to 48 months (till April 2016), but was extended further till December 2021.

We provide hereafter the profile of the three private companies taking part in this project:

- **BUTEC Utility Services – known as BUS**

⁵³ DSP Contract, General Conditions, Article 4 – 'Obligations of the Owner'

A subsidiary of 'BUTECH - Bureau Technique d'Etudes et de Construction' which is a family-owned contracting company founded in Beirut in 1964 and investing in engineering, construction, logistics and design services. In 2008, the International Finance Corporation (IFC) of the World Bank Group, signed an agreement with BUTEC through USD15 million investment, to acquire a minority shareholding in BUTEC Group' capital supporting by this the strategic objectives of the company to list publicly on stock exchange⁵⁴. BUTEC has a large portfolio of activities in the MENA and GCC region. In building and constructions, BUTEC invested in building the Lebanese Olympic Sports Stadium that hosted Asia Football Cup in 2000, the Doha International Airport terminal and Qatar Airways Operation Centers and two in schools in Qatar as well. BUTEC also invests in building large industrial facilities (Sharjah waste to energy project in Dubai, Bellara Steel Complex Balance of Plant in Algeria, Kizad Zone Aluminum Extrusion Plant in Abu Dhabi...). In the sector of infrastructures, BUTEC contributed in the restoration of bridges in Lebanon as well the enhancement of the Doha International Airport security systems. BUTEC also invested in power and energy projects in Abu Dhabi, Qatar and Lebanon (installation of gas turbine units in Algeria, building extension and enhancement works in the Shah Gas Sulphur plants, expansion of transmission systems in Umm Birka Qatar...). BUTEC has also participated in fuel refinery and storage construction works (Baniyas refinery fuel storage tanks and pipelines in Syria, Air Separation Unit Plant for mechanical and electrical erection works in Algeria, Aqaba New Liquefied Petroleum Gas Terminal in Jordan...). Wastewater treatment plants, irrigation projects and pumping stations also are part of BUTEC activities (Valley of Ouargla & Drainage Networks in Algeria, Barwa Wastewater Treatment Plant in Qatar, Jbeil and Tripoli Wastewater Treatment Plants in Lebanon...).

BUS is the utility services company of BUTEC Group. It was created by the group to perform the activities of the DSP design. Its operations cover almost 3000Km² (the equivalent of 30%) of the Lebanese territory from its northern frontiers till the northern borders of Beirut. BUS employs 850 employees and owns around 130 vehicles deployed for the needs of the DSP project⁵⁵. The budget allocated to BUS out of the total budget of DSP project is equivalent to USD260 Million.

⁵⁴ IFC Press release, '*IFC Financing Supports Expansion of Leading Construction Company in Lebanon*', Beirut 2008

<https://ifcext.ifc.org/ifcext/pressroom/ifcpressroom.nsf/1f70cd9a07d692d685256ee1001cdd37/fbfa63efda1c258c8525748900657508>

⁵⁵ <http://www.bus.com.lb/>

- **KVA S.A.L.**

KVA S.A.L. is part of a joint-venture that has the majority owned by Khatib & Alami Consolidated Engineering Company (K&A) together with Arabian Construction Co. (ACC). K&A is based in Lebanon since 1959 and serving the MENA region and GCC through a large portfolio of activities in Architecture & Planning, Infrastructure, Energy, Geospatial Systems Integration and Program Management Services. The company has currently 32 offices worldwide located in the Middle East, Gulf, North Africa, Sub-Saharan Africa, Asia and the United States and has invested in number of the largest projects in each region, i.e. Abu Dhabi Military Officers Accommodation, Residential towers and hotel complexes in the Emirates, Warehouses facilities in Qatar, KSA Airports, Bridges in Lebanon and Syria, Hydraulics structures in Lebanon, and many others⁵⁶.

Over the past few years preceding the DSP launching, K&A had provided support to the distribution operations of EdL Beirut Division, which render the company knowledgeable and familiar with EdL particularities and the Lebanese distribution network infrastructure⁵⁷. KVA employs 700 full time employees. A total budget of USD240 Million was allocated to the activities entrusted to KVA.

- **NEU Company**

NEUC is a private company part of Debbas International Holding S.A.L. which is a family-owned business based in Lebanon since 1910 and specialized in delivering indoor and outdoor lighting solutions and services. Debbas has delivered projects in over 40 countries in lighting concepts, integration of different lighting configurations, building management, and audio-visual systems. Debbas capitalizes mainly in its lengthy experience in the lighting field. They tackle indoor and outdoor decorative lighting, façade lighting, landscape lighting, commercial lighting, sport facilities lighting, monument lighting, public facilities lighting, technical lighting and solar lighting. Among the most-known projects of global site lightening: Indira Gandhi International Airport (India), Qatar National Convention Center (Qatar), Musée d'Orsay (France), One Airport Square (Ghana), Address Downtown (UAE), Al-Azhar Mosque (Egypt), The Roxy Cinemas Boxpark (UAE), Louvre (Abu Dhabi), Beirut Souk Entertainment Center (Lebanon), Marriott Hotel (Nigeria) and many others...

⁵⁶ <http://www.khatibalami.com/>

⁵⁷ <http://www.kvasal.com/>

In order to be ready for the execution of the DSP requirements and to take part of the rehabilitation and modernization of the distribution grid in Lebanon, NEU has set up a team of almost 1100 employees and a fleet of 120 vehicles⁵⁸. NEUC was allocated the largest share of DSP budget, because its activities cover the largest of the three subdivisions. This budget is estimated at USD300 Million.

According to the contract governing the partnership, the country territory was divided into three areas (lots) and each SP was assigned to one lot. Details on areas subdivisions will follow in section 1.4.b. “Areas Subdivision”. We will designate by SP1, SP2 and SP3 the three service providers representing respectively BUS, KVA and NEUC. We will also provide details of the roles and responsibilities of each SP in section 1.4.c. “SPs Scope of Services”.

The organizational chart representing all participating stakeholders and the different levels of authorities governing it are represented in Figure 3.1 below.

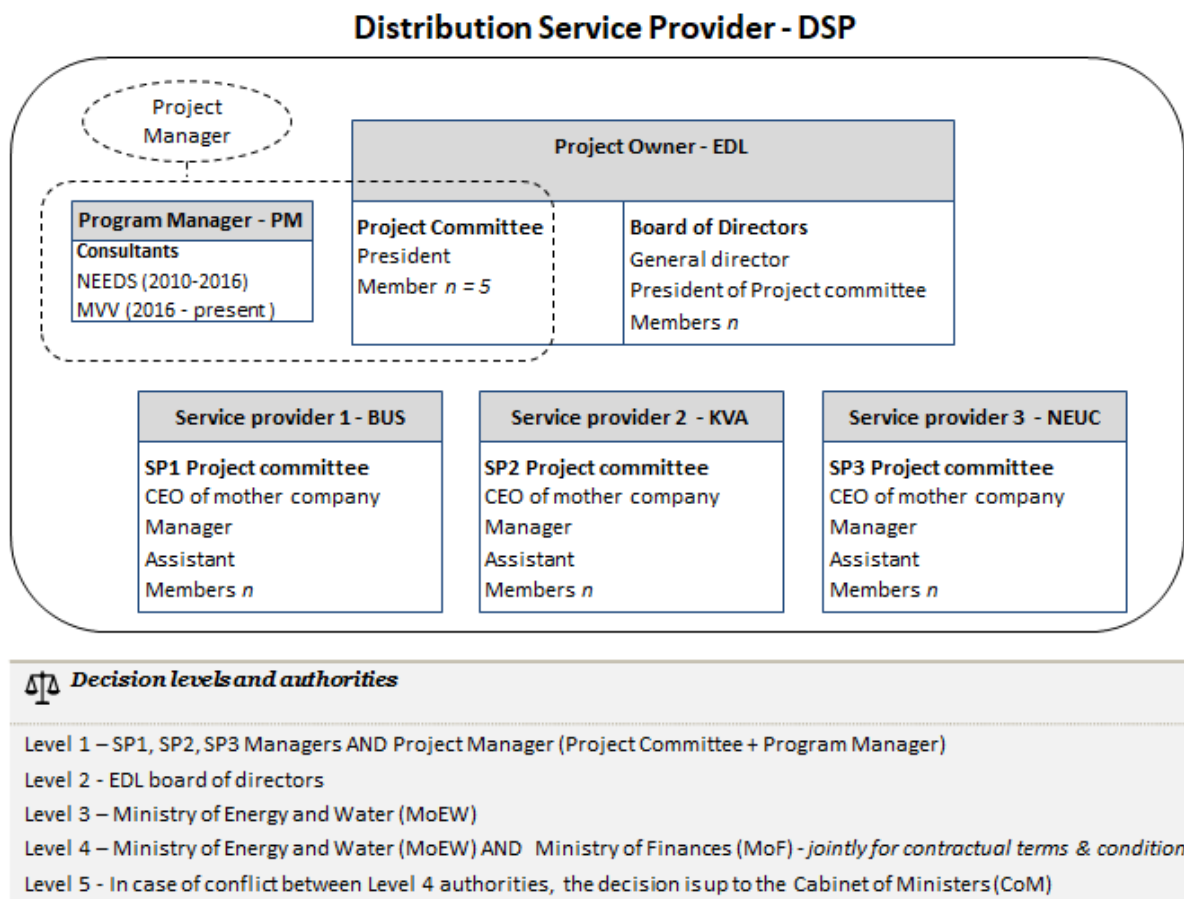


Figure 3.1 – DSP collaborating actors; decision levels and authorities

⁵⁸ NEUC, <http://www.neu-company.com/about>

2.3. Consultancy and Project Management

The approach to supervise DSP implementation was put in place by EdL with the assistance of specialized consultancy firms, appointed by EdL and assigned with the responsibility of the administration, supervision and governance of the partnership from the starting date till the end date of the contract implementation. As stated earlier, the DSP contract names this consultancy as Program Manager (PM) “*who shall be responsible for day to day contract management and supervision throughout the duration of the Contract*”⁵⁹. The contract also specifies that the PM staff shall be composed of qualified engineers, PPP specialists and other professionals who are experienced in the energy sector and competent enough to carry out this mission. The PM shall continuously consult with the Owner and does not have any authority over the contract or the SPs, however the PM may at any time issue to the SP instructions that are necessary to the contract execution or that can remedy any defect in an executed service or activity.

In reference to Contract C1784 “Program Management Consultancy Services”, signed on March 31, 2012, between EdL and “Near East Engineering and Development Services” (NEEDS) as Program Management Consultant, the latter was tasked with assisting EdL in the management of the DPS Project through the following four tasks:

1) Project Initiation: this task is associated with establishing all processes during the initiation phase of the project (mobilization and logistics, kick-off meetings, project organizational charts, plans and schedules, project manual...)

2) Business Process Flow Organization: a task related to the development, setting and implementation of all business processes identified within the DSP project.

3) Engineering and Management: this task is concerned with the setup and implementation of guidelines for the monitoring and auditing of the technical and financial progress of the DSP.

4) Information Flow Management and Computation: this task concerns the monitoring of DSP performance in terms of definition and calculation of respective Key Performance Indicators (KPIs) throughout the project implementation.

NEEDS is a leading consultancy company in the digital transformation of utilities in the Middle East and Gulf regions, and has been “*servicing the regional market needs in the fields of energy systems, electrical and water networks, infrastructure development, smart grid, automation and control systems, information technology, smart metering, environment,*

⁵⁹ DSP Contract, General Conditions, Article 7 – ‘Contract Administration and Supervision During the Implementation Period’

*policy development, and project quality management*⁶⁰, since 1997. In the DSP project, NEEDS supported EdL in handling the approving, monitoring, following-up and coordinating of all processes and activities of the project. It is worth mentioning that NEEDS was not only the Program Manager of the DSP during its execution, the consultancy was appointed by EdL in June 2010 to assist the public utility in coordinating the bidding process, designing the pre-qualification documents as well as the design of the contract itself.

In June 2016, the “Program Management Consultancy Services” contract between EdL and NEEDS came to an end and was not renewed. EdL called then MVVdecon, a subsidiary of “decon international”, which is an engineering consultancy for energy and water infrastructure based in Homburg-Germany and having offices in eight countries other than Lebanon, to handle the role and responsibilities of the partnership PM. MVVdecon had previous experience and knowledge in Lebanon’s energy sector since it took part in a consortium that proposed in February 2012 a “National Road Map for Lebanon that shall contribute to achieve legal and regulatory convergence for future large scale deployment of renewable energy, in particular solar and wind energy”⁶¹. MVVdecon was still assisting EdL as a PM at the date of our research study.

During the rest of the study we shall use PM-1 and PM-2 to designate respectively the two consultancy NEEDS and MVVdecon.

3. CONTRACT DESIGN, TERMS AND CONDITIONS

In this paragraph we explain the main terms and conditions addressed by the DSP contract in its initial form, the General Conditions, as well as in its Appendices. We highlight in particular the different documents forming the contract as well as the scope of services and activities to be accomplished by the SPs and the criteria upon which each SP was assigned a region of the Lebanese territory.

3.1 General Conditions of the Contract

As stated earlier, the DSP is governed by a contract to design, implement, operate and maintain a distribution network with customer and metering services. This contract consists of 11 articles detailed in the contract ‘General Conditions’, clarifying its nature, governing mechanism (administration and supervision), terms, timing and completion, obligations of the

⁶⁰ <https://needs.com.lb/>

⁶¹ National Road Map for Lebanon, February 2012, funded by the European Union, implemented by the consortium MVV decon/ENEA/RTE-I/Terna/Sonelgaz.

service provider, obligations of the owner, price and payment, copyrights and intellectual property, liability and risk distribution, suspension and termination. The DSP contract is formed by several documents that are all considered to be correlative, complementary and mutually explanatory and shall be considered as a whole while reading the contract. The General Conditions of the contract imply terms and obligations on the contract timing and completion, obligations of the SP, obligations of the owner, contract price and payment, copyrights and intellectual properties, contract administration and supervision during the implementation period, liability and risk distribution as well as ways to deal with changes in the contract elements, its suspension or termination. Whereas the appendices to the contract clarifies, among other issues, the terms and procedures of payment, the scope of services of the SP, technical standards, area subdivisions, information and the distribution network, contract price adjustment, framework of the performance monitoring and compensation for the contract, liquidated damages... In addition to these Contract Documents, additional documents were added in the course of the DSP evolution. A first Memorandum of Understanding was added in August 2016, and a second one was added in December 2016. In the end, the order of precedence of the contract documents as of December 2016 is:

- Form of the Contract
- Special Conditions of Contract (Appendix 1 to the General Conditions of Contract)
- General Conditions of Contract
- Remaining appendices to the General Conditions of Contract (including Terms and Procedures of Payment, Scope of Services, General Quality Standards, Technical Standards, Description of the Area Subdivisions, Information about the Distribution Network, Contract Price Adjustment, Performance Monitoring and Compensation, Liquidated Damages, Information of Key Personnel, Service Provider's Bid).
- MoU-2 and its Annexes (as of December 2016)
- Remaining appendices to the General Conditions of Contract
- MoU-1, dated August 2016 (APPENDIX H – Memorandum of Understanding 1)

3.2 Areas Subdivisions

Under its current structure, EdL divided Lebanon into 15 divisions with a total of 67 High Voltage/Medium Voltage substations. These divisions were grouped in the context of this PPP to create three geographical lots, to which were appointed the three service providers, respectively: SP1 for Lot 1 (25 substations covering North Lebanon), SP2 for Lot 2 (18

substations covering Beirut and the Bekaa Valley) and SP3 for Lot 3 (24 substations covering the region of South Lebanon). Various technical and administrative criteria were considered in the establishment of this subdivision: number of customers, subscribed amperes, subscribed capacity, number of transformers, transformers capacity, number of buildings, area (hectares), consumption and revenues and others⁶².

3.3 SPs Scope of Services

The General Conditions of the DSP contract detail the scope of services of the SPs. Accordingly the three selected SPs are responsible for planning, design, and constructions at the level of distribution facilities located in their assigned areas, with an overall objective of maintenance and modernization of the power grid, reduction of technical and non-technical losses, improvement of bill collection and installation of advanced metering infrastructure. A detailed description of tasks related to each activity is clearly stipulated in the contract, along with the required deliverables and technical specifications and standards. For the sake of providing further specificity of the services that the SP shall perform, the “Scope of Services”⁶³ details these services and requirements and is intended to supplement the General Conditions of the contract. This part of the contract stipulates that SPs shall assume full responsibility of all electrical distribution network services and related tasks on its service lot, and assign a period of time for the completion of the activity. These tasks are grouped into twelve categories (or tracks) of activities:

- 1- Project mobilization: requiring the SP to prepare and mobilize vehicles, equipment, and personnel for a transition of responsibilities with the existing EdL staff in regional divisions. This shall be conducted over a 2-months period at the beginning of the contract.
- 2- Network survey: each SP should complete a comprehensive survey and develop accordingly a network mapping assessing the conditions of all assets and equipment composing the distribution grid. This activity shall be conducted over a 6-months period.
- 3- Plans and programs: developing all plans and programs for each activity to be performed by the SP. To be delivered within the first 6-months of the project.

⁶² DSP Contract, Appendix 4-Area Subdivision

⁶³ DSP Contract, Appendix 3A – Scope of Services

- 4- Investment plan: to be developed in order to improve the state of the network based on the findings of activity no. 2, the network survey. To be performed during the first _- months of the contract.
- 5- Asset management: activity that will be conducted throughout the contract period and related to planning and design of LV and MV distribution network.
- 6- Construction of distribution facilities: also conducted throughout the contract period and related to the re-enforcement of the network providing new connections to customers with supply and installation of MV/LV substations, panels, transformers... as well as cable laying.
- 7- Distribution network operation and maintenance: conducted throughout the contract period as well and related to operations, maintenance, repair, management and coordination services.
- 8- Advanced metering infrastructure: the implementation of these services include the supply, installation and maintenance of advanced meters at MV/LV feeders and transformers.
- 9- Meter reading: performing the responsibility of meters reading, management, maintenance, replacement and violation discovery. This activity is to be conducted throughout the contract period.
- 10- Bill collection: related to the collection process of bills issued by EdL. SP shall collect bills and deposit in EdL revenues account, improve this collection and maintain accurate records of it, report all non-paying customers and undeclared connections. Activity to be performed throughout the contract period.
- 11- Customer services: managing, analyzing and responding to customers operational and technical complaints, all throughout the contract period.
- 12- Management and reporting: through which the SP provides periodical reports with technical and operational performance analysis, solutions and recommendations, to be submitted to the program manager/owner, throughout the project execution period.

All activities shall be performed pursuant to recommendations stated in the General Quality Standards and the Technical Standards appendices of the contract.

4. A CONTEXTUALIZED PROCESS RESEARCH

The access to a situation presenting such characteristics is by itself a research opportunity promising richness and having a great revelatory potential. More importantly, and since our

interest is not only limited to the independent progress of a PPP, but rather expands to its coevolution with the elements of the environment, we found in the context described earlier a set of interactions among institutional and political elements that could impact the performance of a PPP and shape its progress. The complexity of the structure interconnecting all these elements makes of it an interesting object to observe. The evolution process of this PPP, the DSP, taken together with the evolution of constituents of the environment surrounding it, is significant to the theory of coevolution which is our theoretical framework for analysis. We recall the statement of Lewin & Volberda (1999) on what would serve as an object of study for a coevolutionary perspective “A *coevolutionary approach, however, requires that sets of co-acting organizations and their environments be the object of study*” (p. 527). For the purpose of this research, the set of co-acting organizations are the organizations taking part in the DSP project (EdL and the three private companies); the object of the study is therefore the constellation of various elements (from the institutional and political environment) in a network structure and their interconnectedness with a central set of co-acting organizations, the DSP.

We propose through our research design a holistic approach to observe the entire process of coevolution of this object over a period of time. To understand this coevolution we swing between the context, the parts and the whole, and observe the type of interactions between them. Situating the case to study in its spatial and temporal context helps us to precise further our unit of analysis as well as the different levels of analysis. We base our reasoning on the so-far identified elements:

- the gap in the PPP literature, identified through our literature review: the need to have a dynamic/processual approach to look into PPPs,
- the analytical lens of coevolution that we chose in order to analyze our object of study and define the different levels of analysis,
- the methodological approach we found suitable to explore our object of study (earlier in this chapter) which is an inductive approach to explore PPP dynamics using process research strategy,
- the context which provides concrete details on the spatial and temporal environment within which our object of study is evolving,

and of course, our research question, “*How do PPPs emerge, operate and develop in an emerging economy, in the initial absence of a PPP dedicated regulatory framework?*”

We define the constituents of our object of study and the different levels of our analysis:

- a) At the micro- level: we investigate the DSP sequences of evolution; the factors that initiate and delimit each sequence; actions/reactions of the actors (partners and other stakeholders) and their role in each sequence; the performance of the DSP during each sequence and its capacity to reach its pre-defined objectives.
- b) At the macro-level: we look into processes, actors and factors, which are determinants in shaping the institutional environment that interacts with the DSP; the development of rules and policies regulating PPPs; the role of political actors in setting regulations.

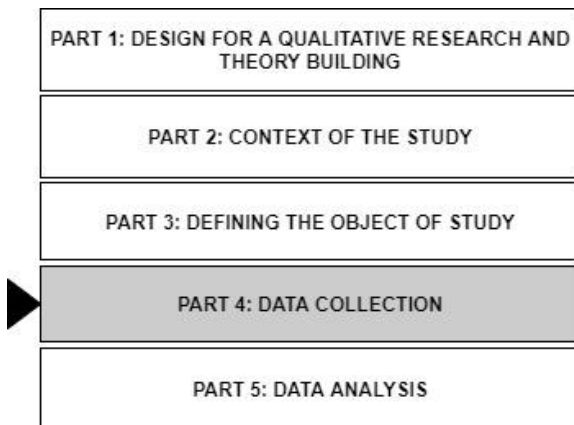
We follow the evolution of the process as it unfolds with time, describing the different steps of this evolution through the articulation of sub-processes defined by the actors and determining the performance of the project. The evolution is mainly delimited by temporal brackets, which allows us to retrieve a chronological sequence of events tracing the progress of the DSP. At this stage, we need to start considering the different levels of analysis as various categories of data impacting the trajectory of the DSP. We also identify critical events that may be inflection points that change the path of the DSP progress.

In parallel to these steps for realizing process research, and in line with the recommendations of Lewin and Volberda (1999) on research on coevolution, we adopt a set of dimensions which we try to incorporate in our research strategy design. We studied the DSP evolution over a relatively long period of time through longitudinal data gathering and analysis. We considered multi-directional causalities between and across different interacting elements of the entire system of the DSP and its surrounding environment. We looked for changes at the level of different institutional elements including the process of PPP regulation, and we observed the impact of these changes on the DSP phenomenon. We also observed how economic, social and political factors of the surrounding context may have changed over time and influenced the dynamics of the DSP observed. We also looked into how the evolution of the DSP in its turn has impacted environmental variables and we tried to identify these variables and the extent to which they were impacted.

Most importantly, we remained open for the emergence of new themes or dimensions coming from the field of study and that are determinants for the DSP coevolution with its surrounding environment. We believe that this brings important insights, and will surely suggest new

concepts and open new horizons for the analysis. This was initially intended through our inductive research approach.

PART 4 - DATA COLLECTION



In this part we provide details on our fieldwork. We explain how we identified the key informants taking part in our investigation. We highlight the challenges we had for accessing organizations. We also explain how we constructed our initial interview protocol and how this protocol has evolved during the study to address the different categories of

participating actors and to keep up with the process and environmental evolution, since our observation of the phenomenon is being made on a real-time basis. We then expose the different types of collected data with their respective sources and a focus on their relevance to this research.

1. ACCESSING INFORMANTS AND DATA COLLECTION

Gathering data in real organizational contexts are important for process research. And the dimension of time in these collected data is equally important (Langley, 1999), as we attempt to document as accurately and completely as possible the sequence of events relevant to his process research.

The field work was conducted while the DSP was “live development”, so capturing real-time data allowed insights on actual decisions and perceptions, which is significant in rich and fine data. Data collection has started in July 2016 through semi-structured interviews as a main tool for the start of the data collection. At first, we did not have a well-defined list of the persons to contact; we did not have a clear idea about the identity of stakeholders or key informants. It was through our first meeting with EdL representative, who is the President of the Project Committee (or the Project Manager) that we built a list of participants to call. This list of actors to be interviewed included representatives of the DSP stakeholders:

- EdL, the public partner (as Project Owner): the Project Manager representing the project committee.
- The three private partners, (as Service Providers): represented by their respective Project Managers, as well as members of their project teams.

- Consultancy company (as Program Manager): representatives of both consultancies that took turn as Program Manager in the partnership (up until then we did not know about these consultancies). In fact, we were told that the first consultancy company, that actually had a central role in the design of the DSP contract, may not be ready to take part in this research project, since they left the project in April 2016 on bad terms with EdL. But our drive to approach this actor, considered to be a major player in the DSP evolution, was strong: we wanted to get as close as possible to our subject, so we managed to have an interview with the Technical Assistant Director of the company.

On a different level, and in parallel to our interviews with the DSP stakeholders, it was also essential to identify key players of the PPP national institutional environment. In July 2016 was our first visit to the HCP, during which we met the council financial expert who became our main informant in this domain. It happened that during that period of time a team of PPP specialists from the World Bank were on an official mission in Lebanon to execute a country diagnostic for PPP procurement and also to assist the HCP in its mission of setting an appropriate PPP regulatory framework. Our HCP key informant helped us schedule an appointment for an interview with one of the World Bank team members. On a similar note, we also met with third-party actors from financial and legal institutions who were knowledgeable in both PPP practices in the Lebanese national context.

From July 2016 till February 2019 we did several rounds of interviews. 36 interviews in total were done, two rounds with some participants, three rounds with others (APPENDIX C provides details of these interviews). The time-span separating these rounds was not regular or unified, because scheduling interviews depended mainly on the availability of the participants, which was not the same among them all. The great majority of our encounters took place in a relaxed and open atmosphere, where the participants were particularly excited about sharing their experience and expressing their perceptions towards different aspects of this partnership. Some of them insisted on providing additional information they found important to share. For instance, a representative of one of the service providers gave us a 20-min presentation of how the company deployed its technical and human capital at the service of the partnership and went over the achievements done since the beginning of the project. Another representative of a service provider showed us landscape maps and plans of the distribution grid network while explaining the regional and territorial challenges they encountered during the execution of their activities. However we recall that only one of the service providers' representatives was relatively reserved and avoided participating in a

second round of interviews (although he was very responsive and rather talkative during our first meeting, but he avoided answering our calls when we tried to solicit him for a second interview).

Most of our primary data is collected through formal face-to-face interviews, in addition to numerous informal phone calls. The answers of the respondents were registered by means of extensive notes or recordings when allowed. In fact, the great majority of the interviews were conducted at the offices of the participating respondents located within the premises of the concerned companies or governmental institutions. While the participants did not mind keeping track of their answers, recording was not always possible. As an example, our interviews with participants from the HCP could not be recorded because visitors' electronic equipments were simply not allowed within the premises of the building. In fact, the offices of the HCP are located in the highly secured Grand Serail⁶⁴ which is the headquarters of the Lebanese Prime Minister and the Cabinet room. Accessing the Grand Serail is highly controlled and secured and visitors are only allowed in upon a formal invitation from officials working from inside the building.

The process of data collection did not only consist of interviewing participants in the DSP project or key informants of the institutional environment. During the first round of interviews, we noted that certain phenomenon, that took place sometimes earlier in the project development timeline, and that were determining factors at that time, were absent or merely mentioned in the discourse of the informants which implied the necessity for us to collect retrospective data from other sources of information. Although the observed phenomenon is still in progress and was initiated less than five years however, retrospective data collected *a posteriori* would be relevant: 1) to understand the circumstances and events that led to the current situation and 2) to be able to reproduce a systematic sequence of ordered incidents.

This practice is seconded by the recommendations of Langley (1999) to “*combine historical data collected through the analysis of documents and retrospective interviews with current data collected in real time.*” (p. 693). Existing material do not only serve as baseline information and historical record of events used to develop a case history; analyzing existing material contains pertinent data that has the power to reveal untold perceptions, decisions and

⁶⁴ Cultural digression: the Grand Serail is a monumental historical building situated in the heart of Beirut downtown and covering 39,700 sq.m of floor space. It is a blend of heritage architecture with a modern interior and high-tech facilities. Up until 1943 the Grand Serail served as the Presidential headquarters, and then turned into the headquarters of the Prime Minister with offices of his staff, cabinet room, ministers' offices, reception areas, conference rooms and press room.

events that cannot be collected through interviews alone. Besides, and following the common recommendations of ensuring construct validity, information liability and triangulation in case study analysis (Yin, 2009), it is necessary to support interviews by the gathering of secondary data retrieved from different credible and relevant sources. However, secondary data that are essential to studies conducted *a posteriori* are confronted with two key challenges: their accessibility and their validity (Thiétart et al., 2014).

Public sector organizations are legally required to be transparent and accountable for their actions and that extensive documentation is maintained for this purpose. However the access to internal documents is quite challenging when they are not published in open-access platforms. We also know that asking bluntly for such documents is not appropriate and will most likely induce trust issues between the informants and the researcher... At least, not towards the beginning of the fieldwork....

In the early stages of our data collection, we were given copies of the DSP contract-related documents (the general form of the contract and few annexes that explicit the scope of services and activities to be achieved, details on the roles of each partnering actor as well as the governance mode, the compensation and payment schemes...). Few months later, and during our second round of interviews, we were more at ease asking for additional documents, especially that we perceived the need to have retrospective data in order to be able to construct the entire DSP evolution as well as to understand the current status of the project. EdL representative and president of the DSP project committee handed us copies of memorandums of understanding signed between contracting actors, quarterly progress reports dating back to July 2013 and covering different time spans of the DSP journey, ministerial decrees and other internal reports issued by the MoEW. In addition, and for a comprehensive understanding of the context and the variables related to the institutional and political environment impacting the PPP in-the-making regulatory framework, we reviewed secondary data mentioned in different sources: law texts, reports published by local banks on the participation of private companies in infrastructure and service projects, reports issued by government institutions on infrastructure projects, annual/quarterly/special reports published by international institutions on PPPs in countries of the MENA region in general and in Lebanon in particular, data retrieved from online national and international databases (when available) as well as local newspaper articles. For this last type of data sources, we signed up for a membership at a Lebanese French-language daily newspaper, *L'Orient-Le Jour* to be able to access their archives.

We did in total 36 formal interviews with key informants from the public as well as the private sector (with a duration average of 71 minutes per interview). Each category of actors contributed a great deal in providing insights on different dimensions of the study (Table 3.5).

Table 3.5
Actors interviewed and insights provided for the study

Actors interviewed and their positions		Insights for the study
DSP Project evolution		
Public (EdL) Private companies (SPs) Consultancy	President of program committee, program managers, project managers, program consultants, engineering consultant, procurement manager, project assistant manager	Micro-level of analysis: sequence of events, actions/reactions of the actors, their own interpretations of the events, relational aspects among actors, project performance, governance; influencing factor; internal relationship and tension; project progress and key events
PPP regulatory framework		
Main actors: WB, HCP. Other actors: CDR, financial institutions	PPP consultant, procurement consultant, financial consultant	The development of the PPP regulatory framework: key actors, sequence of events; Political influences; progress of the legislation process and political influences, assistance of the World Bank

Table 3.6 summarizes the documents collected during our interviews. These internal documents constitute an important part of our analysis and coding process. The table below provides information on the type of collected documents with descriptive details, and the main insights provided for the study. ‘APPENDIX B – Data Collection / Existing Material / Internal documents’ provides an inventory of these documents with further details (date, source, title, date, size...).

Table 3.6
Internal documents and insights provided for the study

Type	Description	Insights for the study
DSP Contractual documents	7 documents: Prequalification and bidding - General conditions of the contract – Payment procedures – Scope of activities – Performance monitoring and compensation	Overview of the DSP project, terms and conditions of the contract, governance mechanism, roles and responsibilities of each actor, scope of activities, performance evaluation criteria...
DSP Quarterly reports	10 documents covering different time span of the DSP timeline	Evolution of the DSP project, general performance, individual performance of each actor, constraints, challenges, accomplishment of the project
Memorandum of understanding	2 MoUs signed by all partnering actors	Conflicts resolution related to contract extension, delayed payments and other pending issues

Official documents	Ministerial decrees and decisions, EdL BoD decision on SPs contract extensions and renewal	Terms and conditions for contract renewal
Companies presentation	Power point presentations on the companies	Actions deployed by the SP as part of the DSP activities
Internal memos	Divers content	Conflicts and ambiguities related to DSP contract interpretation

A main strength of case study design is the use of multiple data sources for data collection (Yin, 2003). This largely contributes to the understanding of the cases being studied through accessing a large range of data. Multiple sources of data collection are also multiple sources of evidence that provide opportunities for a more accurate data comparison. This research relies on two types of data, primary data generated by our semi-structured interviews, and secondary through archived documents that we consider of equal relevance and importance. We develop further details on the internal documents as a source of data in the next part.

Our research field was particularly challenging in the sense that we were dealing with different categories of actors, and real-time events and major changes were happening at both the micro-level of the DSP process as well as the macro-level of political and institutional environments. This was particularly stimulating. We could easily notice the tendency of some of the informants to unintentionally reorient the conversation to express their own perceptions, thoughts and feelings, towards recent pressing events, instead of lingering on past events. This happened repeatedly despite primary focus of our questions on processes and incidents that historically modulated the progress of the project. In order to adapt to this situation, we focused our efforts on the following:

First, we found it essential to go through historical data for the sake of understanding events that occurred in the past and that the participants have difficulties to retrieve, or even missed retrieving (intentionally or unintentionally) in details during interviews (we detail further the types of data collected in section ‘3-Types of data collected and triangulation’).

Second, for each round of interviews and category of actors we adjusted our interview protocol in order to keep up with incidents impacting the entire process and addressing upcoming issues that are of general interest to the DSP process but also of particular interest to the company interviewed. Details on the interview questionnaire are explained in the next section.

2. DEVELOPING AND DEFINING THE INTERVIEW QUESTIONS

Personal interviews are one of the main techniques we used for data collection. Given the high importance of the interactivity and the sensitivity of the respondents to our inductive grounded approach for data theorization (Gioia, et al., 2012), we carried these personal semi-structured interviews with an interview guide consisting of a checklist of topics to be covered. We formulated the questions around these topics in the course of the interview granting a large margin of freedom for the informants to elaborate on their experiences and express their perceptions, following by this the guiding principles and ground assumptions of Gioia method in giving “*extraordinary voice to informants, who are treated as knowledgeable agents*” and “*preserve flexibility to adjust interview protocol based on informant responses*” (Gioia et al., 2012, p. 26). At this level, we would like to quote a particularly influencing statement of Gummesson (2017) on the selection of questions during personal interviews:

“The selection of questions is governed by the actual situation confronting the interviewer... Attention is paid to what the respondents consider important, even if this was not included in the original interview guide. This inductive aspect is important to allow sensitivity and avoid forcing. The researchers have total freedom to change the form of the interview during a study and to exclude or add to areas of interactive inquiry....Validity is improved by the ability to let questions evolve in the course of a research project...Data will arise in a context which is not necessarily very clear in the beginning; in fact, it should not be clear. ” (p. 228-229)

It is also important to mention that the initial interview protocol is not the same for all categories of actors. We did not ask the same questions for informants at the micro-level of the DSP projects (which are the actual partnering actors in the project) as well as for informants working on the national PPPs regulatory framework (i.e. respondents from the HCP). That would be of a total irrelevance. However, we made sure to orient the conversation towards asking questions that could reveal insights on feedback among the elements of these two levels of analysis, for instance a potential relation between the DSP (or one of its constituents), with the PPP regulatory process and its key actors (a particular influence exerted, a causal connection...). As an example, in our first round of interviews we raised the following question: *Is there any national/international body that helped as an external moderator/advisor with any aspect of the project design? i.e. procurement process,*

contract design, risks allocation between public and private partners... We also asked the private companies if they ever got involved in other PPP-like projects in Lebanon and if they ever collaborated with the HCP in this regards and not only with line ministries.

Following the twists and turns of the DSP progress and given the different categories of actors involved and the particularities of each actor, revising the interview protocol before each round of interviews was a must. It did not take us much time on the field to notice that many political variables, regional constraints as well as institutional changes have largely impacted the evolution of the DSP project in general and the course of actions of each service provider in particular. For example, we recall that the second round of our data collection overlapped with a stressful period during which partnering actors were eagerly waiting for the Cabinet of Ministers to approve (or not!) the renewal of their contracts. So in order to keep up with these changes we had to adapt our interview protocol before our visits. However, and while remaining open to the emergence of new concepts, we tried to maintain consistency among interviewed respondents by addressing the same topics to allow comparison during data analysis, but most importantly we remain consistent with our initial research question and underlying interrogations.

Our questions addressed both facts and opinions, and it is mainly when talking about their personal perceptions that the informants were most relaxed and motivated. Questions evolved during the period of data collection around the guiding categories and topics in Table 3.7:

Table 3.7

Topics of the interview guides

AT THE MICRO-LEVEL (WITHIN THE CONTEXT OF THE PROJECT)
On the DSP project description and initiation
Type of contract; General contractual terms and conditions; Partnering actors and their selection; Scope of activities; Monitoring process; Performance evaluation and partners' remuneration; Governance mode; involvement of external advisor/mediator (local or international...
On the relational aspects among partnering actors
Involvement of private actors in contract design; Relation between SPs and EdL; Relation between EdL and both consultancy; Relation between SPs and both consultancies; Relation among the three SPs; Partners' perceptions of the project governance mechanism; Conflict resolutions...
On appointing a new consultancy company
Relational aspects between EdL and both companies; Relational aspects between SPs and both companies;

Reasons why the first consultancy decided to leave the project...

On the DSP contract's extension/renewal

Constraining factors; Re-negotiation process; Aspects (contractual or others) that changed during contract renewal; Contract ambiguities...

AT THE MACRO-LEVEL AND INTERACTION WITH THE ENVIRONMENT

On constraints and challenges facing DSP evolution

Constraints related to the project in general, and to each SP in particular; Regional constraints; Adaptation to unplanned events and incidents; Political and institutional constraints...

On actions taken by the partners towards particular incidents impacting DSP progress

Social movements; Refugees crisis; Restriction in accessing some areas on the Lebanese territory; Effects on DSP evolution and performance; Actions/reactions of the actors; Role of MoEW in regulating these incidents...

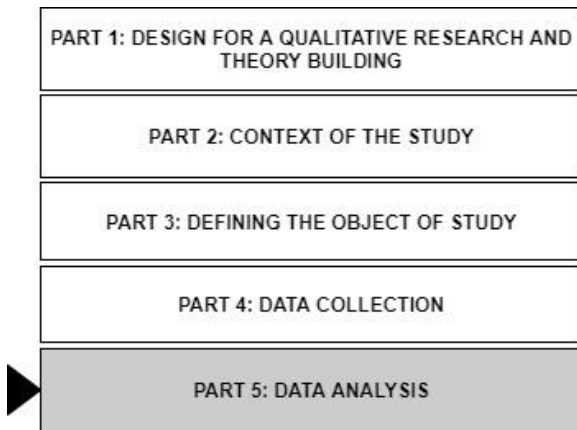
On the collaboration with the HCP

Actors awareness of the new PPP law; Prior or future collaboration with HCP; Readiness to invest in future projects with MoEW; Readiness to invest in future projects with HCP; Readiness to invest in future projects under current law or PPP-Law...

On the PPP institutional and regulatory framework

Current modes for governing PPP projects; PPP-law enactment: Reasons for delay and constraining factors; Key players; Role of HCP in PPPs current project in general and DSP in particular, political challenges...

PART 5 - DATA ANALYSIS



Qualitative research methods vary in their preferences and their prescriptions for how to conduct fieldwork and write about it (Saldaña, 2013) while preserving adherence, loyalty and rigor. To better understand the diverse patterns and complex meanings of the data generated and collected through inductive approach to the field of study on PPP dynamics, we try to

give sense to this data by analyzing it. In this part we describe the methods for qualitative analysis we put in place to be able to attribute meaning to raw data collected. We start with explaining the process of data condensation and preparation before coding – leading later on to theorization - while we refer to scholars guiding principles on process data analysis, namely Langley (1999), Pettigrew (1992) and Gioia et al. (2012). We also present the challenges we faced during the different steps of data analysis.

1. PREPARATION OF THE DATA AND DATA PROCESSING

“Process data collected in real organizational contexts have several characteristics that make them difficult to analyze and manipulate” (Langley, 1999, p. 692). The author proceeds to advance that data often deal with sequences of events, involve multiple level of analysis with ambiguous boundaries. Arranging the collected raw data into a structured material is not an easy task. Langley (1999) suggested seven generic strategies for the analyzing and theorizing from process data: narrative strategy, quantification strategy, alternate templates strategy, grounded theory strategy, visual mapping strategy, temporal bracketing strategy and synthetic strategy. The author advanced that each strategy favors a different type of process understanding or “sensemaking” among which the researcher can select or mix and match, depending on the research approach and the nature of data in hand. The most important is to be able to link data to theoretical perspectives. In the same vein and for the same purpose of “sensegiving” while demonstrating qualitative rigor, Gioia et al. (2012) chose to link data to the induction of new conceptual insights through reporting both informants and researcher voices (1st and 2nd order analysis), and incorporating them into aggregate conceptual

dimensions, for the basis of building a data structure and developing it into a dynamic grounded model.

Theorizing studies advance that a process model in general “*involves a storyline that reveals the mechanisms by which events and activities play out over time*” (Cloutier & Langley 2020, p. 2). Therefore, and for the purpose of this research, and also to be in line with what was advanced by Langley (1999) and Gioia et al. (2012) on theorizing from process data, we adopt a narrative writing style to tell the story of the DSP in its contextual details. In our findings section we narrate the story based on the concepts developed through the data structure (themes and dimensions) and we include lots of evidence and informant quotes. Our findings will also include visual graphical representations which are particularly useful and powerful in representing numerous dimensions and spanning multiple levels of analysis and several processes (succeeding or parallel) in a single diagram. It is true that drawings are not theory, but can offer an effective way of data reduction and synthesis, and constitute an intermediary step and the beginning of theoretical explanation before further abstraction (Langley, 1999; Miles et al., 2014).

As mentioned earlier, the types of data collected include handwritten field-notes, interview audio recordings, and documents in electronic or paper format. This raw data must be processed in order to be ready for analysis; that means the raw data must be transferred to a refined readable text to be analyzed. According to Langley (1999) raw data “*do not come quite so neatly sliced and packaged*” (p. 692) and the main challenge lays in moving from “*shapeless data spaghetti toward some kind of theoretical understanding that does not betray the richness, dynamism, and complexity of the data but that is understandable and potentially useful to others*” (p. 694) which is not an easy task to do. Another difficulty also concerns the selection of what data to retain and what is not directly relevant for this research, given that data gathered in an inductive approach tends to be heterogeneous and include interpretations, opinions, events feelings... An additional difficulty we also faced is that some of the documents that were transferred to us as well as all the interviews were conducted in the Arabic language. This implied an additional step of data preparation before becoming ready to analyze, their translation from written Arabic (for the documents) or the Lebanese dialect (which is the spoken dialects in interviews) to the English language. Further details on this will follow in the next sections

In our research design we incorporated few dimensions that relate to process research as well as to coevolutionary studies and that we observe again at this stage of data preparation and

processing. We studied the DSP phenomenon over a relatively long period of time through longitudinal data gathering. So time was a critical dimension to consider in our data. We considered multi-directional causalities between and across different interacting elements of the system. We also incorporated different types of effects as a consequence of feedback flows and interacting variables. We looked for changes at different elements of the macro-environment and how they may-or may not- affect the DSP phenomenon, and vice-versa. Most importantly, we remained open for the emergence of new themes coming from the field of study because we believe that this brings important insights, and will surely suggest new concepts and open new horizons for the analysis.

2. DOCUMENTS ANALYSIS

Qualitative research is expected to draw upon multiple sources of evidence (interviews, documents, observation, physical artifact...) as a mean for triangulation and credibility (Yin, 2009). In addition of providing background and context to the phenomenon observed, documents can be *“the most effective means of gathering data when events can no longer be observed or when informants have forgotten details”* (Bowen, 2009, p. 31). These retrospective data allow the researcher to reproduce the sequence of ordered events that led to the actual situation. But restricting the role of existing material to a simple narration of a case is an underestimation of their importance and relevance. Existing material contain pertinent data that has the power to reveal untold perceptions, decisions and events that cannot be collected through interviews alone. For Gummesson (2017) *“the text comes alive and begins to speak and the researcher tries to find the actual meaning behind the material; compare this to the expression ‘read between the lines’.”* (p. 217). As mentioned earlier, during our field work we have collected a variety of documents from multiple sources of data that we have examined carefully in order to extract information that are relevant to what we were looking for.

The analysis of the DSP contractual forms (contract general conditions and appendices) allowed us to understand the fundamentals upon which the DSP partnership was built and write an overview of the DSP specifications: the bidding process, the regulatory framework, the governance mechanism, the roles and responsibilities of partnering actors, the payment and compensation scheme of the private companies, and so on.

As we mentioned earlier, during our interviews we realized that informants get so immersed in their present situation that they merely remembered details about past events. Even when

we focused our questions on specific events that happened in the past, we realized that answers sometimes missed details. Therefore we relied on the provided quarterly reports to cover this gap. Although scholars are rather sceptic towards the validity of secondary data collected *a posteriori* (Thiéart et al., 2014), we consider these quarterly reports as highly reliable and a legitimate source of information: they present a comprehensive description and documentation of the progress DSP project on a quarterly basis since its execution start date, they cover all aspects of this progress (technical, operational and financial) and they are written by the consultancy company and agreed upon by all partnering actors. These reports are part of internal archives belonging to EdL, and are supposed to be confidential. However, we were granted access to ten of these reports which cover various time spans over the period of the study, after few months of field work. We believe that by that time actors have gained enough confidence and trust towards the importance of this research and felt more at ease sharing further information, whether verbal or written information. The analysis of these ten quarterly reports was quite challenging, their volume and the quantity of information they present is very large and diversified. In terms of content, these reports present extensive technical, operational and financial details: the status of all project tasks (planned, executed and delayed), activities performed by each stakeholder (service provider, EdL and project managing company), associated parameters and indices evaluating these activities, details on stakeholders meetings held and other communication (letters, memos and documents) exchanged during the period covered by each report, KPIs and financial indicators progress, subsequent decisions and actions taken by each stakeholder to address the various challenges facing the project... In terms of volume, the number of pages ranged from 106 pages to 288 pages per report (without the appendices); so coding all these pages was of course unconceivable. Deciding upon what information to retain or disregard, sorting, classifying and categorizing, was a particularly interesting exercise, although highly time-consuming. Once again we focused on data that give insights on the overall progress of the DSP project and also data related to any environmental element revealed to be impacting this evolution. We then reduced the volume to a manageable document of nearly 80 pages synthesizing the content of these ten quarterly reports by retaining activities that inform us on the following guiding categories: factor triggering a process or sub-process (mediation / adjustment / bottleneck / constraints), change in a process trajectory, temporal interconnectedness of events, role of contexts and actions in explaining a process, link between process and outcome, elements spanning multiple levels of analysis and any coevolutionary effects that

could be detected among these elements, as well as other emergent theme to retain or simply to ignore.

We consider analyzing quarterly reports of equal relevance and importance as analyzing primary data collected through interviews for the purpose of this research, since they allowed retracing retrospectively the evolution of the DSP process. Going through all these pages was particularly stimulating as the entire picture of the coevolutionary process started to get clearer. When the analysis of these reports was coupled with the analysis of data coming from other sources of information, the missing elements started to emerge gradually and take their places to fill different gaps, add clarifications and provide more accurate explanations.

3. INTERVIEWS TRANSLATION AND TRANSCRIPTION

Another step in data analysis as a preparation for coding is the transcription of interviews' recording in order to transform them into a readable text that could be coded later on. This task is much simpler and less time consuming when the analysis and the interviews are in the same language. As stated earlier, our collected data comprises documents written in Arabic language: official documents and memos, laws, decrees... Some of the texts are available in English (i.e. the PPP Law) though. However, the interviews were mostly conducted in the Lebanese spoken language or the Lebanese Arabic dialect. The conversation of field text to research text needed choices and decisions to be made. We consider this as a cultural challenging issue, because in social sciences in general, and in qualitative interpretive studies in particular, the translation concerns ideas, opinions, perceptions and feelings expressed in one language within a social group to another language. The objective of interpretive studies is the understanding of people's experience and the meaning they give to this experience. Therefore, while translating it is important to keep this social aspect in mind. Interview transcription was not a straightforward technical task, especially that the end use of the transcripts is not limited to the use of facts to narrate a story. Transcripts will rather be used through a process of systematic coding and analysis that is primarily based on informants' quotes. At this level we couldn't but raise multiple questions and try to address them: Is it problematic if the researcher himself performs the task of translation? Does this relate to epistemological considerations and the position of the researcher in this debate? Our dilemma was to achieve balance between remaining faithful to informants' words and also preserving credibility and rigor in methodological requirements.

Besides being a Lebanese native and fairly fluent in English, other factors helped us render this conversion process credible: first, the analysis of documents written in English (i.e. the DSP contract related documents, the quarterly reports) helped us refine our terminologies during translation/transcription process and easily find the English equivalent of the Arabic words used to describe factual elements; and second, the ‘multilingualism’ as a characteristic of the Lebanese society. Although Arabic is the official and national language, linguistic influences of various European cultures significantly shape language patterns of the Lebanese society. In fact, multilingualism is one of the most impacting and valuable heritage left by decades of French and English colonization of Lebanon. This aspect was reinforced through centuries by the establishment of educational missionaries and economic institutions making by this French and English languages as first and second foreign languages officially adapted in the Lebanese education system. Interestingly, this has induced a phenomenon of code-switching widely spread over the different Lebanese social classes and especially among educated persons (Bahous et al., 2011). In Lebanon it is common practice that a person alternates between the Lebanese spoken Arabic language, the French language and the English language while engaged in an informal talk or a single conversation. Sure enough, this was the case of the participants in this research. They are of different profiles in terms of education and language proficiency, with the great majority of them speaking English as a second language. This was obvious during our interviews; informants mainly spoke in Lebanese Arabic, but very often alternate between English and Arabic when it concerns terminologies related to the DSP project in particular or terms of the PPP lexical field.

4. CODING AND DATA STRUCTURING

As mentioned earlier, the collected information from field work for the purpose of this research has taken different forms and is therefore heterogeneous and not really quantifiable. We needed a kind of mechanism that breaks the data apart then provides elements to cluster together similarities and regularities, to guide our reflexion and inspire our sensemaking, this latter not being an easy and linear task to perform. As Langley (1999) simply puts it: “*The analysis of process data requires a means of conceptualizing events and of detecting patterns among them*” (p. 692). One way to analyze our data can be through coding. Coding has been masterfully discussed in different manuals. We choose as a fundamental reference in our approach to coding and the type of codes we found appropriate for this research design, the seminal works of Johnny Saldaña (2013) on coding for qualitative research.

Coding is best described by Charmaz (2001), (as cited in Saldaña (2013)), as the “critical link” between data collection and their interpretation or explanation of their meaning. For a more exhaustive description of codes, Saldaña (2013) advanced that:

“In qualitative data analysis, a code is a researcher-generated construct that symbolizes and thus attributes interpreted meaning to each individual datum for later purposes of pattern detection, categorization, theory building, and other analytic processes. Just as a title represents and captures a book, film, or poem’s primary content and essence, so does a code represent and capture a datum’s primary content and essence.” (p. 4)

Saldaña (2013) conceives coding as a cyclical act and therefore recommends two cycles for data coding. The first cycle requires particular attention on emergent patterns that reflect the experience and perceptions of the participants and a second cycle for refining and revision of first-cycle codes entailing analytic skills for abstraction and conceptualization. This scheme, or approach to coding, is further supported by Gioia et al. (2012) who proposed a systematic presentation of both 1st-order analysis and 2nd-order analysis, linking by this data to insights and therefore demonstrating enhanced qualitative rigor in studies on social construction processes through ground assumptions. The Gioia method praises the role of informants as the main “*knowledgeable agents*” and the best positioned to “*construct their organizational realities*” by explaining “*their thoughts, intentions and actions*”. Therefore the authors propose to stay faithful to the voices of the informants and represent them by using their own terms during the first cycle of coding. Concepts used by informants constitute a solid basis for providing evidence for the researcher’s assumptions, and this was the main impetus behind the authors’ development of a systematic way to justify findings emerging from an inductive search. Through the second cycle of coding, Gioia method suggests using “*researcher-centric concepts, themes and dimensions*” for refining the overwhelming number of codes categories generated from the first order coding cycle, the “*informant-centric terms and codes*”. An additional level of coding results in what the Gioia method founders name as “*aggregate dimensions*” is suggested to end up with a data structure displaying 1st-order concepts, 2nd-order themes and aggregate dimensions: a graphic representation of how the researcher progresses from raw data to terms and themes.

On selecting the appropriate type of coding, Saldaña (2013) posits that coding methods must be aligned with the nature of the research question guiding the study. A harmony between paradigmatic, conceptual and methodological assumptions and what the author calls

“accompanying coding methods” is to be maintained. In regards to coding types that are most compatible with a grounded theoretical model or a “*classic or re-envisioned grounded theory*” (p. 62) about a phenomenon or a process, the author recommends using: In Vivo, Process, Initial, Focused, Axial and Theoretical Coding. Based on these coding methodological assumptions as well as the developments of Gioia method, we will adopt the following types for each coding cycle in our data analysis:

- For 1st-Order concepts (or First cycle coding), In Vivo Coding: this type of coding was also labelled “verbatim coding” for the exact reason that it refers to a word or phrase from the actual language found in raw data, or the terms used by the participants themselves. Saldaña (2013) explains that this type of code is mainly used for grounded theory studies and those that honor the participants’ voices, which is highly advocated by Gioia method.
- For 2nd-Order themes (or Second cycle coding), Axial coding: this type of coding will be used to reassemble codes generated previously (1st-order themes). By grouping similar codes, not only we reduce the number of initially generated codes, but also we sharpen the code “*to achieve its best fit*” (Saldaña, 2013, p. 218, quoting Glaser (1978)). The ultimate goal to be achieved during Axial coding is to achieve theoretical saturation. The codes generated at this level represent: actions in the data or factors that are determining variables of the actions.
- For Overarching theoretical dimensions, Process Coding: often labelled as “action coding”, this type is used for more generable conceptual action (i.e. negotiating, surviving, struggling), or processes implying actions intertwined with the time dimension, “*such as things that emerge, change, occur in particular sequences, or become strategically implemented with time*” (Saldaña, 2013, p. 96). This goes in line with the sequences of PPP dynamics that we wish to observe. This type of codes uses verbs in their gerunds form “-ing” to indicate action in the data.

Axial coding and process coding are both types of coding encouraged in diagramming processes where arrows and boxes are connected to show temporal progression. This joins the main objective of Gioia method in generating a grounded theory model that assembles the constellation of boxes and arrows illustrating relational dynamics among themes and dimensions contained in the data structure.

What we actually are going to code is what we look for in raw data. This concerns the following concepts:

1. processes that come across multiple levels of analysis and dynamic factors that triggered changes in the DSP process trajectory, (mediation, adjustments, constraints slowing factors, interruptions...);
2. temporal interconnectedness and understanding of the sequence and flow of events over time, to determine a succession of events, a sequence of stages or even cycles of recurrent events;
3. the role of contexts and actions in explaining the DSP process and the role of the process itself in shaping contextual elements or other processes taking place in the contextual environment;
4. a search for holistic rather than linear explanations of the DSP process that makes sense of all its components (actors, governance, activities, performance...);
5. links between process and outcomes in terms of the process performance and its capacity (or incapacity !) to create difference or to realize the objectives it was initially set for;
6. coevolutionary effects among the elements revealed within and across levels of analysis.

Through an iterative process of inductive generation of patterns, we identified first-order codes (the ones induced by informants and archived data) that we assembled into second-order themes (brought by our own interpretation) and condensed further into aggregate dimensions or more theoretical concepts.

We started the first-order coding by reviewing multiple sources of data: interview transcripts, quarterly reports, internal documents, events and historical data retrieved from press archives and special reports. We identified datum that we believe are worth taking into account because they represent a central idea or a fundamental concept. The size of datum varied depending on its revelatory capacity (few words or few lines). We attributed to each identified datum “in vivo” labels or labels that are the closest to the meaning of the informants to ‘loyally’ capture their experience. Next to each code, we explicitly noted the level of analysis to which the attributed codes correspond: micro-level (the partnership level), or macro-level (the elements of the surrounding environment). We also explicitly marked the codes that we believe are in relation with other codes in other levels of analysis, in order to capture coevolutionary effects between the elements of different levels of analysis. During

this process we continuously compared identified codes among each other's: we either categorized emerging codes under previously identified ones if they represent similar thoughts and concepts or created new categories if they were distinct.

During the 2nd-order coding process, we continued comparing the 1st-order generated codes among each other's, over time and over the different levels of analysis and assemble them in themes and concepts. Various intermediary first- and second-order coding steps were necessary between raw data and the final step of conceptualization. The last phase is a further level of theoretical abstraction where we identified analytical relationships between themes of 2nd-order coding and labeled these dimensions in a way to indicate processes and actions articulating the generated grounded models.

Accordingly we first classified the resulting codes into two distinct data structures, representing the concepts, themes and dimensions related to each process observed: the PPPs legislation and emergence of a regulatory body, as well as the process of crafting a PPP for energy distribution.

Then we retained concepts that interplay between both previous processes by introducing an additional level of abstraction. This will illustrate the dynamics supporting PPPs emergence and development in the Lebanese context.

These results will be further explored in the next chapter.

SYNTHESIS AND TRANSITION

This chapter explained the methodological design behind this qualitative research and provided arguments for the methodological choices at each phase of the research process: the philosophical assumption underneath this research, the way to approach the field of study, the choice of the object to study and its empirical context, the process of data collection and the data analysis. The primary focus is to understand the actions, thoughts, beliefs and perceptions of actors towards a particular experience; making sense of a social reality posits this research in an interpretive approach with a main concern to ensure consistency, rigor and coherence through the research design. For this purpose the methodological choices had to be relevant to the nature of research question, the object of study as well as the analytical framework; and most importantly they had to be compatible with each other's.

In order to observe the dynamics of PPPs coevolution in the particularly challenging context of developing economies and understand the lived experience from the perception of concerned actors (organizations and individuals), we adopted a single-case study that we investigated through process research fundamentals. We inductively examined the processes articulating this crafting experience and occurring at different levels, in a particular context and within a specific timeframe. At the same time, we observed related changes in the surrounding environment; shifts in institutional rules and changes in socio-economic variables and political influences, allowing the research to track the relationship between both the organizational level of the PPP (as a partnership) and environmental changes and influences. For this observation we relied on seminal works in process research strategies and design (Van de Ven, 1992; Pettigrew, 1992; Langley, 1999) that we complemented with Gioia method to identify emerging concepts and constructs in order build at a later stage the grounded conceptual model for PPPs coevolution.

In order to delimit the study in space and time, we presented an overview on how developing economies in the MENA region are engaging in PPP programs with a particular focus on countries experiencing a transition between pre-PPP and post-PPP regulations. These countries, driven by a significant need to attract private investments in order to support their economic growth, are in a phase of structural and economic reforms. Lebanon is one of these countries that suffer from severe deterioration in public infrastructure and services due to various historical, economic and political reasons. The country has been involved in a set of

sectoral and national reforms with a great support from the international community; reinforcing PPPs being one important aspect of these reforms. The government suffers from technical and managerial capacity, transparency and confidence issues especially in bidding processes where credibility is highly crucial to attract private investors. In order to increase its readiness for PPPs, regulatory developments are strongly needed to ensure a solid framework for PPP policies in various infrastructural sectors, with a priority attributed to the energy sector. In fact, the energy sector has been a source of major deficiency in the Lebanese economy, facing serious technical, financial and administrative difficulties; which makes it a favorable candidate for radical reforms. The Lebanese government chose a PPP mechanism to support its national policy for the energy sector reform, introducing a PPP for the restructuring and development of power distribution infrastructures and services. We explain the characteristics of this program, the Distribution Service Providers (DSP) that justifies its choice as the PPP to look into. We detail the organizational structure of this PPP, partnering actors, mechanism of governance and overview on main contractual terms and conditions. In parallel, an ongoing process of regulatory reform was also taking place at the national level. The reform consists of the design and setting of rules, laws and regulations to organize the country's investment in PPP programs. This entire setting constitutes an interesting field to explore, since the observed phenomenon and related processes evolving together, form a case study underlying issues that are nationally important, and implying significant policy and practical terms.

The access to an evolving situation presenting such dynamic characteristics and challenges is by itself a research opportunity promising richness and having a great revelatory potential. We delimited further the object of study as being the evolution process of the DSP, taken together with the evolution of environmental constituents surrounding it. This object seems to be highly significant to the theory of coevolution, where the set of interactions among institutional and political elements could greatly impact the performance of the PPP and shape its progress. The interest of this object lies in the complexity of the structure interconnecting all the constituting elements. We precise as well the different levels of analysis covering the micro-level investigation of the DSP sequences of setup and the role of partners and stakeholders in these processes; the macro-level, where evolving processes are related to the reforms of PPPs regulations and a key determinant in shaping the institutional environment of PPPs. Most importantly we remained open to any concept that emerges from the field of study.

Next, the process of information-gathering and field exploration are detailed. It was highly significant for this type of study to be able to capture real-time data that allow insights on actors' current decisions and perceptions, since the processes observed were still in progress at the time of data collection. Retrospective data collected are also equally important and relevant to understand the circumstances and events that led to the current situation and to allow an accurate reproduction of systematic sequences of incidents. In this direction, the sources of collected data were various: primary data collected through live semi-structured interviews and secondary data available in archived documents. It is essential to mention that both primary and secondary data were equally important for tracing the path of observed processes and understanding all contextual circumstances that helped shaping these processes.

Particular challenges were faced during this phase of data collection. The most significant is related to the access of legal and official documents of the public sector, which are extensively rich but not published in open-access databases. Another challenge was also related to the different categories of actors and organizations involved in this research (representatives of different public institutions, managers of private firms, PPP consultants, law firms, financial institutions...), which rendered the task of developing interview protocols particularly stimulating. Real-time events and major changes were happening at both the micro-level of the DSP process as well as the macro-level of political and institutional environments. This as well kept us highly alert and ready to follow up with informants, to re-orient our questions during different rounds of interviews and most importantly to meet new actors or ones that have exit the sphere of coevolving processes after being, at some point, key actors and decision makers in this sphere. During interviews we insisted on formulating questions that grant a large margin of freedom for the informants so they can elaborate on their experiences and express their own perceptions (following ground assumptions of Gioia method).

The treatment and analysis of the considerable and varied corpus of gathered data is then explained. The aim of data analysis is to link data to theoretical perspective, which is a process of multiple stages and not quite obvious when the research deals with messy qualitative data. We rely on strategies for data analyzing suggested by process theorizing studies (Langley, 1999; Gioia et al., 2012). The main purpose behind using these strategies is to give sense to raw data. The types of data collected are heterogeneous and important in volume, including handwritten field-notes, interview audio recordings, documents in

electronic or paper format which necessitates several steps of preparation, organization, selection and processing before reaching the final step of coding. Since the interviews were all done in the Lebanese language (spoken Arabic), and also most of the official documents provided are also in Arabic, a step of translating data into the English language was necessary. Documents and existing material had a great share in data analysis. The importance of these sources of data relies in their power to reveal perceptions, decisions and events that could not be collected through interviews alone. The documentation of the PPP progress constitutes a valuable, reliable and a legitimate source of information presenting a regular comprehensive and detailed description of the project progress. These documents were of course included in our coding scheme and process.

The final step of data analysis before theorization is the coding. We pursued an iterative process of coding as suggested by the Gioia method to all collected data: first-order cycle coding is centered on the voices of the informants providing evidences that emerge from the inductive search; the second cycle of coding suggests concepts and themes generated from the first order coding cycle; and a third level of coding results in “*aggregate dimensions*” reflecting further conceptualization.

During all this process we were mainly looking for elements that are critical to the analytical lens through which we are looking at PPPs. We considered: multi-directional causalities between and across different interacting elements of the system; different types of effects as a consequence of feedback flows and interacting variables; changes at different levels of analysis and their mutual influence with the DSP. Most importantly, we remained open for new insights brought to us by the emergence of new themes from the field of study.

This coding process led to the identification of dimensions and concepts related to two distinct phenomenon: the PPPs legislation and emergence of a regulatory body and the process of crafting a PPP for energy distribution. Data is then classified into two distinct data structures related to each process observed. We next brought particular attention to different types of interplay revealed within and between the concepts previously identified, looking for processes of coevolution among these concepts. This will illustrate the dynamics supporting PPPs emergence and development in the Lebanese context and presented as the empirical results of the analysis in the next chapter.

Chapter 4

Empirical Results

INTRODUCTION

In this chapter we present the results of data analysis that preceded. The process of data analysis is our logic behind data structuring and theorizing. The previous chapter of methodology, detailed the approach adopted to collect/treat and analyze data using a process research design to explore the dynamics of PPP evolution. We recall that the PPP, object of this study, is a partnership between three private, service providers, and the Lebanese energy utility, EdL, over the modernization of the energy distribution grid. This PPP constitutes one of the recent projects taking place at the national level, and among the existing projects, it presents the characteristics of a PPP in terms of contractual terms, risk sharing and deferred compensation based on performance evaluation and monitoring.

In the meantime, the country was going through the establishment of a regulatory framework to govern PPP projects. It was therefore interesting to understand the dynamics of this regulating process to be able to constitute a holistic picture on how PPPs are handled in this country with an initial absence of proper regulations as well as during the co-construction of these regulations.

We present our findings in four subsequent phases. We present a **timeline and a sequence of main events** in PART 1, which is pertinent to the evolution of the DSP project along with the process of PPP legislation taking place at the national level. We also mention on the timeline important dates reflecting changes at the political environment that were impactful on both the DSP process and the PPP legislation process.

In PART 2 we present the ordering and structuring of data related to the **process of PPPs legislation and emergence of regulatory body**. We construct a detailed story of how the PPP regulatory framework was put in place, the circumstances leading to it, the main actors and incidents involved in its setup, as well as the events following it.

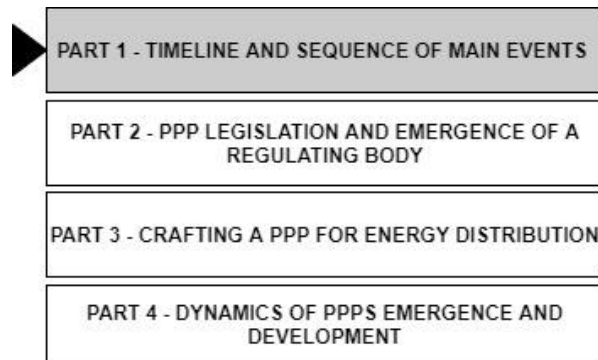
In PART 3 we describe the **crafting of a PPP for energy distribution** at the Lebanese energy sector, also based on the ordering and structuring of data related to this phenomenon. We explain the key processes leading up to the setup and implementation of this PPP, with a detailed analysis of the microevolution of the process itself as well as the interplay with elements of its surrounding environment.

In PART 4 we present **the dynamics of PPPs emergence and development** based on the consolidation of concepts and dimensions revealed in PART 2 and PART 3.

During the presentation of our results we give particular attention to narrate our story that is driving towards concept development while carefully presenting rich empirical evidences to emphasize the linkage between data and theory.

Because single case studies are context-related, we found it important to shed the light on details that contribute to the understanding of contextual and local variables that are determinants to a PPP project when the latter is being implemented in a challenging environment. We explore how acting stakeholders react and adapt to these environmental disruptions, defining by this course of action of the partnership and its performance over time. For this we compiled details on processes taking place at the socio-political level in parallel to the DSP evolution and placed them in appendices. In addition to their relevance to our analytical framework of coevolution, these details provide important historical and contextual insights on elements of the environment impacting the partnership evolution.

PART 1 - TIMELINE AND SEQUENCE OF MAIN EVENTS



Different approach may co-exist for the sake of process understanding, but the dimension of time remains essential for this type of research. The narration of a detailed story provides an accurate description of the events so that any external reader would understand it, even if he/she is unfamiliar

with the context in which this process is evolving.

Retrieving a chronology of events is a preliminary step preparing the construction of the story and subsequent analysis of gathered data. It is important to mention that at the stage of the construction of this timeline, our analysis of collected data has reached a level of condensation and categorization that precedes its abstraction and conceptualization. We provide hereafter, in Table 4.1, the chronology of main events constituting the DSP evolution from the date of its conception in June 2010 as part of the energy sector policy reform, to the extension of its completion date in June 2018. We also provide in Table 4.2 a second chronology of events spanning over the same time period and retrieving events related to the setup of a PPP regulatory framework at the national level in parallel to impacting changes at the political environment.

In order to reproduce these chronologies, detailed examination of interviews transcription as well as the review of quarterly reports and newspapers articles was deemed necessary. We built this timeline from raw collected data, after their organization and condensation. We try to present as completely and accurately as possible the organizational phenomena of the DSP project setup and execution, while avoiding analytical abstraction at this stage, to allow the reader the understanding of this phenomena in all its richness and complexity.

Table 4.1**Timeline of events involved in the setup and development of the DSP**

At the micro-level of the DSP project	
Jun 2010	MoEW published a policy paper framework including 10 strategic initiatives for the reform of the generation, transmission and distribution of the electricity in Lebanon. The DSP is part of it.
Dec 2011	The MoEW and EdL launched the DSP bidding process to outsource the distribution network services, including planning, design, constructions, operation and maintenance, Advanced metering infrastructure, and bill collection.
Mar 2012	Contract over Consultancy Services , Contract C1784 “Program Management Consultancy Services”, through which PM-1, as the Program Management Consultant
Apr 2012	DSP launching: Signature of the DSP 4-years contract-based activities No. C1761, to “design, implement, operate, and maintain a distribution network with customer and metering services”. Contract is due on April 2016.
May-Aug 2012	Daily workers first strike: Right after the launching of the DSP project in April 2012, an unexpected strike movement among EdL daily workers. 2000 daily workers are claiming full-employment positions at EdL, refusing to work with the private partners within the DSP project.
Aug 2012-Dec 2012	Re-launch of project activities , EdL BoD, the PM, and the SPs agreed on a framework to help resolve the pending issues related to the strikes and to promptly re-launch project activities. Revision and minor adjustments of project schedule
Mar 2013	Contractual Meetings for a second project revising: due to on-going delays in the performance of project activities
May 2013 – Jun 2013	Executive Management Meetings for a Remedial Action Plan: Further delays and shortcomings, necessitated a third revision to the project schedule. Development of a 'Remedial Action Plan' to clear claims and contractual issues and launch the implementation stage of its core activities. A 4-months extension of the contract duration is suggested.
Jul 2013 – Sep 2013	Achievement of considerable part of preparatory phases (mobilization, plans and programs, network survey as per the tasks defined in the contract) and start of implementing key project objectives , the smart meters pilot project.
Oct 2013 – May 2014	Difference in SP performance starting to show and tensions around contractual interpretation and execution between SPs and PM started to arise. Frequent interruptions and suspension of tasks in some regions mainly due to the abstention of municipalities from granting permit for excavation works, the abstention of EdL regional Head of Divisions from signing and approving work orders; activities in lands and 'inaccessible areas' are forbidden; EdL delayed reply (approval/feedback) for all pending projects.
Jun 2014 – Jul 2014	Project Road Map: PM-1 and EdL suggested a Project Road Map to ensure that project objectives are achieved within the contractual framework and according to the Remedial Action plan agreed upon in June 2013. The three SPs approved and adopted this project road map.
Aug 2014 – Nov 2014	Daily workers second strike and 4-months sit-ins at EdL premises led to the closure and inaccessibility of EdL Headquarters. Slowdown of DSP essential activities. Joint efforts from all EdL and MoEW for the reiteration and re-launch of the affected project activities, and adjustments to the implementation of the Project Road Map (dated June 2014). SPs continued reporting frequent interruptions and suspension of tasks performed in some regions for the same ongoing reasons. EdL delayed further any action to solve these pending issues.
Dec 2014 – Jan	Extensive meetings to reschedule and revise delayed activities after EdL headquarters open and

2015	DSP activities resume. Meanwhile, overall progress is slowed and affected due to strike and to EdL delays in payment of overdue invoices to SPs.
Feb 2015 – Mar 2015	<p>SP3 submitted a notice of suspension of their activities</p> <p>EdL General director called all CEO's of PM-1, SP1, SP2 and SP3 to a joint weekly meetings, in the presence of MoEW in order to formulate a viable strategy for the resumption of all Project activities to meet the project's deadlines and bring the project back to a successful completion.</p>
Apr 2015 – Jun 2015	<p>Three SPs submitted commitment letters to normalize project activities, including their demands. SP3 ended the suspension of its activities.</p> <p>Little concrete action was taken by EdL to resolve the long due needed approvals and payments. SP2 went further in its escalation by submitting a notice of termination.</p> <p>As a result of the escalations, PM-1 proposed a Memorandum of Understanding (MoU) with clear actions to be signed by the SPs and EdL and endorsed by the MoEW, which calls for its execution by end of June 2015. SP1 signed the aforementioned MoU, but SP2 and SP3 refrained from signing.</p>
Sep 2015	SP3 submitted a “Notice of Restatement of Suspension / Notice of Suspension” of all services under the DSP Contract, gradually until October 31, 2015. SP2 remains unclear regarding its status, which was previously in an extended notice of termination .
Nov 2015 – Feb 2016	Significant efforts by PM-1, EdL, and the MoEW, culminated in a “Service Providers Project Road Map” to resolve all major issues on the DSP project with clear milestones to be reached, in order to ensure the realization of project objectives and directing the project within the contractual framework. Overall stressed atmosphere is noted.
Apr 2016 – Jun 2016	<p>PM-1 perceived further delays and reluctance from the partners in adhering to the decisions of November 2015 and the latest roadmap proposed. This led to escalating tension between NEEDS and EdL and puts an end to the consultancy contract C1784 “Program Management Consultancy Services”, signed on March 31, 2012 between EdL and PM-1.</p> <p>New consultancy, PM-2 is appointed as DSP program manager following the first consultancy contract expiration and the unwillingness of the initial consultant to renew the contract.</p>
Aug 2016	PM-2 led the signature of the final version of MoU-1 by the three SPs. MOU-1 states, among other resolutions, two phases for contract extension: Phase 1, 4-months extension till December 2016 then Phase 2, 36-months renewal till December 2020. It also elaborates a new roadmap for unaccomplished tasks during Phase 1, and for smart meters implementation during Phase 2. MOU-1 shall be considered as part of the contract.
Sep 2016 – Dec 2016	<p>MoEW approved DSP project extension till December 29, 2016 (Phase-1 of the MoU- 1). Smart meters installation was put back on track. Agreement on Phase-2 through the establishment of a second MoU, MoU-2, requiring an additional year to be implemented for a total of 48 months instead of 36 months, and amending many sections of the DSP contract.</p>
Oct 2017 – Sep 2017	<p>Successive Quarterly contract extensions: The MoEW approved the 48-months extension of the DSP project while MoF rejected it. Subsequently, project was sent to CoM for approval. In-between, the SPs were requested to continue the implementation of the project's services till end of March then till June 30, 2017 then till September 30, 2017.</p> <p>CoM established a special Ministerial Committee headed by the Prime Minister of Lebanon himself, to put a closure on the DSP project's several successive short-term extensions and bring more focus on the approval of Phase 2 and MOU-2 in order to fulfill the project's remaining objectives.</p>
Sep 2017 – Dec 2017	<p>CoM approves the DSP 48-months contract renewal for SP1 and SP2.</p> <p>Delegation to MoEW to start negotiations for SP3 issues or launch of new tender for Lot 3</p>
Apr 2018	<p>Division of Lot3 into Lot3A (60% of Lot 3) and Lot3B (40% of Lot 3).</p> <p>Approval of 48-months extension of DSP in Lot 3A with SP3 retrospectively from January 1st, 2018.</p>

Appointment of a new sub-contractor to Lot3B.

Jun 2018 SP3 and sub-contractor agreement was signed and endorsed by EdL.

Table 4.2 below is a timeline of important dates and key events that was determinant in the setup of the PPP regulatory framework in parallel to overlapping periods of national political stalemate and other environmental elements and changes:

Table 4.2
Timeline of impacting events occurring at the macro-level

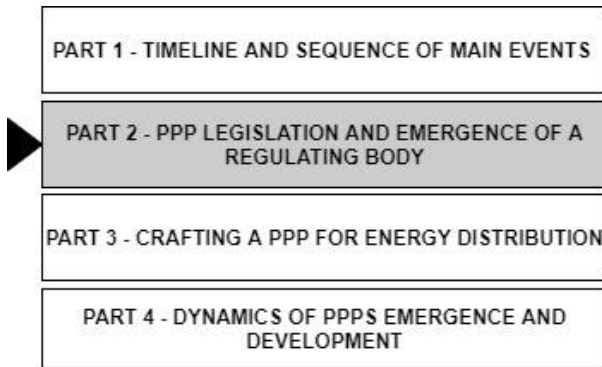
At the macro-level (regulatory, political and environmental events)			
	<i>Regulatory</i>	<i>Periods of political stalemate</i>	<i>Other environmental factors and events</i>
2007	First draft of the PPP law		
Jun 2009 - Nov 2009		5 months following parliamentary elections	
2010	Second draft of the PPP law		
Jan 2011 - Jun 2011		152 days following government collapse	Displaced refugees escaping war in a neighbor country
Oct 2011	New text for PPP law		
Mar 2013 - Feb 2014		329 days following government resignation	
Apr 2014 - Dec 2016		2.5 year of presidential vacancy	
Sep 2017	PPP law promulgation and creation of the national PPP unit (HCP&PPP)		
April 2018			CEDRE for international support of Lebanon development and reform
May 2018 - Feb 2019		8 months following parliamentary elections	
Mar 2019	Resignation of PPP council Secretary General		

In the last decade Lebanon suffered from long periods prevailed by political deadlocks and lack of functioning governments. Provisional governments were supervising regular state affairs during various and relatively long periods of time. A political stand-off during which the presidency office was vacant also stamped a period of two and a half year. Therefore, any project of law enactment or any decision that is relevant to the Cabinet of Ministers may be subject to extremely long delays, depending on transition periods between governments as well as the agenda of priorities of each government. Deep divisions among political leaders were also delaying further governments formation and causing many decisions to fail.

On another hand, the extremely weak economic growth slowed even further by the influx of more than one million displaced since 2011 into the Lebanese territory, escaping a war in a neighborhood country. The repercussion of this rapid and heavy influx had significant negative impact on various sectors of the Lebanese economy, and in particular the energy sector. The demand of displaced population has rapidly increased the overall country demand and had major implications on EdL network and DSP resources.

Changes at the social, economic and political environments are all variables that impacted in a way or another, the evolution of the DSP project. Some of these elements had negative effect by delaying or even interrupting some of the partnership activities, whereas other events were favorable for the proliferation of these activities. Key actors' actions or decisions were also influential at different levels of the analysis.

PART 2 – PPP LEGISLATION AND EMERGENCE OF A REGULATING BODY



We present in this part the results of the data analysis related to the observed crafting of a regulatory framework for PPPs, in the form of structured and ordered data (Figure 4.1).

We recall that 1st order codes include data from interviews, archived documents and press release. Nine concepts are aggregated into four dimensions representing four sub-processes related to the process of PPPs legislation and emergence of a regulatory body: (1) Need for PPPs regulation, (2) Emergence of PPP regulatory framework, (3) Political power game and (4) Development of PPP as collaborations; and there corresponding concepts and themes. These dimensions incorporate processual elements – actors and variables - from the country’s political environment. This process was marked by a key event which is the enactment of a long-awaited PPP standalone law. Commonly, the passage of any bill through the Parliament commonly follows a lengthy process of drafting, formulation and approval before certification and enactment, the Lebanese PPP legislative journey extended over ten years. This prolonged period was not only due to procedural routines but also to substantive roadblocks that we explore in our findings along with involved actors and variables. These findings are not only limited to the prolonged period of the PPP law enactment, but extends to cover the prologue of the law enactment as well as dynamics of implementation of the law, the creation of the PPP unit and the implementation processes that followed this law enactment. Emergent key concepts, themes and dimensions provide insights on the interplay between different sub-processes of this model, feeding upon each other’s to shape up the trajectory of this evolution that spanned over a relatively long period of time.

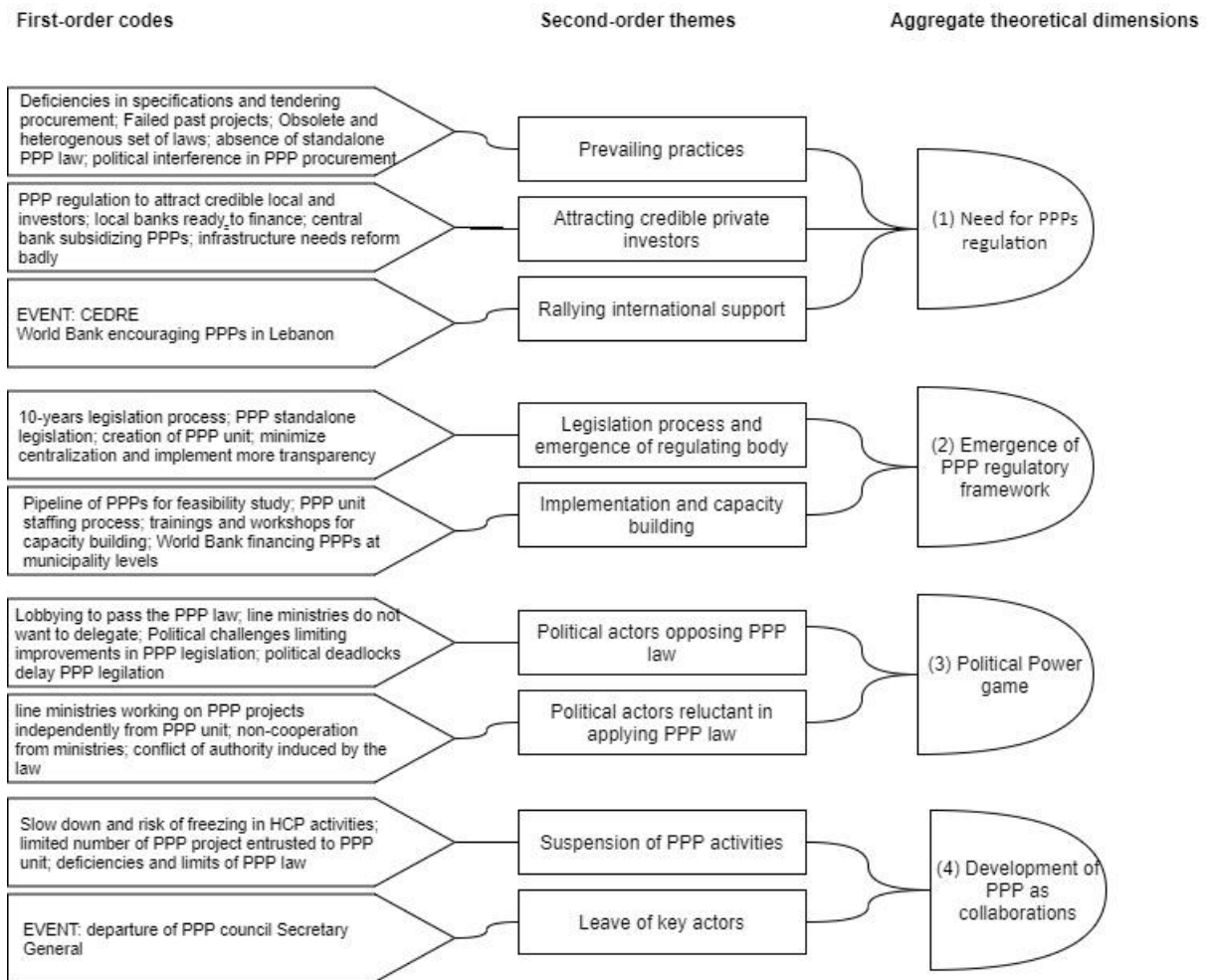


Figure 4.1 - Data structure for PPP legislation and emergence of a regulating body

1. NEED FOR PPPS REGULATION

As mentioned previously, Lebanon has a long history of private participation in its infrastructure and public services since 1958. And this participation has taken different forms of contractual arrangements: concession, BOT, management contract and lease, yet with a total absence of a PPP regulatory and governing body which caused many delays and sometimes cancellation of planned projects due to an unsuccessful implementation, the tension prevailing the relationship between different actors, the absence of proper consultation, the non-transparency of the tendering process and many others. Furthermore, the deteriorating economy and necessity for economic and institutional reforms have called for an urgent private participation in public infrastructure and services as part of these reforms. This perceived need for PPPs is the first dimension revealed in data related to the process of crafting a PPP regulatory framework. The concepts and themes articulating this

dimension are: ‘prevailing practices’, ‘attracting credible private investors’ and ‘rallying international support’.

Prevailing practices

Different reports from local financial institutions and international agencies have addressed the evaluation of all past and existing PPP-like projects. These assessments have revealed facts on several aspects that constituted real obstacles to the success or continuity of these projects. Investments in public services and infrastructures have known delays, cancellation or even failure to deliver their promises. These past failures were shown through flawed non-transparent tender processes, tense relations between private operators and municipalities, bad implementations and improper consultations between partnering actors. The absence of a unified regulatory framework (public procurement is allowed through different laws) and a regulating body to manage PPPs was clearly an additional reason for unsuccessful design and setup of these projects. Lebanon’s history in setting PPP-like projects was mainly a set of concessions contractual agreements that lacks the principles and characteristics of a real partnership between the public and the private sector whatsoever. Even the HCP (the Higher Council for Privatization that became later the PPP national council), previously involved in privatization programs in the country, started shifting its efforts towards the advancement of PPPs as a way to inject dynamism through private participation in the Lebanese slow-moving economy. A study by the European Investment Bank in 2011 confirms that the Lebanese banking sector has a large lending capacity for PPPs, which is another favorable factor for PPPs proliferation in the country⁶⁵. During an interview we had with a financial advisor at one of the leading investment banks in Lebanon⁶⁶, we went over an interesting study conducted by the group with the assistance of the World Bank office in Lebanon, a local law firm and the HCP, synthesizing the assessment of a portfolio of existing PPP-like projects that failed to deliver their promises. The assessment is primarily based on both the value for money of these projects and the measurement and management of their risks. The document reports a number of projects in different sectors with reasons leading to their partial or total failure:

“The lack of a PPP regulatory framework over the years has led to many projects failing to deliver as promised. With regards to the Mecanique example above, the project was not successfully implemented, leading to long waiting hours and

⁶⁵ Study on PPP Legal & Financial Frameworks in the Mediterranean Partner Countries, European Investment Bank, May 2011.

⁶⁶ ‘Fransa Invest Bank’ group for Banking and Finance

widespread consumer dissatisfaction at vehicle inspection centers. The tender result for Mecanique was contested by several disqualified bidders, claiming that the tender process was flawed. Additionally, the Jeita Grotto project was awarded by the Ministry of Tourism and a tense relationship prevailed between the operator and the municipality throughout the contract. The Solid waste treatment plant in Saida is another example of a badly implemented project without the proper consultations between concerned parties, leading to several delays and tensions between the Saida Municipality and the Ministry of Transportation and Public Works.” - (Financial Institution Research Unit, 2017)

These assumptions on failed PPP attempts were seconded by the PPP financial consultant at the HCP:

“So far projects conducted are an attempt of partnership projects, for example the solid waste in Saida which was an ultimate failure.... The Mecanique as well. ...As for the infrastructure projects done, they are a traditional procurement system. ...Even the two failed attempts of mobile privatizations in 2003 and 2008; they were all led by line ministries.” - (Financial advisor, HCP & PPP)

From a legal point of view, these failures are primarily due to the fact that the PPP procurement is governed by a scattered set of laws and prerogatives that give the freedom to actors entitled to initiate a PPP project (municipalities, ministries and few public institutions) with no obligation for them to refer to a unified regulatory body:

“The challenges in Lebanon, is that first there was no PPP law, then the laws governing public procurement and previous PPPs in general are obsolete and divers and not unified under one main legal framework. Also the procurement phase is not governed or supervised by the Central Tenders Committee/Board, for instance the ones done by the municipalities and some public institutions other than the ministries like in EdL.” - (Legal Advisor, law firm)

Deficiencies in the existing set of rules governing PPP projects has also led to the proliferation of corruption at different levels of the process especially at the procurement level: well-connected companies were often able to obtain governments contracts and offer bribes in order to secure PPP contracts. The way this procurement process was designed presents various pitfalls that resulted into several poorly planned projects, limited funds and transparency issues, which all justified the need for reforming the way PPPs were procured.

Attracting credible private investors

Actors and policy makers started becoming more aware of the importance of having clear and dedicated PPPs regulation as a way to foster economic development and most importantly to attract much-needed foreign direct investments to contribute in this development. The Central bank is also sponsoring projects that foster sustainability and technological innovation especially in the Lebanese weakened energy sector. Oddly, we noticed that, despite the need

to revive local businesses and exploit the capabilities of local firms within PPP projects, financial institutions and investment banks in Lebanon have a preference for foreign private companies to invest in PPPs over local companies. This interest is twofold: foreign investments can bring international expertise to the country in order to avoid the “learn-as-you-go” effect related to lack of specific knowledge, and foreign private companies, in general, have better financial credibility especially if listed.

“Why not to get international partners, that can get lower cost of financing, that already have expertise, and not the “learn as we go” problem.... Some projects are subsidized by the central bank. Energy efficient projects, wind power... We are leader in environmental projects; we are concerned with environmental projects and solar powers. For these projects loans rates on the private sector are relatively very good rates, 1-2%, subsidized by Banque Du Liban, so we charge 5-6%, and the Central bank pays the difference. That’s to encourage technologies, energy efficiencies, and green buildings.” - (Financial advisor, Financial institution)

Local companies are also keen to join the economic reform and participate in building public infrastructures and developing public services, however trust in the Lebanese procurement system and all its implications remains problematic. Equally, local capabilities are still underdeveloped for large-scale infrastructure projects. According to informants, they lack appropriate PPP knowledge and expertise.

Rallying international support

International support to Lebanon’s economic and financial reform materialized in different forms at different occasions. This lobbying from the international community on the necessity to inject private financing and transfer private expertise to the Lebanese market through PPP structures gave a great support to local PPP advocates and activists, led by the Secretary General of the HCP. World Bank economists, international experts and PPP investors have all agreed upon PPP benefits for the Lebanese economy through countless interviews, conferences and published reports and articles. We reviewed a large number of newspaper articles and special reports where we could detect a clear international and local consensus across political and institutional lines on the adoption of PPPs, not without warning about their risks and perils with the absence of the right legislation and supporting government and business environment.

A set of conferences convened in Paris (Paris I in 2001, Paris II in 2002 and Paris III in 2007) gathering international donors to support Lebanon’s deteriorating economy have all conditioned their financial aids with the country’s commitment to serious economic, financial and legal reforms. The longstanding promises of reforms include changes in the

regulatory environment, fiscal discipline and legal frameworks; the setup of a regulatory framework for PPPs being one of these reforms. PPPs were viewed by practitioners and decision makers as a pillar and an essential component of a comprehensive economic growth; and were highly and repeatedly advised by international institutions for a reform strategy. However the country showed poor record of implementing suggested reform programs because of its weak institutional capacities, governments' dysfunction and perpetual political disputes.

Ahead of a fourth similar international conference, CEDRE (or Paris IV) in April 2018, the Lebanese government, with the support of the World Bank, finally resumed to enact the PPP Law. This step was important for the approval of the international community on the suggested Capital Investment Program (CIP) shared by the Lebanese government during the conference. In brief, the CIP is considered to be the largest investment program in the Lebanese history estimating a budget of nearly USD20 billion for almost 250 PPP projects to be executed by 2030.

“Many of the 250 projects have been in the concept books for a long time, some since the late 1990s or early 2000s. Some of the projects appear to be the leftovers from previous development efforts that, for one reason or another, were not funded.”- (Executive Magazine, April 2018)

Led by its Secretary General, the HCP had an important role in the elaboration of this investment plan. Our informant at the council explained that the plan is a comprehensive one; the projects were to be deployed as PPPs and cover different regions of the Lebanese territory. They also concern eight economic vital sectors: transport, water, wastewater, solid waste, electricity, telecom, tourism and culture and industry.

“Our boss is investing a lot in this plan; he thinks it is vital that the HCP gets hold of the listed projects, or at least part of them. The largest, and the ones that are at the national level. We can also help in local projects, the ones handled by municipalities. The program is designed around infrastructure projects to be deployed via PPPs all over the country and across main economic sectors: transport, water, wastewater, solid waste, electricity, telecom, tourism and culture and industry” – (Financial advisor, HCP & PPP)

Therefore, having a dedicated PPP regulatory framework was deemed necessary to enhance the government credibility towards international donors ahead of CEDRE international conference.

From an analytical point of view on these empirical details and events, we note a consensus from a rallied international community with the support of international organizations led by the World Bank, on the urgently perceived need for PPPs in Lebanon and therefore the

necessity to develop an appropriate dedicated regulatory framework. The next stage of the process is characterized by interplays between two processes where key actors and policy makers are divided among advocates to PPPs and opponents to this type of collaboration. The reasons behind this tension are various. During the legislation process, many political actors and activists were clearly opposing the PPP law enactment. These same actors became reluctant in applying this law afterward.

The next two dimensions occur in tandem: ‘Crafting PPP framework’ and ‘Engaging in a trust/power game’, and the concepts they reveal intertwine to articulate the processes taking place.

2. EMERGENCE OF PPP REGULATORY FRAMEWORK

The process of PPP regulation and policy implementation was not a smooth or short journey. The duality of the situation was obvious: the need for PPPs to enhance economic reforms and to raise international financial funds is pressing; however the slowness of the legislation process was noticeable, and its implementation as well. The two concepts emerging in this dimension: ‘legislation process and emergence of a regulating body’ and ‘implementation and capacity building’.

Legislation process and emergence of regulating body

We retrieved the details of the PPP legislation process and enactment of the law with the help of our informants at the HCP, and through scrutinizing the archives of local newspapers. Historical data reveals the following marking events of the legislation journey:

A first version of the PPP law text was drafted by the HCP in 2007 and approved by the government then, but it was part of a law projects’ bundle that was rejected by the head of the Parliament, judging the government not legitimate at that time due to the resignation of many of its ministers. In 2010, the text reappeared in the form of a law proposition submitted by a member of the Parliament, but it was not examined in parliamentary committee because part of the political class considered that it was a duplicate of the previous law project. In 2011, a committee of experts convened by the HCP prepares a new text and presents it to the government. Some of the ministers expressed their reservations towards few key provisions stipulated in the text and that are mainly related to details of the tendering mechanisms.

A prolonged period of political deadlock and stagnation marked the country between April 2013 and December 2016 and contributed further in the delay of the PPP law enactment.

Meanwhile the country was drowning into accumulated public debts and increasing fiscal deficits. The passing of a PPP law, as well as other major aspects of reform measures, started to get urgently needed, but delayed further because of political instability and frequently changing governments in Lebanon.

In the meantime, the World Bank was particularly active in assisting Lebanon during this process through different types of operations and activities. During our quest, we got to meet with a PPP transaction advisor from the World Bank who was on a mission in July 2016 in Lebanon, Jordan and Egypt for a PPP country diagnostic. This mission was in the context of a large project piloted by the World Bank Group for benchmarking PPPs procurement in order to help governments improve infrastructure delivery through measurements and improvements of their PPP capabilities. In the context of his mission, the PPP transaction advisor has met with different entities involved in existing PPP-like projects, and shared with us some of his findings and opinions on how PPPs are conducted in Lebanon. He explained to us the nature of his mission, the actors he met, the main challenges Lebanon faces in attracting PPP projects and the political and institutional considerations that are hindering the progress in this direction. In his opinion, the efforts of the HCP and other involved actors are not very efficient because many actors and especially line ministers are not very cooperative.

“There is no real improvement since our last visit. Most of the challenges we’re running into here are political...We had a long list of people we wanted to meet, we saw them all except for the line ministries, which gives some indication, they are kind of skeptical. They don’t wanna meet... PPPs is by definition , about delegations and some kind of loss of control, maybe that’s why they don’t wanna do it....Right now HCP people are not very efficient. I understand where they are coming from, in terms of centralization processes that they are trying to minimize....and implement more transparency. But the problem is that you also need the line ministries, they have the projects...you need to have good coordination between the HCP and the line ministries for the whole thing to work, and right now the line ministries do not want to work with the HCP and they don’t have to, since there’s no PPP law. The next step would be to have a law, and the law enforced to line ministries to actually work with HCP. It’s really tricky; it’s hard to work out...” - (PPP Transaction Advisor, World Bank)

He also raised the issue of trust among private actors towards policy makers and public institutions, where an obvious lack of trust exists between the private sector and the majority of public institutions: the private sector does not trust procurement transactions occurring at the level of line ministries, neither the ones entrusted to any public entity, including the HCP for the simple reason of the HCP being an entity associated to the Prime Minister office and this fact does not comfort the private sector and will not make any difference in the procurement process. Clearly, private investors do not trust Lebanese public institutions. He quoted on this the manager of a private company bidding for a tender launched by the

Minister of Interior Affairs for the “Mecanique” project (to finance, build and operate a vehicle inspection facility).

“We had the guy of the Mecanique project, he was complaining a lot about political interference in the procurement of a new project...the Ministry of interior is now re-bidding that project, and his company is taking part in this tender... he’s complaining that the entire procurement process is wrecked and there’s no way he can win because there’s one company that is politically favored...So I asked how would he feel the way that the PPP law is drafted, and the fact that it will take the procurement responsibility away from the Ministry of Interior and put it in the hands of the HCP would that give him a comfort. He said that the HCP is set at the Prime minister office and that won’t change things. His opinion was interesting. He said his opinion in front of HCP responsables and they were expecting this. So I said the question is if you don’t like it in the PM office, where else would you like it to be? At the Ministry of Finance? Where else? They don’t trust any governmental institution.” - (PPP Transaction Advisor, World Bank)

Local financial institutions and law firms were among actors involved in facilitating the mission of the HCP and the World Bank with the PPP legislation process. These actors also have doubts around line ministers’ willingness to positively cooperate in this process; some line ministers even found excuses to avoid participating in the World Bank study on benchmarking PPP procurements in Lebanon.

The WB is very interested in PPPs and the public sector in developing countries. They are working on two projects: Benchmarking public procurement and Benchmarking PPPs, and we’re helping them in this mission....The law has been in the making since 2010 or even before. In both projects, the WB sends a large questionnaire of three parts: about the project life cycle, filing complaints, and transparency. It is interesting to see the points that are of a main concern to international organizations and private sector, in terms of transparency and publications and justifying the rejection of the bidder...detailed questions All this is important...You need to see to which extent the ministries are willing and interested to cooperate and participate with these studies... Which ministry would participate anyway? Which ministry is ready to be transparent? The MoF? Usually public institutions in Lebanon adopt the strategy of ‘pour vivre heureux vivons cachés’; they prefer to remain silent in order not to be held accountable.”- (Legal advisor, Law firm)

In September 2017, these attempts and efforts finally materialized into a regulatory framework: the enactment of Law No. 48, which was ten years in the making and the creation of a PPP relevant authority. The PPP law renames the “Higher Council for Privatization (HCP)” as “Higher Council for Privatization and PPP (HCP & PPP)” recognized now as the PPP Lebanese national unit or the PPP council. Surely, the efforts of all activists and PPP advocates during this long period, and especially those of the HCP Secretary General and members have finally bore fruit in enacting the PPP long-awaited law. However, and as stated earlier, this enactment cannot be separated from the upcoming of the CEDRE; with

frequent changing in national governance, the PPP Law was never given a priority on the government agenda, until CEDRE was set to take place in April 2018.

Implementation and capacity building

Soon after the PPP law passed, the PPP national unit created by this legislation started deploying its activities alongside various stakeholders interested in PPPs: ministries, municipalities, civil society and private investors.

Following the CEDRE, the PPP council started from scratch the prioritization of the long pipeline of PPP projects with the formalization of proposals and pre-feasibility studies in preparation for the next step of hiring consultants for the full-feasibility study. The financial advisor at the council expressed her enthusiasm while telling us about how busy things have been since the law was enacted and right after CEDRE:

“We got many PPP project proposals from different parties... However these proposals were not formalized. We therefore elaborated a document, a kind of template called Pre-feasibility study, from a technical and operational perspective, if the ministry has a land or not, any private company interested in investing with you, does the financing of the private sector cover the expenses of the project... Our job as HCP is to coordinate with the consultants: financial or transaction advisor leading the process and coordinating with the technical and the legal” - (Financial advisor, HCP & PPP)

By that time, in July 2018, 18 active projects were entrusted to the PPP council out of 250 projects listed in the Capital Investment Program: a national data center, the expansion of Beirut International Airport, expressway and toll roads, hazardous waste, regional solid waste projects and an Olympic-size swimming pool.

“Out of 250 projects, we selected 18 projects that are to prioritize. The total budget allocated by CEDRE was 20 Billion for those 250 projects. We chose the 18 most important projects and they total 6 Billion USD. These projects are essential for the government and the private sector would be interested in investing in them (construction and O&M), which is an important criteria for choosing a PPP.” - (Financial advisor, HCP & PPP)

Interestingly, PPP projects in vital economic sectors like water and electricity were, for some reason, not mentioned among the ones entrusted to the Council...

For the feasibility study of each project, a working team is assigned, led by the PPP unit, and including representatives from line ministries. The personnel of the PPP central unit were very few; while waiting for further recruitment they outsourced the financial and transaction advisory to international consultants and organizations, and took in charge the coordination between different parties.

The diffusion of PPPs within infrastructure projects was not obvious to all policy makers and interested parties and carrying on PPP projects needed lots of preparation, awareness and trainings. The PPP national unit also organized trainings and workshops for capacity building with cooperation of interested entities - i.e. 'Institut des Finance Basil Fuleihan' (an autonomous public institution operating under the tutelage of the Ministry of Finances) - destined to departments and municipalities encompassing raising awareness on the importance of PPPs, submitting PPP project proposals, initiation to financial, legal and technical aspects to PPPs.

"We did four training sessions with the collaboration of the Institute of Finances. It was beneficial, in some ministries people are aware of the PPP implementation aspects, in other ministries people do not even know the importance, principles or objectives of PPPs. ...People involved in projects committees need to be knowledgeable in the domain and also to be available. Training has to be more focused once the project gets accepted at the HCP level, and then prepare customized training to people at the ministry concerned because these people will be responsible of monitoring the projects later on." - (Financial advisor, HCP & PPP)

While the discourse and actions of the PPP council actors concentrated mainly on the preparation and procurement phase of PPP projects - which is in total coherence with the text of law that dedicates a large section related to the procurement process - the implementation and monitoring phases of a PPP project were hardly ever mentioned and left with little attention. In fact, the law delegates the mission of monitoring the execution of the PPP project to the related public entity. In addition, the procurement process is also considered to take too long and involves the Council of Ministers at different levels of approvals, which extends further this process. A legal advisor endorsed this remark while addressing some of the law pitfalls:

"The law does not handle any financial indicators. The main interest of PPP over traditional procurement is financial. The law does not specify any comparison in this regards...The law comprises 3 out of 5 pages about the procurement process and there's nothing about monitoring or supervising, nor about the evaluation of the project....The procurement process is very long. It takes more than a year. In Lebanon the imminent needs are usually urgent, infrastructure problems need to be addressed rapidly. By the time the project committee and the external advisors are designated, the government would probably change...so the entire process should be repeated again. There are also no precisions about the implementation and also the right of the government to continuously monitor, the modification of the contracts." - (Legal advisor, law firm)

With our very limited knowledge in laws and regulations, we also noticed that the text of the PPP Law remained silent or vague on the definition of various types of PPP agreements and schemes as well as the allocation of risks associated with each phase of the PPP project.

Back to PPP capacity building, the World Bank continues supporting Lebanon in promoting and implementing PPPs through their Maximizing Finance for Development (MFD) program, always in cooperation with the PPP council. Through this program the World Bank handholds the municipalities in developing their know how and the transfer of global lessons and good practices in addition to a variety of financing opportunities to support Lebanese municipalities engage in sustainable PPP projects.

“The WB divided the municipalities into primary and secondary. The secondary do not have the appropriate capacities for PPPs. So the WB helps them by granting them loans according to the usual scheme. The primary municipalities where the demand is high are rather encouraged to engage in PPPs. However these municipalities do not have the appropriate capacities and know how to identify projects, to make pre-feasibility study, to get lenders, and get private financing...they are also understaffed. The WB is going to handhold them through a program Lebanon Municipal Investment funds (150M USD). Among which 50M are granted to PPP components, which is under our supervision. Phase 1 consists of 3T (training, tools, transactions). Since the project is identified, and since the entire process is being done through us, the project is now ready for a RFP. The WB is the guarantee for the payment of the private sector. Under this mechanism, we are expecting that out of 16 primary municipalities, and 9 secondary municipalities to have at least 25 infrastructure projects for the next year.” - (Financial advisor, HCP & PPP)

3. POLITICAL POWER GAME

The passage of the PPP law is hailed as a big step allowing the participation of the private sector in infrastructure and public services thereby putting the country on the right path to economic growth and development. Actors perceived this step as a guarantee to the success of projects governed by this law, the country being in urgent need of efficient and effective infrastructure construction, upgrade, operation and development. Newspaper headline reported this long-awaited step as the key to allowing the financing of major infrastructure projects.

« La loi sur les partenariats public-privé enfin votée...Réclamé depuis des années, le texte doit permettre le financement de grands projets d'infrastructure...Après plus de dix ans d'attente, les députés ont finalement voté hier la loi sur les partenariats public-privé... La loi PPP était très attendue par les représentants du secteur privé et les organisations internationales, Banque mondiale et Fonds Monétaire International en tête, qui ont multiplié les appels à l'adopter en vue d'amélioration des services publics. » - (L'Orient-Le Jour, August 2017)

Nevertheless, the text of the law has triggered discontentment by disclosing trust issues among key actors concerned with the process of PPP project selection and procurement: line ministers, minister of Finance and the PPP council Secretary General.

We identified two concepts in this dimension: ‘political actors opposing PPP law’ and ‘political actors reluctant in applying PPP law’.

Political actors opposing PPP Law

Political deadlocks and delays in governments' formation were surely behind the delay in passing the Lebanese PPP law. However, the passing legislation did not have unanimous consent of the parliament; notably the disagreement over the tendering process details explains in large part the 10-years enactment process. The stated mechanism stipulates the involvement of various stakeholders in the tendering process and selection of private partner, with the aim to enhance transparency at this level, and the PPP unit has a central role and authority in these two processes. Article IV of the law suggests that PPP projects to be proposed by line ministers (or by the president of the municipal council for PPP projects of municipal nature) and submitted to the PPP council for approval (or rejection) based on the feasibility and the extent of the interest of the private sector to finance and invest in the project. Upon project approval, the PPP council then forms a project committee chaired by the council Secretary General and including a representative of the concerned ministry, a representative of the Ministry of Finance, the chairman of the sector's regulatory body (where it exists), the president of the municipal council (when looking into projects proposed by municipalities) in addition to financial, legal and technical consultants to assist the project committee in its work. This project committee shall also be in charge of the process of private partner selection, once the CoM approves to proceed with the concerned PPP (as per Article VI of the law).

Once the project proposal is accepted, details on the procurement phase (largely described in Article VII of the law) include the preparation of tendering documents, prequalification information, bidding process and recommendations with respect to the best bidder as considered by the project committee. The process of selection of the private partner *“shall be subject to the principles of, transparency, freedom of participation of competing bidders and their equal treatment, and the bid shall be given wide and sufficient publicity to ensure a multitude of competing bids”*(Article VII, Law 48/2017).

Hence, the law centralizes a large share of the project selection and project procurement processes at the level the 'project committee', which is considered to be an independent entity, that assists working teams for each project and ensures the involvement of all stakeholders while enhancing the transparency of the tendering process and the selection of the private partner.

Naturally, this procedure did not please the opposing ministers because it simply goes against the constitutional rights allowing them to procure PPP projects without involving as many actors. This mechanism was perceived by some political parties as “eroding the Ministers’ power”, and was the main reason behind the 10-years delay of the legislation process. This opinion was pointed out openly by contributors to our interviews:

“People are afraid of losing power especially the ministers; this is why in the PPP law, how they got it to pass, is each line minister will be involved in selecting projects. The new law gave the HCP more power. Before this the HCP was even not aware of the deals taking place” - (Financial advisor, Financial institution)

In the context of the World Bank mission for PPP country diagnostic, the transaction advisor explained to us that it is a normal thing for each country to develop the regulatory framework that is appropriate for the particularities of this country. For him, the HCP & PPP main concern was to address the transparency issues that were prevailing over practices in previous PPP-like projects and this is the main reason why they purposely designed a PPP law that prevent tailoring tenders that favor the bidding of politically-well-connected private companies:

“The way here in Lebanon how is laid down in the PPP law, the process here centralizes quite a lot of responsibilities within the HCP. For example the procurement is done at the level of the HCP, which is different than in other countries. In most other countries the line ministry develops the project and implements the project. The PPP unit helps guide the process. Whereas here the HCP is taking much more power, which is probably the reason why the line ministries wouldn’t like to work with them. The answer of the HCP at this level is that they deliberately designed it this way to eliminate a lot of transparency issues. No PPP framework is the same in every country. When they explain it to you it makes sense, they are trying to solve some of the political issues that are unique to Lebanon in the design of their framework”. - (PPP Transaction Advisor, World Bank)

Political actors reluctant in applying PPP Law

Despite all controversies around the PPP legislation: its benefits as well as its pitfalls and how they can be bridged, this step has definitely introduced a new regime for PPP projects in Lebanon. The CEDRE along with the adoption of a PPP new regulatory framework would be a turning point for infrastructure investment by creating a favorable environment for local and foreign private investments. All efforts are now oriented towards the same direction in regards to the implementation of the capital investment program and the creation of pipeline of properly structured projects in preparation of the proactive establishment of the partnership agreements. As stated in the previous dimension, *Crafting PPP framework*, in our

development on implementation and capacity building, things got clearly busy at the PPP national unit following CEDRE, however, during our second visit to the council our informant did not hide her disappointment from the non-cooperation of few ministries during this busy period. She complained that the ministries are reluctant in appointing representatives to take part in the project committee assigned to the ‘National Data Center’ PPP agreement. However the PPP council Secretary General and team members remained very motivated and were looking forward to their next staffing process. After all, they consider the passage of the law as a great achievement they have been struggling to accomplish for the last decade.

“As per the law each project should have a committee, a representative from the Ministry of Finances and from the line ministry are member of this committee....By the way, we do have a real problem with the Ministry of Finances, they are not cooperating, they did not designate a representative for the data center project. We cannot go on with this, but for now we’re still in the feasibility study phase and there are no decisions to be done. For each project committee there is a working team, operating day to day, I am coordinating this team and I am supposed to be assisted by representative from the Ministry of Telecom, the Ministry of Environment....But these ministries are not cooperating... This is why we are overwhelmed. But our boss [talking about the council Secretary General] does appreciate our motivation and enthusiasm and we are looking forward to hire five more people. We also prepared three decrees: one for staffing, one administrative (structure and organization), and the third for the financial system (our contracts, budgets...)” - (Financial advisor, HCP & PPP)

Despite the pressing need of the law and all the recommendations of the international community, many of the line ministries were still reluctant in regards to set a legal framework at the national level, and have an independent body to regulate PPPs, and lose by this power over PPP projects that can be procured at the ministries’ level. Even though they are still involved in projects selection according to the new law as members of the project committee, however the decision in regards to project selection or bidder selection is not centralized at the their level anymore the way it has always been before the emergence of a PPP standalone regulatory framework.

4. DEVELOPMENT OF PPP AS COLLABORATIONS

The game of power and trust between existing political actors and the new framework being put in place to regulate PPPs was not in the favor of the proliferation and the development of PPP activities in Lebanon. Explicit recommendations and repeated requests from local and

international economics, experts and policy makers insisted on the necessity for the Lebanese government to entrust all infrastructure PPP projects presented in the Capital Investment Program at the CEDRE to the national PPP unit:

« Le diplomate français chargé par le président Emmanuel Macron du suivi du processus CEDRE, l'ambassadeur Pierre Duquesne, a d'ailleurs affirmé, à chacune de ses visites au Liban, que les grands projets d'infrastructure inclus dans le CIP, tous secteurs confondus, devraient faire l'objet de PPP et donc être confiés au HCPP. Il a dans ce sens appelé, à plus d'une reprise, le gouvernement à honorer l'un de ses engagements durant la CEDRE, en donnant au HCPP les ressources financières et humaines qui lui permettraient de jouer pleinement son rôle. « Il faut donner au HCPP les moyens de réguler les PPP au Liban en lui permettant de recruter une quarantaine de personnes supplémentaires et d'avoir un budget indépendant », avait insisté le responsable français. » - (L'Orient-Le Jour, March 2019)

However, this game of power and trust between stakeholders, in addition to the country's political instability, has strongly frozen the diffusion of the regulations and therefore the development of all pre-planned PPP activities. We explore in the last dimension of our model the outcome of this undesirable balance of power and the interplay between the previous two dimensions. We identify two main concepts determined by the course of the events taking place and decisions of involved actors: 'leave of key actors' and 'suspension of PPP activities'.

Leave of key actors

The central and striking event that marked this stage of setting a PPP regulatory framework is the resignation of the Secretary General of the PPP council in March 2019. The Secretary General has held this position since 2006 and had worked for more than ten year for the adoption of the PPP law. He lately advised the government on the investment program on the basis of which the international community pledged to mobilize more than USD11 billion. He spent a career with senior positions in local and international financial institutions, and is an expert in privatization and PPP programs particularly in emerging markets.

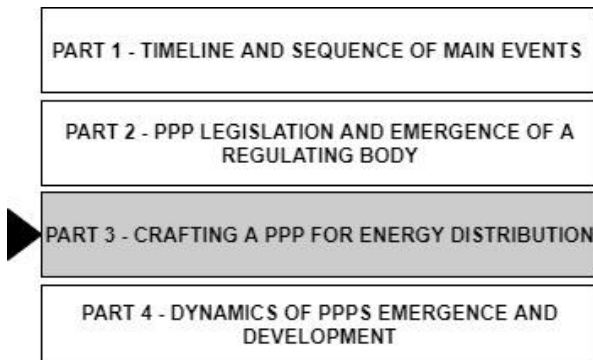
Two main reasons were reported by the press of local newspapers - and confirmed to us by informants at the HCP & PPP – to stand behind the resignation of the council Secretary General: first, the unwillingness of line ministers to cooperate with the council in applying the PPP law, second, the government withdrawal of its nomination to the council Secretary General to run for the latest World Bank presidency that took place in April 2019, only two weeks after his candidacy. Both the event of the World Bank and the political reluctance to entrust major PPP projects to the PPP Council have eventually convinced the Secretary General to consider ending his career in public administration.

Suspension of PPPs activities

The resignation of the Secretary General has slowed further the activities within the HCP & PPP. After reaching a phase of implementation and diffusion of the law and engaging in the development of PPP projects through feasibility studies for various large-scale PPP projects, the activities of the HCP are suddenly interrupted. In addition to being at the head of the council and managing its regular work, the Secretary General is attributed a key role in chairing all projects' committees, by virtue of PPP law.

“...Things are pending now. It is frustrating since we reached the phase of implementation and suddenly everything stops. So we were trying to keep things moving forward, now there will sure be delays. If you remember the law states that for every project a steering committee needs to be formed and the secretary general is at the head of the committee. So this position is empty now. I now hope they will appoint someone quickly, otherwise things will remain freeze.” - (Financial advisor, HCP & PPP)

PART 3 - CRAFTING A PPP FOR ENERGY DISTRIBUTION



We present in this part our findings of observation and analysis of the PPP crafting experience at the Lebanese energy sector. Figure 4.2 is the data structuring and ordering related to this phenomenon. The 1st order codes include data from interviews, archived documents and events. This data structure

features sixteen concepts aggregated into six dimensions that represent the six sub-processes interplaying during the PPP crafting process: (1) Need for technical and administrative reform, (2) Framing partnership design, (3) Resisting private participation, (4) Questioning partnership viability, (5) Resisting partnership activities and (6) Pursuing partnership. As explained in our methodology for data analysis, we used verbs in their gerunds form “-ing” where possible to indicate action in the data.

The dynamics of this partnership evolution is mainly driven by the interplay between processes and variables existing at both the micro- and macro-levels of analysis; it is therefore irrelevant to describe this evolution in a linear way, so we will be highlighting the interplay between and among emergent themes and concepts. The implementation of the DSP project was not as smooth as planned. Its execution experienced lots of turmoil and disruptions that started at the very beginning of the partnership setup. Sequences of contextual and regional events, institutional constraints and high hybridity in logics between acting partners succeeded in a relatively short time to greatly impact the performance of the project, preventing the completion of its core pre-planned activities.

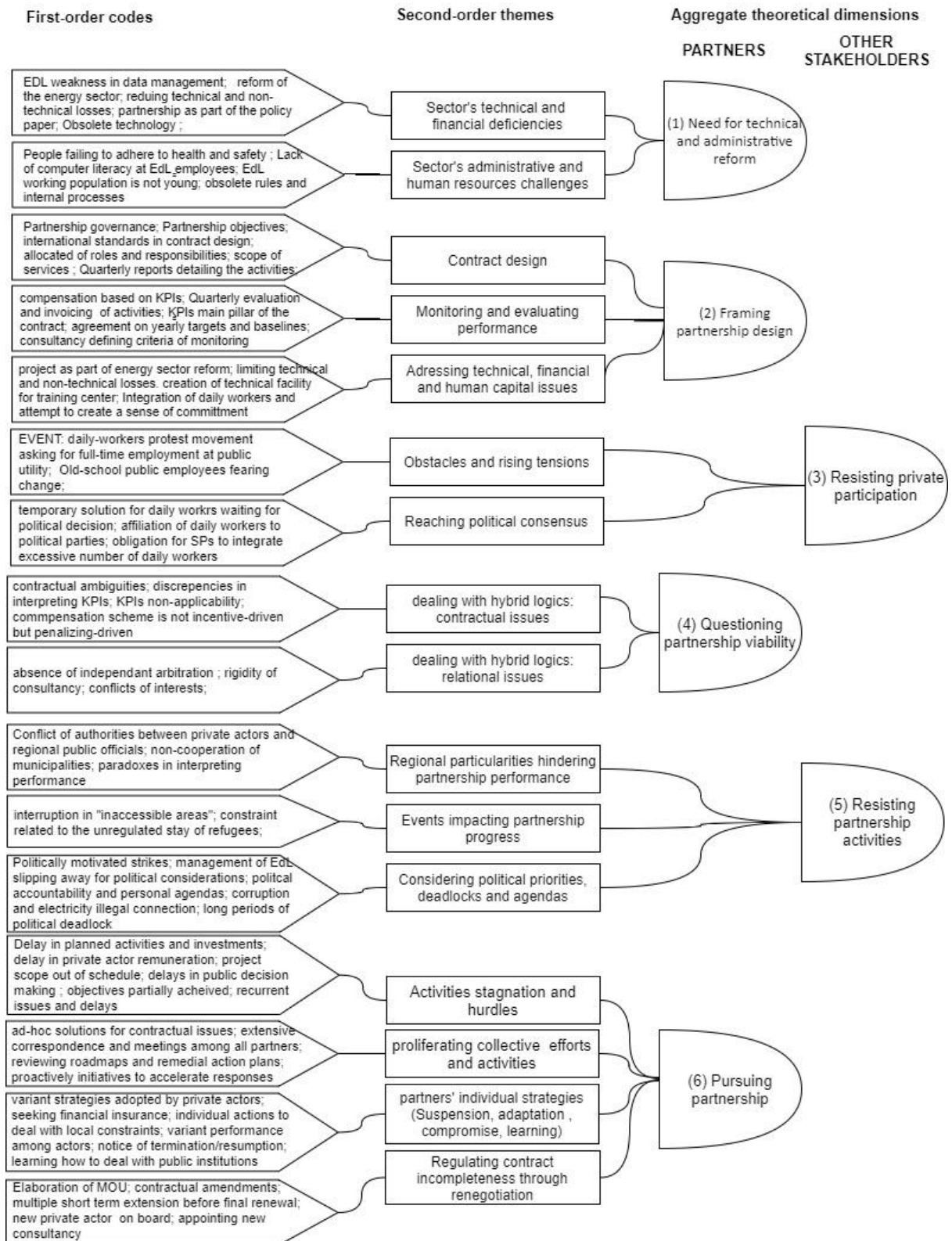


Figure 4.2 - Data structure of crafting a PPP for energy distribution

In sum, we label this experience as a “controversial” one, a concept that was repeatedly revealed by participating actors during our interviews while describing their journey in the context of this project: *“The project is important for the nation but is also so controversial; We consider this as the first PPP project in Lebanon despite the existence of previous PPP-like projects”* - (PMO Manager, SP1). As stated earlier, Lebanon has a record of PPP-like projects, however the DSP was hailed as the first project presenting the characteristics of a PPP that distinguish it from the concession-based contracts and management contracts of previous projects. The general conditions of the DSP contract explicit the terms related to the scope of activities bundled in this project: designing, building and maintaining a distribution network. The contract also provides a scheme for liability and risk distribution among partners, and suggests a framework for performance monitoring and compensation for the activities of the private partners (details were provided in Chapter 3 to support the relevance of the DSP choice as a PPP case to study).

The DSP evolution unfolded as detailed below:

1. NEED FOR TECHNICAL AND ADMINISTRATIVE REFORM

The deficiency of the energy sector reveals a great need for reforms at many levels. The entire activities of generation, transmission and distribution became unreliable because of the poor the quality of the flow of energy unreliable, the prevalence of long rationing hours, low citizens’ confidence in the utility services, high technical and financial losses and a perpetual deficit budget.

The Lebanese energy crisis hit the headlines and remains in the light for many years...

“The electricity and water sectors face major challenges in increasing supply and improving service, and they both are in need of significant reforms. One of the most striking aspects in the electricity sector is the heavy dependence on the informal, private generation sector, which nonetheless operates outside any state supervision or guiding framework” - (World Bank, 2009)

“Even prior to the Syrian crisis, Lebanon’s electricity sector had insufficient installed capacity, low efficiency, high losses and inadequate infrastructure, resulting in poor reliability, inadequate levels of supply and extensive load shedding” - (World Bank and United Nations, 2013)

“Lebanon’s power sector is a substantial drain on the state’s treasury, responsible for 40 percent of the country’s fiscal deficit, according to the World Bank. Significant reforms are required to cut the fiscal shortfall and address structural and governance issues at the root of the crisis.” - (Executive Magazine, December, 2018)

The DSP project was launched on April 2nd, 2012, as part of a reform policy of the suffering energy sector in Lebanon. The analysis of this dimension reveals two main concepts: ‘the sector’s technical and financial deficiencies’ and ‘the sector’s human capital and administrative resources’, and evidences to support these concepts are countless.

Sector’s technical and financial deficiencies

The distribution grid suffered from long-lasting technical deficiencies. Illegal connections, meter manipulations, and deteriorating equipment have contributed to the drastic weakening of the energy distribution grid. In addition to shortcomings in the billing system which reveal accumulated amounts of uncollected bills as well as significant errors on the accounting and record keeping. These deficiencies were documented in many sources, and also explicated in the Policy Paper for the sector’s reform:

“The failure of the GoL (Government of Lebanon) to reform the electricity sector is causing an annual deficit of 1.5 billion dollars on the public purse and losses on the national economy estimated at not less than \$2.5 billion dollars per year. This crisis is caused by the lack of worthy investments); high fuel bill (62%-75%); the operating status of power plants half of which are old and inefficient and the other half uneconomical; high technical and commercial losses in transmission and distribution; wrong tariff structure and low average tariff; deteriorating financial, administrative, technical and human resources of EdL, all this in the presence of convoluted legal and organizational frameworks. The totality of these issues needs to be addressed in a prioritized manner in order to find a comprehensive and durable solution, which is the core of this paper.”- (Policy Paper for the Electricity Sector, June 2010)

The Policy Paper also states that the problems related to the distribution activities are to be addressed with the participation of the private sector:

“The distribution sector policy is based on implementing a transitional and realistic program with the participation of the private sector on the basis of the existing legal framework and aiming at investing in planning, constructing, operating and maintaining the distribution activities including metering, billing and collection based on modern and smart systems” – (Policy Paper for the Electricity Sector, p. 9)

Sector’s administrative and human resources challenges

The energy sector also recognizes problems and challenges related to obsolete administrative structures and overstaffing in administrators. In this sense, the public sector recognizes the lack of appropriate competencies in various areas and the need to collaborate with the private sector for its restructuring and transfer of managerial resources and capabilities.

“In terms of IT platforms, EDL had only one very old application developed on COBOL for bill collection. All other operations were paper-based, and the computer literacy of EdL personnel is almost absent.” – (PMO Manager, SP1)

EdL lacks young, talented and specialized human capacities. The utility is overstaffed with administrators who earn very high salaries, who obtained their jobs through political connections.

“Two third of our staff are above 50 years old, they average around 59 years old, and most of them were employed through ‘wasta’. Fresh graduates are not interested in working at EdL. On the administration level we are overstaffed but with no fresh blood to innovate in daily practices and processes; on the technical level we mostly rely on daily workers who get paid on hourly basis” – (President of DSP committee, EdL)

EdL workforce also lack awareness in regards to the importance of health and safety measures, and there is no rule to enforce them to adhere to these measures:

“Many people failed to adhere to health and safety regulations and do not taking them seriously. They totally refuse to use protection equipment and consider these measures as a waste of time.” - (PMO Manager, SP1)

2. FRAMING PARTNERSHIP DESIGN

Framing the DSP activities and their governance mode was designed to address the needs explained in the previous dimension. Our interviews revealed three noticeable concepts this sense: ‘Contract design’ and ‘Monitoring and evaluating performance’ and ‘Addressing technical, financial and human capital issues’.

Contract design

The DSP contract was designed by PM-1, who were extremely enthusiastic about bringing in their international expertise to the Lebanese context. They designed the specifications for the tendering process and wrote all documents that constitute the contract while taking into consideration that the project is a national one, unique in its size and design, and also presenting the particularities of PPPs unlike other projects previously executed in Lebanon. PM-1 has taken part in the design of many PPPs implemented in countries of the GCC region and therefore has an important expertise in designing and managing PPP projects. They also believed in the capacity of Lebanese local companies to handle PPP requirements if they acquire the appropriate know-how of international expertise.

“We are a Lebanese company that worked on PPPs in the Gulf region, and we wanted to bring in these international standards and experiences to Lebanon. The recruitment of service providers required this caliber...We wanted it to be a success story... We made sure to hire local companies because they are familiar with the Lebanese context.

And we asked them to be technically assisted by international companies for transfer of know-how.” - (Technical manager, PM-1)

In terms of governance, the contract stipulates that a project manager committee presided by EdL and assisted by specialists from the project consultancy is supposed to manage the DSP and ensure the proper application of contractual terms and conditions. As a public institution with no prior experience with such a partnership, EdL surely needed to be assisted by PPP specialists and private technical advisors. The president of the project management committee explored with us several documents constituting the DSP contract while explaining the governance mechanism of this partnership:

“This project is managed by a committee presided by me, the contract gives a main role for the project manager... PM-1 prepared the specifications, they were the program managers, if you read the “General Conditions” of the contract you find the PM responsibilities as well as the responsibilities of each SP. Also the document “Scope of services” clarifies the DSP activities. We did not know anything about how this project might be conducted, PM-1 did much of the effort, they designed all aspects of the project: [flipping through the different parts of the contract] the scope of services, the performance monitoring and compensation for the KPIs, a document for the markets, BoQ and raw material price, area subdivision assigned for each SP: Beirut and Bekaa will be handled by SP2, the North area by SP1 and the South is with SP3. The SPs are very advanced technologically, they have call centers, GIS, IT platform, They have plans and designs, and a very important IT platform....They have a full monitoring of the project.” - (President of DSP committee, EdL)

The Appendix 3A-‘Scope of Services’ of the DSP contract details the activities to be performed by the SPs and the ones of the PM/Owner nexus (as project manager). These responsibilities include, but are not limited to:

- Approving all SP activities (investment plans, construction programs, maintenance plans, technical specifications of purchased equipment, monthly and quarterly progress reports...)
- Monitoring and assessment of these activities (KPIs reported by SPs throughout project execution, bill collection process, customer service process...)
- Defining KPIs and targets for the different distribution activities.
- Auditing the accuracy of operational, technical and financial reporting.

Monitoring and evaluating performance

The monitoring and evaluation of the SPs performance is based on a scheme of 11 KPIs, pre-defined in the contract. Accordingly, financial compensations or penalties will be determined for each SP on a regular basis. Details of this performance monitoring and compensation

procedure, baselines and calculation of KPIs as well as details on terms and procedures of payment are stated in the different appendices of the DSP contract.

Each quarter SPs submit their progress and invoices supported with evidences within a Quarterly Progress Report. The remuneration of the services is done on a quarterly basis. However the amounts due to the SP are subject to a percentage of deductions and or bonuses calculated against KPIs. PM reviews the details of these evidences, based on which PM calculates for each SP the amount approved to be processed to payment. The payments are subject to incentive and penalty compensation factors, according to Appendix 7- 'Performance Monitoring and Compensation' of the contract. SP eligible payments are according to Payment Schemes defined in the contract, and "*The Service Provider performance will be assessed on quarterly basis where incentive payments and or liquidated damages shall be set for the period under assessment*" (Appendix 2- 'Terms and Procedures of Payment', p. 2).

Actors informed us about the performance monitoring scheme done through the measurement of a set of 11 KPIs, as in Appendix 7. According to this scheme, the contract indicates a baseline for the KPIs to be carried out during the first twelve months, after which the SP, owner and PM agree on annual targets progressively through the next 3 years of the contract implementation. Annual targets are subject to annual reconciliation within 3 months before the end of the year. The owner/PM reserve the right to audit the process and corrections may be applied if inaccuracy is determined.

All actors seem to agree that the KPI scheme in terms of setting targets, evaluating performance and calculating remuneration is clearly the main pillar of the contract. For the consultancy, the KPI scheme is the monitoring tool for the performance of private companies.

"The DSP contract is built around performance. It is performance-based. The KPIs were a main pillar of the contract... we need the private sector to perform into public services through monitoring the performance through performance evaluation and calculation of KPIs. Based on this we do invoicing, we reflect the performance into invoicing, either they get incentive or they get penalized" - (Technical consultant, PM-2)

Addressing technical, financial and human capital issues

The DSP project was initially designed with a main objective of modernizing the distribution power grid through the installation of advanced metering infrastructure. At different occasions the partnering actors explained to us the various technical and financial benefits that EdL and its customers can get from this innovative aspect of the project, if the scope of

services is adequately performed and achieved. The project's activities are designed to prepare the utility for this technological change through the comprehensive installation program integrating smart meters, communication networks and data management system that is supposed to achieve substantial impact on the power grid as well as great benefits for customers and utilities (remote billing, accurate tracking, operational efficiencies, improved customer services and others). The innovative aspect of the project lies at the technical level of the distribution grid: complete construction of Advanced Metering Infrastructure (AMI) which is a smart grid configuration for power networks. These technical advantages of this configuration imply economic benefits as well by improving the grid reliability, reducing meter reading costs, enhancing bill collection and reduce energy theft through illegal connection. This will therefore increase the generation of cash flow for the public utility.

On a complementary note, the DSP deal also consists of competencies exchange through the integration of a category of EdL employees within partnering private companies, on a contractual basis, for the project duration period. This category of EdL workforce, also known as "daily workers" is a form of precarious employment paid on daily basis to perform various tasks ranging from office duties to technical interventions as well as bill collection. This workforce is a geographically mobile one recruited basically from locals to serve at EdL regional offices and interfere on the power grid on different territory locations. The DSP project anticipated the integration of number of daily workers into the three SPs for the duration of the project, depending on the size of the area affected to each company and the actual estimated need of the company. Proper training of daily workers is the responsibility of private service providers. On staff mobilization for the project implementation the contract stipulates:

"During the staff mobilization, the Service Provider shall assume the responsibility of: 1) man power provided by the Owner at his disposal, 2) man power hired by the Owner for meter reading and bill collection activities. The Service Provider shall assume the responsibility of daily workers contracts personnel for the first three months of the contract. The Service Provider shall assess the performance of the mentioned man power at the end of the three months and shall enroll the succeeding ones to work for the project under his responsibility and management." - (DSP contract General Conditions, Appendix 3A-Scope of Services, p. 8-9)

Framing the partnership objectives and launching of its activities was a trigger for a process of tough resistance from public servants and rising tension among political stakeholders.

Before even realizing and assessing the potential social and professional benefits that could come along with the recent opportunity offered to them through the DSP project, EdL contractual employees went on strike expressing their opposition to the conditions imposed by this private participation in public services. DSP activities related to project mobilization, set up of all EdL area offices in terms of vehicles, equipment, and offices renovation have stopped as soon as they started....

3. RESISTING PRIVATE PARTICIPATION

As advanced in the previous process, at the kick-off of the partnership, a major strike by EdL contracted daily workers hit the project in its launching phase and caused a drastic interruption of DSP initiation activities. Public officials who felt threatened by the participation of private companies in activities initially performed by them (maintenance, bill collection...) were behind this resistance process. Two main concepts have impacted the process of resistance: 'obstacles and rising tensions' and 'reaching a political consensus'.

Obstacles and rising tensions

The daily workers protest movement lasted 93 days (from May 3 till August 8, 2012) and was considered among the longest labor strike known in the modern history of Lebanon. Around 2000 contractual workers have been claiming full integration in the electric public utility a while ago, and engaging into a protest movement that has been intensifying since 2011. With the advancement of the DSP project, this movement built up because daily workers were already drained by the financial and social repercussions of their unstable employment. When the DSP program was launched, daily workers organized strikes and sit-ins in all EdL divisions and sites on the Lebanese territory. They refused working for private companies because they think they do not know how the DSP contract will be carried out and they feared the loss of the opportunity of being full-time public servants. For them it is a normal thing that after years of public service they are supposed to get full-employments in a public utility rather than being shifted to an unstable, short-term employment.

« The DSP was part of the policy reform in 2010, part of this reform are the daily workers. DSP was a temporary solution for them while waiting for the permanent one. The temporary one is their integration in the private companies till the parliament issues a law that regulate and legalize their integration to EdL. However the contract stipulates that the companies can chose among a pool of daily workers the percentage they need to run the project after the evaluation. ...The workers' movement found this decision unfair. And they claimed that all of them be integrated in the project as a first step, till a final decision is taken for their full employment at EdL. » - (PMO Assistant Manager, SP3)

The daily workers movement hit the headlines for 4 consecutive months. The leading French-language Lebanese newspaper was following up closely on this matter and reported the workers' concerns while the protest movement was still ongoing and no concrete action was taken to deal with the harmful consequences of protests:

“Ils refusent catégoriquement de se faire embaucher par les trois entreprises privées « car nous n'avons aucune garantie sur la façon dont va se dérouler le contrat et il est normal qu'après des années de service à l'État nous soyons embauchés dans le service public », a confié à L'Orient-Le Jour A.C., l'un des porte-parole des travailleurs journaliers, au cours d'un sit-in à l'EdL. » - (L'Orient-Le Jour, June 6, 2012).

The situation seemed to be controversial, while the daily workers were afraid of working with private companies and therefore losing the opportunity to become full-time public officials, the private companies themselves admitted that they cannot carry on with the project activities without the participation of these workers. In an interview with local press, the CEO of SP1 confirmed that private companies definitely need the unique expertise of daily workers to perform field work, which should secure the jobs of those who were hired, at least for the duration of the partnership:

“Nous avons besoin de ces gens, de leurs compétences. Il est de notre intérêt de les embaucher, car eux seuls possèdent l'expérience nécessaire du terrain » - (L'Orient-le-Jour, June 2012)

The repercussions of this long strike proved harmful for the Lebanese power grid in general when rationing reached unprecedented peaks in all regions of the country, and the DSP in particular when different pre-planned activities were put on hold for 93 days.

“Une fois de plus, l'EdL est au centre des projecteurs, et une fois de plus, elle ne fait pas office de star. En cause, un contrat entre la société et trois entreprises privées pour la gestion de la distribution de l'électricité. Les journaliers de l'EdL craignent pour leur avenir et font grève, inlassablement, depuis plus d'un mois. L'Électricité du Liban (EdL) se rappellera pendant longtemps de cette saison printemps-été 2012, où le rationnement atteignant des sommets inégalés dans toutes les régions du pays et la grève ouverte de plus de 2 000 de ses travailleurs lui valent les critiques les plus féroces.” - (L'Orient-le-Jour, June 6, 2012)

Blockages and delays in pre-planned activities were important as a consequence of the protest movement. The preparatory phase comprises activities related to mobilization (in terms of vehicles, equipment, and personnel required for the installation of SPs in EdL divisions of their respective areas), network survey (assessing the condition of existing assets and developing network mapping of these assets) and plans and programs (for each of the activities to be performed by the SP in executing the contract). While the General conditions

of the contract have allocated a two-months period for mobilization activities and a 6-months period for the development of plans and programs and the completion of a comprehensive network survey starting from the date of the contract award, the execution of this preparatory phase was frozen and resumed only four months after the project launching.

DSP documentation repeatedly mentioned the disruptions caused by the strike as main constraints to project progress:

“As documented previously, due to the disruptions and delays created by the strikes from May – August 2012, most DSP project activities were delayed... Accumulation of non-collected bills resulting from the strikes for three months of the Meter Reading / Bill Collection personnel and from the existing backlog of emission collection in some divisions....” - (DSP Quarterly report no. 6)

Reaching political consensus

Although the private service providers have guaranteed daily workers many benefits that they did not have at EdL, this was not enough for them to stop their protest or alleviate their fear.

“All these advantages [talking about the benefits offered by the company to daily workers] were not appealing to 80% of them. The idea is that they know they are already overstaffed and they know that if they were to be properly assessed, not all of them will meet the requirements. They understood that but still this did not comfort them. All they wanted is to be integrated as public officials, and the private world is not appealing to them.” - (PMO Assistant Manager, SP3)

The concern of daily workers was twofold: their qualification level, especially for senior workers, perceived as a burden and a risk of losing their job upon evaluation and assessment of the private sector, and the state of uncertainty about their fate for the post-DSP period. After all, the DSP is planned to be executed in four-year' time, after which there is no guarantee for them to get back to any type of employment at the Lebanese electricity public utility. In order to address these concerns, SPs, in consultation with EdL and PM-1 offered to provide daily workers with better financial remuneration and appropriate trainings to improve their transferable skills and acquire the appropriate competencies required for the new way of performing their jobs. For daily workers, these offerings remain temporary and do not outweigh the benefits of the so anticipated full-employment at EdL. In our quest to understand the complex situation of daily workers and the drives behind this rigid resistance, as well as the reasons why DSP partnering actors could not reach any type of compromise with members of this workforce base, it was necessary to uncover the origins of the daily-workers phenomenon in the public sector, and more specific in EdL. This daily-workers employment model dates back to the 80's. In fact, behind the precarious work model of daily workers lays a whole system of “clientelism” and distribution of EdL economic and human

resources among politicians and confessions. This religious and political affiliation is rather diverse since all confessions and political parties are represented among daily-workers, but at different proportions. Although the protest movement's aims and ideologies were always significantly linked to social aims: the integration of EdL as full-time civil servants after many years of underpaid and precarious work, however speaking of a political/confessional oriented movement will contribute in explaining this phenomena. The reason why some political parties were opposing the permanent integration of workers in the national electrical utility is their concern towards a political/confessional imbalance within EdL. The Minister of MoEW himself was part of the opposing clan to the draft law regulating this integration and submitted at that time for Parliament approval. A temporary solution was agreed upon in order to end this crisis: MoEW agreed on giving temporary employment to all daily workers in the three SP companies, and promised them full-employment after the DSP contract ends in April 2016 (the initial end date of the contract). Daily-workers then agreed to temporary be employed within the project in anticipation to their full integration into EdL after the contract expiration date. From their side, the private companies were not happy with this consensus, but they did not have other alternatives. In fact, the number of daily workers affected to each SP exceeded by far their staffing needs and initial budgetary considerations. This number is proportional to the SP share in the project as well as the size of the corresponding region. Accordingly, 600 daily workers were assigned to SP1, 500 to SP2 and 900 workers to SP3. Furthermore, the political consensus overlooked the three-month' probation as well as the performance assessment conditioning the employment of daily workers, as stipulated by the DSP contract.

“At the end of the first strike, there was a “political” consensus on resuming the project under the condition to hire all daily workers (900 instead of the 500 we needed). We developed our financing plan on this basis. We estimated our needs at the total of 500 workforce size. So from one end we hired more people than we needed, plus we had to compensate with more qualified people for the lack of skills that they have.... Although some of these employees have good skills and were properly trained and are now holding good positions at our company, however the vast majority have political considerations and were not really committed.”- (PMO Assistant Manager, SP3)

This put an end to the strike in August 2012, and all efforts were then oriented towards the rescheduling and relaunching of project activities.

“August 8, 2012 was considered as the date for the re-launch of project activities, since it was the date when the EdL Board of Directors (BoD), the Program Manager, and the DSP's agreed on a framework to help resolve the pending issues related to the on-going strikes and to promptly re-launch project activities. To account for these delays and to ensure that the project objectives remained viable within the time frames defined in the

DSP Contract, revision to the project schedule was deemed necessary.” - (Quarterly progress report no. 6)

Despite the stressful business environment, the SPs with the support of EdL/PM intensified their efforts to move ahead with project activities that were initially destined to take place in the previous process of framing activities and objectives, and attempted reaching a normal level in this regards. A revised schedule was agreed upon from all participating actors in order to bring the project back on track with respect to its overall time completion.

Tangible efforts were perceived from all partners showing their commitment to re-orient and re-align efforts in order to accomplish the project objectives on time after the protest blocking events and despite their internal institutional conflicts. However, field work started to unveil that for main tasks to be executed, a number of actors and decision makers at different operational and administrative levels need to be involved. Although the DSP binding contract was signed between EdL and the three SPs, the latter found themselves facing a complex net of organizational relationships and stakeholders involved in the power distribution operational processes. In addition, number of emergent factors and field constraints with significant impelling effects hit the DSP progress and forced partnering actors to find collective or individual solutions in order to preserve partnership survival. The partnership enters a long phase during which the process of progressing and creating difference gets hindered by many environmental and political variables. At this level we identified three processes that interplay and feed upon each other to shape the path of the DSP evolution: questioning the viability of the partnership, resisting the partnership activities and pursuing partnership. These processes did not evolve independently. Multidirectional effects and nonlinear interactions were detected among the elements incorporated within these processes..

4. QUESTIONING PARTNERSHIP VIABILITY

Moving on with project activities after a disturbing start was not as smooth as expected. Despite the trials and collective efforts to pursue the revised schedule, delays in the performance and accomplishment of project activities continued to accumulate for various reasons. These delays created tension among partnering actors and triggered a set of actions/interactions between SPs and PM that added confusion and anger to their relation. Besides, variant interpretations of the contract terms and conditions started to emerge and contributed to further tension among stakeholders. At this level we observe strong conflicting logics dictating these interactions and disparate opinions over the interpretation and proper

application of some contractual terms and conditions. When describing the situation, the President of the project committee at EdL said: *“When companies start telling you about their problems with us, they would not finish”*. The DSP project has rapidly reached a tipping point that will determine its viability, stability and continuity. Two aspects of conflicting logics were revealed within partners during this process, hybrid logics related to ‘contractual issues’ and hybrid logics related to ‘relational issues’.

Dealing with hybrid logics: contractual issues

As soon as field work started actively, the monitoring, follow-up and coordination processes were also launched. As per the DSP contract the owner along with the consultant are responsible of thorough field supervision on the managerial, technical and financial works. The contract stipulates that:

“A centralized monitoring control system will be established by the Owner / Program Manager in order to monitor, register, control and evaluate all activities that will take place during the implementation of this project and being reported by the Service Provider on a daily, monthly and annually basis”- (Scope of Services, Art. 1, Sec 1.3, p.7)

In this sense the contract enumerates a long list of “monitoring”, “approving”, “supervising”, “overseeing” and “auditing” responsibilities; terms that reflect the rigidity of the monitoring system and makes its application rather problematic in the context of a partnership. In order to enforce this monitoring process, the contract provides a performance monitoring and compensation scheme, built around 11 KPIs. The calculation mechanism suggested in this scheme was supposed to create incentives for service providers; yet it soon started to be perceived as a penalizing mechanism. KPI issues, among many other contractual concerns, have dominated the discourse of the participants who addressed various aspects of the suggested KPIs system with noticeable frustration, especially that KPIs are the basis to calculate the remuneration of private actors. The payment scheme and the set of KPIs were subject to different interpretations, and a consensus could hardly be reached at this level. The KPI calculation process as explained to us by the actors is rather complicated and involves many steps. In brief, it starts with the consolidation of data and invoices sent by the SPs to the PM on a regular basis (weekly or monthly) for the performed activities (construction or services). The PM proceeds to data reconciliation with previously set targets and baselines through verification of matching and accuracy, accordingly payments for the SPs are issued. As explained by PM-2 technical consultant: *“the SPs either get incentives or get penalized,*

depending on their performance in each assessed aspect of their work: quality, duration of completion, capacity to meet pre-set targets... ”

On-going delays in project activities from the SPs side were noted, and this has directly impacted the corresponding KPI calculation and therefore the companies' remuneration.

At different occasions the SPs' general managers and project managers expressed their frustration towards the results of the reconciliations and perceived their actual remuneration as unfair comparing to the amount they initially invoiced for their performed activities. The interpretation of KPIs definition and calculation as stipulated by the contract as well as their proper applicability were subjects to continuous debates among partnering actors. For the private companies, this remuneration system is designed on purely theoretical basis, is ambiguous at many levels, and does not take into account the field particularities or the unexpected events that the project may encounter, whether these events are external, such as the previous daily workers strike or internal, such as delays in EdL decisions or needed approvals for the purchase of equipment.

« There is something ambiguous in the KPIs, which is related to internal and external factors. From one end the whole system prevents you from executing a task, and then renders you accountable for your performance and your KPI. At some point, EdL went out of meters, and there was a delay in delivering them. This delay has affected the calculation of the KPI relative to preventive maintenance. There is a legal principle that is not respected here, if you are preventing me from doing something, you cannot render me accountable for the delay! » - (PMO Manager, SP1)

« When you work on the concept, it is different than the practice. Every conceived contract will certainly imply variation orders to clarify it. We raised many questions. Let's take the example of feeders utilization, the equation of KPI-3 is (Total No. of Feeders with peak demand between X% and Y% of nominal rating / Total No. of Feeders as stated by the contract). How can we define X and Y? In order to define X and Y you need to have actual data to measure the baseline for that. According to the contract, the feeder should be installed to measure the data and set this X and Y. The installation of feeders was delayed by the strike. In this case how can we be accountable for this KPI ? ” - (PMO Managing director, SP2)

“When KPIs were initially set it was rather based on an academic approach. It's kind of ideally we should be doing this and that. This is different than what happens in real-life. PM-1 put the design. Unfortunately PM-1 has never worked in practice and never been on the ground. This was their project, and they're failing to run it properly. This is a disaster. ... We were even arguing about what would reflect a good performance in a KPI? Was it the increase or the decrease of its value? To this extend the KPIs were not clear and ambiguous. They answered that: during investment period the KPI should increase to indicate a good performance, whereas in later stages it should decrease. OK, then what indicates the limit or the border between the investment and the next

stage of operations?... In our opinion, we have the impression that the contract consists of a patch work. Sections are copied and pasted from different sources. The KPIs section is controversial by itself.” - (PMO Managing director, SP3)

SPs also found that it was so obvious that some KPIs are not relevant to the Lebanese context, and therefore SPs cannot be responsible for their non-applicability. They explained that two of the KPIs which are internationally accepted metrics in power generation and distribution reliability (SAIFI & SAIDI)⁶⁷ and that concern the supply interruption frequency, are totally irrelevant in Lebanon. Power rationing in Lebanon is a common practice on the entire territory, and rationing hours fluctuate between 6 to 12 hours depending on the regions. This is an issue at the generation side of the energy rather than the distribution. It is therefore totally unrelated and unreasonable to measure interruption frequency and consider SPs accountable for its high percentage.

Another example of issues related to the applicability of KPIs is the installation of smart meters. As explained earlier in dimension (1), the heart of the DSP project and its innovative aspect is the installation of an advanced metering infrastructure. But this step comes later in the project after all preparatory activities have been performed. Therefore a KPI that is related to smart meters is considered to be irrelevant when the installation of smart meters did not even take place. SP2 Managing director remarked:

“This led to a lot of confusion in the contract, because the assumption of the contract and its biggest scope was the installation of the AMI (Advanced Metering Infrastructure). Many of the KPIs are related to the smart meters. And because the AMI couldn't be installed, EdL and the consultant started to search for ways on how to apply KPIs in the absence of electronic meters. And in case we did not agree they were forcing their decisions. There were lots of problems at this level.” (PMO Managing director, SP2)

When we asked the three private actors for the reason why they engaged in a contract that displays such evidence of ambiguities, we received very similar answers claiming that their respective companies were most of all interested in taking part of a first PPP in Lebanon, especially that the innovative aspect of the project, which is the advanced smart metering system, was very appealing to them.

From their end, PM-1 had a totally different point of view. For the program manager, who is also the consultancy behind the design of the contract, the DSP is a strategic project, implemented at the national level, and therefore environmental factors or emerging events

⁶⁷ SAIFI : System Average Interruption Frequency Index and SAIDI: System Average Interruption Duration Index

may delay some activities but do not justify that the private companies engaged in this partnership could not execute their activities within a revised schedule. The PM accused the companies of being profit-driven, and this incentive is not a key success factor for a real partnership. Most importantly, the project is oriented towards innovative services, and therefore companies who act like traditional contractors are not service-oriented and will surely perceive KPIs as threats instead of incentives:

“The main concern of private companies is to realize profit. So they did not work as service providers, they were more like contracting-oriented. They executed the work, and invoiced it. They took advantage of the events and external factors during the first period to “escape” from the performance monitoring..... It wasn’t a copy/paste experience from other countries as they are saying, it is a project designed to be ready to be executed in Lebanon only if the SP committed to the specifications ... There are some competencies that are missing. The external factors are not considered to be valid reasons. KPIs are not in favor of SPs who want to work as contractors” (Technical Manager, PM-1)

Accumulated delays in performing tasks as well as tension escalating between SPs and PM have triggered a set of extensive meetings labelled as “the DSP’s March 2013 Contractual Meetings”. The main objective of these meetings evolved around agreeing on rescheduling some activities and milestones through the elaboration of a second revised schedule, in addition to financial compensations concerns raised by private companies. Contractual issues were extensively argued upon when EdL and PM started putting financial pressure on SPs and notified them that liquidated damages shall apply for the corresponding delayed activities. This section of the contract, the liquidated damages, entitles the SP to pay Liquidated Damage-delay to owner in case the SP exceeded the time for completion set to all implementation services and activities (Section 2.2.6 - Delay of completion - Liquidated Damages – Delay, DSP contract General Conditions, p. 20-21)

SPs requested a 4-months extension of the contract duration in order to compensate for the delays caused by daily workers. However PM-1 insisted on the time completion of the project within the initial contract framework.

During this period, tension reigned over the DSP business environment, and quarterly reports recorded an extensive activity of meetings and contractual letters exchanged in April/May 2013. The extension of project time completion, the impact of additional incurred costs and conflicting opinions about monitoring process adequacy were the highlights of the conflicts.

Dealing with hybrid logics: relational issues

The coexistence of different logics within the DSP is quite challenging. At its micro-level the DSP is an entity involving a diverse range of stakeholders: a public institution that lacks the appropriate competencies and resources to run a complex and innovative PPP, a private consultancy with earlier experience in designing and managing sophisticated PPPs in countries other than Lebanon and three distinct national service providers, all gathered with no prior collaborative experience in common. These stakeholders united in a structure that is “unlike anything that came before it”, are struggling to coexist and continue, each one driven by his own perceptions, expectations and organizational practices. Hybrid logics are dictating actors’ behavior towards each other’s as well as towards external factors. One thing is sure, while these logics emphasize social benefits combined with the pursuit of efficiency and financial gains, they also imply conflicts within the DSP itself. In order to precise the different roles and responsibilities of partnering actors, the contract governing the DSP seems to be “perfectly” designed and formally assigning to each actor a clear set of roles and responsibilities. In practice, things did not go as smooth and regulated as they seemed to be. Persistent debates on the DSP contract administration have fueled partners’ interrelations with tension and pressure.

While describing this relation, private actors repeatedly complained about the absence of an independent entity capable of facing these dilemmas and reconciling conflicting logics. The managing director of SP2 announced:

« When constraints start they limit roles, problems start as well; this is mainly because there is no entity to organize and arbitrate this. EdL is the owner, the consultant relates to the owner, so as a private partner when I have a problem with the contract or interpreting the contract, I am referring to the same partner which is the consultant and the owner, EdL or the consultant to explain an issue... the party that is responsible of validating our activities are the same people... Here’s the situation: EdL constituted a PM (program manager) committee composed of members from EdL and from the consultancy. All communications are signed by EdL, the legal entity is EdL, as if the consultancy does not exist to communicate directly with us. So in a PPP, I am a private party communicating with a public entity, where is the private entity that can protect me or assist me in case of problems? There is no third party for this. The consultant is on a contract-basis with EdL, so they will always work for the interest of EdL which is very normal. We asked for an independent entity at the beginning, and we had a big clash about it” - (PMO Managing Director, SP2)

SPs clearly perceived the conflict of interests resulting from the same actor being EdL client by virtue of a consultancy contract and the partnership manager at the same time. For the private companies, PM-1 could never act as an independent entity or a mediator providing appropriate solutions for the problems encountered within the partnership independently from

EdL interests. Concepts evoking the absence of “an independent entity” or a “mediator” or a “problem solver” were repeatedly raised and this perception that the tandem EdL/Consultant does not constitute a moderator or independent third-party arbitration was an additional source of tension for partnering actors.

« We consider that there is a conflict of interests when the person who developed the project and designed and written the contract is also the one who is executing it and arbitrate in case of problem. There was supposed to be a supervision committee but it was never established. And this greatly impacts the performance of the project. » - (Assistant Manager, SP2)

The general manager of SP3 was clearly annoyed when telling us about a declaration made by the CEO of PM-1 to the media, claiming to realize a USD90 Million saving for the benefit of the Lebanese government by deducing them from SPs remuneration.

“PM-1 are taking pride with their accomplishment, their CEO once claimed to the media, that he realized a USD\$90M saving for the benefit of the Lebanese government, because he could deduce them from the SPs. What kind of pride is this? Are they trying to justify their role as a consultancy by continuously deducing from the amount due to the SPs, through reconciliation and review of KPIs calculation, they will be justifying their role. What kind of partnership is this?” - (General manager, SP3)

This was seconded by the opinion of an assistant manager who thinks that the consultancy is mainly concerned with pleasing EdL and the public opinion rather than properly administering the project. And this is the reason why they were not open to any suggestion of contract amendment:

“The consultancy considered that the more they penalize the private companies, the more they have a better image towards EdL because they are saving the public money....In my opinion they were very strict in the application of the contract because the issue of the electricity in Lebanon is always brought to light, it is a hot topic for the news. However this is not the best way to do it.” - (Assistant Manager, SP3)

Naturally, the consultancy had a totally different perception of its role and the responsibilities towards the execution of the project. For them the private actors were reluctant in the application of contractual terms and conditions, and this was the main reason behind the accumulated delays in tasks execution. For this EdL needed to be firm in enforcing the contractual terms on all people involved, and quick decisions and resolutions needed to be taken, which was not the case.

“The DSP is a huge project, EdL should have enforced the contractual terms, and all stakeholders needed to cooperate and get involved. Both parties are held responsible. This reason of the resistance of daily workers is not valid. We are not supposed to be judges. We are responsible for the proper execution of the project.” - (Technical Manager, PM-1)

The consultancy does not consider that there was any issue in the contract itself; however they were more sceptic about how private partners are approaching the partnership:

“Unfortunately, we couldn’t perceive that the private sector wanted to offer services or be part of a partnership. Are they service-oriented or contract-oriented?... Our way to approach the project was flexible we were open to suggestions and changes. But they did not take any initiatives.” - (Technical Manager, PM-1)

Despite conflicting logics and continuous debates among actors, everyone agreed on the necessity to deploy further efforts in order to preserve the partnership viability and ensure its continuity. A third revision to the project schedule and planning the upcoming period became necessary and led to develop and submit a ‘Remedial Action Plan’, in line with the contract, with the main objective to clear all submission claims and contractual issues as project enters the implementation stage of its core activities like meter installation. A 4-months extension of the contract duration is suggested.

5. RESISTING PARTNERSHIP ACTIVITIES

In addition to what we designated as internal factors, our data analysis has revealed variables and processes of the institutional and extra institutional environment that did not contribute in enabling a smooth implementation and execution of the DSP. Although this partnership was hailed as an important initiative for the strategic reform of the energy sector, at some point of its evolution, different elements of the external environment contributed further in limiting its capacity to achieve the objectives it was initially set for. Existing factors as well as emerging incidents are explored in this dimension, namely: ‘regional particularities hindering partnership performance’, ‘events impacting partnership progress’ and ‘considering political deadlocks, priorities and agendas’.

Regional particularities hindering partnership performance

During tendering process and contract design, one thing is sure: none of the partnering or managing actors took into account the importance of the changes affecting the mechanisms, business processes and widespread practices that support the functioning of EdL regional divisions. We highlight the following elements of the institutional environment that appeared to be particularly impacting DSP evolution.

At first, backlogs of unprocessed work orders existed at EdL regional divisions before DSP launching (DSP Quarterly report no. 10 mentions 57,110 old existing and pending

construction work orders). These existing pending tasks were in large amounts lined up in the bureaucratic red tape of EdL different regional divisions and/or headquarters. These accumulated work orders related to customer services, constructions and maintenance were handed to SPs to be categorized and scheduled as part of their scope of services. In the same way, many of the activities to be performed by the SPs - i.e. overhead and underground network installation, customer provision of electricity connections and other customer requests... - require the approval of EdL regional head of divisions, as per EdL rules of procedures. Almost two years after the project was launched, the scheduling of past and ongoing tasks still shows further accumulations and delays.

Recurrent backlogs were regularly reported during DSP progress. A significant amount of past and present unprocessed works, waiting for EdL head of divisions' signature and approval, were always mentioned under a section of "Accumulated backlogs" in each quarterly report issued. According to actors of private companies, these accumulations were either caused by EdL red tape, or by "intentionally" slowed approvals. In fact not all EdL head of regional divisions and other public servants were easily compliant with the changes imposed by the DSP, because these changes jeopardize the authority and social status they have within their region.

"Private participation in EdL public services and utilities was called for without any prior preparation of the public employees to change....For the head of regional divisions, the private companies came to invade their workplace and take away their roles while they used to be like emperors in their region. All issues related to power grid, installation of new substations, customer requests used to be under their authority...They used to take pride through providing such services. This used to give them an important social status representing the dominance of the government. This is not to talk about other benefits and bribery.- (PMO Managing director, SP3)

Secondly, the number of actors and entities involved in EdL operational processes at the regional levels is not only limited to EdL public officials and head of divisions. This bureaucracy is the ultimate example of complex processes and dispersed authorities among many actors involved in public policy implementation. This network extends to include Lebanese municipalities as well. In practice, all digging and excavation works for underground power cables and conduits installation or repair, need to obtain the approval of the related municipality. This adds a layer of approvals needed for such activities and impacts the completion dates of their execution. Although the legal time for these approvals is initially taken into consideration during the design of the DSP operational processes, however

the municipalities' frequent very long delays to approve – or even reject! - were not taken into account.

These factors entail a chain reaction of cumulative effects produced upon the delay of execution of any work order initiated by the private actor and necessitating the approval of a regional public authority. The process is the following: time execution of work orders is a variable in KPI calculation. Long delays in approvals, and therefore in execution time convert into lower KPI value, hence weaker performance of the SP, resulting in his poorer remuneration. The performance of private companies is therefore inappropriately evaluated and the private actor is unfairly rendered accountable for these delays.

« Some of the works done face obstacles related to the regional authorities like municipalities as I told you, especially when they involve excavation works. This type of work needs the approval of the municipalities and sometimes they object. This may cause delays and this is beyond our control. It takes like forever to prove that it really is beyond our control. We're still having debates about works achieved in Year 3 » - (PMO Manager, SP1)

“Another problem concerning customer connection, because we are related to EdL procedures, when a customer applies for a connection, the application process implies many back and forth to and from EdL regional divisions and headquarters, every step of this process necessitates many validations, and some EdL personnel might not validate...all this is out of our scope” - (PMO Managing director, SP2)

Third, one of the important objectives of the DSP project is the reduction of non-technical losses resulting from violations on the distribution grid. Stealing power and illegal hook-up is a practice largely present in poor districts, where the population is overcrowded. Removing these connections follows a process established by EdL rules of procedures. This process requires the intervention of inspectors from EdL and in case of repeated violations, a legal follow up with issuance of “procès verbal”, and therefore the involvement of a coordinator from the Ministry of Justice, becomes necessary. Once again, and for different reasons, this process may be delayed and the concerned authority may be reluctant in assigning coordinators to accelerate the resolution of pending illegal connections that reached the legal level. DSP quarterly reports repeatedly list this issue, among many others, as a main obstacle difficult to overcome and that hinders the project progress:

“Non-provision of a coordinator from the Ministry of Justice in order to expedite the resolution of the pending PV's that reached the legal level, in addition to unavailability of the required support from local authorities in some areas in which NTL (Non-Technical Losses) activities were in progress during this Quarter.” - (DSP Quarterly reports no. 12, 13, 14, 15)

Fourth, other constraints that were also repeatedly reported as factors hindering project progress relate to entities and institutions outside the energy distribution sphere of actors or even external to EdL. For example the suspension or abstention of the “Transmission Directorate” to execute many activities required prior to activities related to distribution⁶⁸. This shows major malfunctioning within EdL organizational structure and communication within and between its three main directorates: generation, transmission and distribution. Also the delay of the Lebanese telecommunications entities in providing the SP’s with a requested 4-digit Call Centre numbers, which would facilitate the customer communication and services, was also one of these factors.

Events impacting partnership progress

Data analysis has also revealed interesting insights on fields’ particularities in different regions of the Lebanese territory that had significant unfavorable impact on the DSP activities. These factors were designated by partnering actors as “external” factors that impeded, interrupted or even completely blocked some of the DSP activities in these regions. One of the most impacting factors that went totally unforeseen when the project was designed is the total inaccessibility of some areas on the Lebanese territory, due to political and field constraints. These areas are located in Lot 2 and Lot 3 allocated respectively to SP2 and SP3. The barrier of “inaccessible areas” emerged as soon as the field work of activities related to network survey has started. This track of the project, the network survey, consisted of a full assessment of existing assets composing the distribution network in order to establish a network mapping of all MV/LV equipment. Activities related to this track were interrupted as soon as they started in areas where the State authority and interference are weak. In these areas ruling elites and political parties have a great influence and power at many levels. A brief political digression in ‘APPENDIX L - Inaccessible areas to DSP project’ provides insights on the reasons why government sovereignty is challenged in those inaccessible areas. When assessing project constraints, the progress reports regularly mention instability and security incidents in “inaccessible areas” that impede, interrupt and sometimes completely block DSP activities. PM-1 and SPs continually warned EdL of the necessity to address the

⁶⁸ Technical note: the energy network is a three-phase system. The generation stations producing the electric energy (generation phase), that is transmitted in high voltage over long distances (transmission phase), then reduced at a lower voltage at the distribution level where distributions overhead or underground lines distribute the energy along streets, factories and residences (distribution phase). *Adopted from:* Electrical Engineering Portal <https://electrical-engineering-portal.com/>

concerned authorities to regulate this issue; otherwise projects activities are likely to be incomplete in almost 40% of each Lot2 and Lot3.

“Inaccessibility of some DSP areas, due to political and field constraints, where several incidents are regularly reported, is still impeding the finalization of the Network Survey activities. These issues, if not properly addressed by the concerned authorities, may lead to incompleteness of the Network Survey activities within this Project, and, subsequently, may affect other Project Activities in these areas.” - (DSP Quarterly report no. 10)

“Interruptions in the Network Survey and GIS activities resulting from the insecure situation within the inaccessible areas of some DSP lots, due to political and field constraints, is preventing the finalization of the Network Survey activities in such areas. These constraints also affected the performance of Preventive Maintenance Activities. This situation, if not properly addressed and resolved by the concerned authorities, may lead to the non-completion of the Network Survey activities within the Project timeframe, and, subsequently, may affect other Project Activities in these areas, such as full implementation of the AMI activities and Investment Plan, etc.” - (DSP Quarterly report no. 13)

“Accessibility lack of privileges to some DSP areas continue to be a limiting constraint on the ability to close some of the pending activities“ - (DSP Quarterly reports no. 19, 21, 23, 27)

Another factor that has created major network constraints in different regions of the Lebanese territory is an on-going influx of refugees escaping war in a neighbor country and being hosted in various parts of the Lebanese territory. The repercussions of the rapid and heavy influx of more than one million displaced into the Lebanese territory has hit the energy sector badly and created major network constraints, including increased load on the network lines that were already strained and overloaded. This crisis had important implications on EdL network and DSP resources and has affected different tracks of the DSP activities related to network operations, non-technical losses, meter reading, bill collection and customer services. The constraints imposed by the refugees' crisis on the distribution network and therefore on DSP activities, were repeatedly reported through many quarters of the DSP lifecycle, however without major resolutions or proper interventions.

A third incident that severely hit the DSP progress in August 2014 was the eruption of a second strike of the daily workers allocated to SP2 and SP3 activities in Lots 2 and Lot 3. This second major interruption of DSP main activities is very similar to the first strike that took place at its launching in April 2012. This movement occurred upon EdL announcement of its possible full-time employment of only 897 of the nearly 2,000 contract workers actually employed by the three SP's, and this employment is made upon undergoing civil written examination organized by the civil service department. EdL decision coincided with the delay in payment of some daily workers receivables by the private companies. The protest took

different forms: the usual strikes, road cuts and burning tires in addition to a 4-months sit-in at EdL headquarters that rendered EdL headquarters and regional divisions inaccessible to EdL officials and SPs personnel.

“We had lots of issues dealing with this category of workers, they burnt tires, closed roads, closed EdL divisions... And EdL left us to deal with them as if they were initially “our” employees.” - (PMO, Managing director, SP2)

Considering political priorities, deadlocks, and agendas

At many occasions actors mentioned political factors to stand behind most of the regional factors identified earlier as hindering the DSP progress. In fact, political intervention in public administrations and political affiliation of the majority of public officials are widespread in Lebanon. Our informants considered political considerations to be a major reason behind the obvious non-cooperation of head of divisions:

« Talking about the authority of head of divisions... I believe that head of divisions do not report directly to their supervisor in EdL hierarchy. They rather report to the political figure to which he is affiliated. Or the one who actually got him to work at EdL. Political considerations are always a major factor in all this. » - (PMO Consultant, SP1)

Even while explaining the process of removing electricity illegal connections, SPs observed how political interventions can suspend this process that is contributing to additional burden on the network. The manager of SP2 explained to us the legal process to follow in order to remove these illegal connections, and how ‘clientelism’ and ‘political affiliation’ can allow legal infractions at this level:

“Non- technical losses are related to illegal electricity connections to the network There are internal rules and regulations proper to EdL, that regulate the way to remove these illegal connections. As private companies, we cannot simply remove them, it is not explicitly mentioned in the contract, our responsibility is to identify the areas where frauds and illegal connections are detected in our region, and we notify the EdL. A sworn expert from EdL, comes to verify the fraud, removes it, writes an official proceeding registered at the EdL. The customer is wind up to pay a fine within a particular delay. If the customer refrains from paying, EdL regional authorities are supposed to suspend the power supply, In many cases, and for different reasons, they do not do this and sometimes the customer simply gets connected illegally once again, it depends on the region. It is also supposed to be declared as a judicial report. Of course this is not being done, for many reasons, but mainly because customers may have some political affiliations to local authorities that allow them to overrun the rules” - (PMO Managing director, SP2)

Political considerations are also observed with the issue of daily workers; actors confirm that the second strike was likely a repetition of the first, but this time with more political implications. The struggle of EdL contractual workers is part of various labour movements

against the erosion of workers' socio-economic rights as well as the dysfunctional management of this model of precarious work. The interruptions caused by these movements added further accumulated backlogs and pending issues when major DSP activities were put on hold.

Furthermore, the great political instability left the country with long periods of deadlocks and repeated governments' coalitions, which had direct or indirect repercussions on the DSP partnership that will appear later in the process of its evolution.

6. PURSUING PARTNERSHIP

All issues discussed in previous dimensions have culminated into enormous persisting backlogs and obstacles challenging the partnership efficiency, threatening its success, implying enormous financial burdens and adding tension among key actors. EdL, PM and SPs did not stand idly while pressure exerted by internal and external factors disguises the importance of their partnership. Various initiatives were taken to address these numerous issues, whether at the collective level or at the individual level of each actor, to make sure the partnership persists and survives.

Within this dimension we observed the following concepts: 'struggling against stagnation and hurdles', 'proliferating collective efforts' and 'adopting individual strategies'. These concepts describe sub-processes arising at the micro-level of the analysis.

Activities stagnation and hurdles

Over a relatively long period of time, the various factors explored in earlier dimensions have been hindering the progress of the DSP project by affecting the performance of private companies, and therefore their remuneration. This has significantly impacted the SPs' cash flow. Private actors strongly believed it was beyond their control to overcome many of these obstacles and that is totally unfair they get "penalized" for this.

Recurrent backlogs were consistently reported in DSP progress reports emphasizing the risk of non-accomplishment of the project scope within the contractual period of 48-months. It took two years and a half (from April 2012 to June 2014), almost 54% of project duration, to finalize tasks that are under "Implementation phase", which were initially planned for the first six months of the project. Delays were also noticed at the level of communications

between EdL and SPs, and this was equally highlighted in quarterly reports. For instance, quarterly report no. 10 mentions a total number of 172 letters as “Total Letters Pending with EdL” at the beginning of the quarter, and this number increased further to reach 269 letters waiting signatures and response from EdL towards the end of the quarter.

Out of curiosity, we rapidly computed the number of occurrences of the word “pending” in each reviewed report as part of expressions such as “*still pending with Owner*”, “*all pending projects*”, “*pending the approval*”, “*pending work completion*”, “*pending resolutions*”, “*pending customers application*”, “*letters pending*” and others. We found that this word was repeated:

- 104 times in quarterly report no. 10
- 62 times in quarterly report no. 12
- 95 times in quarterly report no. 13
- 93 times in quarterly report no. 14
- 77 times in quarterly report no. 15
- 114 times in quarterly report no. 19
- 101 times in quarterly report no. 21
- 139 times in quarterly report no. 23
- 73 times in quarterly report no. 27

Delays and unresolved matters have become recurrent issues continuously being reported in DSP activities.

As explained earlier, the approvals and signatures of head of EdL regional divisions are necessary to allow the initiation of work execution and then to confirm the accomplishment of work orders. Any delay at this level has a double repercussion: the date of work completion as well as the SP payment and remuneration procedure. The accumulation of unprocessed approvals or abstention from signing the completion of work orders, and therefore SPs payment delay, was regularly reported as a main reason for regular interruption and suspension of tasks. This also applies to the process of construction of distribution facilities or replacement of deteriorating equipment necessitating asphalt cutting and excavation work, that require municipalities’ approvals and confirmations.

These several interruptions, when reported by SPs to the owner, were often delayed further due to EdL deferred reply or feedback on all pending projects. SPs found themselves entangled with procedures involving actors of different roles and authorities and therefore

caught in EdL endless red tape encumbering their actions. EdL responsible admit that these significant difficulties are related to internal rules of procedures; however these rules cannot be altered:

« One of the problems and obstacles we had with the private companies was that the contact between the private companies and the EdL should be done through a single entity. However, practically things are different, there is a lot of decisions and authorizations to be given by the head of divisions in each geographical area. SPs were very frustrated about this, they cannot administer a project with everyone, there must be some kind of centralization...But in public institutions there are decrees precising the role of each department and head of division which are difficult to be altered, modified or canceled by the terms and stipulations (or scope of services) of a contract... The head of divisions have signatures and authority” - (President of DSP committee, EdL)

SPs were frustrated when accused of causing delays in tasks accomplishment. For instance, on the delays in addressing non-technical losses related to illegal connections, the manager of SP2 explained that these delays are not within the scope of the private companies but rather the responsibility of public authorities:

“Of course, we as SPs cannot be responsible and accountable to all this, the entire process of removing illegal connections and the enhancement of the services and being counted in our KPIs. How do you measure this anyway? Is it by the number of illegal cases reported or official proceedings by region? If the customer repeats his illegal action, and the PV (process verbal) report doesn't constitute a deterrent preventing him from repeating his action, it is not measurable, and the number of PV) do not determine our performance.” - (PMO Managing director, SP2)

The implementation of an IT unified platform for communication and real-time exchanges would certainly have alleviated some of these hurdles and accelerated the time completion of some tasks through automated processes and operational transactions. This also was agreed upon contract signature but was also delayed and rendered impossible to complete because of EdL excessive and obsolete internal rules of procedures.

“EdL asked for some real-time tool, we told them that their own procedures do not allow real-time tracking, and since they cannot change them we cannot send them real-time data” - (PMO Managing director, SP2)

“Do you know what “Kalamzoo” is? The huge documents used in public administration as a record for bill collection. EdL are still using them [laughing]. You are laughing but this is true! We suggested a procedure of electronic payment. They refused, because they think it is against the internal financial rules and procedures. And also because the invoice issued from EdL is an invoice and receipt at the same time, and cannot be changed. They are still not convinced that the time has come for a drastic change. The basic things and processes are becoming obsolete.” - (PMO Assistant Manager, SP3)

It was not before the end of 2015 that some of the processes were rendered automated. Quarter no. 14 (dated October 2015) mentioned that a testing IT environment is being

finalized and became possible before engaging in a full live integration, which should have happened since early preparatory stages.

“A set of technical IT meetings was held with each DSP to monitor the implementation process of the adopted IT platforms in all EdL Divisions and to finalize the testing phase and switch to the production environment DSP’s to finalize the implementation of the adopted IT Platforms at EdL Divisions, each within its respective service area, and ensure system operational acceptable performance, accessible functions per each business process to the designated users, and satisfied training for EdL concerned personnel to ease their enrolment in the production environment.” - (DSP Quarterly report no. 14)

As for interrupted activities in inaccessible areas of Lot2 and Lot3, they continued to delay the finalization of some DSP tracks, mainly the network survey activities. The failure to properly address this situation deriving from security constraints set forth by local authorities started hindering the achievement of activities within the allocated timeframe, and subsequently threatening the progress of the entire project. The 4-months interruption due to the second strike added further accumulated backlogs and pending issues, and major DSP activities were put on hold in Lot2 and Lot3 as well. These delays concerned mainly the monthly process of bill collection.

From its end, the refugee crisis had a long-lasting effect on the Lebanese network (similarly to other aspects of the Lebanese economy). A report prepared by the MoEW and the UNDP has assessed the direct and indirect impact of this crisis on the Lebanese electricity sector, which caused a rapid increase in electricity demand estimated at more than 20% of the initially generated capacity. Main implications of this crisis on the electricity sector concern the impact on the quality of supplied power and the damage of the distribution transformers and cables due to the increased loads, as well as the increase of non-technical losses caused by non-metered connections of large portion of refugees shelters. These issues have accompanied the DSP journey and were regularly reported in progress evaluations and quarterly reports:

“The on-going refugee crisis in various parts of the Bekaa, South and North regions of Lebanon has created major network constraints, including increased load on the network which in turn is straining already overloaded distribution lines. This crisis is also affecting EdL and DSP resources, in terms of network operation, Non-Technical Losses (NTL), meter reading, bill collection, and customer services, among others.” - (DSP Quarterly reports no. 12, A3, 14, 15)

“The continuing refugee crisis in North and South of Lebanon, as well as in various areas of the Bekaa, has created major network constraints with increased pressure on

an already exhausted electrical distribution network.” - (DSP Quarterly reports no. 19, 21, 23, 27)

All these stagnations and hurdles, and especially the ones affecting bill collection have implied the accumulation of SPs overdue invoices because of EdL payment delays. SPs also started claiming additional charges related to cost of living adjustments. The President of the DSP committee acknowledged:

“Another example of factors that affected the companies’ remuneration is the fact that in Lebanon the public institutions never pay on time, there’s always a delay in this process because of the multiple signatures required to release public funds. This delay in payment put some SPs in difficulties in regards to their financings as well as their lenders.” - (President of DSP committee, EdL)

In mid- 2015, things started escalating rapidly and in light of the project contractual status, the DSP remained outside the proper contractual framework with negative impact and delays in achieving project objectives. This was accompanied with important financial constraints: accumulation of payables and incapacity of the project to generate cash flow, as revealed in quarterly report no. 19:

The Financial Challenges faced by the DSP project are the following:

- *The widening gap between bill collected and operational cost;*
- *The delays from the owner in closing payables, due to the previous point;*
- *The Inability of the project to have a positive operational cash flow as originally planned;*
- *The lack of visibility of the financial strength (cash flow) of the DSPs;*
- *The most urgent demand for all 3 DSPs during the negotiation phase was immediate cash payment clearly highlighting the cash flow problems*

(Quarterly report no. 19)

Proliferating collective efforts and activities

Against all odds, continuous cooperative efforts among all parties to achieve project milestones remain noticeable. Quarterly assessments reported a high level of correspondence activities between EdL/PM-1 and each SP reflecting a growing interactivity and continuous cooperation between all parties. After the first daily workers strike the project schedule was revised three times until all partners agreed on a ‘Remedial Action Plan’ that was implemented starting June 2013 with the main objective to clear all submission claims and

contractual issues as project enters the implementation stage of its core activities. By that time considerable parts of preparatory phases (mobilization, plans and programs, network survey, bill collections, common IT platform implementation), were considered partially achieved, and partnering actors were ready to move to implementing key activities related to smart meters installation in regions where this was possible.

Notable progress of several significant contractual and technical matters had demonstrated that commitment to pursue with the partnership remained strong from all sides despite the persistent contractual conflicts related to cost impact, liquidated damages for SP delays and shortcomings, interpretation of KPIs (definition, applicability and calculation). Quarterly reports covering this phase of the project mentioned a high level of correspondence activity and extensive meetings between DSPs, EdL and PM-1.

“The current phase of the Project remains dynamic and critical in terms of ensuring that the necessary efforts are exerted to achieve significant milestones in the implementation phase of the DSP Activities” - (Quarterly report no. 6)

“We exchanged a lot of letters, literally a lot. It was necessary to document our field work progress... We had a very good quarter during which we our activities proliferated and we invoiced lot of projects. Quarter 2 of 2014 was by far our best operations. Our invoices have risen to around USD18M, which was huge and required a lot of investment.” - (PMO Assistant Manager, SP3)

One interesting aspect revealed through our analysis of these collective efforts is related to the role and behavior of PM-1. Quarterly reports have often described the actions of PM-1 as the actor who continuously reminds all partners of their duties and re-aligns their efforts towards the tight application of contractual terms and conditions. PM-1 was determined to maintain the project initial time frame set by the contract despite all delays and impacting factors; but documenting their actions was also a way to make sure they get the credit for their work. This shows through different sentences they included in their reporting activity:

“PM-1 emphasizes the necessity to resolve all pending contractual and financial project matters to ensure that clear visibility is reached on the contractual status of the project and to ensure that the project objectives continue to be achieved within the contractual framework... PM correspondence surpassed DSP correspondence in this Quarter, clearly indicating the level of activity of the PM to proactively initiate actions and accelerate responses by the DSP in all project tracks” - (DSP Quarterly report no. 6)

“PM-1 stresses on the importance of continuing all DSP project activities whose implementation is possible despite the current circumstances and Owner current situation, in order to mitigate any negative impact on the Project”- (DSP Quarterly report no. 10)

Some tasks, that were long overdue, were finally executed, for instance, a unified data structure for data exchanges between SPs and PM and a common IT platform has been implemented; this IT platform dedicated to facilitate data exchanges in a unique format and therefore accelerates all transactions taking place between levels of exchange, was a long-delayed process and supposed to be operational during the first 6 month of the project.

The proliferation of collective efforts continued to show after the end of the strike on December 5, 2014. But, the DSP project struggle to accelerate progress did not end. A myriad of residual issues surfaced again at all levels: contractual, technical, managerial, administrative, and inter-relationship. With EdL short on revenues because of the strike, the SP's, short on cash because of aging invoices, resorted to all kind of pressures to get their payments first before taking any action to bring the project back on track. The escalation started by suspending substantial investment activities, work at a reduced rate of progress, followed by contractual demands for time extension, cost reimbursement, High Cost of Living (HCL) adjustments, and technical demands related to AMI activities and others. An overall exhausted atmosphere started to be perceived among private actors and a strong need to formulate a viable strategy for the project recovery and the resumption of all its activities was deemed essential. In a unique initiative, EdL General Director called in February 2015 for weekly joint meetings, this time with the assistance of the CEO's of the three private companies, their project general managers and assistants, EdL senior officers in the presence of the MoEW representatives. The aim of these extensive meetings is to primarily address all pending issues and give incentives for the SPs to resume their commitment to the project. This initiative and close follow up from EdL Chairman/GD says a lot about the governance of the project which was starting to weaken while the PM was not capable of managing the crisis. A close follow up from the GD himself is now crucial. The presence of representatives from the MEW is also significantly indicative. As if the project needs official endorsement and the presence of higher authority grants trust to the private actors and regulates the relationship between all partnering actors.

On a different note, collective efforts were deemed necessary to manage the refugee crisis. A great part of the displaced population is living in informal settlements and accurate data on their power consumption is almost impossible to be obtained. Hence, energy consumption and energy loss at this level were neither regulated nor billed and therefore cannot be quantified. This had serious effect on meter reading and bill collection activities and their corresponding KPIs. SPs and EdL had to closely and continuously collaborate with other

concerned organizations and institutions, namely the UNHCR and the national General Security to manage power transmission and distribution in areas of the Lebanese territory accommodating this population. SPs and EdL also had to rely on different sources of data to maintain accurate data analysis and calculation: primary data retrieved from GIS and site survey and complemented with secondary data obtained from the mentioned supporting organizations.

In March 2015, EdL GD committed to schedule the payments of almost all outstanding invoices until all overdue invoices are paid by end of June 2015, through issuing letters of good faith to all SPs. EdL also committed to timely provision of feedback and/or approval regarding the SPs submitted documents. This payment mechanism was proposed to ease SP's cash flow. In return, the three SP's committed to normalize project activities, improve bill collection to ensure revenue increase to EdL, achieve desired customer services and thus meet project improved performance on all tracks.

Meanwhile, PM-1 kept exerting pressure for achieving more progress, especially when the partnership entered its fourth and final "contractual" year:

"It is crucial that all parties proceed in implementing the above recommendations to continue to drive the Project forward and to address any issues that have hampered its progress, in order to achieve the intended use of the Project within the remaining time frame. Otherwise, the progress to be achieved in the various Project tracks will be limited, while jeopardizing Project objectives. Several critical project matters requiring resolution to provide visibility as to how the Project would progress towards its conclusion, noting that only two Quarters remained in the contractual time frame."- (DSP Quarterly report no. 14)

Substantial efforts by PM-1, EdL, and MoEW culminated in one last agreement entitled "Service Providers Project Road Map" that started circulating during the EdL Chairman's meeting in November 2015. The objective of the Road Map is to resolve all major issues on the DSP project till January 31, 2016 with clear milestones to be reached, in order to ensure the realization of project objectives within the contractual framework.

Partners' individual strategies

A noticeable difference and variance in the performance of all three SPs start showing as soon as external factors started disrupting and delaying project activities. This variance is mainly twofold: on the one hand it relates to the particularities of each region and the complex intervention between different stakeholders (Head of EdL divisions, EdL/PM, municipalities) and on the other hand it depends on each SP strategic action towards these impacting variables, their operational capacities and the type of leadership that defines their

way to approach the partnership. While EdL has addressed some of the aforementioned constraints by issuing the relevant BoD decisions and administrative/executive memorandums, DSP's have also implemented alternative plans to deal with these constraints accordingly, such as in the survey activities.

“Each one is qualified in his own way. SP2 and SP3 have lots of claims and we have regular conflicts with them; SP1 at a less degree. SP1 CEO is working on this partnership more from a patriotic commitment and were ready to make settlements. SP2 were very concerned with their financial status, they did a great job in Beirut but not in Bekaa. While SP3 faced many difficulties and particularities in their region, but could not design a strategy to encounter these challenges.” - (President of DSP committee, EdL)

SP1 has adopted the vision of its parent company's founder and CEO who openly expresses the commitment of his company in contributing to the much needed infrastructure development in Lebanon. Although this is not directly related, but we found it interesting to mention that SP1 founder is also the author of a book entitled “*Jomhoriati*” – My Republic – calling for a farsighted vision towards the prosperity and development of Lebanon.

“We insist on keeping on with this partnership, despite its difficulties. Our CEO, has an inspiring sense of patriotism and duty towards the country. He is even the author of the book “My Republic” where he considers that private participation is one of the crucial ways to reform economy. This is his vision, and we are all adopting it in the DSP.” - (PMO, Consultant, SP1)

SP1 has also anticipated the risk of the public sector delays in payment, or high risk of public sector non-honoring of their financial obligations, so they signed up for the MIGA (Multilateral Investment Guarantee Agency) guarantee coverage since day one:

“We are also the first company to get the insurance of the MIGA, related to the WB group. It was an important weapon for us to cover the risk of non-payment by the government. It is a dissuasive power, so in case we did not get paid by the government, the entire WB would start raising questions.” - (PMO Manager, SP1)

Even in regards to the repercussions that the KPI monitoring and compensation scheme had on the DSP evolution, SP1 could adopt a strategy that engage their people in a service-oriented culture while linking all their business processes to performance measurement. SP1 realized since the beginning that translating goals and KPIs into execution should be dynamically monitored and sustained and this should be disseminated among all parties involved in the project, whether at the strategic, managerial or operational level.

“SP1 knew since the beginning that if you want to provide services, KPIs are essential. What we did is that we raised awareness among all our people involved in the partnership, even daily workers and head of divisions, about the importance of KPIs. We set a reporting system, from top down to bottom up among our operational and managerial teams based on the variables of the KPIs set by the contract. We did bi-

weekly meetings to calculate and follow up on our KPIs and try to regulate them before reaching the end of each quarter and get surprised by the PM calculation. Since the beginning we understood this dynamic. We also took into account the margin of the prevention, in a way that even if the PM decides to reduce our KPI and the related remuneration, we would remain fine with these values.” - (PMO Consultant, SP1)

When we asked SPs representatives whether they had, at any point in the project lifetime, joint decisions or a common approach to deal with the contractual and relational challenges of the project, the Assistant Manager of SP3 replied:

“At the beginning yes, with the first awareness campaigns regarding raising the sense of responsibilities of the citizens towards violations. This was our initiative, but it was joined among the three of us. This will help us have better reach. When difficulties have started, each SP had to deal with the particularities and circumstances of its regions. And each company took its own character. SP1 always wanted to be the “good student” that does everything to please the supervisor. SP2 are all the opposite. They do whatever suits them and care very little about pleasing the PM. Probably they are backed up....I dunno. As for us, at first we restricted our effort to doing our mission, and we were sure our effort will pay off eventually.” - (PMO Assistant Manager, SP3)

In regards to the issue of “inaccessible areas”, the manager of SP3 explained how the company went out of its way to find alternative solutions, although the issue of “inaccessible area” is supposed to be in the scope of responsibilities of the Lebanese government. Clearly irritated, the managing director explained:

« Till now we couldn't accomplish our network survey. Local authorities were afraid of the misuse of our device for security reasons. We did presentation and present certifications to show them that the devices are safe. ...They even took samples. This process took over a year. We tried to involve EdL, they were helpless. The MoEW in this regards was also powerless. ...All investment activities were pending. We were just doing maintenance tasks and repairs. ... It is the responsibility of the Ministry. We are a technical company we are not the government! And we did not sign up for this!” - (PMO Managing director, SP3)

From their end, SP2 concentrated their activities on the accessible areas of their lot in order to compensate for their underinvestment in inaccessible areas. As for SP3, they tried to work on alternative methods for conducting the network survey and other activities in inaccessible areas. Of course, their overall progress remained very limited.

Although the three regions (or lots) did not suffer from the same factors at the same intensity, however the variance of their performance started to clearly show after the events of August 2014, the second protest movement.

“It is not always efficient to coordinate with the two other SPs, at the beginning we had somehow the same concerns, but as we go, each SP had their different concerns and worries, especially after the strike of 2014. It was a big turning point in the contract. And each one wanted to defend its position.” - (PMO Managing director, SP3)

Furthermore, divergence in SP performance started to accentuate with the end of the second strike in August 2014. Only SP1, out of the three DSP's, made an extraordinary attempt to maintain some meaningful productivity, since it was the least affected by the strike. For a true and fair view, it is worth recalling that the lot attributed to this SP was also free of 'inaccessible areas', therefore the company did not suffer from this constraint as was the case of the two other SPs. Even when it concerns data integration in a unified GIS solution and the implementation of a common IT platform, SP1 and SP3 showed a compliance with PM recommendations on different levels; a clear reluctance to compliance from SP2.

Following February 2015 extensive meetings called for by EdL General Director, the three DSP's submitted commitment letters to normalize project activities, including their demands. However, results were not encouraging by all three SP's, In the meantime, little concrete action was taken by EdL to resolve the long due approvals, a real divergence in their respective actions were perceived: both SP2 and SP3, exhausted by the pressure on their financial resources, delays in reimbursement, the absence of independent mediation to settle disputes, and the unwillingness of EdL to extend the DSP contract once more to compensate the delay accumulated due to the second daily workers strike, went further in the escalation by submitting a notice of termination in April, 2015.

At this stage, the tandem EdL/PM needed to resort to higher authorities to enforce their credibility of towards private actors. As a result of the escalations, the EdL/PM found it urgent to propose to three SPs a Memorandum of Understanding (MoU) with clear actions to be signed by all parties and endorsed by the MoEW. Despite this endorsement, considered as a guarantee of the public utility promises, while SP1 had signed the MoU, the signature of the two other SPs was awaited. This once again shows a lack of trust in public authorities and PM united.

By mid-2015, PM-1 conveyed to EdL that the status of SP2 in relation to normalization of project activities was currently beyond the control of the PM-1.

“EdL to urge SP2 to stop extending the validity of its Notice of Termination and stop the excessive use of “Without Prejudice” at every occasion. The state of ambiguity and indecisiveness cannot continue indefinitely since two of the three DSP's, SP1 and SP3, have proceeded in normalizing Project activities as of June 2015, whereas SP2 continues with its Project activities, while serving a notice of termination.” - (DSP Quarterly report no. 13)

Once again, as no significant progress was achieved towards the implementation of the MoU, PM submitted a reminder-to-action letter to EdL in August, 2015. Additionally, in September 2015, SP3 submitted a 'notice of restatement of suspension / notice of suspension' of all

services under the DSP contract, gradually until end-of-October, 2015, if EdL/PM does not address all outstanding technical, financial, and contractual issues that were raised to the date of the letter.

Alongside the MoU initiative, EdL, in a unilateral step, endorsed a request by SP2 and SP3 and asked them to submit names and qualifications of third party arbitrary for consideration. In fact, these two SPs perceived relational difficulties with the current PM; they believe that the consultancy is not acting as an independent entity for project arbitrage. SP3 even considered to be unfairly treated by the PM especially in regards to KPI reconciliations and performance evaluation. The company perceived its remuneration as unfair and jeopardizing its credibility towards its creditors (lenders and suppliers)

“Just before the strike we had a very good quarter during which we our activities proliferated and we invoices lot of projects. Quarter 2 of 2014 was by far our best operations. Our invoices have risen to around USD18M, which was huge and required a lot of investment. Beginning 2015, the PM did an assessment, and estimated our compensation at only USD3.5M. ...There is something wrong... This had serious implications on our financing and relationship with financial institutions. When they see such a huge difference between our estimations and what we actually received, this questioned our credibility. This is recurrent, once you break the cycle , you cannot get your credibility back. And your invoices start cumulating at your suppliers...” - (Assistant Manager, SP3)

In respond to the various individual initiatives taken by the SPs, and considering the current project status and the pressing need to move forward with various critical matters (operational, financial and contractual), a breakthrough agreement was severely needed to salvage the project and provide a way forward, according to which all parties can proceed. Once again, concerted efforts were exerted by PM, EdL, and MoEW, to formulate a framework to address and resolve all major issues concerning the DSP project. These efforts resulted in reaching an agreement endorsed by the MoEW and materialized with the ‘Service Providers Project Road Map’ document, which requests the PM and EdL to work in close collaboration and full coordination with each other, with the objective of resolving all major issues on the DSP project till end of January, 2016. The roadmap details eleven milestones to be followed, including but not limited to the appointment of new EdL Project Committees, KPI pending issues (including settlement of related payments), the AMI meters, MoU finalization (including time extension, compensation and additional costs). These resolutions are considered to be the main challenge for leading to project stability and providing a clear

way forward for all parties to proceed accordingly. SP Roadmap is considered to be a breakthrough that provides the needed visibility for moving the project forward.

When perceiving further delays and reluctance from all partners in adhering to the decisions of November 2015 and the latest roadmap proposed, tension escalated further between PM-1 and EdL and put an end to the consultancy contract C1784 “Program Management Consultancy Services”, signed on March 31, 2012 between them. PM-1 refused to renew their engagement as project manager of the partnership.

“We consider this project as “orphan”, we hope it will find some sponsors to keep on with it. When we realized that major decisions were not taken, we preferred to leave the project. We did everything we can, we gave our recommendations, we couldn’t reach the objectives. The delay in taking decisions is a common thing in this country. In some aspects it was a success, in others it was a failure.” - (Technical manager, PM-1)

PM-1 submitted one last report providing a full assessment of the DSP project from a technical, financial and contractual perspective (extract of the report shown in ‘APPENDIX G - Final PM1 Report / Executive Summary’). The report states that *“the DSP’s achieved 33% progress after an elapse of more than 80% of the time frame”*, and that the project reached significant levels of achievements in some of its tracks namely the mobilization, the network survey and the construction; however negligible progress was realized in the main project track which is the advanced metering infrastructure. The report also detailed the outstanding issues that have been lately raised by the partnering SPs. The report precise that any extension of the project *“will require an increase in the original contract price”*. Accordingly, PM-1 gave their last recommendations, written in bold and underlined letters:

“The PM recommends to close the project on April 1, 2016 and not to proceed with the project extension due to the inability to complete 100% of project activities and objectives within the current approved budget and time frame, based on the assessment conducted in this report.”

A new consultancy, PM-2 is appointed as DSP program manager following the first consultancy contract expiration and the unwillingness of the initial consultant to renew the contract. It did not take long before the new appointed consultant shows involvement and active contribution in the coordination of the DSP activities and helps maintaining the best viable balance for the project. The two main challenging tasks of PM-2 are to reschedule unaccomplished project activities over the next 48 months of the project renewal and adjust the aspects of the contract that have always constituted a source of conflicts between partnering actors. The change of project consultancy was a substantial transformation of the relational aspects in DSP management. The SPs welcomed the assignment of the new consultancy and found more flexibility, openness and pragmatism in their way to deal with

recent issues. The difference between the two approaches to manage the project could be easily perceived.

“PM-2 were assigned in June 2016, they were knowledgeable with the DSP and the contract but did not have this “complex of possessing the contract”. They showed more flexibility and suggested MOU-1 and MOU-2 to solve what remained pending. Many aspects that were really rigid with the contract, we could be able to render flexible with PM-2. This showed more pragmatism in the approach. » - (Assistant manager, SP3)

This change was equally perceived in the reporting process. Through our data analysis of the DSP quarterly reports we noticed a clear-cut difference in the styles and glossary of words used in reports written by PM-2 and those written by PM-1. For instance, quarterly report no. 19 (written by PM-2) mentions the following:

“PM-2 would like to clarify that the implementation of a full-scale smart grid program is not just one more deployment project but implies a complete cultural transformation of the utility company” - (DSP Quarterly report no. 19)

It was the first time that a concept such as “cultural transformation” is ever mentioned in a progress report. Another example of statements figuring in this progress report and that emphasizes an important dimension of the relational aspect between the SPs and the PM:

“The natural thing to do was to clear any ambiguities in the contract by tackling all BoQs or process issues that were unclear due to the contract ambiguities, which have left deep scars in the trust relationship between the DSPs and the PM. Again PM-2 took on the challenge of clarifying the last unclear points in the Contract with the purpose of leaving no stone unturned in order to smoothen the road for Phase 2” - (DSP Quarterly report no. 19)

The fact that PM-2 is tackling contractual ambiguities and admitting that these ambiguities were behind deep trust scars between the private service providers and the PM, is a turning point in the relation between these parties. PM-2 is clearly willing to take careful charge of solving all pending problems that once hindered the DSP progress. While PM-1 was putting pressure at all levels to accomplish all objectives as set by the contract and held both the private and the public sector responsible for their incapacity to do so, PM-2 realized that these goals were impossible to attain within a 48-months timeframe and managed the contract accordingly. This was obvious in their way of tackling the track of advanced metering infrastructure, which is the main DSP objective and its innovative contribution. In fact, smart metering is an appealing technology that promises drastic improvement for the energy efficiency and helps EdL manage its costs effectively while improving customer services and allowing operational benefits. However its deployment is not only technical. While a preparatory phase consisting of mobilization, network survey and construction activities can be finalized in such a relatively short time (48 months), the full roll-out of a digital

transformation of the distribution grid involves further management and organizational aspects and therefore needs additional time for its complete deployment. Poorly defined specifications of such a change and its improper management will naturally lead to a very limited value creation, if not to failure. PM-2 have rapidly embraced this perspective, and oriented their efforts to gain the trust of the private companies and regulate the ambiguities of the contract governing the partnership. In their evaluation of the previous AMI strategy and roadmap, PM-2 confirmed that while lots of work has been done on this level, “*in reality, the AMI scope was never put on the right track by the entity managing the project*” (Technical consultant, PM-2).

Within the first quarterly progress reports submitted by PM-2, the new consultant announced their strategy adopted for managing DSP with the following statement:

PM-2 had to close issues related to the past 4 years mainly: ... - More than anything, regain a lost trust of partnership relationship.... The Operational Challenges faced by the DSP project are the following: ... - Work with the DSPs as a partner and not as a subcontractor... ” - (Quarterly report no. 19)

With these words, PM-2 recognized that the DSP was never approached as a PPP, and at the relational level the SPs were in fact never considered as real partners, although policy discourses have always claimed otherwise.

The CoM decision not to renew the contract for SP3 similarly to the other two SPs, was both surprising and suspicious; and justifying this decision with the underperformance of the company in its assigned area was even more suspicious and not a plausible excuse. A simple comparison of the three SPs overall performance during the period 2012-2016 of the contract execution as assessed by PM-1 revealed the following figures:

In terms of physical progress at the level of the scope of activities: while SP1 has achieved 48.7% of its pre-planned activities, SP2 has achieved 34.4% progress and SP3 33.7%. In terms of financial progress, SP1 was remunerated at 42.5% of its allocated budget, SP2 28.7% and SP3 29%. These figures show that although SP1 had noticeably the best overall performance among private actors, however SP2 and SP3 were very close in terms of achieving investment and construction activities and SP3 was even slightly better than SP2 in terms of financial progress. When we asked the DSP Managing Director at SP3 about their opinion regarding the CoM decision and the way the negotiations went, he replied by confirming that negotiations were driven by political considerations rather than contractual ones:

“We are still negotiating with the MoEW, it is the floating part now. At this level things are not contractual, but rather purely political. We were simply required to give up on part of our share in the contract for another contracting company, if we would to continue with the renewal. This is where we are now.” - (PMO Managing Director, SP3)

Clearly the company was drained more than the two other service providers by previous accumulated backlogs, the interim quarterly extensions and most recently the negotiation for contract renewal. They also could not rely on any financial resources or bank facilities to maintain an adequate level of operations. Starting December 2017, the company was even unable to settle the salaries of its staff which led to a partial suspension of its services, namely the customer services and call center. SP3 General Manager described the situation as follows:

“What works for us is that they make up their mind and take a final decision. Whether they want us to continue as per the initial conditions or through the allocation of part of our area to another SP, or even pay us our receivables and we give up on the entire share in the contract. It’s been since January 2017 we are living in limbo. Even the banks started to be reluctant in granting credit facilities for SP1 and SP2. But they resumed now after their contract renewal. Not for us though. They are asking us for guarantees since we do not have an extension of 4 years like other SPs. We’ve been in difficult financial situation, and now it is getting even worse. When you are in a hole you should stop digging, and the hole is getting bigger.” - (PMO Managing Director, SP3)

It took almost six months of negotiation before a final solution materializes into an agreement between SP3 and the MoEW. A new sub-contractor was appointed to assist SP3 with the DSP activities in the South region of Lot 3. In fact, it was suggested that Lot 3 be split into two subdivisions Lot 3A (60% of the initial Lot) and Lot 3B (40% of the initial lot), and the new sub-contractor was assigned to Lot 3B. Accordingly, the DSP 48-months contract extension for SP3, along with the new stakeholder, was finally signed in April 2018, with retroactive effect since January 2018 (APPENDIX J – Extract of Ministerial Decree – SP3 Contract Renewal). During our last round of data collection, we asked the PMO Assistant Manager at SP3 for details on the process and outcomes of the negotiations. For them the CoM decision was demeaning; after all the new sub-contractor did not tender for the project, he was simply “designated”, and in order to preserve at least a share of the contract and recover the tens of millions due from EdL, SP3 had to compromise. The company had to adapt their business plans and financing strategies, the budget allocated to them through contract renewal on these new bases was now reduced by more than 35%.

“We re-organized ourselves in order to adapt. ... It was either that, or we were out of the game completely. We had to compromise. To be fair, and we do not like to be quoted for this, but I can tell you that it is purely politics. The reason they gave was that we did not perform well in the North, this is ridiculous. We were performing the same in all our allocated regions. We are either good on the entire area, or bad on the entire area. When our performance is lower in some areas, that means the problem comes from the particularities of this area. ... The way the decision was taken was a bit demeaning. CoM nominated this company in particular, without going into a tender process... We admit this is something we had to do but we did not like at all the way the decision was taken. ...We could have bailed out, but our debts to suppliers and dues from EdL are in tens of millions. Even with being part of the project, we had problems retrieving our money. It will be even more difficult if we are out, almost impossible.” - (PMO Assistant manager, SP3)

When we asked SP3 whether their perception towards the partnership has changed, the Assistant Manager replied in simple words, as if he wanted to say that at the end, the company finally understood the rules of the game and decided to adapt accordingly:

“We started to be closer and have better connection with EdL personnel in the regional divisions as well as to local authorities. This is why we are now doing much better than before. So we are cooperating more with existing authorities” (PMO Assistant manager, SP3)

Regulating contract incompleteness through renegotiation

Although the idea of developing a Memorandum of Understand (MoU) was first initiated in June 2015 to address major issues that were hindering project progress as described in previous dimensions, however this MoU did not become effective until August 2016 when the newly appointed consultancy managed to confirm a final version of this MoU and get the signature of all partnering actors. This MoU, among other resolutions organizes the contract renegotiation and extension process according to two phases: Phase 1, 4-months extension till December 2016 then Phase 2, 36-months renewal till December 2020. It also elaborates a new roadmap for unaccomplished and pending tasks during Phase 1, and for AMI implementation during Phase 2. The MoU shall be considered as part of the contract, and was designed later on by “MoU-1”, since a second MoU was also established. MOU-1 stipulates:

“The purpose of this MOU is to extend for 4 months (Phase 1) as a result of a mutual satisfactory solution to continue the services within the Scope of the Contract that were hindered or delayed due to the strikes that occurred during the term of the Contract, in particular those related to 2014 events, and negotiate on the other 36 moths (Phase 2) extension.”

The 4-months extension was claimed by SPs since the occurrence of the first daily worker strike. Initially, 48-months' time completion for a PPP scope is considered to be a very short period of time.

MoEW approved DSP project extension till December 29, 2016 (Phase 1 of MoU-1) and PM-2 performed all necessary tasks to settle pending issues with SPs: clarification of contract ambiguities, KPI yearly reconciliations, reassessment of internal and external factors and readjustment of KPI calculation accordingly, with also particular considerations for the specifications of each lot, to regulate the multiple conflicts that preceded during previous processes and the introduction of a new concept to KPI calculation: the “internal/external factors (IF/EF)”.

“We recently introduced what we call “internal-external factor”, specific to EdL and to the particularities of the Lebanese distribution utility structure and organization We specified what was needed to take into consideration for KPI calculation that is very specific to Lebanon. Delays within EdL, strikes, inability to execute work due to inaccessible areas, delays and approvals of municipalities...All these were recently added, at the end of 2016.” - (Technical consultant, PM-2)

Major decisions were taken during Phase-1 in preparation for Phase-2 addressing pending and recurrent issues that have been hindering the project progress. SPs strongly coordinated with new PM on these issues and agreed upon a crash plan that can provide a feasible roadmap for the deployment of the AMI during Phase 2 of the project. During the short period of Phase1, EdL/PM have managed to deliver on their commitment to SPs despite all the challenges and the much squeezed time; PM-2 presence and efforts were a game changer for this partnership. The regained trust, between EdL/PM and SPs is strengthened with the Phase 1 key achievements.

“The project also have the full support and the commitment day in and day out hour after hour of the EdL General Director himself like never before...While a lot of efforts were exerted in Phase 1 to make sure that the move into Phase 2 is safe and smooth by clarifying old ambiguities and introducing new concepts like IF/EF, it remains in the hands of the Owner and DSPs to put the best interest of the Country first and take a leap of faith into Phase 2 in order to achieve together. With these key achievements, PM-2 has managed to close long pending issues that have been hindering the project and pave the path for a clean start.” - (DSP Quarterly report, no. 19)

PM-2 also acquired the technical support of Spanish large electricity utility (Iberdrola QSTP), to put AMI back on track and give more credibility to its work. Studies and negotiations during this period led to a consensus among concerned parties on the time needed for the process of certification of software/hardware of the AMI meters: this process takes about one year to be achieved before the SPs can start its deployment. Therefore, it was agreed that

Phase-2 requires a total of 48 months instead of 36 months. These positive participatory effects materialized in the establishment of a second Memorandum of Understanding (APPENDIX I – Memorandum of Understanding 2) to administer the upcoming Phase-2. This MoU and its annexes shall be considered as part of the Contract documents. The main focus of its articles as well as its annexes concerned: the 48 months contract extension, The settlement of claims and outstanding issues, the KPIs and the introduction to internal and external factors and the Road Map for AMI activities. On this, the MoU stipulates:

“The end date and subsequently the time of completion shall be extended for a period of 48 months...The Service Provider irrevocably accepts the final settlement amount shown in Annex 3 for all claims and outstanding issues...The Owner/Program Manager and the Service Provider shall agree on KPI targets including the modification and/or replacement of the currently non-applied KPIs... The Internal/External factors applicability is listed in Annex 4...The Road Map for AMI was agreed by both parties and is found in Annex 5”

The three SPs seem to be more at ease with the amendments introduced by MOU-2, especially the ones related to KPI calculation because this has a direct implication on their remuneration and compensation.

“The same contract is still valid, but the MOU-2 includes amendments. Some of the KPIs are still not applicable (SAIF and SAIDI) international KPIs, they cannot be applied because of problems at the level of the power generation. Some others are related to smart meters so as long as the smart meters are not installed yet, we agreed with EdL/PM not to apply them. They are not considered in our total KPI calculation. They will just consider the applicable ones. It is subject to agreement to introduce or not new KPIs. We are also working on a new schedule concerning AMI and other investment plans, because the schedule set in the contract is no longer valid.”- (PMO Manager, SP1)

“Now with the renewal, MOU2 allows officially to take into consideration external factors (or prevention). The MOU2 has settled all claims. So we do not have claims now. The tension is eased. » - (PMO Consultant, SP1)

Yet, in order for this MoU-2 to be effective, it needs the approval of both the MoEW and the MoF. The MoEW naturally approved MoU-2, but only few days before the MoF rejects it under the pretext of absence of budgetary provisions. EdL raised then the project via the MoEW to the attention of the CoM for approval. At EdL, the president of the DSP committee explained the process of approvals:

“It was agreed that it is simpler to re-negotiate with the existing companies instead of launching a new tender with new companies. So MOU-2 extends the project till end of December 2021. A conflicting decision on the extensions duration, 36 or 48 months, but the MoEW accepted the extension of 48 months while the MoF refused. I think it's a political issue; both ministers are from opposing political parties. We took a decision at EdL board of direction but we need the approval of the government. In the general

regulations for the public entity (EdL) the art. No. 4517, states that if one of the two ministers, the line-minister and the Minister of Finances, had restrictions in regards of a bid launched by EdL, it is up to the Cabinet in this case to take the decision.” - (President of DSP committee, EdL)

So once again, the concept related to political considerations identified in dimension (4), popped up as the DSP enters a new episode of negotiations for its extension, but this time at a governmental level. Nevertheless the DSP was not listed on the government’s priorities. Back then, end of 2016, the Cabinet was recently formed after almost two years and half of political deadlock due to presidential vacancy. Filling the vacant head of state office put an end to a long period of political stagnation and opens up a new phase where a long pipeline of suspended projects and issues were on the government’s agenda; electoral reforms being on the top of the list.

This brings back the concept of “considering political priorities, deadlocks, and agendas”; the DSP extension process was put on hold by the Lebanese government and the private companies were again in “waiting mode”. Meanwhile, three subsequent quarterly extensions of the project, from January till March 2017, then till June 2017 and last till September 2017 guaranteed that electric distribution public facilities continue to function properly, but with no additional effort to go further with the DSP key tracks.

“We are all waiting for the Cabinet of Ministries approval to renew the contract. For the time being, they are giving us three-months renewal. We signed the MOU end of December and they transferred the case to the Cabinet of Ministers for 4-years project extension. And of course for the Cabinet we are not a priority, so we are still waiting...”- (PMO Managing director, SP2)

Interim extensions have created an overall exhausted atmosphere among private partnering actors, under the “for the sake of the national interest” motto. The companies were running out of budget, out of loaners and also out of patience.

Meanwhile the CoM established a special Ministerial Committee, headed by the Prime Minister of Lebanon himself, to put a closure on the DSP project’s several successive short-term extensions and bring more focus on the approval of MoU-2 in order to fulfill the project’s remaining objectives.

In October, 2017, this Committee issued a recommendation for approving the extension of the DSP project for 4 years, till end of 2021 for SP1 and SP2, but required more focused auditing and reconciliations for SP3 activities before a final decision. CoM approves these recommendations and issues a ministerial decree with the following main decisions (APPENDIX K - Extract of Ministerial Decree – SP1 & SP2 Contracts Renewal):

- The exemption from KPIs application for 2017 to all SPs due to provisional extensions that prevented SPs from getting private financing to conduct their investments and constructions projects.
- 48-months contract renewal for SP1 and SP2;
- Further auditing operations and reconciliations with SP3 before deciding on contract renewal due to the SP perceived underperformance and other considerations.

CoM delegated to MoEW minister the task of negotiating with SP3 and finding a solution for pending issues or, failing that, launching a new tender for Lot 3.

At this point, SP1 was ready to cooperate once again with all partners and kick off the contract extension; SP2 had some reservations and needed guarantees mainly related to timely payment of their invoices, whereas SP3 was financially drained and could not commit to an adequate operational level. It is worth mentioning that at this advanced stage of the DSP life cycle, daily workers assigned to SP3 were still engaging in occasional strikes and suspending further the services and activities of the region.

“With MoEW’s confirmation of the CoM’s decision, the DSPs’ approaches depended on their respective expectations and objectives: SP1 was keen to kick off the long term extension and cooperatively coordinated with the PM on a weekly basis, while SP2 resisted to the PM’s focal points set to launch the long extension. As for SP3, it has exhausted all and any financial resources on bank facilities to maintain an adequate level of operations and was not able to settle the salaries of its staff which led to strikes and partial suspension of services.” - (Quarterly Report no. 23)

By April 2016 tension among DSP actors was at its highest. The project was approaching its completion date and main objectives remain far from being realized. Number of recurrent and pending issues was still waiting for drastic decisions in order to save the project. Previous actions and ad-hoc solutions proved to be ineffective for the project salvation. A potential game changer is the only action that can significantly shift the failing pathway taken by the partnership. At this stage, the program manager took a major resolution: they are quitting the game. Three themes emerged and articulated this process of game changing decisions: ‘exit decision and culture change’, ‘regulating contract failures through renegotiations’, ‘compromise, adaptation and new actor on board’. Once again, this process was greatly impacted by elements of the political environment where political variables were determinants of the contract extension process and the welcoming of new actors on board.

Analysis of the process of crafting PPP as collaborations

This first incident revealed a lot about EdL institutional weakness, reduced problem-solving, the limited competencies of its workers in technology, their tough resistance to change and more importantly its high political dependence. As soon as the process of framing the partnership activities and objectives was initiated, it was abruptly interrupted by the process of resisting this private participation in public services, then resumes normally after the protest suspension. We use on purpose the word “suspension”, because the development of subsequent events shows that the political consensus adopted was not a radical solution for daily-workers situation and did not put an end to the various forms of their protest movement.

Despite the notable and commendable achievements after the project blockage by strikes and resistance from public officials, the DSP project, almost one year since the effective date, has reached a tipping point, the resolution of which will determine its viability, stability and continuity. Contractual terms and conditions related to performance monitoring and compensation design scheme were subjects to long debates. While private actors perceived a great deal of ambiguity in the compensation scheme, irrelevance and non-applicability to the scope of the partnership and the contextual developments, the program manager represented by the tandem EdL/consultancy went beyond contractual considerations to presuppose an opportunistic behavior from service providers by avoiding financial penalization for their delays in tasks accomplishment. These conflicting logics and debates on contractual and relational issues remained vivid through the DSP journey. In addition to the conflicting internal factors, other emergent factors coming from the external environment helped moving the DSP progress to a new dimension, where further complexity is within sight.

The concepts that emerged during these two processes revealed that the DSP kept struggling with difficulties, hurdles and recurrent challenges. A complicated network of interconnected elements has limited its capacity for improving EdL profits, reduction of technical and non-technical losses or allowing technical innovation of the energy distribution network. Elements of the external environment, labelled as “external factors” in DSP reporting, have impacted many aspects of the project: its actual progress and capacity to realize its objectives, the resilience of each partnering entity and their inherent capacity to adapt and transform, as well as their ability and willingness to maintain effective collaboration and communication.

These conflicts among partnering actors started to show very early and remain persistent during the project life cycle, or at least during the first 4 years before the contract renewal. Elements of the surrounding environment fueled these differences further.

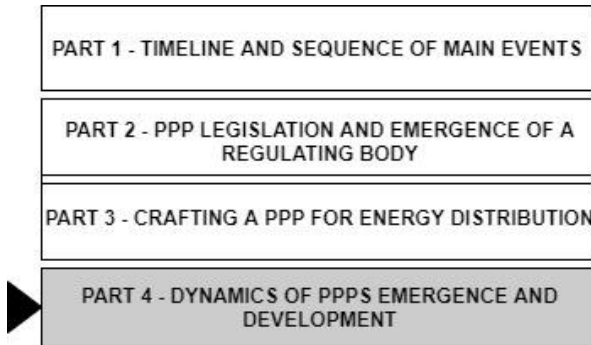
Collective efforts were noted among all actors – partners and other stakeholders - showing their willingness to pursue their engagement in this PPP despite the difficulties. However, these collective efforts were hit by a set of factors and events that existed or occurred in the surrounding environment, some of which were unforeseeable emergent incidents, such as the refugees crisis, whereas others were existing variables that went unseen or non-anticipated by project managers during preparatory processes of the partnership, namely: the inaccessible areas, the procedure for removing illegal connections, and others. Internal tension kept rising fueled by persisting hybrid logics. The discourse of the PM through the different quarterly progress reports tilts mainly towards a unilateral decision-making behavior, rather than a collaborative decision making and shared risks. PM-1 was continuously accusing SPs of not taking proactive actions and being more profit-driven than partners. From their end, SPs accused PM-1 of not acting as an independent entity and a mediator between public and private. Plus, the private SPs were always under the impression that the contract and the management of the project left them with very limited freedom to take initiatives or be proactive and innovative. They had the impression to be concessioners or sub-contractors rather than real partners, and trust was lost in partnership relationships.

“Revised plans”, establishment of “roadmap” and “remedial action plans” are all adjustment actions taken by partnering actors to maintain the survival of the partnership facing the environmental pressure. The last version of these revised plans was the “Service Providers Project Road Map”, which was considered to an additional – or last – opportunity for DSP salvation, as its time completion date was getting closer and tension among actors was getting higher. These conflicts were further encouraged by the confrontation of the contract design and project governance mechanisms with the particularities of the local context. The accumulation of unaccomplished tasks as well as unresolved claims and unpaid past-due amounts to SPs have raised tension levels further and many solutions were put in place in order to alleviate the effects of this tension. Workshops and extensive meetings have resulted in setting up remedial action plans, drafting MOUs for contract amendment and extension of project duration, but no radical solution was ever put in place. From its end, EdL did address some of these constraints by issuing the relevant BoD decisions and administrative/executive memorandums, while SPs have also implemented alternative plans to deal with some of these constraints accordingly; yet the outcomes were never satisfactory.

While certain processes do have distinct outcomes that can be considered as final stopping point, the outcomes of the major decisions that changed the rules of the games can be

understood as inputs determining the next stage of the DSP progress. From an ongoing flow of activity perspective, these game changing decisions do not represent a static termination point of this PPP crafting process but rather the start of a dynamic future activity, episodes, events and change that are certainly determinant of the DSP fate for the upcoming years. The decision of the CoM to assign a new service provider into Lot 3 project activities was highly influenced by political considerations. In fact, the issues of inaccessible areas in this region of the Lebanese territory needed a clear-cut solution. The only conceivable solution to address similar situations is to reach a consensus with local authorities that suits all concerned parties. The negotiations resulted in naming a sub-contractor, as the fourth service provider to take part in the DSP. And of course, in order to be trusted and allowed to access these ‘inaccessible areas’, the new actor is inevitably affiliated to local governing political parties.

PART 4 – DYNAMICS OF PPPS EMERGENCE AND DEVELOPMENT



The emergence and development of PPPs as institutions in Lebanon inferred the observation of the dynamics of DSP setup and execution, as an example of crafting a PPP project, in parallel to the setting of a PPP regulatory framework. The observation of these two phenomenon as they coevolve in

the same context revealed interesting insights on actions and events through cross-level interactions within and between these processes. Various multidirectional effects and changes over time with nested phenomenon and co-existing processes span the multiple levels of the analysis. Same actors playing different roles in those processes were identified. The historical context and path dependence of certain phenomenon was also determinant in the organizational dynamics of the DSP coevolution with its surrounding environment. As a crafting experience of the first PPP in the country in parallel to the setting of a PPP regulatory framework, the DSP evolution has triggered many actions among existing elements of the political and institutional sphere, that were so far “dormant”. As explained in the previous chapter, and in order to understand further the interaction between elements of the two observed phenomenon, we consolidated the dimensions and concepts related to interacting elements and on-going processes in this complex system of co-acting constituents. This consolidation is a further step of abstraction and represents the dynamics of PPPs emergence and development.

The three concepts articulating the results of this consolidation are: *Political actors contesting PPPs regulations*, *Resisting the creation of PPPs* and *Challenging PPP evolution*.

As part of requirement for studies on coevolution, it was essential to dig into the history of some of the processes that emerged from the field of study to understand further their roles in shaping the emergence and development of PPPs process in Lebanon. The path and history dependence of these coevolving processes revealed past events that had a significant effect in shaping the actual status of elements of the DSP macro-environment.

In addition to the data revealed through interviews and existing documents, historical data was also retrieved from press archives and special reports and included in the presentation of

the results. It is important to recall that some of the concepts revealed in these consolidated results have been explored earlier in Part 2 and Part 3. The aim of the discussion is not to re-explain the emergence of these concepts but to emphasize the coevolutionary aspect implied within and among these concepts.

1. POLITICAL ACTORS CONTESTING PPPS REGULATION

Although the need for the development of a PPP standalone regulatory framework was pressing and there was a local and international consensus on this necessity, evidences have revealed that this regulatory reform may go against private interests and political agendas of individuals or existing institutions. When we closely observed the evolution of the two phenomenon: the PPP regulation at the national level and the DSP creation and execution at the energy sector level, we noticed that the process of developing a PPP regulatory framework and the establishment of a PPP national unit was challenged at different occasions by policy makers who are key actors in the energy sector.

Our empirical observation revealed that not even once, at any of the DSP stages, the partners have taken the initiative to consult with the HCP over legal or managerial issues regarding this partnership. Actors showed very little awareness, as well as limited trust in efforts deployed by the HCP:

“At the level of our company we would like to get involved in other PPPs in Lebanon....We knew that recently a PPP law was enacted, but we couldn’t know its specifications, and how serious will be its implementation.” – (Assistant Manager, SP3)

We witness here the coexistence of two phenomenon, taking place in the same environment, during overlapping time periods, being influenced by the same institutional and political variables, and most importantly serving the same vocation of reform and modernization of the infrastructure and public services, yet not intersecting at any point or level. The personal drives of policy makers and key actors engaged in these processes are clearly divergent and so are their political agendas and intentions dictating their actions.

Empirical evidences enabled us to understand further the dynamics of this situation of avoidance or reluctance in cooperation between key actors of the DSP project and experts of the PPP national council. If we observe the actions/decisions of Ministers at the head of the MoEW since 2007 in regards to private participation in large-scale infrastructure projects, we notice conflicting behaviors towards the PPP national regulatory process from an end and the private participation in the energy sector projects’ on the other end.

The ministers who took turn on the head of the MoEW (and who were all partisans of the same political party), were opposing any tentative for PPP legislation at the national level while preserving the right to regulate the private participation within their sector's activities. The Ministry endorsed the DSP project extension and sponsored its activities, independently from the national PPP framework. Also the same actors did not entrust any PPP project in the energy or water sectors to the PPP council, even upon recommendations of the CEDRE, and their reluctance in doing so was one of the reasons behind the resignation of the council Secretary General from his position.

At the project' launching in 2010 as part of the national energy reform policy, the PPP law was still waiting for parliamentary approval. Experts and advisors in the domain were available at the HCP & PPP, consulting over ways to develop improved PPP programs in Lebanon. However these experts were never solicited for PPPs taking place at the energy sector.

During the multiple rounds of DSP contract extension, the PPP law was already in place. Nevertheless, the PPP council was never approached by any of the decision makers at the DSP level, (owner or consultancy) and not even by representative of the MoEW.

Despite the enactment of the PPP law, the international lobbying in favor of this legislation as well as the eagerness of local and foreign investors awaiting it, many political parties did not vote for this law and were even reluctant in applying it. In this sense, the political party who has been heading the MoEW since 2007, considers that the constitutional rights of line ministers allow them to maintain control over PPP procurement projects and therefore it is totally useless to go through a procedure that involves other stakeholders in this decision. Members of this party have openly declared their disagreement over the new tendering mechanism designed by the law, perceiving it as "eroding the Ministers' powers". In a way, this is accurate. The PPP law was deliberately designed to shift the decision-making process from a single ministry to a committee of ministers and experts, in order to reduce corruption and increase transparency.

"The PPP law enactment took too long because line ministries did not want to entrust their projects to another entity while they are still capable of conducting these projects within their ministries. Especially that the decision making in this case is not under theirs anymore. Also, there are political considerations, for example the Ministry of Energy and Water who is as well at the head of the Free Patriotic Movement, does not want to go through a decision making process headed by the Prime Minister and other decision makers while his own constitutional rights still allow him to do PPPs" - (Financial advisor, HCP & PPP)

Informants taking part in this research repeatedly mentioned the lack of transparency and the opacity prevailing procurements at the level of MoEW in general and EdL in particular, which largely explains the unwillingness of this Ministry in particular to cooperate with other entities or regulatory bodies when it comes to PPP procurement. A legal advisor stated her opinion in this regards:

“I am not sure that in Lebanon in general and at EdL in particular there is a lot of transparency so you can have data about procurement projects. Especially that the DSP project was very controversial, even till now they still have problems for the renewals, the daily workers as well...It is also politically sensitive.” - (Legal advisor, Law firm)

This perception was also endorsed by the PPP national council when asked about the reasons why line ministers are reluctant in their cooperation with the PPP council even after the enactment of the law:

“When the ministries have someone along the way with them, this prevents them from being the sole decision makers. Some of them were against this law since the beginning because they considered that the way the project selection and procurement were designed, it goes against their authorities. It is too bad because this says a lot and confirms a lot of our suspicions on nepotism and corruption practices taking place during tendering processes. Plus, it is too bad because a PPP is not only about the procurement phase, it is an entire mechanism that needs experts specialized in the field, and that also needs credibility” - (Financial advisor, HCP & PPP)

Also the fact that the PPP law was not enforced on public institutions willing to invest in PPPs, gave a total freedom for ministers or municipalities to adopt existing sectoral laws that are still widely used to govern PPP procurement mechanisms.

“The articles of the law stipulated are rather general, there is a lack of precision at many levels. Plus, why would a municipality or even a ministry goes to the HCP for a PPP project as long as they preserve the right to do it under the current existing laws? The PPP law does not offer any incentive or stipulate any advantage for public institutions to apply this law, and also it is not enforced on them. The law text is subject to lots of procedural gaps. There are lots of opponents to the law anyway, and it is till non-comprehensive.” - (Legal advisor, law firm)

Credibility-seeking is also believed to be a motive behind the establishment of the energy reform policy, which includes the DSP. The minister of energy and water envisioned this reform and promoted it in many occasions as the first PPP experience in Lebanon. Most probably he wanted his ministry to be the pioneer in engaging with private firms for power distribution services during his mandate. When we raised the question of the partnership duration and time of completion with the consultancy and asked them why the duration was relatively very short for a PPP project (48 months) where it should be at least planned over ten years, they replied:

“To be honest with you, our initial proposal based on existing data was 7 years not 4. And we suggested to divide the country into 5 to 7 regions instead of 3 But at that time, the minister wanted to guarantee that the project will be executed during his mandate....” - (Technical manager, PM-1)

Whether seeking credibility or having hidden interests, the ministers who took turn at the head of the MoEW for almost a decade, made sure to steer through the CoM their ambitious plan of energy reform while ultimately attempting to hinder the proliferation of a proper PPP regulatory framework at the national level. In this sense, while positive feedback loops of relational quality are thought to be critical for the success of the partnership at the energy sector and the establishment of the PPP regulatory framework, the results were surprisingly unanticipated. The output of interactions between actors and organizations could have been an input for the success of the partnership and the development of an adequate regulatory framework, but this was not the case.

2. RESISTING THE CREATION OF PPPS

As we noted earlier in our findings of the process of crafting a PPP for energy distribution, the creation and evolution of this process has witnessed various types of resistance, at its launching as well as during its development. We bring a close focus in this section on three forms of resistance, coming from various categories of stakeholders involved directly or indirectly with this partnership.

The first form of resistance to the setup of the PPP at the energy sector was initiated by a group of EdL workforce called ‘daily workers’ who’ve been waiting, since their recruitment on hourly-basis, for their full-integration within EdL. The first time the word “daily workers” appeared in the collected data is when DSP partnership actors mentioned the first strike that blocked the activities of the partnership at the time of its launching.

Understanding the origins and evolution of daily workers social movement is necessary for the interpretation of its role in the coevolution of the DSP with the elements of its close environment. The examination of historical secondary data, coupled with collected primary data, allowed the reconstruction of the story of this phenomenon.

The following is a brief narration composed of two parts: the first part is historical digression based on secondary data that disclosed the historical events and context explaining the circumstances and mechanisms through which EdL daily workers engaged in a collective action and became a legitimate social movement, up until 2012. This historical briefing is

considered as a prologue to the second part that presents the analysis of the interplay between this movement and the DSP evolution starting 2012, based on primary data.

1. 'Daily workers' before the DSP launching (up until 2012): a stable precarious status

In order to access posts of civil servant or government official in Lebanon, public competitions are organized by the governmental entity in charge of civil hiring⁶⁹. As a part of the Lebanese government policy to “rationalize” the cost of labor when it comes to public administrations and public utilities hiring, the government has been limiting the number of public competitions to access the post of civil servants, since 1974. The integration of new staff is been made mostly through the hiring of precarious workers paid on daily basis. Progressively, the “externalization” of these daily workers to subcontracting companies became a practice largely adopted by some Lebanese public utilities like in EdL; this led to an important percentage of daily-workers in public administrations working with private companies. Daily-workers actually operate for the ordering institutions (they report to civil servants managers and supervisors, they drive publicly owned vehicles, their work shifts is tracked by the public institution to which they are affiliated), only their salaries and social protection is the responsibility of the subcontracting company (limited to the duration of the subcontracting contract), unlike their permanent civil servants peers. This model of employment does not offer its workforce any social security, benefits or retirement pension.

Over the years the number of daily-workers exponentially amplified; at EdL the workforce increased from 500 to 2,400 between 1995 and 2011. Despite the underpaid and informal nature of this occupation, it is not easy to get; in fact, behind this precarious work model lays a whole system of “clientelism” and distribution of EdL economic and human resources among politicians. This gives politicians who have control over public hiring, the opportunity to selectively chose and keep these positions to their favorites and supporters. The actual value of this precarious model of employment is not in its insignificant compensations and revenues; it rather originates from the potential opportunity that comes up: the status of “daily worker” was always perceived as a stepping stone for public servant full employment.

Although the protest movement’s aims and ideologies were always significantly linked to social aims which are the integration of EdL as full-time civil servants after many years of underpaid and precarious work; however other inherent elements can contribute further in explaining this phenomena: the political/confessional orientation of the movement. The religious and political affiliation of EdL daily workers is diverse: all confessions and political

⁶⁹ the Civil Service Council (CSC)

parties are represented among daily-workers, but at different proportions. This confession and political imbalance was one main reason why some political parties were opponent to the full integration of workers as permanent workers in the national electrical utility. Otherwise a threat of confessional balance EdL will be prevailing the public utility.

2. *'Daily workers' with the advancement of DSP (starting 2012)*

EdL daily workers status was mostly latent until the announcement of the energy sector reform policy calling for the participation of private companies to run the entire distribution sector. For daily workers this announcement was perceived as a twofold threat: they would lose their jobs because for them most likely these companies would bring their own employees; and they would never be able to access the civil servant position within EdL. As part of the requirements of the DSP Project, the private service providers have been required to train and enroll a large number of EdL daily workers (not all of them though) for the duration of the contract. So this partnership was the cherry on top of the frustration and long years of *status quo* that triggered the protest movement considered to be the longest in the Lebanese history of labor movements. This movement built up in a resistance to the private participation in EdL activities because daily workers were already drained by the financial and social repercussions of their unstable employment. Most of them had been working regularly for more than 15 years at EdL as daily workers without having any legal or social rights (no social security, no insurance, no paid leaves, no compensation for end of service, etc.). They expressed their perception of major injustice through organizing frequent strikes, blocking public roads, burning tires in the streets and even forcing EdL to shut down through organizing sit-ins in all EdL divisions. This movement started on May 2nd, 2012, less than a month after the DSP was launched, and lasted for 93 days. In addition, many of those EdL workers did not have the required qualifications to carry out their duties and no effort had been made to provide them with the necessary training and professional development in order to integrate them properly...

The daily workers movement, whether intentionally or not, has succeeded in highlighting once again the dysfunction and corruption of public institutions. Despite the vulnerability of their working models daily workers succeeded through their movement to challenge political and governmental structures. Although they could not achieve their ultimate goals to evolve from the status of “daily workers” to “full-time employees” within EdL, their movement could not be ignored by the government, not by EdL and not even by the PPP actors themselves. In the beginning, the movement succeeded in blocking the implementation

activities of the partnership and subsequent disruptions have slowed the partnership progress at various levels.

Our analysis reveals a nested phenomenon, the daily workers social movement, within the DSP evolution process, implying multidirectional effects and interactions at different levels of the model. Activism within this social movement impacts the evolution of the DSP structure as well as its performance, so does the DSP influence the structure and the actions of this social movement. The DSP provided daily workers with opportunities to alter their social goals, improve their social status, develop their competencies tied to the sector's technology. In return, daily workers possess unique field knowledge and expertise that enable them to perform field work. Without them, the SPs would never been able to perform the activities related to main project tracks: bill collection, maintenance and repair... In this sense, interdependent cycles of mutual influence existed among the DSP (initially perceived as a form of threat by the social movement of daily workers, and later as an opportunity for a long-awaited stable employment), political authorities (to whom daily workers are affiliated), and the actions of the social movement.

Interestingly, following this impacting movement, the private SPs had different approaches for daily-workers integration into their companies: while SP2 and SP3 offered short-term contracts (over the 48-months project duration) for the concerned man power, with various types of incentives and benefits, SP1 had a different approach: they adopted a full-integration of more than 600 daily workers into the company, offering them indefinite-term employment contracts with all associated benefits. This strategic step was considered as a social achievement related to SP1 contribution in their partnership with the energy public sector.

3. CHALLENGING PPP EVOLUTION

Evidences presented earlier during the description of the DSP crafting process have highlighted various challenges that impacted the evolution of the DSP and the proper execution of its activities. Actors that were not initially part of the PPP creation and setup found themselves constrained by a radical transformation of the processes and operations they used to perform, without a prior preparation for this change.

In this context, the MoEW was excited about introducing international PPP practices into the energy distribution network. Adopting a project that typically responds to international standards by virtue of its contract specifications and design was a pioneering PPP experience in Lebanon. In this regards, we were informed that the DSP project has competed along with

32 projects designed by international companies specialized in technology and engineering, for the “Smart Grid Paris 2014 Award for Distribution” and was awarded the “Grand Prix du Public” trophy in June 2014 based on criteria including: innovation and interest to the society and the utility.

“The design of our project won the Smart Grid award competition in France in 2014. This is a radical change to the grid. We were competing with international companies. It is too bad it could not be implemented properly in Lebanon because of lack of commitment from partnering actors...” - (Technical manager, PM-1)

Partnering actors expected that the outcome of such agreement would surely have been as ideal and perfect as its design. Nevertheless, in environments with high uncertainty such as in Lebanon, these assumptions are not always relevant. Not taking the particularities of local contexts into account while allocating risks during DSP design has increased the likelihood of an underperformance of the partnership.

EdL is considered to be the typical example of bureaucratic structures. Caught in redtape and obsolete ways of doing things, EdL public servants, and particularly the ones serving in regional divisions, found it extremely difficult to change their practices or innovate in EdL operational processes, although the DSP was suggesting more efficient alternatives. This may be justified if derived from path dependence and the way processes were always done at EdL regional divisions; however variables other than path dependence can also explain this behavior. EdL regional head of divisions are sensitive positions granting their tenants a “respected” social status and local authority within the region they are serving. In most of the Lebanese regions, people occupying these positions are well connected to local sectarian elites and often accept bribes and gifts in exchange of a work order or an approval to be granted. The introduction of new actors from the private sector to participate in tasks initially done solely by public servants is considered to be a threat to these relationships. Not all EdL head of regional divisions and other public servants were easily compliant with the changes imposed to their routine tasks by the DSP, because these changes jeopardize the authority and social status they have within their region as well as the type of public relations they were attempting to “institutionalize” with local citizens and other local authorities for so many years. In addition, the advancement of the DSP implies changes in the obsolete procedures and processes, and imposes the use of technologies to support this change; which was not very appealing to public servants that are used to their old ways of doing things. SP3 Managing director explained how head of divisions perceived the participation of private actors in their tasks:

“...All of a sudden all this authority is taken away from them by a private company that invades their positions and start teaching them what to do. Unfortunately, it is common for Lebanese citizens to struggle in order to get what is their basic right. Bribery in Lebanon is widespread. People got used to the necessity of giving money in return of a public service done. We tried to change this mentality by the way we accomplish our tasks and by explaining to citizens that this is their right and we’re only doing our job”- (Managing Director, SP3)

As mentioned in the findings of the process of crafting PPP for energy distribution, this can get even more complicated when the tasks to be performed involve or need the authorization of other stakeholders, like the heads of municipalities. This is the case for instance where approvals for excavation works are necessary. The participation of actors from the private sector has attempted to contest these established practices, by introducing new and more transparent alternatives. Of course this change was not welcomed in some regions where accepting bribes and gifts, and being affiliated to political or sectarian elites, is a prevailing and embedded culture; whereas in other regions, the DSP was not only a structure for technological advancement and modernization of the distribution grid, but also a way for injecting public ethics in existing practices that transformed the conduct of local civil servants.

According to actors of private companies, these resisting elements - whether resulting from EdL red tape, or from deliberately slowed approvals and processing waiting for any kind of ‘bribes’ to bypass red tape and speed-up the decision making process - caused harmful delays in the execution of DSP activities, and excessive accumulation of backlogs.

“For us the most important lesson to draw from this experience is the necessity of a proper change management especially at EdL level. In some regions there was a total cooperation between us and the head of divisions. They understood that this project is enhancing the entire services. While in other regions, they perceived it as a threat taking away their authorities. This change management was not addressed in the contract.” - (PMO Manager, SP1)

This transformation of the energy distribution system, at the technical, operational and managerial level, was possible but only to a very limited extent. Communications between private actors and central and local authorities were not fruitful most of the time. This has emphasized further regional disparities and caused significant uneven performance among DSP partnering firms.

An additional layer of complexity is also added when the private SPs were restricted from accessing some areas of the Lebanese territory due to political and security considerations. The observation of the DSP as a PPP crafting experience also revealed a unique type of resistance to the activities of this partnership in some of the Lebanese regions located mainly

in Lot 3 (the Southern side of the country). These areas have access restrictions due to security constraints, and the performance of the private firm, SP3, assigned to this lot was significantly affected by these constraints. Local authorities and security forces perceived the DSP activities as threatening the security of the regions and therefore stood in the way of their execution. The reasons behind this impediment being strictly political, SP3 found themselves in an ambiguous situation, incapable of performing the tasks they were assigned for on almost 40% of their Lot, and taking on a risk that is initially out of their scope and that was supposed to be handled by governmental authorities.

All these facts are an evidence of cultural, normative and regulative elements that dictate prevailing practices, among Lebanese public administrations being highly influenced by political considerations and personal agendas. And the institutional and regional factors identified earlier cannot be dissociated from these considerations and also cannot be disregarded during the execution of large infrastructure and services projects.

In response to these challenging external factors, sequences of actions and events occurred at the micro-level of the DSP emphasizing mutual influences and interrelationship exerted among the partnership' components themselves. The interplay among these components ensured the survival of the partnership against all resisting factors. And the observation of these dynamics revealed interesting insights on the partnership evolution and performance. These manifested effects were discussed in the previous section (Part 3) with rich supporting empirical evidences. We recall here the main findings in this regards with focus on the interplay between endogenous elements and exogenous factors.

The DSP process evolution shed the light on how partnering actors have centered their interests on coordinating mechanisms in order to ensure the partnership viability despite important conflicts and tension over the DSP contractual design and relational aspects. Above all, issues of performance and monitoring evaluation scheme were highly pertinent and caused important controversies. While the contract systematically linked the performance of private actors to their compensation and payments, its execution revealed the necessity to go beyond organizational and relational considerations to take into account contextual aspects that went unseen by the partnership initial design. "Ambiguity", "irrelevance" and "non-applicability" of the compensation scheme, were terms and expressions used repeatedly by the informants. The main problem concerned how to articulate the private firms' actions, EdL decisions and PM arbitration in order to achieve the DSP objectives within such contractual

ties. Divergent institutional logics among partnering actors have strongly limited the capacity of this project to operate and innovate. An overly stressful business environment and continuous tension between SPs and the tandem EdL/PM have succeeded in a relatively short time to jeopardize the viability and continuity of the project.

Negotiations between different stakeholders were tough while attempting to reach a consensus for this issue. Alternatives were suggested, but no radical solution was ever proposed. This was ended as soon as the MoEW and the private SPs agreed on giving temporary employment of all daily workers in the three private companies and promised them full-employment after the DSP contract ends in April 2016 (the initial end date of the contract). So daily-workers agreed to temporary be employed within the project in anticipation to their full integration into EdL after the contract expiration date, not without discontentment and major trust disruption between the workers and their affiliated political parties, because the movement was almost “forced” to end upon a political agreement with EdL management not without leaving important divisions and ‘fragmentations’ among workers.

“The issue with daily workers is not new. The DSP was just a trigger for their strike. Discontentment among this category of EdL workers was always there because none of the latest governments could propose a radical solution for this precarious work model. They constitute a cost that the government would like to externalize...finding ad hoc solutions and giving unfulfilled promises were never satisfactory. In my opinion, politicians are simply taking advantage of this type of employment...” - (President of DSP committee, EdL)

Among the three service providers, only SP1 recognized the importance of this social challenge, and also the capacity and potential of daily workers, their competences and most importantly their field knowledge and familiarity. Daily workers’ tasks are diversified and extend from basic clerical work, collecting payments, to more dangerous technical intervention at the level of the power grid with fixing, installation and maintenance. The company anticipated the forthcoming effects of the first strike and put a strategy to mitigate them. They decided to enroll 600 daily workers (who became ex-daily workers and officially SP1 employees) by offering them full-time jobs on indefinite-term employment contracts, with all associated benefits, social security, paid annual and sick leaves, end of service compensation, fair salary scale based on competence and the nature of the work and a foreseeable career path. The company also provided these workers with regular technical trainings including safety and computer literacy. SP1 management also made sure they have a successful integration and become socially affiliated to the company through participation in promotional gatherings and company events.

“Through extensive training programs, daily interaction, gathering events, participation in internal workshops and discussions, these newly enrolled employees have developed the required skills and proficiency with a sense of sharing of the company’s goals. ...At this level we consider this was our greatest achievement, a social achievement. Because we could integrate 600 EdL daily workers, who were deprived from rights and opportunities, no sick-leave, no social coverage...and most of all they had all the same pay rate regardless of their tasks (office boy or technical support). They are now full-time employees at our company with indefinite-term employment contracts with social security coverage and end of service indemnity, schooling and family allowances.... For us there are no daily workers anymore, this workforce is part of our employees... We also succeeded in creating a sense of commitment for these workers to our company. Any strikes taking place recently, there is not a single employee that participated in those strikes. Other SPs couldn’t do this.” - (PMO Manager, SP1)

Except for the first 4-months strike (May 2012 - August 2012), not a single ex-daily worker who became employee at SP1 has ever participated again in any of the subsequent strikes held by EdL daily workers.

For SP2 and SP3, handling this issue was much more challenging. Daily workers assigned to Lot 3 not only outnumbered by far the ones assigned to the remaining two areas, Lot 1 and Lot 2, but also surpassed the company’s need for workforce implying heavy additional costs. Even though the company succeeded in joining EdL daily-workers to its workforce however they could not offer the same benefits as SP1 did, at least not indefinite-term employments.

“To our luck (or not !) the area we are assigned to hold almost 57% of the daily employees. Instead of having 450 employees to run the project we were obliged to take 900 employees as daily workers. In addition, we needed a management team to run these employees. So instead of having a total of 450 we ended up having a total of 1200 employees to run the project. As opposed to other companies who had to deal with 450 to 600 employees. We explained to this category of workers the advantages of working with private companies for the duration of the project versus the status of being daily workers (social security, compensations and benefits, possibility to improve and develop).” - (PMO Assistant Manager, SP3)

Less than two years after the first strike, the political agreement proved that the workers movement did leave a lasting mark. A second long-run protest movement started again in August 2014 and lasted for 4 months, when EdL announced that it will only recruit 897 workers of the nearly 2000 daily precarious workers, and the government seemed to be backtracking on passing the promised law that guarantees full-time employment for daily workers. In addition, and because of EdL delayed payment of SPs compensations, the latter were also late in paying their workers dues. During this protest, daily workers organized sit-ins at EdL headquarters in Beirut, and regional divisions. The movement escalated into cutting roads by burnt tires, causing traffic problems and of course interruption of electrical distribution activities (bill collection and major EdL dysfunctions). Once again, a political

deal was reached in order to end this protest in mid-December: the deal consisted of organizing competitions for full-position employments at EdL, the workers that will not be selected shall be compensated. This deal never materialized whatsoever and diverse forms of strikes persisted during 2015.

In fact, their partial affectation or transfer to private companies was not a radical solution and did not ensure job security. Resistance remained in one form or another as long as core issues were not successfully addressed. However the group of workers that were attributed full-time contracts in one of the private companies has challenged the public so-called employment stability comparing to the merits of private employment.

SYNTHESIS AND TRANSITION

Engaging in a process research to understand the dynamics and their coevolution with the elements of the surrounding environment implies exploring the interconnection of processes, concepts and contexts through time. Time order is an essential dimension for this longitudinal study; so is the understanding of the linear sequence of events that determine the phases of evolving processes. We presented at the beginning of this chapter a linear timeline of key events that were determinant in the DSP lifecycle, along with major activities happening in the environment where the DSP is embedded. Although timelines do not present results in their analytical abstraction, however this abstraction cannot be possible without prior clarification of sequences of events taking place across levels of analysis. We consider this step as a preliminary stage and a time reference to subsequent analysis the network of intertwined processes narrating the story, presented throughout the chapter.

At this level, the collected data is analyzed and ordered into two data structures revealing concepts and dimensions related to both observed phenomenon. We explored in this chapter these processes in the light of the findings and empirical results: *PPP legislation and emergence of a regulating body* and *crafting a PPP for energy distribution*.

PPP regulations in Lebanon are a kick-off action for the establishment of an adequate environment for private – and foreign private - investments in public infrastructure and services. Data revealed that this process was relatively a long one and different obstacles, mainly institutional and political stood in the way. Despite the urgent need for it and the international consensus on its importance for the Lebanese economy, many policy makers showed reluctance in centralizing PPP regulation and management within a dedicated body. The reasons behind this reluctance are twofold: from one end, policy makers are always able to procure PPP projects via the existing public procurement and accounting laws. In this case the governing mechanism of the partnership would be limited to terms and conditions stipulated in these laws and the contractual ties of the partnership. Most importantly, the power of line ministers and other local authorities (i.e. municipalities) in setting up a PPP (procurement, management and monitoring) would remain irrevocable and the decision is solely theirs.

The Higher Council for PPPs in Lebanon, who took the lead over the establishment of a PPP regulatory framework, with the help of local and international activists and experts in law,

public policies, economy, and PPP finances were all actively engaged in designing and promoting adequate PPP regulatory framework. Parliamentary lobbying got to pass the law almost ten years after the first draft was suggested. This delay was due to frequent and long periods of political deadlock in Lebanon, but mainly to political actors opposing its promulgation for political agendas. These same actors also showed strong reluctance in cooperating with the PPP national unit established by virtue of the new PPP law. Since this law was not enforced on all PPP programs, most of line ministries maintained the right of procuring PPPs at a sectoral level, without soliciting the help, advising or supervision of the HCP & PPP. We named this process “engaging in a trust/power game”, where institutional actors were trying to introduce new practices into PPP programs and increase transparency and expertise while other political actors were mostly concerned with preserving power and dominance over PPP programs. This situation resulted in stagnation and hurdles blocking foreign investments in Lebanese PPP programs and ended up with the resignation of the Secretary General of the HCP & PPP – the initiator and main actor in introducing PPPs to Lebanon - from his public duties.

Meanwhile and through an overlapping period of time, a PPP national project in the energy sector, the DSP, has been put in place, away from the intervention, help, supervision or any type of cooperation with the HCP & PPP...

In the third part of the chapter, we tried to convey the DSP story according to the analytical dimensions and concepts revealed by the data structure related to this phenomenon. We advanced six dimensions representing the sub-processes that constitute the DSP establishment and evolution process. These dimensions interplay among different actors: the partners and other stakeholders, to shape the DSP journey that was strongly marked by institutional and political factors. At the micro-level, although partnering actors were all willing to gather their efforts for the sake of the partnership survival and success, significant differences in logics and conflicts of interests have created high tension related to contractual and relational issues among the three private service providers and the tandem EdL/Program manager. The resistance of stakeholders was also not favorable for the proliferation and success of the partnership. A strong resistance by EdL daily workers to private sector participation in EdL activities started right at the initiation of the DSP project. This category of workers has been struggling for many years to get full-time employment in EdL utility as public servants; and the partnership with the private sector over some of the activities usually performed by these workers was perceived as a great threat for this potential integration. The empirical evidences also showed a large set of institutional particularities of the country’s

environment showing the non-readiness of public officials to embrace innovation and change in the daily processes and operations they used to perform. The significant impact of internal rules and procedures that trapped EdL and its regional divisions' in red tape and obsolete ways to perform the operations related to distribution. In addition, the widespread of bribery and clientelism among public administrations, regional authorities and municipalities also contributed in hindering further the progress of the project's activities.

All these external factors, in addition to internal conflicts generated by high hybridity in logics governing this partnership, have significantly impacted its performance. A general atmosphere of exhaustion and frustration among partnering actors due to the emergence of risks and obstacles that were not considered during the contract design pushed two of the private service providers to suspend their activities within the DSP. Once again, collective and individual efforts among partners ensured the survival of the partnership, but not without a notable difference in performance among the three private service providers, affecting their remuneration and therefore their motivation, their behavior as well as their strategic choices.

After four years of the DSP life-cycle, the partnership has reached a turning point with three major game changing decisions. First, the consultancy company that initially designed the PPP contract, and supervised its execution during the first four years, decided to exit the game and another consultancy was appointed to assist EdL in managing the DSP. Second, a new private service provider was appointed by the Lebanese government to assist with the DSP activities. And third, the renegotiations of the DSP contract have introduced major amendments and adjustments that would help in regulating the tension caused previously by internal and external factors.

In the last part of the chapter, we consolidated the empirical findings to reveal insights on *the dynamics of PPPs emergence and development* in Lebanon. We find that these dynamics are articulated around three main processes. The first represents a game of power through which political actors are contesting institutional rules. Line ministers are contesting the establishment of a PPP standalone law and are also reluctant in cooperating with the newly established HCP & PPP over PPP projects. The second represents the processes of resisting the creation and setup of PPPs and significantly delaying the launching of its activities. The third process represents the set of events, actors and factors of the institutional environment challenging the evolution of PPPs, hindering their progress and impeding the proliferation of their activities.

From an interpretive perspective, we attempted to understand the processes embedded in this constellation of elements surrounding PPP projects crafting and PPP regulation in the developing economy of Lebanon. The chapter provided details of actions and decisions taken by key actors; it described flows of activities; and events taking place on different levels of analysis and provided contextual details in all their richness and complexity of all internal and external factors that conditioned these evolutions and interactions. Plenty of informants' quotes and extracts from existing documents are used in the narration of events.

The next chapter links data to theory and emphasizing grounded theorization, focusing on each emergent dimension and construct revealed in this chapter.

Chapter 5

Discussion, Contributions and Limits

INTRODUCTION

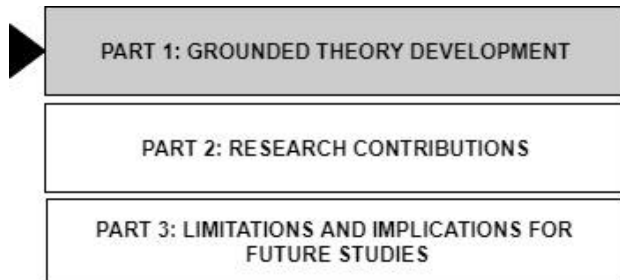
With the aim to theorize from data we attempt in this chapter to put motion to the static picture of data structures and their consolidation developed in the previous chapter. Our theorization tries to capture the relational dynamics that articulate the concepts and dimensions revealed and thus suggest theoretical models that advance our understanding of PPP dynamics in developing economies as well as their coevolution with the elements of such unstable environments. We also reflect on the contributions offered by this research, not without recognizing its limits as well, suggest ways that can advance our understanding of PPPs.

In PART 1, we adopt a **grounded theory development** perspective to propose three conceptual models associated to the results of the analysis. The different components of these models are discussed in the light of empirical results and existing literature on PPPs, institutional developments and coevolution theory.

The contributions brought by this research suggest new directions and enlighten new ways to look into public private collaborations. These **research contributions** are explained in PART 2, where we also include few recommendations to practitioners involved in the design or management of PPP programs.

We report in PART 3 the **limitations** of this research as well as the opportunities it presents for **future research paths**.

PART 1 – GROUNDED THEORY DEVELOPMENT



PPPs are not an alternative for governments' failures. Their performance was often questioned by practitioners as well as by scholars. Most of the studies on PPP performance were done in environments with pre-existing frameworks to regulate PPP

programs. In many emerging economies where the need for private participation in public services is important, the PPP market is still less advanced, and a solid institutional framework to regulate this market is still in the making. This research addressing an aspect of the reform of PPP programs development which is the establishment of a PPP dedicated regulatory framework, has revealed interesting insights on this co-construction. In this part we explain the dynamic relationships among the constructs that emerged from the study and we suggest grounded theory models explaining respectively: the process of *crafting a regulatory framework for PPPs* and *crafting PPPs as collaborations*. From a coevolution perspective, these two phenomenon taken together can explain how PPPs as institutions emerge, operate and develop in developing countries and therefore provide insights on the dynamics of the *institutionalization of PPPs*. In this discussion we try to connect our observations with the large institutional theory literature, with previous works on PPPs, and with insights revealed through the coevolutionary theoretical framework.

1. CRAFTING OF A REGULATORY FRAMEWORK FOR PPPs

While PPP literature has largely explored interesting aspects of this type of collaboration, the process of PPP institutionalization and development of adequate institutional settings has been overlooked. Studies have agreed that various critical factors are behind the success of PPPs but strong and supportive regulatory settings remain a key aspect for this success (Geddes et al., 2013). In some OECD-countries where PPP markets are considered to be mature, dedicated PPPs jurisdictions and enabling PPP laws have been developed (Albalade & Geddes, 2018). These settings are considered to guarantee a favorable environment through clear policies and transparent processes for procuring PPPs, appropriate framework for preparation and selection of PPP projects, setup of PPP units or dedicated bodies to manage PPP processes. Again, in countries benefiting from well-developed regulatory frameworks, these features become commonplace and PPP program more mature as

institutional structures start to emerge and realign to support the use and the establishment of PPPs.

This research has uncovered details of the crafting process of a PPP regulatory framework, which is considered to be an initiation and preliminary step of a PPP institutionalization process in a developing economy. In its simplest form, this crafting process can be defined as the mean by which regulating authorities (central governments, regional authorities) promote the way PPPs are carried out in a country. This process encompasses the definition of the different activities to be performed, the key actors concerned by each activity, and the rules governing these activities in order to go through with a PPP project. From an institutional perspective, these processes usually mature over time engaging organizations - from both the public and the private world in the case of PPPs - in increased interactions and showing a greater consensus on procedures for conducting activities (DiMaggio & Powell, 1983). These settings generally provide fundamentals on how to procure PPP projects, design the agreements, manage their implementation and monitor their execution.

The collaboration between public and private actors mixes different rules and logics and the PPP legislation is perceived as a main determinant for a strong governance model adopted for this collaboration and a guarantee that limits various forms of opportunistic behavior. Therefore, this regulation would be the potential therapy preventing failures in PPP projects in a country with nascent experience - or non-successful preceding experiences - in administering this type of complex networked mechanisms. However, promulgating PPP standalone laws is not the unique aspect of PPP institutionalization. The process of regulating PPPs, in general and in emerging economies in particular, implies other considerable institutional changes that have to go in tandem with the introduction of PPP projects (Zhang et al., 2014). Empirical evidences have shown that this process of *crafting* or *bricolage*, mainly inspired by existing practices, aims at challenging, developing or simply changing them with the purpose of fulfilling existing needs. It also introduces new practices at different levels and extends the sphere of stakeholders and institutions involved in regulating the participation of the private sector in the field of public work. In developing countries, this crafting experience is very significant since it emerges in an environment where high levels of hybridity in logics and in interests and drives prevail. Many actors are involved in setting the rules for a PPP regulatory base, especially that in developing markets the know-how in this concern is very limited and the need for PPP experts. This experience is a collective effort of actors to challenge the way PPPs were conducted and transform these practices into

what they perceive to be 'the best way to do things'. Evidences have shown that designing rules and regulations for PPP programs consists of a group effort led by actors of what would become a PPP national unit or regulating body, activists from the civil society, national lawyers and the assistance of international agencies like the World Bank. In order to satisfy the needs of local contexts and also meet benchmarks in PPP programs, rules usually integrate elements from existing international references adapted to local conditions.

In this line of thoughts, studies have jointly agreed that PPP enabling laws are extremely important for attracting private investors to join works in infrastructures and services provisions; and the proper design of such laws is equally important to lower transaction costs resulting from uncertainties surrounding PPPs (Albalade & Geddes, 2018). Despite being the first step towards PPPs institutionalization, the promulgation of dedicated laws by itself is not the guarantee for successful PPPs. In emerging economies, an important question remains relevant: how to enable, enforce and cultivate a supporting institutional environment. Findings also showed that reviewing all sets of existing laws concerned with public contracting is essential in order to close any legal gap that allows parallel routes for PPP procurement and therefore reduces public agents' opportunistic behaviors. In this sense PPP laws are to take priority over sector or existing laws in order to allow successful partnerships development. A statement that became obvious and largely supported by empirical evidences: failures affecting PPP agreements are likely to be significant due to the complete absence or deficiencies in the regulatory framework governing PPPs. The promulgation of a PPP standalone law has a main purpose to close pitfalls of pre-existing scattered laws governing PPP procurement and to provide the international community and foreign investors with a guarantee of goodwill towards economic and regulatory modernization and reforms.

The legal aspect is not the only aspect of PPP institutionalization. In fact, the consensus of all policy makers around the necessity to build a proper institutional arrangement around PPPs is closely related to the healthy establishment and engagement in PPP programs. The current study joins the assumption that the adoption of a reform is subject to a political and institutional consensus and implies the necessity to revise sectoral laws and existing decrees. This reform is not only restricted to PPP legal aspects but also extends to cover cultural and administrative facets. The creation of a PPP national unit or a PPP regulatory body is equally an essential element of this process. The role of these units is still underexplored by the literature. PPP units have a legitimate identity as institutional builder, making rules and building regulatory, operational and monitoring framework for upcoming PPP projects. Most

importantly, PPP units have the role to coordinate all PPP activities among stakeholders and involved actors. While they are considered to be institutional engines that regulate, develop, and most importantly promote the standards of PPP programs and policy guidance, in upcoming stages the role of the PPP unit may develop. They may engage into the overseeing of the entire PPP process and evaluates and approves the eligibility of projects and contracts. This deregulation of vertical control and enhancement of horizontal coordination across public actors and governmental departments may not be welcomed in environments where corruption and personal interests are widespread.

Evidences also showed that despite the importance of this process, established institutions and existing authorities may show some kind of resentment towards PPP regulation. Even if this process is a key aspect of national reform plans, however, in case the regulatory design proposed goes against personal interests or even challenges some attributed rights and privileges, opposing actions may start to show. It is true that global paradigms around PPPs' efficiency and performance are widespread non-unified and, for the opponents of this mechanism, PPPs are mostly associated with fiscal-circumventing motivations and their real capacity lies in 'hiding part of public debts' off the government balance sheet instead of closing a real financial gap (Buso et al., 2017) in addition to generating excessive return on investment granted to the private sector. However the opposition may also hide other types of motives, and opponents may be trying to use their systemic power and exerting dominance and control over PPP actors and regulations. This opposition may be expressed in reservations towards suggested PPP regulation, abstention in approving PPP law proposals, or even total rejection of these laws. By exploring the conditions under which an economy in transition has initiated the regulation of PPPs, we argue that this process has triggered resistance to the transformation and disruption of existing behaviors and rules. By virtue of the existing regulatory framework (i.e. existing set of laws, constitutional rights...) actors and decision makers at the executive level (i.e. line ministers, head of municipalities...) have historically gained a set of rights allowing them to procure PPP projects. These actors may therefore adopt a clear stance against this change in order to preserve control over PPP procurement, especially when the suggested law allows PPP national units to detain solely the right to regulate PPP procurement. For decentralization and increased transparency purposes, PPP standalone laws often suggest group of stakeholders to form procuring committees. Evidences in this research showed that these law provisions may be perceived as eroding the power of current procuring authorities who accused the process to be time consuming and pointless. The compliance of existing actors with new norms will certainly reduce their power

over PPP procurement operations or other PPP processes; which justifies their opposition and explains this political game of powers.

While promoting PPP projects and raising awareness among central and local administrations is the next challenge of a newly established PPP governing unit, this challenge may also be subject to the reluctance of political actors who are initially behind the opposition to PPP regulation. This opposition and reluctance, coupled with other political and environmental elements such as the country's political instability and long periods of political inertia, may lead to a situation of undesirable balance between promoters and opponents. This resistance started showing when opponents expressed reservation towards PPP law provisions delaying by this the promulgation of the law; the non-cooperation of those same actors with the PPP unit made that PPP projects at different economic industries were not entrusted to this regulating body and therefore were still procured and managed according to traditional means and processes. This behavior is further encouraged when PPP laws are not enforced and/or when existing laws are not revised.

We view the process of crafting a framework to regulate PPPs in emerging markets as a significant initiation of institutional change in this direction. It is an attempt to transform and disrupt existing inefficient PPP practices by introducing further transparency and expertise in implementing PPP programs. Revisiting existing control processes and roles and responsibilities of main actors is a requirement in order to change and innovate. However, this may engage individuals and organizations in interplays of resisting forces and driving forces between actors willing to challenge and transform existing practices and those who would like to preserve their power and dominance.

Within these dynamics, the noncompliance with new mechanisms and the tension resulting from conflicts and resistance may become so important to the point that some actors may choose to exit the 'battlefield'. This exit takes place when the efforts put by individuals or collective actors to induce innovation and change into old established institutions is important but the resistance is even more impactful. This causes great discouragement and weakens the motivation of actors promoting improvement in PPP programs. Similar undesirable situations may be avoided, as stated earlier, by the enforcement of the law as well as by reviewing the set of existing laws that attribute scattered rights and authorizations to procure PPP projects.

The promulgation of a PPP standalone law is an important step in PPP activities reform, but not sufficient *per se*. A complete regulatory reform and a general consensus are also necessary. Based on the above discussion, and taking the observed phenomenon of crafting a

regulatory framework for PPPs into context, a theoretical model is suggested to conceptualize this process, as shown in Figure 5.1 below.

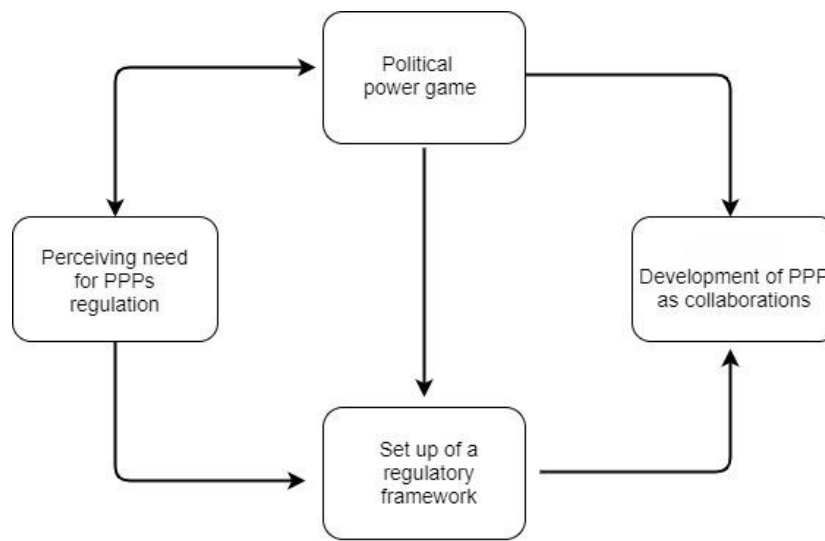


Figure 5.1 - Crafting of regulatory framework for PPP

2. CRAFTING PPPS AS COLLABORATIONS

Studies focusing on the initial conditions of formation and the final performance of a PPP outweigh those exploring their evolution. While a static approach to view PPPs can reach its limits, dynamic considerations can significantly improve their understanding at the theoretical level, and help improving their efficiency on a more practical level. This inductive research has revealed that in developing economies PPPs are constructed and evolve on the basis of multiple-levels dynamic interchanges.

While PPPs contractual specifications are supposed to be the most important and essential aspect of a partnership capacity to offer innovative solutions, empirical evidences have shown that changes at the level of the design, scope or duration of activities are likely to occur during the partnership course of action, especially when the latter evolves in an unstable environment where PPP programs and environmental readiness are not yet mature enough to cope with the innovation. Field characteristics may often impose adjustments or adaptations to the partnership governance due to reasons such as improper risks assessments during the design and negotiation phase, insufficient knowledge of the field's particularities or even emerging and unexpected factors in the surrounding environment. The literature on strategic alliances has revealed that the management of alliances over time is often more

important that crafting the initial design (Doz & Hamel, 1998). Likewise, the initial settings of a PPP project may typically respond to international standards by virtue of its contract specifications and design, nevertheless this does not guarantee its success. Further complexity is entailed in the success/failure of a PPP. Therefore, a process view on PPPs and a close follow up on their progress over time proved to be relevant for their proper management and the evaluation of their performance.

The observation of a PPP setup at the energy sector level of a developing country with a nascent experience in the domain revealed interesting insights about the dynamics of this experience which was a controversial one in the sense that things did not unfold as planned. Although noticeable improvements of the infrastructure were achieved, however the failure/success of this first partnership experience remained debatable. In addition to the high hybridity in both organizational logics (integrating market and government) and organizational governance (formal contractual ties around multiple layers of organizational actors) feeding up internal tension and conflicts, number of factors originating from the institutional environment were determinant in tracing the path of the PPP. Empirical data revealed a sequence of processes occurring at various levels of the analysis; partners and other stakeholders are at the center of these processes.

The observation of partners' interplay revealed signs of high hybridity in logics among partnering actors, which is not uncommon in PPPs. The resulting conflicts and tension have questioned the viability of the partnership only a short time after it was launched. These internal conflicts are mainly due to contractual issues (i.e. monitoring mechanism, project duration, contractual ambiguities...) as well as relational issues mainly between the arbitration committee and private partner.

Although contractual governance designed around targets is considered to be an effective tool for improving partnership outcomes and positively influence the behaviors of the partners, secure their goal clarity and alignment and serves as a reference point (Alonso & Andrews, 2017), the empirical evidences of this research revealed that this same tool can also be penalizing in different ways. First, if the targets set do not take into considerations the plenitude of the partnership risks; second if the indicators of performance are imported from international PPP practices and standards with disregard to the undesirable effects and risks of a one-size-fits-all model; and third, targets should be agreed upon by partnering actors upon the contract signature. These elements may be the natural result of the incomplete nature of PPP contracts, but the literature has suggested that governance by targets can

enhance the efficacy of these contractual forms (Alonso & Andrews, 2017). Evidences showed that the efficacy of this type of governance is questionable when the contract design imports ready-to-use models of performance monitoring measurement systems. Explicit targets that do not allow a margin of flexibility can be greatly challenged by field conditions where actors may face various environmental events and institutional particularities that hinder the partnership progress and prevent goals achievement. In this case, the efficacy of this type of governance becomes uncertain because it is not solely related to strong partners capabilities.

Contractual terms and conditions related to performance monitoring and compensation schemes can be subject to debates between partners who perceive ambiguity, irrelevance or non-applicability in the design of this scheme. The absence of an independent arbitrator that does not tied to any of the partners by a personal or employment relationships, does not help in resolving these conflicts. This research study illustrated an example of partnership where the public partner and the partnership consultant (as project manager) engage in a principal-agent relation implying that the consultant will act on behalf of the public partner in managing the project, and therefore cannot act as a mitigating entity between public actor and its private partners. Instead of accommodating the tension that emerges from hybrid logics, the consultant behavior becomes somehow disturbing for private partners. The literature revealed a lot on how PPPs respond to conflicting logics arising from the coexistence of multiple partnering actors. Studies emphasized the importance of coordinating and aligning stakeholders' goals and values across public and private partners, and this coordination is mainly done through the deployment of appropriate contractual constraints (Brown, 2006) and also through partners' relational aspects that may be able to counterbalance contractual incompleteness (Caldwell et al., 2017). An important issue remains to be considered: contractual and relational conflicts are expected to rise when public actor acts as both partner and regulator, or even when the regulator (i.e. project manager, external consultancy, international agencies...) is tied in a principle-agent relation with the public actor. Arbitration in this case is likely to be biased and far from being an independent regulation.

On a different note, we reflect on the fragility of PPPs survival and success when stakeholders, other than partners are taking part in its processes and operations. In developing economies that are highly vulnerable to domestic instability and where public institutions weakness prevails, organizations face the challenge of dealing with highly impacting institutional elements, and collaborations with public sector are likely to unravel under weak

enforcement of decisions and regulations. At some point the viability of these collaborations become questionable. In the context of a PPP, organizations are faced with the challenge of dealing with different stakeholders other than the contracting partners. While PPPs are often challenged by their internal conflicting institutional logics imposed by the coexistence of multiple organizations (Quélin et al., 2017; Jay, 2013), further complications arise when other types of demands are imposed by external institutional referents as well and other stakeholders. Administrative structures are considered to be a main aspect of a country's institutional environment. Public administrations are commonly characterized by dysfunctional bureaucratic structures and deficiencies in modern administrative knowledge (Perry & Rainey, 1988), and corruption also prevails on public institutions in developing economies (Guasch & Straub, 2009). When a country engages in economic and structural reforms change does not necessarily occur at all levels of public administrations and institutions at the same time. The research showed that the administrative structure of central and local governmental departments concerned with PPPs operations, remained unchanged with the enactment of the PPP law. Daily operations are still restricted by excessive red tape and a long list of legal approvals for each and every possible transaction; which does not allow innovation and adaptation to the concept of introducing private practices into public agencies. Changes in structures and practices remain limited to what existing rules of procedures allow. Exercised control remained also tight as head of regional administrations perceived this participation as a threat rather than an opportunity to develop, innovate and grow. Theories advance that societal change and administrative reforms become problematic when public and administrative machineries are so embedded in their references (Thoenig, 2012). These institutional considerations limit the ability of PPPs stakeholders to manage the contractual arrangement effectively. This also highly constrains intended innovation and change. A preparatory phase that introduces the necessary innovative practices did not take place before the implementation of the PPPs and the drastic changes that affected existing procedures were not properly addressed. While the administrative capacities of the public partner are supposed to be the backbone for a successful deployment of PPP activities, the design of PPP contractual governance around targets and key performance indicators may be a less effective strategy if these targets are tightly related to administrative operations and processes.

This research has also revealed a form of resistance to PPPs featured by actors of a precarious work model affiliated to the public sector. Members of this large group of precarious workers have been waiting for long years for their full integration as public officials within the public

utility. The advancement of the PPP was perceived as a threat and this category of workers feared being replaced by younger or more competent employees of private firms. Their resistance manifested through protest movements which succeeded in blocking the activities of the partnership for a period of time.

A third category of stakeholders' resistance has succeeded in hindering the progress of PPP activities. The research has shown that PPP evolution can be constrained by local factors in areas where the government sovereignty is almost inexistent and rules are set by local authorities and political elites. These regions present high-risks related to security and informal but powerful rules may even go against common public policies. Although this form of resistance may be highly idiosyncratic to particular environments, however it had a significant impact on PPPs evolution and efficacy. This type of risk was surely not anticipated in the allocation of risks in the PPP contract, but its repercussions on execution and performance were important.

In sum, the research revealed that stakeholders' opposition has limited to a high extent the proliferation and development of PPPs. And this opposition is strongly related to the particularities of the environment within which the partnership is embedded. The analysis revealed that during a relatively short period after its setup, the PPP project observed was likely to face complete inertia due to these particularities that continuously hindered the progress of activities. The analysis also revealed a high potential of private actors to withdraw from the partnership through repetitive suspension of their activities when reaching dead end with their negotiations with public partners over risks falling out of their scope of responsibilities. PPP literature recognizes that the effective governance of resources and capabilities is a criteria for effective performance of the collaboration, and this effect is strengthened further in high quality institutions (Quélin et al., 2016). We argue that, in environments of weak institutions, and in order for the partnership governance to be effective, organizations need to have specific capabilities to address the particularities of institutional environments. These particularities are often related to established informal rules, norms and behaviors. The research revealed that some organizations were more effective than others in dealing with these particularities through mobilizing the appropriate resources and adapting suitable choices for a strategic fit. In this case the quality of institutions is not considered exogenous to PPP performance but rather a variable to be considered as originating internally in the process of PPP performance 'evolution and evaluation'. This suggests that elements of the institutional environment and partners'

capabilities and resources are not mutually exclusive and their close association has important implications on the performance expected from a PPP.

Within the course of action, and despite a careful initial contractual design and governance, a PPP is likely to unfold during its execution into sequence of adaptations that range from simple *ad hoc* solutions, revision of initial schedule, elaboration of remedial action plans to more significant changes like the departure of key actors, change in the consultancy managing the partnership, important alteration of the contract terms and conditions during renegotiations and the welcoming on board of new actors.

In this case, talking about PPP performance in terms of capacity to reach objectives within the contractual timeframe sounds incomplete. We suggest that PPP performance is not an undisputable construct or a fixed variable that can be measured or evaluated separately from the processes giving rise to it. Empirical evidences showed that PPP performance evolves with the course of action of the PPP project, and therefore reducing it to a quantifiable value at a time t seems to be an imperfect delineation. The outcome of agreements featuring innovative solutions would have probably been as ideal and perfect as its design in environments where high quality institutions prevail. Nevertheless, in environments with high uncertainty, such assumptions are not relevant. Risks allocation and institutional particularities are a highly idiosyncratic aspect of PPPs; not taking them into consideration during the design of the performance evaluation mechanism scheme increases the likelihood of an underperformance of the PPP.

The complexity characterizing the constellation of elements involved in PPP dynamics render their observation challenging to represent. We propose hereafter in Figure 5.2 a grounded model representing the dynamics of a PPP setup and evolution. This model features cross-interplays of processes shaping up the evolutionary path of a PPP in a developing economy.

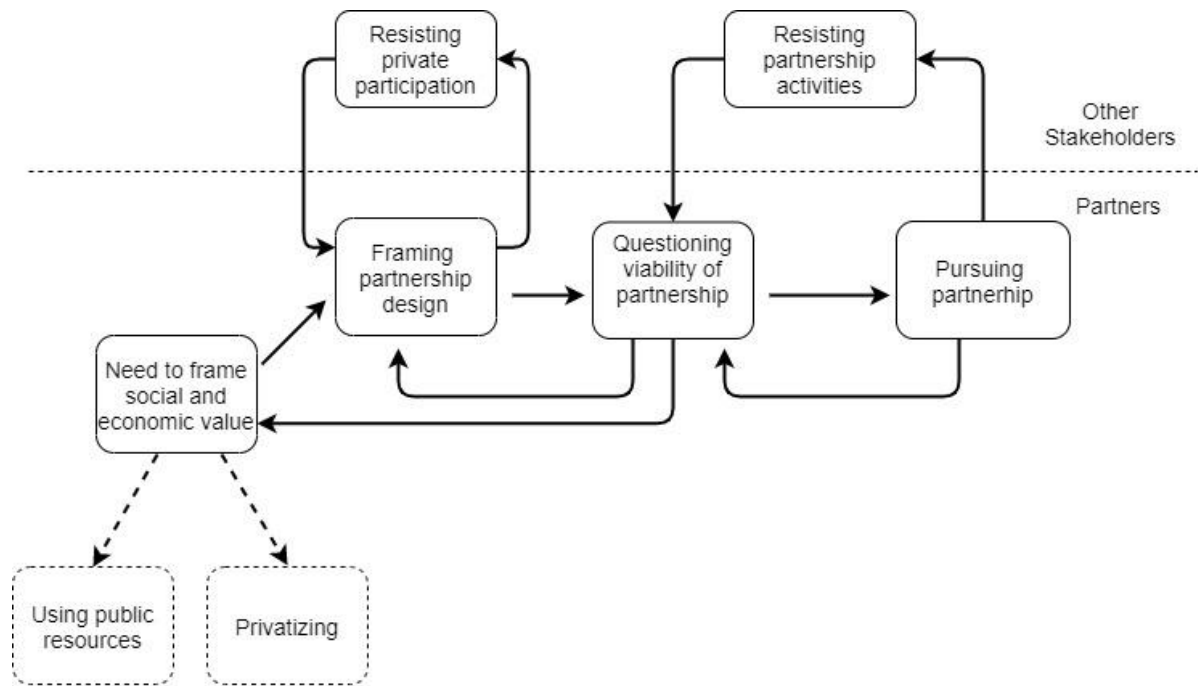


Figure 5.2 - Crafting PPPs as collaborations

3. INSTITUTIONALIZATION OF PPPs: A COEVOLUTION PERSPECTIVE

The inductive exploration of the field has revealed a complex constellation of elements - factors and processes - that shape the emergence, operation and development of PPPs. These elements exist at both the micro-level of industries where PPPs are being setup and the macro-level where formal rules are being put in place. Because institutional change is context-specific and path-dependent, the advancement of PPPs, although perceived as urgently needed for economic reforms in most of developing countries, has encountered different forms of resistance for different reasons; most importantly because new institutions can threaten the opportunities of existing individuals and groups. In response to stakeholders' resistance, actors of this process of institutionalization took different actions to maintain a steady development, and encompass these institutional and political difficulties, but the results of these efforts remain limited. The situation presents lots of ambiguities and actors' limited expertise and reduced intentionality may hinder the crafting progress. This process of co-creation has triggered various patterns of coevolution. The exhibition of these coevolutionary effects in this complexity is scattered among the different components, do not follow a unified pattern and do not present similar traits. We explain hereafter the different processes of coevolution identified in this research.

First, the interplays observed between the process of PPP creation and evolution at the industry level and the process of setting a regulatory framework for PPPs at the national level exhibit very limited evidences of coevolution. The coevolution in terms of positive feedback loops and processes feeding upon each other's to progress and evolve, is almost inexistent. The loose coupling of the components manifests as a gap between formal structures and actual PPPs practices and is further allowed by political conflicts. Although these phenomenon progress within the same ecosystem, respond to similar evolutionary pressures and share the same origins – which are the perceived need for developing and regulating PPPs – however they undergo parallel evolution. This separation and almost inexistent interrelation is mainly fueled by political considerations, and exhibits resistance and reluctance of actors to communicate using the same language.

We recall the important role of power and politics in designing institutional paths within political-institutional spheres of activities. The relation between power and institutions has been largely examined in a stream of institutional studies that explored the roles of politics and conflicts in the evolution of institutions and organizations. This stream emphasized the necessity to consider power and politics in a situation of institutional change (Lawrence, 2008). Coevolutionary studies also emphasize the use of power and influence as an evolutionary driver in the relations between an organization and external parties (Child et al., 2012). Hybrid organizational forms involving actors from public spheres - i.e. PPPs - are politically dependent; therefore drawing from power and institutions theories is essential to understand PPP organizational dynamics.

Looking at the process of crafting a regulatory framework for PPPs, empirical evidences have shown that public authorities may take advantage of their power and rights to execute influence over PPP legislatures by either facilitating or delaying the promulgation of PPPs enabling laws and the establishment of PPP dedicated regulations. Data revealed that a category of PPP procuring authorities (i.e. line ministries) do not seem to be ready to compromise their power and lessen their control over PPPs projects in favor of a properly regulated PPPs environment. This has serious repercussions on attracting private investments in public infrastructure: a PPP procurement process that is not highly centralized at the level of executives may display further transparency and provide more assurance to private investors, especially if it is placed at the level of a PPP formal specialized and dedicated entity (i.e. PPP national unit). The presence of a well-designed PPP regulatory framework increases transparency and most importantly limits potential opportunism, corruption or

nepotism during procurement processes. Political considerations are at the heart of this debate on how to design regulations and allocate power and authorities among stakeholders concerned with the procurement/management and monitoring of PPP programs. A game of power and trust among actors of the institutional/political sphere articulates the process of PPPs regulation and this game is likely to lead to a situation of undesired balance and conflicting policies and practices between executives at the industry level in charge of the creation and operation of PPPs as collaborative projects and policy makers at the national level in charge of regulating PPPs.

In weakly institutionalized environments where reduced willingness and delinquency of public policy makers prevail, initiatives towards PPPs regulations are exposed to failure. The establishment of a regulatory framework managed by a PPP national unit or a regulating body can provide an initial backbone for PPPs institutionalization and could develop with time into a more solid structure; however, it cannot guarantee the success of PPPs projects. Scholars agreed that in emerging markets where economic, institutional and financial variables are less predictable, attracting private investments is a function of political instability, rule of law and government transparency and accountability (Moszoro et al., 2015). Our findings confirm that these criteria are not only important to attract private investments in PPPs but also to sustain PPPs projects, ensure their success and most importantly to clearly separate the roles and authorities of stakeholders. However, personal agendas of public authorities who would like to keep control and dominance over PPP projects, will strongly impede the regulation process that connects public and private sectors over trustful collaborative partnerships.

This research reveals insights on political dynamics between established processes for procuring and managing PPP-like projects through scattered public procurement laws and existing practices from one end, and the introduction of initiatives to change these policies in favor of building a dedicated regulatory framework on another end. Evidences show that coevolving processes bring multi-level relationships among political and institutional actors into play leading to conflicting interactions within the entire process of PPP regulation. Ideally, if personal agendas were non-existent, we would have explained this kind of resistance by the path dependency effect through which authorities persist in adopting the same approach to procure and manage PPPs programs even though improved and innovative regulations become available. But, personal agendas do exist within the sphere of political and institutional actors who are in charge of designing policies, and the likelihood of the emergence of conflicting demands is very important. This case-study explored through this

research is an illustration of a process of co-construction taking place at different levels of an institutional environment, in which a multiplicity of actors and policy makers are busy crafting in parallel PPPs projects at the micro-level of economic sectors and industries, and rules and norms for PPPs governance at the macro-level of the nation. This situation can easily become a race where policy makers prioritize their seeking for political accountability over actions for the general interest. ‘Negative feedback’ loops are giving rise to disturbing effects, impeding the speed of decisions and hindering the efforts of a group of PPP activists in order to block centralization and preserve the multiplicity of institutional referents. While regulating PPPs constituted a large part of political discourses, in practice, independent and side initiatives of power holders to procure and sign up for PPP projects remain dominant. Active attempts to influence the setup of a PPP regulatory framework through lobbying, control, pressure and defiance led at some point to an extreme outcome such as organizational paralysis, delays in actions and decisions, and even exit of key institutional actors because of their incapacity to defy political pressures and influence.

On a different note, this research revealed mutual influences and unexpected outcomes among the observed PPPs at the micro-level and other elements of the institutional environment; which added further complexity to the process of PPP institutionalization. These effects were mainly due to the resistance of various stakeholders to private participation in public services and infrastructure, explained earlier.

If taken from a coevolutionary perspective, the lack of cooperation from local governmental departments can be explained by a strong effect of path dependence: public officials prefer to believe that things can remain unchanged and the outcomes would still be perceived as satisfactory even though an innovative way to do things is now available. Nevertheless, in environments with high uncertainty around public ethics, such assumptions are not accurate and we may think of other drives that have limited the cooperation between public servants (i.e. head of public regional divisions) and PPP actors (private actors in particular). In fact, the head of regional governments divisions and members of municipal governments perceived the participation of private firms in public services they are initially entitled to supervise, as a threat for their acquired power and authority. Furthermore, the authority they retain over regional public services and servants, allows them to establish clientelistic relationships with local citizens, and accept – or even ask for – bribes and gifts in return to approval of citizens’ requests and transactions.

Naturally, these institutional aspects had undesirable effects on PPPs activities: they contributed in hindering their progress and reducing their efficiency; which fueled further the tension among private actors and the PPP supervising entities. In return, the advancement of PPPs succeeded in challenging many of these aspects. The PPPs raised the citizens' awareness on public codes of conduct and reminded them of public servants responsibilities and obligations towards them, which reduced to a high degree unethical practices like exchanging bribes and gifts in return to what is supposed to be citizens' basic rights. In regards to the limitations of public administrations capacities and the excessive bureaucracy, PPPs introduced advanced information and technology to support and improve processes and transactions and also to innovate the operational aspect of public administrations. However, and since the introduction of changes at the macro-level is not very smooth and welcomed in such environments, the PPP mechanisms also had to adapt to a certain degree by altering, at the micro-level, the design of certain activities, their assigned duration, and also by updating the performance evaluation scheme to take into considerations delays caused by the inefficiency of public administrations.

Another aspect of coevolution is observed as when the PPP succeeded to create a positive social impact on the group of precarious workers and change drastically their vulnerable status, although this was not initially among the scope of activities of the partnership. Literature considers social movements "*as exogenous actors that enter the field to contest and disrupt established logics and advocate those carried by the new industry.*" (Paheco et al., 2014). In this process, two distinct entities, the PPP and the group of precarious workers, have mutually influenced each other's evolutionary paths. The coevolution between these two objects was articulated according to two phases of reciprocal relationship between them:

Initially, the actors of the social movement perceived the establishment of a PPP as a threat and their resistance and protest movements succeeded in blocking the activities of the project. In response to this resistance, PPP private actors proceeded to the full integration of precarious workers within their firms, in a logic of inclusion, when they realized that the actors of this movement possess unique knowledge and capabilities enabling them to perform efficiently and effectively some of the PPP essential activities, if provided with appropriate training and favorable working conditions. This causes the actors of the social movement to change their perception, and found in PPPs an opportunity to improve their social status as well as their economic and social conditions. Drawing upon the way the literature has always viewed social movements – exogenous forces that bring institutional change and contributes

to the growth of emerging industries – we advance that PPPs may have crucial role in bringing economic and social change to the status of existing social movements, by offering opportunities for growth and career development. We advance that, even though public-private collaboration over infrastructure activities was not initially designed to address social issues, but mainly economic efficiency and technological innovation, it may induce social integration and inclusion of groups of precarious workers. The mutual influence observed between PPPs and social movements may be described as a process of coevolution that is likely to create social value. This also raises interrogations about private merits comparing to public so-called employment stability, when the latter could not provide appropriate solutions for precarious work models. Previous studies have focused on coevolutionary processes where social movements, institutions and emerging industries mutually influence one another (Paheco et al., 2014). This research is the first to raise few insights on how a PPP can address social movements by the integration of precarious workers within the scope of its activities, even though this was not part of the project's initial objectives. This integration has the capacity to alleviate the effects of the resistance of public workers to private participation in infrastructure by altering their social goals and improving their social status from one end, and also to providing the partnership with unique skills and capabilities that are essential for its efficiency from another end.

On a different note, PPP projects development can be constrained by another aspect of national institutional particularities when operating in environments where the government sovereignty is almost inexistent. In regions where local authorities and political elites rule, PPP private managers can find themselves powerless when local conditions enforces severe constraints on project execution. In these regions categorized as 'high-risk regions', existing rules and regulations may go against common public policies, and therefore may constitute a risk that was not anticipated during the PPP governance design and allocation of risks. In such extreme cases, PPPs' capacity to transform is very limited; actors found themselves constraint to adapt rather than able to influence existing institutional and local elements. This adaptation may take the form of contractual amendments and reevaluation of risks during renegotiation stages.

In sum, PPPs are in constant debate for satisfying some demands while defying others. The micro-level analysis revealed continuous adjustments and alignments among the components of the partnership: contractual terms and conditions, hybridity in logics and governance, and partners' strategic choices and actions. The difficulty in attaining pre-set targets may persist

even with the coordination of contractual and relational elements. In parallel to this coordination done at the micro-level of the PPP, there is an overt necessity to consider the coevolution with the challenges, opportunities and emergent constraints of the macro-environment. As advanced by the theory of coevolution, “*change may occur in all interacting populations of organizations, permitting change to be driven by both direct interactions and feedback from the rest of the system. In other words, change is not an outcome of managerial adaptation or environmental selection but rather the joint outcome of intentionality and environmental effects*” (Lewin & Volberda, 1999, p. 523). This research has demonstrated that the shaping of PPP institutionalization is achieved through the interaction and systematic influence of partnering organizations with other organizational elements in the environment. These constraints may dictate the strategic choices of actors, and when exposed to external pressure, partners’ hybridity in logics may be the cause of further tension. Even during contractual renegotiations, not only these renegotiations should realign contractual and relational issues, also a reevaluation of risks and environmental factors imposed by the environment is necessary. Although emergent results from this research may be highly idiosyncratic, we could identify mechanisms that drive specific patterns of PPP dynamics and others considered to be more global. We propose hereafter in Figure 5.3, a conceptual model representing the dynamics of PPPs institutionalization, and how PPP processes are coordinated to coevolve and survive with their surrounding environment. This model features cross-level interplay of processes taking place, namely: the creation of a PPP as collaborations, their evolution, the setup of a regulatory framework and the processes of resistance coming from various stakeholders. Taken together, this set of processes determines the evolutionary path of PPPs as institutions in a developing economy.

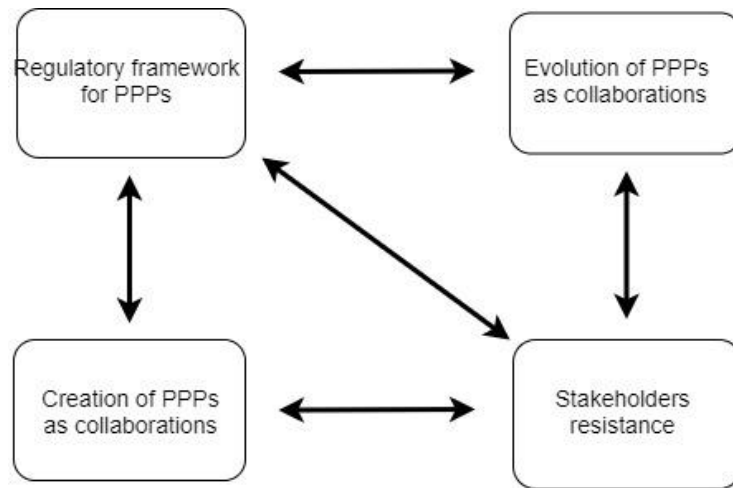
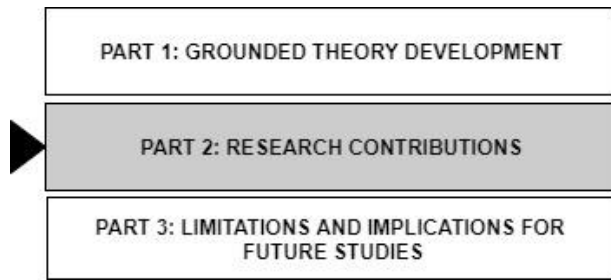


Figure 5.3 - Institutionalization of PPPs: a coevolution perspective

PART 2 – RESEARCH CONTRIBUTIONS



While various single-lens perspectives have made important contributions to our understanding of PPPs, other perspectives integrating multiple theoretical lenses in a comprehensive framework also have the potential to reveal new insights on PPPs. The

aim of this research is to look at PPPs from a different perspective focusing on how the components of these collaborative forms coevolve with a changing organizational environment. The contribution of this research is multi-fold. It mainly provides important elements for extending literature on PPPs and for understanding their management within a country with a nascent experience in this type of collaboration. It also extends the line of inquiry of coevolutionary studies by exploring an object that was never examined by this theory before. It also gives institutional insights on the initiation of the institutionalization process of PPPs. Finally, recommendations for public policy makers and private firms interested in public services participation can be drawn in the light of these findings.

1. CONTRIBUTIONS TO THEORY

Contributions to studies on PPPs

While PPP literature remains fragmented among various literature streams that discussed individually sets of factors underpinning the performance of this type of hybrid collaboration: contractual factors (i.e. procurement, renegotiation, unbundling tasks, risks implied, incomplete contracting,...), institutional environment (i.e. quality of the institutional environment, regulations, political implications...), concepts in strategy and management (i.e. hybridity in logics and governance, resource dependency, coordination mechanisms...), the results revealed remain fragmented as well; and there was no single analytic framework proposed or developed so far in order to capture the complexity of PPPs (Brinkerhoff & Brinkerhoff, 2011). There is a need to progress beyond traditional studies on PPPs to encourage a holistic analysis that has the capacity to reveal elements that go unseen if the focus is uniquely on particular components. Up to our knowledge, this research is the first to look at PPPs from a holistic perspective in an attempt to provide a comprehensive assessment and exploration of PPPs by observing their real-time evolution within the surrounding

environment and uncover determinants of their effective functioning. In this vein, calls for research on PPPs from a process perspective are prominent in recent studies (Villani et al., 2017; Kivleniece & Quélin, 2012; Slesky & Parker, 2005; Wettenhall, 2003) and this research makes a number of contributions on PPPs process-related aspects. Most importantly, this research enables examining how external contingencies along with internal factors, can explain PPPs evolutionary dynamics.

First, this research challenges prevailing PPPs input-output models by exploring processes of non-linear emergence and evolution in and around these partnerships and identified useful dimensions and constructs articulating their outcomes, while focusing on a dynamic perspective that can identify feedback loops among elements of the systems in which the partnership is embedded. We responded by this to scholars' call for more longitudinal research to capture process-related aspects of the evolution, coevolution, development and survival/demise of PPPs (Slesky & Parker, 2005; Kivleniece & Quélin, 2012). The relevance of such studies is to provide a clear visibility on the effective functioning and survival of these forms of collaboration as well the way they are managed throughout their life-cycle; a perspective that is now overdue according to recent calls in PPP literature (Villani et al., 2017).

Second, PPP literature has revealed different forms of the adaptation made during contract renegotiations (Guasch et al., 2014) but has rarely examined the micro-adaptation made during the course of action of the partnership evolution. On a similar note, literature on organizational collaborations confirms that managing alliance governance and relationship over time is basically more important than crafting its initial design (Reuer et al., 2002); which is a focal aspect of evolutionary studies that observe the capabilities of organizations to adapt to evolving market industry activities (Koza & Lewin, 1998). This literature stream also investigated the dynamics of post-formation and the different types or aspects of adjustments that may occur during collaborative project. Our work joins this research trend by investigating different aspects of PPP dynamics focusing on each critical stage and processes underlying these stages of PPP post-formation and revealing actions and processes of micro-adjustments; for instance: actors' strategies to face resistance of individuals and groups to private participation in public services, adjustments and revised schedules to fit the project activities into the contractual framework, pending or termination actions, remedial action plans, contractual adjustments during renegotiation for contract renewal... In this sense, our analysis also revealed two categories of strategies adopted by partnering actors in

order to circumvent tension caused by differences in logics and contractual ambiguities: collective strategies adopted in the aftermath of partners' consensus on common actions and adjustments, and individual strategies adapted to the need and challenges of each private actor (in case of a consortium of companies as the private partner) and designed on the basis of its resources and capabilities.

Third, in regards to combining hybrid institutional logics which is a typical characteristic of PPPs that gives rise to unexpected and challenging consequences (Jay, 2013), the micro-evolution analysis in this research highlighted further these consequences and explored the different organizational responses to this complexity through actions and strategies deployed by partners to address these challenges. This also partially answers the call for addressing how tensions underlying the governance of these hybrid forms of collaboration are being resolved or dealt with (Mahoney et al., 2009) during a PPP evolution. This research highlights the important role of having an independent arbitration or independent project/program manager, as part of the PPP governance. Conflicting logics have induced considerable relational issues during the execution of the partnership activities. The tension resulting from this form of high hybridity emphasized mutual accusations of opportunistic behaviors among partners. The principle-agent relationship between the PPP owner (or public entity) and the project consultancy - that was supposed to be the arbitration party – added further bias and favoritism during conflict resolution attempts. This tension significantly worsened the relationship between partners and even led to key actors exiting the partnership, as a consequence of incompatible institutional logics.

Fourth, we advance that the performance of a PPP is essentially generated by joint mechanisms taking place at different levels: micro-level (within the components of the partnership) and the macro-level (between the partnership and other phenomenon evolving in its surrounding environment). Through the process research design adopted, we go beyond considering PPP performance as the final outcome of a process and a static termination point; instead we view it as an input that determines further activities in upcoming stages. We therefore consider that PPPs performance is an evolving concept instead of being reduced to a static quantified financial or economic indicator. In this sense, the PPP literature suggests various indicators for PPPs performance evaluation that are usually applicable *ex post* after the partnership has reached its terms, but remains silent about the ongoing evaluation of this performance.

Fifth, we noticed that the great majority of studies on PPPs focus on environments where these partnerships are rather formalized, stable and regulated. Up to our knowledge, there are no studies done on crafting PPPs in the light the establishment of a PPP dedicated regulatory framework in a developing economy. In general, developing economies experience, in varying degrees, the convergence of economic forces of change (such as reform programs) and the associated environmental turbulences. PPPs that evolve during this process will surely experience the pressure to become adaptive and their strategic and organizational responses are highly impacted by the changes and the rigidity of the country's institutional particularities. In contexts where sectoral and political implications prevail, rule making and reforms around PPPs become harder to implement. Previous studies have identified conditions where PPPs' performance is linked to the quality of the institutional environment in which they are embedded. This research extends further the knowledge base of institutional studies on PPPs by exploring the process of their institutionalization in developing countries. It reveals insights on the preliminary stages of how PPPs emerge, operate and develop in weakly institutionalized environments.

Although the study of Matos-Castano et al. (2014) in Public Management could be an exception in the sense that it addresses aspects of institutional changes in PPP markets, however it does not provide a process-view of this institutionalization. Instead, the authors explore how path-dependent institutional change takes place in the development of PPPs programs and identifies factors predicting the direction of institutional change.

Finally, our empirical contribution also enlarged the database of in-depth investigated case studies on PPPs in unstable environments. Qualitative research leading to grounded theoretical models in the PPP literature remains at its early stages. There are very few inductive case-studies realized on PPP projects in general, and also very few studies exploring PPPs in the context of developing economies like the ones of the MENA region.

Contributions to studies on coevolution

While prior studies have taken a coevolutionary perspective on number of organizational forms (firms, industries, social movements, strategic alliances...), a coevolutionary framework is likely to be relevant to undertake research on PPPs. These partnerships are known to incorporate the coexistence of multiple actors from multiple organizational spheres – public, private and social – and a strong embeddedness within the context where they operate, which render them vulnerable to environmental changes and at the same time

capable of driving change with interacting organizations and other elements of the system. While PPPs literature argues that the outcome and efficacy of a PPP project is highly context-related, in this research we go beyond merely recognizing external factors impacting PPP performance. The fact that the coevolution framework incorporates differences and variations in outcomes related to organizational dynamics and to the particularities of the environment as well, makes it a relevant theoretical lens to look into PPPs.

There is a call from coevolutionary scholars for the necessity to extend coevolutionary studies in a way to investigate dynamic phenomenon and processes involving microevolution and environmental and regulatory evolution within the same system (Lewin & Volberda, 1999). Through this research we initiated a new direction in empirical research using coevolution. We observed a dynamic phenomenon of PPP establishment within an unstable environment where other related phenomenon are also taking place, namely at the national institutional level.

By introducing coevolution as a theoretical framework to observe PPPs as an organization form, a new line of inquiry for the theory of coevolution is introduced. PPPs are observed through a new theoretical perspective that was not explored before in order to understand how strategies in a hybrid and challenged type of collaboration are formulated and implemented across groups of actors, and how these collaboration forms adapt to environmental changes and also to what extent they are able to initiate mechanisms of change in this environment.

We observed that during the evolution of a PPP at the energy sector of a developing economy, the set of actors and existing organizations participated – intentionally or not – in the articulation of distinct coevolutionary processes taking place between the micro-level of the PPP and the surrounding institutional environment, emphasizing:

- 1) Conflicting interests among political actors involved in both a PPP project and the PPP regulatory process; more precisely, political actors at the head of authorities procuring PPPs showing resistance and reluctance to PPPs regulations for personal interests and political agendas.
- 2) Stakeholders' forms of resistance: where different categories of stakeholders have contested private participation in public services through different forms of resistance, which engaged partners and stakeholders in a set non-linear processes that intensified or reshaped

affecting significantly the activities of the partnership as well as the strategic choices and actions of partnering actors.

3) Institutional particularities of the country: where the limited capacities of public administration, the excessive bureaucracy and the corruption have limited the efficiency of the partnership and conditioned its evolution.

In line with the latest studies on PPPs and scholars' interrogation on their capacity to create social value and the type of social value that can be generated from the use of PPPs, our findings can be considered as a preliminary step presenting empirical evidences about the capacity of PPPs to create social value through its coevolution with a social movement. The observation of this coevolution revealed that a PPP may be able to address the needs of a precarious group of public workers in the time where the government failed during many years to develop an appropriate working environment for these workers.

2. CONTRIBUTIONS FOR MANAGERIAL PRACTICES AND POLICY MAKERS

Engaging in PPP programs in countries in-transition, where experience in the field and appropriate know-how are extremely limited is a challenging task that needs guidance. International institutions provide different ways and tools on how to attract and involve the right long-term partners, manage the partnership and overview the entire process.

The design of this research allows a vision on the different stages of a PPP life cycle, and highlighted the role of each key actor participating in this collaboration. In this sense, the study can contribute in improving the management of PPP programs and developing appropriate public policies for their regulation. In the first place, managers and professionals involved in PPP process design should be aware that one-size-fits-all model is basically unrealistic: PPPs can either be a mean to improve public service delivery or they can be a disaster, depending on many imperatives among which their effective management and an understanding of their contextual particularities. In addition to the legal and regulatory framework as well as the investment framework for PPPs, an implementation framework is equally important. Also the establishment of a clear PPP process map as part of a coherent program, and the possibility to update it during the project course of action. The flexibility of PPP design and management is essential for its survival in unstable environments. The partners' relationship in a PPP, implies not only a careful contract design but also its effective management. Public administrators usually look to prevent private actors' opportunistic

behavior by carefully writing detailed contracts, and monitoring their performance. For PPP stakeholders who are outside the public sphere, they need to bear in mind that public managers often operate under the pressure of politically charged environments where direct involvement of politicians prevail.

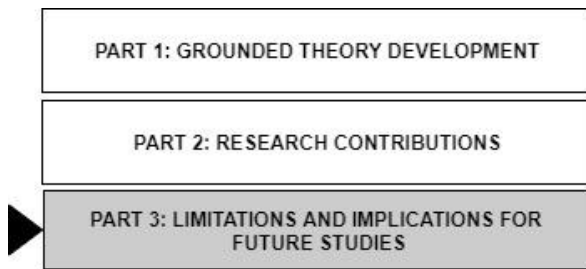
In terms of managerial contributions, we believe that a process-related observation of a PPP evolution gives the key actors the opportunity to improve their decision-making and develop effective routines and processes through the adoption of an appropriate adaptation/selection decision in the light of the evolution of the PPP as its different stages and influencing events unfold over time. A conceptual model to understand PPP dynamics has also practical implications in setting optimal policies that are able to adapt and change as PPP institutions within a country develop; this is particularly useful for developing countries where key institutional limitations are frequently faced. A process research and observation of a process' live development allows capturing real-time data on actors' expectations, decisions and perceptions. By identifying the determinants of each process in this evolution, the study offers a guide for practitioners on how to address the needs and challenges of each stage. In the first place, PPP practitioners and specialists need to know that evaluating the success and failure at a micro-level is much easier, precise and relevant than talking about the overall performance of a PPP project.

It would be useful for managers and policy makers to recognize the sources of tension as well as the factors hindering the progress of a partnership and find ways to address them as early as possible in the project life-cycle instead of waiting till its financial closure to judge upon its performance. Expanding questioning about these partnerships and including their back history not only can tell a lot about their successes and failures, but also can give indication on how to capitalize on the sources of success and circumvent the ones causing failures. Studies on the evolution or coevolution of PPPs give a better understanding of the mechanisms that support the effective functioning of these collaborative projects, and therefore allow managers from both the public and private sectors to become better entitled to avoid inefficiencies and ensure the survival during the execution of a PPP. This justifies further the interest of knowing more about internal and external factors impacting the evolutionary processes in order to be able to manage and cope with internal tension as well as environmental complexity.

Alliances mature with time, so do PPPs. Balancing stakeholders values, behaviors and hybridity in logics during a PPP lifetime is not a given. Efforts need to be exerted from all stakeholders. By understanding the mechanisms that support their proper performance, managers and PPP supervisors can avoid the sources of inefficiencies and help ensuring the viability of the partnership after its setup. The more the stakeholders know about internal processes and understand key elements underlying these processes, the better they can develop appropriate strategies to ensure the partnership survival. And also by identifying the environmental elements and properly assessing the risks impacting the partnership performance, managers become more likely to find solutions for the resolution of externalities by combining appropriate resources and enhancing governance efficiency. This research has informed managers of the business sphere and those of public institutions how to identify particular institutional elements that can impede the performance of a PPP, and how to deploy the appropriate resources, capabilities and strategies to alleviate the hindering effect of these elements. Public and private managers need to map up all the identified elements of the suggested model for PPP coevolution in order to achieve the likelihood of the PPP success. Policy makers need to set strategies to accelerate the process of enabling the use of PPPs through adapting institutional structures and raising awareness about the benefits of PPP programs. Public managers need to engage public servants in systematic regulatory and institutional change. This also implies the restructuring of public utilities to fit into this change.

Finally, it is important for all stakeholders to recognize that recommendations on how to design and manage PPPs are not universal, and to be conscious of the high degree of complexity implied within and between internal and external factors. Frequent periods of tension and are likely to appear in emerging economies much more than in stable environments. It is therefore important for PPP advisors, assigned the mission of project manager, consultancy or arbitration to remain vigilant and open to actors' behavioral complexity and act as an independent regulator with no personal or professional relationship with any of the contracting partners, in order to be able to steer the partnership management into the right direction that serves best its efficiency and performance.

PART 3 – LIMITATIONS AND IMPLICATIONS FOR FUTURE STUDIES



We believe we have extended the knowledge base of PPPs by offering a new perspective on how these forms of collaboration, exhibiting high hybridity and strongly influenced by their institutional environment

have the possibility to circumvent internal and external challenges through mutual influences with environmental determinants. We explored the dynamics of each stage of the PPP evolution and we consider our results as a first step towards a more comprehensive theoretical framework on PPPs. This type of research presents many challenges that may limit its extent but it also paves the way for different research paths in this direction. We present hereafter the perceived limitations as well as the opportunities for future developments.

1. LIMITATIONS OF THE STUDY

The complex nature and hybrid character of PPPs have become self-evident, which poses number of practical and theoretical challenges that can limit the extent to which answers related to this domain are reachable and comprehensive. Although we believe that we have uncovered interesting insights on PPPs, it remains important to see these findings in light of some limitations. The characteristics of the methodological design we adopted as well as the analytical framework may have also impacted these findings.

Studies using coevolutionary theories are particularly challenging because they require large-scale primary data collected over a relatively important time horizon. Although the literature remains silent about the exact value for time measurement or data quantification, however the availability of a large database of longitudinal data is essential.

In the aim not to oversimplify the use of coevolutionary perspective as an explanatory framework for PPP dynamics, or just limit the findings to the interaction between the PPP phenomena and its environment, we acknowledge the need for further empirical validation of our proposed theoretical model. This validation is made possible by both the extension of the period of observation - especially that the object observed is a phenomenon in ‘live-

development' and still exist at the time of the writing – and the testing of the model through other systematic observations and accumulation of research evidences.

The set of requirements for empirical research on coevolution is particularly demanding, and we find some difficulties with their incorporation into our research setting, at certain levels more than others:

- *Longitudinal time series of micro-adaptation events and organization adaptation over a long period of time.* This research has identified a set of events representing the adaptation of partnering actors to upcoming incidents or changes affecting the activities of the PPP project, i.e. schedule adjustments, remedial action plans, renegotiations, review of the performance monitoring mechanisms... The period of observation could be considered relatively short comparing to the usual long-term commitments of public-private collaborations over infrastructure projects; this could be an opportunity for the extension of the study to follow up on the rest of the project evolution which is still in place at the time of the writing.
- *Organizational adaptation within historical context of the partnership and its environment:* in this research the historical context constitutes an important dimension of the process observed and an essential variable in understanding the changes affecting other processes that evolve within the same sphere. The timeline of the study covers the period that starts with the initial conception, launching and establishment of the partnership; at this level the 'historical context' dimension *per se* is not very informative of the partnership adaptation capacity. It is through the follow up on the evolution on real-time basis that variations and adaptations started to show. However, the role of historical context in informing the process of adaptation and change of environmental factors surrounding the partnership was much more informative for the study. For example, it was essential to search in archived data in order to understand the conditions underlying the emergence of social movements in the field of study, their key aspects, the history of their growing, the socio-political assumptions underneath these movements and the conditions making them part of the PPP structure. All the same, the historical context underneath the tensions between political and institutional actors involved in the design and setup of the regulatory framework for PPPs was also important to understand the sources of conflict that caused repetitive delays in approving and enacting the PPP law and that also were behind the reluctance of some line ministries in entrusting sectoral and national

projects to the PPP unit. Likewise, historical context was equally important in order to understand the particularities of the institutional configurations of the country: the challenges of public administrations, bureaucratic structures, centralization of power, rules of internal procedures and also the significant power of sectarian elites over some regional public authorities. These characteristics of local institutions have their roots back in the country's history, and archived data informed us about the established institutional values where sectarianism and political affiliations are continuously challenging the public administrative capacities. The impact of these historical elements embedded in public institutions is omnipresent in the performance of the PPP project and its capacity to achieve its objectives.

- *Multidirectional causalities and mutual influences* between micro and macro evolution were revealed among the interconnectedness of different elements composing the object of study. Although the study did not consist of experimental designs or statistical models and therefore causal analysis was not possible, the complexity of the object observed clearly reveals multidirectional pathways among coexisting elements. For instance, the launching of the PPP project has triggered the resistance of public precarious workers who expressed fear and anger through protest movements against private participation in public services. Political authorities intervened in order to solve the issue but this caused further discontentment among workers who intensified their protest movement. Meanwhile, a private actor attempted to circumvent the situation by offering full integration and different forms of benefits for public workers within the private company. This action caused fragmentations within the group of workers, and put an end to the protest movement for a large part of protesters who indeed integrated the private sector. We are here in a situation that illustrates increased multidirectional influences and feedback among elements of the system on different levels of analysis.
- *Incorporating changes to institutional system*: in coevolutionary studies changes in regulatory systems can affect the organization, and vice versa, the organization may also influence this change. Empirical evidences in this research have revealed limited and localized forms of change at the institutional level. This can mainly be explained by the fact that during early stages of PPP regulatory framework and PPP setup for energy distribution (which we labelled as *crafting experiences*), the mutual influence that can induce change to the national regulatory system and other institutional

elements is not noticeable yet. The country representing the field of study is going into a recent reform for PPP programs, and therefore the actors' expertise is still nascent. Data have also revealed conflicting and strained relations between key actors of the PPP procuring authorities (i.e. line ministries) and PPP national institutionalization process (i.e. actors in PPP unit). Political agendas and personal interests have blocked cooperation and consultation efforts between the two spheres during this period. So the regulatory system of this framework is still in its very first versions and did not have enough time to develop, mature and change upon feedback from ongoing PPP projects. It would be interesting to grant additional time to observe further the type of feedback between PPP projects and the national regulatory framework and understand the systematic influence exerted and the adaptation that would take place at both levels.

On a different note, the outcomes of coevolutionary dynamics being highly idiosyncratic (Lewin & Volberda, 1999), the insights into PPP dynamics and their coevolution with the surrounding environment revealed in this research may not be broadly generalized to all contexts of emerging economies. As interpretative case study scholars posit, this methodology settings suit best local interpretation of a phenomenon and the main aim from putting this interpretation in a theoretical framework is to provide means for advancement and future extensions of the proposed theory, instead of transferring specific conclusions from one setting to another.

2. FUTURE RESEARCH PATHS

This research attempted to move the analysis on PPPs to a new level that goes beyond the contractual arrangement to advance that the overall value of PPPs is not limited to their economic or financial efficiency usually evaluated at the financial closure of the contract. This research also considers PPP performance to be constructed through different stages of the partnership life-cycle and instead of being determined by particular constituents of the partnership. The evolution of a PPP and therefore its performance are highly influenced by the temporal and spatial particularities of each stage. Based on these assumptions, this research starts a new research path through the lens of a theoretical framework that was, up to our knowledge, never used before to look into public-private forms of collaboration.

In order to provide a way of progressing beyond the limitations imposed by this research design discussed previously, we find it valuable to extend the line of inquiry about PPPs in

this same direction, in order to validate it, extend it and most importantly go beyond its idiosyncratic theorizing to cover PPP process dynamics in different contexts. We suggest the following non-exhaustive list of interrogations that have the potential to advance future research in this direction by suggesting promising new research paths:

On PPP institutionalization line of inquiry:

As an outcome of this institutional change we look forward to a PPP maturity phase where the institutional environment would evolve to reach further stability. The current research addressed the initiation part of this process, where formal fundamental rules are put in place, but other institutional elements are not yet ready for this important transition. PPP institutionalization line of inquiry in economies in transition was granted very little attention in PPP literature; a large gap still needs to be addressed, and lots of interrogations start to arise in this direction:

- During the next stages of PPP institutionalization, it will be interesting to understand how to support the diffusion of new institutional norms, promotion and raising awareness. What would be the necessary changes at the level of the administrative structures in order to keep up with this transition? How would institutional change guarantee stability and sustainability to PPP projects?
- Exploring institutional dynamics in other emerging economies for comparative purposes and for the definition of variables and criteria that define PPP institutional maturity.
- Update the existing typology of institutional criteria and metrics of a favorable environment for PPP programs.
- More empirical studies in order to identify areas concerned the most by PPP institutional reforms. Institutional maturity is context-related, and therefore areas that need to be reformed are not all the same in all countries
- Identification and differentiation of PPP institutional variables, as well as the distinction between informal institutions (cultural system, supporting business environment, people readiness for PPPs...) and formal institutions (laws, regulations, decrees, levels of administration approvals...) in this regards.
- The understanding of legitimate identity of PPP national units: How do these units construct their identity as part of institutional bricolage? How does the role of PPP

units evolve in parallel to the PPP market maturity? What is their role at different stages of a PPP project life cycle?

On PPP coevolution line of inquiry:

The question on PPPs outcomes and performance issues remain crucial as they represent an essential mean to address both government and market failures (Mahoney et al., 2009; Quélin et al., 2017). Their capacity to innovate, their management and the interdependencies of their components (both relational and contractual) along with the contextual factors, are all essential elements to consider while evaluating the PPP performance and capacity to realize its objectives. Recent studies have extended further the role of these components and the importance of their coordination to go beyond performance and efficacy and introduce the concept of value creation and appropriation in PPPs (Cabral et al., 2019). Authors of this research trend advanced that value creation is a concept that is not fixed or static but rather evolves with processes that give rise to it. Authors also suggest that value creation can take place at multiple interacting levels and it is necessary to understand the managerial practices interacting with capabilities, governance and institutional features in order to enable value creation. And given the mutual interdependency and the complexity entailed among these components, a comprehensive theoretical framework is needed to incorporate elements at different levels of analysis and allow the understanding of value creation. This supports further the need for process research to look into PPPs and makes the coevolution perspective a promising framework in this new research trend on PPPs.

We also find an important opportunity for future research in the observation of the first wave of PPP projects, undergone in the same context of developing economies, through in-depth investigation of multiple cases of PPP projects. The performance of those future PPP projects will be an important indicator of the success or failure of this institutional transition. Our observation was limited so far to the PPP crafting experience and the preliminary stages of PPP institutionalization.

SYNTHESIS AND TRANSITION

This research provided insights on coevolutionary processes in PPP dynamics, through a detailed examination of a PPP setup and execution. It was possible through an inductive exploration to suggest two grounded models: *Crafting of a regulatory framework for PPPs* and *Crafting PPPs as collaborations*. Further analysis allowed us to consolidate these two processes in a conceptual model on the coevolution of PPPs with elements of the institutional surrounding environment: *Institutionalization of PPPs: a coevolution perspective*.

Obviously, there will always be an interrogation on whether the advantages offered by PPPs can overweight the high level of complexity implied by political and institutional dimensions. These concepts cannot be dissociated. Discussing the advantages of a PPP with total disregard of the complexity in which it is embedded seems to be an incomplete argument. We would rather talk about the aftermath of the coevolution of these elements over a PPP life-cycle, instead of the clear distinction between PPP advantages and the effect of political and institutional dimensions. It is relevant to evaluate the advantages of PPPs only in the light of the extent to which the complexity of the environment allows these advantages to manifest and proliferate. We build on these assumptions to advance that PPP performance is a joint outcome of the interplay among its components and their interactions with their surrounding environment. And the capacity of a PPP project to be efficient is itself in constant variation over the PPP life-cycle and tightly related to the perpetual evolution of a diversity of elements at different environmental levels:

- at the micro level of the PPP: the contract design (especially when it is a target-based contract featuring indicators to measure the performance of private actors); the type of governance (especially when the latter displays a high hybridity in governing logics); and the strategic actions and initiatives of partnering actors, whether resulting from collective efforts or individual decisions of each partner.
- at the macro-level of institutional environment: political considerations engaging actors in games of power and dominance over processes of formal regulations; norms, customs and codes of conduct articulating the behavior of public servants, local authorities and other categories of stakeholders.

The model we are proposing offers the integration of all these elements in the same framework, and contributes in this sense in extending our understanding of PPPs. However, it

is worth noting that developing this PPP coevolution theoretical model was only made possible after close examination of the dynamics of a PPP project evolution as well as the process of institutional reform for regulating PPP programs. In our discussion we advanced that the setup of PPPs in growing economies, with the initial absence of a steady PPP institutional framework, is a multiple-level dynamic process that is likely to show high complexities shaping this development which is far from being a linear process.

One of the problems generating from institutional failures and the critics related to PPP procuring authorities, is that these authorities can of course still have their own procedures and principles of monitoring and control however they should avoid trying to fit PPP policy-making into the mold of other public policy-making procedures and remain flexible and open to customized collaborations. PPPs are likely to encounter a great risk of failure due to mismatch between imported regulations or contractual designs and local particularities and requirements.

Among the advantages of PPP programs, is their potential to create job opportunities. In this direction, this research revealed an interesting observation about the capacity of a PPP to address governments' socio-economic and institutional deficiencies, even though these issues are not explicitly within the initial scope of activities of this PPP. Studies have suggested that social movements can influence the path of emerging industries; we noticed that they can also influence the proper establishment of a PPP project. In return, PPPs can also significantly impact the fate of social movements' phenomenon but introducing a drastic change in their socio-economic conditions through inclusion and integration of their members. These institutional changes are necessary for the proliferation of PPP programs, and emphasize further the incapacity of governments to address these issues when weak institutions, political considerations and clientelism prevail.

Exploring a complex structure, such as a PPP, evolving in dynamic environments, where political and economic situations do not proliferate, institutional processes are not global and still in progress is certainly significant, but not without a number of limitations. One of these limitations is the relatively short period of observation, when coevolutionary studies require longitudinal time series of micro-adaptation events and organization adaptation over a long period of time. This makes it too soon to assess the outcomes of the institutional reforms in the country. The institutionalization process is still in its very early stages when field research was conducted and it would be interesting to follow up on its development and maturity. However, the observed partnership crafting experience at a sectoral level has proved in a very

short period of time, that its efficiency in achieving the pre-set objectives does not rely on a perfectly designed governance and monitoring scheme, neither on the technical and managerial performance of private actors, but also on their capacity to induce change in existing organizations and individuals as well as to circumvent the institutional deficiencies in their operating sphere. Cycles of micro-adaptation and strategic decisions were revealed despite the short period of observation.

On another note, future research paths initiated by this study are numerous. In this last chapter we raised few interrogations that could be useful for researchers who are interested in knowing more about PPPs institutionalization progress, the diffusion of new institutional norms, and the necessary changes in administrative structures to enable a smooth institutional change. An update of the existing concepts on PPP market and institutional maturity with the introduction of new institutional criteria and metrics as well as the identification of different institutional levels would also be useful to define a favorable environment for PPP programs. Further studies addressing the role of PPP units and regulating bodies within this institutional change is also crucial for the understanding of the organizational legitimate identity of these units and their importance in PPP institutionalization.

Finally, we believe that extending interrogations on PPPs coevolution through future process research can greatly serve the recent streams of inquiry on PPPs value creation and appropriation. These interrogations tend to address the complexity of PPPs and integrate their components and different levels of interaction in a single comprehensive theoretical framework, which makes the coevolution perspective a promising analytical lens in this new research trend.

General Conclusion

At the moment of writing, PPPs gain momentum in developing economies of the MENA region due to their promises, but their actual performance is yet to be tested. The way these partnerships should be shaped is still debatable, because this process is not only about designing innovative projects but also innovating in procedural and institutional practices. While further efforts are needed to reach standardization, and stability, collaboration among PPPs stakeholders, personalized considerations and continuous learning is increasingly recognized. Scholars and policy makers emphasize the complexity entailed by PPPs and the ambiguity around their performance, but major findings were limited to the level of the collaborative partnership without further extension to interactions with the surrounding environment.

This research responds to calls for looking at PPPs from a process perspective (Wettenhall, 2003; Slesky & Parker, 2005, Kivleniece & Quélin, 2012; Villani et al., 2017) in order to understand their real-time evolution within the surrounding environment and uncover determinants of their effective functioning. These calls originated from the fact that PPP literature remains fragmented among various literature streams that discussed individually sets of factors underpinning the performance of PPPs and despite their significant importance these results remain inconclusive and lack a single analytic framework to capture PPPs complexity (Brinkerhoff & Brinkerhoff, 2011).

The general conclusion of this dissertation provides a closure to this research by briefly summarizing its main findings, presenting the theoretical and practical implications of the research, informing its limitations, and suggesting areas for future research.

MAIN RESULTS

The inductive exploration of the setup and evolution of a PPP for energy distribution in Lebanon, along with the country's reform process of PPPs' procurement and management, revealed insights on PPPs institutionalization process: their emergence, evolution and development within changes of formal and informal institutional elements.

The data collected and analyzed through process-research techniques have resulted in the identification of concepts and their ordering into two data structures. From a grounded theory

development perspective, this research suggests two conceptual models associated to these data structures. The first model conceptualizes the process of *crafting a regulatory framework for PPPs* at the national level (macro-level) while the second concerns the process of *crafting a PPP as a collaborative partnership* at the industry level (micro-level). The consolidation of both levels of analysis results in an additional step of abstraction that explains how PPPs as institutions emerge, operate and develop in developing countries and therefore provide insights on the dynamics of *PPPs institutionalization*.

The main findings of the research can be summarized as follows:

1. Crafting PPPs regulatory framework

A political and institutional consensus on the necessity to build a proper institutional arrangement around PPPs is essential but not sufficient by itself. The model representing the process of crafting a regulatory framework for PPPs illustrates the dynamics of its setup and development. Empirical evidences of this research showed that policy makers may perceive the need for proper PPPs regulation because of repetitive failures and deficiencies in existing practices and rules governing PPPs public procurement, however putting this reform in place does not happen without serious implications. Crafting a regulatory framework dedicated to regulate PPPs in developing economies is considered to be an important initiation of an institutional change in this direction. In order to allow innovation through this change it is compulsory to revisit existing control processes as well as roles and responsibilities of main actors. However, this may engage individuals and organizations in a game of politics and power between actors “champion of change”, working actively to challenge and transform existing PPP practices and those who found their power and dominance threatened by this change. In an attempt to introduce further transparency and expertise in implementing PPP programs, and for decentralization purposes PPP standalone laws may suggest group of stakeholders to form procuring committees. These types of law provisions may be perceived as eroding the power of current procuring authorities (i.e. line ministries) and the compliance of actors with new norms will certainly reduce their power over PPP procurement operations or other PPP processes. Even after the enactment of a PPP dedicated law and the creation of a PPP unit, and despite the importance of this aspect in a regulatory framework, actors may still show reluctance in cooperation and find ways to circumvent these regulations. This kind of behavior is encouraged further when PPP laws are not enforced or when existing laws are not revisited and still allow parallel routes for PPP procurement. This opposition and reluctance, coupled with other political and environmental elements such as the country’s political

instability and long periods of political inertia, may lead to a situation of undesirable balance between promoters and opponents. The model suggests that a political consensus is a key determinant in the setup of regulatory framework for PPPs; and both political support and the existence of a solid regulation are essential for the proper the development and diffusion of PPPs collaborations.

2. Crafting PPPs at the industry level

Studies that focus on the initial conditions of formation or the final outcomes of a PPP outweigh those exploring their evolution. The observation of a PPP setup in a developing country with a nascent experience in the domain revealed interesting insights about the dynamics of this experience which was a controversial one in the sense that things did not unfold as planned. In fact, PPPs are constructed and evolve on the basis of multiple interactions at different levels. Policies and strategies for PPPs are initially formulated and implemented across groups of actors upon the assessment of the industry needs' to address social and economic issues. At this stage, contractual specifications of a PPP are the most important and essential aspect supposed to address these needs through innovative solutions. However, changes at different levels may occur and force actors to adapt to contextual constraints and upcoming events. Empirical evidences have also shown that the performance of a PPP is highly impacted by these contextual particularities and can vary significantly during the stages of the PPP evolution. PPP performance evolves with the course of action of the PPP project, and therefore reducing it to a quantified value at a time t seems to be an imperfect delineation. Field characteristics may often impose adjustments or adaptations to the partnership governance due to reasons such as improper risks assessments during the design and negotiation phase; this argument is largely discussed in the literature of incomplete contracting and is further confirmed by this research. These adjustments are also necessary in case of insufficient knowledge of the field's particularities, in case of emergence of unexpected factors in the surrounding environment and also if contract specifications are imported from international PPP practices and standards with little considerations to the risks of 'one-size-fits-all' model. The conceptualization of this crafting experience features multi-level processes and events interplaying and feeding upon each other to shape up the PPP journey, so it is irrelevant to consider these levels of analysis independently.

Process dynamics at the partners' level: The research revealed how partners handle differently the tension caused by internal factors such as the ambiguities of the contract as

well as the relational difficulties with the arbitration party. Combining hybrid institutional logics is a typical characteristic of PPPs that gives rise to unexpected and challenging consequences (Cabral, 2017; Jay, 2013). The research highlights these challenges and identifies the actions and strategies deployed by partners to address them and partially answers the call for addressing how tensions underlying the governance of these hybrid forms of collaboration are being resolved or dealt with (Mahoney et al., 2009) during a PPP evolution. Results revealed that collective actions were adopted upon the partners' consensus on common actions and adjustments to make; and in the case of a consortium of firms acting as private partners in a PPP, individual strategies are adopted based on each private actor resources and scope of responsibilities. The research also emphasizes the important role of having an independent arbitration or independent project/program manager, as part of the PPP governance. Conflicting logics induce considerable relational issues during the execution of the partnership activities. The main cause of these debates are mostly related to perceived ambiguity, irrelevance and unfairness in performance monitoring and compensation schemes. These schemes are approved by all partners upon the creation of the partnership; however their limited applicability is further emphasized during partnership evolution. In fact, when the compensation of private partners is tightly linked to their performance in accomplishing pre-planned activities, and the accomplishment of these activities in its turn is subject to delays and hurdles because of the particularities of the fieldwork and other external constraints, the compensation turns to be a penalizing scheme; which is perceived by private actors as unfair and generates tension. The existing high hybridity in logics emphasizes further this tension through mutual accusations of inefficiency, reluctance in taking responsibilities and opportunistic behaviors among partners. The principle-agent relationship between the PPP owner (or public entity) and the project consultancy - that is supposed to be the arbitration party – adds further bias and favoritism during conflict resolution attempts. This tension significantly worsens the relationship between partners and can even lead to key actors exiting the partnership as a consequence of incompatible institutional logics. This tension is further fueled by processes involving stakeholders other than the partners.

Process dynamics involving other stakeholders: The inductive exploration of the field reveals the existence of a variety of power-based institutional mechanisms highlighting different forms of resistance to the creation and the evolution of the partnership. Politicians, public officials and public servants attempted to resist this process of private participation in public infrastructure and services. First, the heads of regional administrations and municipalities perceived this participation of private firms in public services they were initially entitled to

supervise and execute, as a threat for their acquired power and authority rather than an opportunity to develop, innovate and grow. In fact, the authority they retain over regional public services and servants, allows them to establish clientelistic relationships with local citizens, and accept – or even ask for – bribes and gifts in return to approval of citizens' requests and transactions. Excessive red tape and the long list of legal approvals for each and every possible transaction have strongly limited the capacity of PPPs to innovate and changes in structures, and practices remain limited to what existing rules of procedures allow. A second category of stakeholders who also were not happy with the setup of PPPs: a group of precarious workers who have been waiting for so-long their integration as full-time public officials, and who strongly protested against private participation in public services. Members of this social movement feared being replaced by younger and more competent employees of private firms, and their resistance and protest movements succeeded in blocking the activities of the project over considerable periods of time. A third form of stakeholders resistance also contributed further in limiting the partnership progress in certain regions where the government sovereignty is almost inexistent. In these “extreme cases” where risks related to security are supposed to be handled by the public partner, private managers find themselves powerless facing these restrictions. This led to repetitive periods of stagnation during which private actors expressed their willingness to suspend their activities and exit the partnership.

In sum, the research reveals how the complexity of designing, implementing and managing PPPs is handled within weakly regulated environments. The PPP literature in Strategic Management recognizes that the effective governance of resources and capabilities is a criteria for effective performance of the collaboration and reconciliation of conflicting objectives (Cabral et al., 2017). This effect is strengthened further in high quality institutions, unlike environments of weak institution where private actors need to have specific capabilities other than technical and innovative ones in order to address the particularities of the challenging institutional environment. These capabilities range from a good knowledge of the field particularities, personal and professional connections with ruling elites, proper assessment of stakeholders' needs and anticipation of their behavior and high flexibility to adjust. The research reveals that some organizations are more effective than others in dealing with these particularities through mobilizing the appropriate resources and adapting suitable choices for a strategic fit. In this case the quality of institutions is not considered exogenous to PPP performance but rather a variable to be considered as part of the process of PPP performance ‘evolution and evaluation’. This suggests that elements of the institutional

environment and actors' capabilities and resources are not mutually exclusive and their close association has important implications on the performance expected from a PPP.

Within the course of action, and despite a careful initial framing of partnership design, a PPP evolution is likely to unfold into sequence of processes that may totally block the partnership activities or lead to long-period of deadlocks, inertia and suspension of these activities. A game-changer is often needed to break the cycles of inefficacies and recurrent bottlenecks, like the departure of key actors, change in the consultancy managing the partnership, important alteration of the contract terms and conditions during renegotiations or even the advent of new players.

3. PPP institutionalization: a coevolution perspective

PPPs are in constant debate for satisfying some demands while defying others. We argue that the process of emergence, operation and development of PPPs in developing countries is a co-construction of PPPs at industry levels and regulations at the national level. This co-construction is subject to the influences of a set of political and institutional elements of the surrounding environment. It is also subject to processes of resistance and reluctance that hinder this process of institutionalization at different levels. The coevolution of these elements manifests differently in cross-levels interplays, where multiple interactions and feedback occur in all directions, and change may affect any of the interacting organizations.

While positive feedback loops of relational quality are thought to be critical for the success of a PPP at the industry level and the proper establishment of a PPP regulatory framework at the national level, the results were surprisingly unanticipated. This research revealed that in developing economies, the coevolution of a PPP with the establishment of a dedicated regulatory framework in terms of positive feedback loops and processes feeding upon each other's to progress and evolve, is almost inexistent. The absence of coevolution at this level is mainly due to joint interorganizational policy making that are always challenged by key players' self-referential decisions and existing rights and authorities. In weak institutions of developing economies where governments cannot ensure proper development of PPP regulations, there is an increase in the likelihood of power and politics to impinge on PPP coevolutionary dynamics. Existing procuring authorities are not ready to compromise their power and lessen their control over PPPs projects in favor of a properly regulated PPPs environment; which blocked cooperation and consultation efforts between institutional actors actively working on regulating PPPs (i.e. PPP national unit) and political actors at the head of procuring entities (i.e. line ministries). The gap between formal structures and actual PPPs

practices is further allowed by political conflicts and affiliations. This situation is similar to a race where policy makers prioritize their seeking for political accountability over actions of general interest. ‘Negative feedback’ loops are giving rise to disturbing effects, impeding the speed of decisions and hindering the efforts of a group of PPP activists in order to block centralization and preserve the multiplicity of institutional referents. While regulating PPPs constituted a large part of political discourses, in practice, independent and side initiatives of power holders to procure and sign up for PPP projects remain dominant.

On a different note, the research revealed mutual influences and non-linear responses between the observed PPPs at the micro-level and other elements of the institutional environment. These aspects added further complexity to PPP institutionalization and contributed in hindering the progress of PPPs. The main reason behind this is the resistance of various stakeholders to private participation in public services and infrastructure, explained earlier. In return limited and localized forms of change were induced by PPPs to many of these aspects, and mechanisms of adaptation of certain PPPs activities to respond to environmental constraints were also noted. For instance, the PPPs at the industry level raised the citizens’ awareness on public codes of conduct and reminded them of public servants responsibilities and obligations towards them, which reduced to a high degree unethical practices like exchanging bribes and gifts in return to what is supposed to be citizens’ basic rights. PPPs also succeeded in creating a positive social impact on a group of existing precarious workers – initially part of the protest movement against PPPs setup - and change drastically their vulnerable status, by offering them favorable working conditions within the private companies, although this was not initially among the scope of activities of the partnership.

In short, the research demonstrates that the institutionalization of PPPs is achieved through the interaction and systematic influence of partnering organizations with formal and informal constituents of the surrounding environment. However, the power dynamics between different levels and the contextual particularities of the country limited significantly the capacity of PPPs to realize the objectives they were initially set for. Positive feedback loops are critical in the evolutionary process, however partners had to modify their behavior unilaterally in an attempt to adapt to contextual particularities, which led to long periods of stalemates and inertia all along the PPP life cycle.

RESEARCH THEORETICAL CONTRIBUTIONS

We draw on Strategic Management research and Organization Studies to address ongoing calls for connecting various literature streams and develop a comprehensive framework in studying PPPs. The contribution of this research is multi-fold. It mainly provides important elements for extending the literature on PPPs in countries with a nascent experience in crafting cross-sector collaborations. It also extends the line of inquiry of studies on coevolution by exploring an organizational form that was not examined by this theory so far. It also gives insights on the initiation of the institutionalization process of PPPs, a concept that is still underexplored in PPPs literature.

1. Contributions to studies on PPPs

The study highlights the importance of taking together the internal factors as well as the external contingencies to better explain PPPs evolutionary dynamics. By challenging the input-output models prevailing on PPPs studies this research explored processes of non-linear emergence and evolution within and around these partnerships. Numerous aspects of the creation, development and survival of PPPs were revealed extending by this the base of knowledge built around them.

While the PPP literature has revealed different forms of contractual adaptation made during contract renegotiations (Guasch et al., 2014; Saussier, 2009), the micro-adaptation related to processes interacting during a PPP course of action (i.e. bargaining, conflicts, coordination, learning...) remained unexplored Kivleniece & Quélin (2012). These micro-adaptation have been a focal point in evolutionary studies where organizations are observed over long periods of time with a focus on their capabilities of selection, learning and adaptation to evolving the activities of the industry (Koza & Lewin, 1998). This research highlighted that managing PPP governance and relationship among interacting elements is as important as crafting its initial design. The dynamics of post-formation and the stage-specific follow up on a PPP life-cycle revealed a number of internal conflicts as well external constraints shaping the PPP trajectory and disturbing the initial planning of its activities. In response to these constraints, partners in a PPP engage in cycles of micro-adjustments and adaptation: revised schedules, establishment of remedial action plan, actions to contain the resistance of stakeholders.... These actions aim at keeping the project activities into the initial contractual framework. However, continuous pressure and repeated cycles of inefficiencies may lead actors to suspend their activities or even exit the partnership.

Literature on PPPs performance shows complementary results rather than conclusive ones, and the assessment of performance remains highly subjective. Studies concerned with PPP performance and efficiency, consider this performance as a measurable final outcome of the project's capacity to reduce costs on construction, operation, and maintenance comparing to traditional procurement (Blanc-Brude et al., 2006; Iossa & Martimort, 2015) or its capacity to reduce financial pressure on government' budgets (Hodge & Greve, 2007), or even associate this performance to meeting explicit targets set in the contract (Alonso & Andrews, 2019). Instead, this research looks at PPP performance differently. It is rather viewed as an evolving concept, subject to review and readjustment throughout the life-cycle of the partnership, and a variable of multiple determinants: internal (related to the performance evaluation scheme as designed by the contract) and external (related to environmental particularities and risks).

Much of the work on PPPs focused on environments where a regulatory framework for PPP procurement and management is already established. This research revealed particular insights of a case where a PPP project at the industry level and a PPP dedicated regulatory framework at the national level are being co-constructed. The coevolution of these two processes provided insights on the preliminary stages of how PPPs emerge, operate and develop in weakly institutionalized environments. PPPs that evolve in environments engaged actively in economic reforms are likely to experience pressures in order to become adaptive. Their strategic and organizational responses are expected to be shaped by the changes and the rigidity of the country's institutional particularities. In contexts where sectoral and political implications prevail, rule making and reforms around PPPs become harder to implement.

2. Contributions to studies on coevolution

Prior studies have mobilized the theory of coevolution to examine a number of organizational forms: firms, industries, social movements, strategic alliances and others. Among the common characteristics of PPPs is the coexistence of multiple actors from multiple organizational spheres within the same structure and a strong embeddedness within the contexts where they operate; which renders PPPs vulnerable to environmental changes and at the same time capable of driving change with interacting organizations and other elements of the system. From its end, the coevolution framework incorporates differences and variations in outcomes related to organizational dynamics and to the particularities of the environment as well, which makes it a relevant and potentially revealing theoretical lens to look into PPPs.

Incorporating the theory of coevolution in PPPs studies responds to the call of coevolutionary scholars for the necessity to extend coevolutionary studies in a way to investigate dynamic phenomenon and processes involving microevolution and environmental and regulatory evolution within the same system (Lewin & Volberda, 1999).

RESEARCH MANAGERIAL CONTRIBUTIONS

A process-perspective on PPPs evolution is important in different ways for practioners and policy makers involved in PPPs programs. Tracing the path of a PPP is extremely important because it is during this process that strategic decisions and managerial operations are taking place and have a major impact on the partnership performance. It is also during this lifespan that important incidents and environmental factors significantly impact the activities of the partnership. Managers from both the public and private sectors need to be aware that contracts will remain incomplete, so there is a need for formalized institutions adapted to ensure a proper PPP development. The two concepts are not mutually exclusive and cannot be dissociated. They are rather complementary and mutually dependent and determinist of a good PPP performance.

There will never be a “one-size-fits all” solution or a complete set of “best practices” to address the different types of institutional weaknesses in developing countries (Estache & Lewis, 2009), therefore a nuanced understanding of contextual particularities is important in order to address them individually and develop strategies to mitigate their effect. Scholars interested in PPPs institutionalization call managers of both sectors for further collaboration over “tailor-made solutions” and increased learning to address PPPs (Koppenjan & de Jong, 2017).

This research shows that the presence of a dedicated PPP regulatory framework: a PPP law and a PPP national unit is not sufficient *per se* to immune PPPs from failure or underperformance. Mutual collaboration between partners and complementarities between institutional rules (formal and informal) and contracting design are essential. In this regards actors involved in regulating PPPs (i.e. members of PPP units) have important role in facilitating PPPs development while raising awareness among central and local governments of the benefits of having regulated processes for PPP projects. In order to avoid undesirable situations and conflicts among institutional actors and procuring authorities, it is crucial to review the set of existing laws that attribute rights and authorizations to procure PPP projects.

LIMITATIONS

The contributions brought by this research have certainly enlightened new ways to look into public private collaborations, but not without a number of challenges that may limit its extent and the generalization of its results. The self-evident complex nature of PPPs, the characteristics of the methodological design and the set of requirements for empirical research on coevolution may have also impacted these findings. Further empirical validation of the proposed theoretical model is surely needed. This validation is made possible by both the extension of the period of observation - especially that the object observed is a phenomenon in 'live-development' at the time of the writing – and the testing of the model through other systematic observations and accumulation of research evidences.

More specific challenges were encountered at the level of methodological requirements of research on coevolution. First, longitudinal time series of micro-adaptation events are expected to illustrate organization adaptation over long period of time. However, the period of observation could be considered relatively short comparing to the usual long-term commitments of PPPs. In studies on coevolution, the historical context is considered a key informative dimension in organizational adaptation. This research focused on a specific period of this history during which a PPP dedicated law was initiated with limited insights on the history of the evolution of public procurement.

Second, the study did not consist of experimental designs or statistical models to analyze multidirectional causalities and mutual influences, however the observation of processes has revealed multidirectional pathways among coexisting elements, for instance the multidirectional influences among PPP partners, political actors, and other stakeholders.

Third, the country representing the field of study is going into a recent reform of the way PPP programs are procured and managed, and therefore the actors' experience in this field is still nascent. For the time being the capacity of PPPs to incorporate changes to institutional system is very limited. Additional time and future developments will unveil more about the type of feedback and systematic influence between PPP projects and the institutional environment.

Finally, the outcomes of coevolutionary dynamics being highly idiosyncratic (Lewin & Volberda, 1999), the insights into PPP dynamics and their coevolution with the surrounding environment revealed in this research may not be broadly generalized to all contexts of

emerging economies. This is also acknowledged by interpretative case study scholars who posit that these methodological settings suit best local interpretation of a phenomenon (Gioia et al., 2012) and the main aim from putting this interpretation in a theoretical framework is to provide means for advancement and future extensions of the proposed theory, instead of transferring specific conclusions from one setting to another.

FUTURE DEVELOPMENTS

The emergence of webs of organizations, procedures, laws, actors and their joint interplay shaping the institutionalization process of PPPs remains a particularly promising field to explore. In this sense, the findings of this research illuminate the dynamics of this process in its preliminary stages and set the ground for further developments in this direction of discovering how PPPs are created, evolve and reach further stability in various contexts.

These developments may validate or extend the line of inquiry about PPPs in this same direction, and go beyond its idiosyncratic theorizing to cover PPP process dynamics in different contexts. Future developments may progress beyond the limitations imposed by this research design. A list of non-exhaustive interrogations is suggested at this point with the potential to advance future research in this direction:

1. On PPP institutionalization line of inquiry

The passage of time is a revelatory dimension of institutionalization processes. Therefore it is interesting to follow up on these processes and find out how the next stages of PPP institutionalization will be carried on. It will be interesting to observe how organizations involved in PPPs behave in order to support the development of PPP programs and diffusion of new institutional formal and informal rules. These organizational behaviors will either constitute a guarantee for the stability and sustainability of PPP projects, or contribute to their underperformance and potential demise. In addition to organizational behavior, it is also interesting to be able to identify the different variables of the institutional environment (formal and informal) that impact the process of PPP institutionalization and understand their respective roles in this process.

For comparative purposes it is also interesting to conduct process research on PPPs institutionalization in different countries engaged in reforms related to PPPs and draw conclusions about similarities and differences among these experiences.

Insights on the legitimate identity of PPP national units (or other regulating bodies) are still scarce in the literature. The role of these actors in PPP institutionalization processes is crucial. Therefore details about the evolution of their roles in parallel to PPPs programs maturity and at different stages of a PPP project life-cycle are important to understand how these units construct their identity as part of this institutional crafting process.

2. On PPP coevolution line of inquiry

Recent trends in Strategic Management emphasize the role of PPPs components and the importance of their coordination to go beyond performance and efficacy and introduce the concept of value creation and appropriation in PPPs (Cabral et al., 2019). Authors of this research trend advanced that value creation is a concept that is not fixed or static but rather evolves with processes that give rise to it. Authors also suggest that value creation can take place at multiple interacting levels and it is necessary to understand the managerial practices interacting with capabilities, governance and institutional features in order to enable value creation. In response to these calls and given the interdependency and the complexity entailed among these elements, a comprehensive theoretical framework is needed to incorporate different levels of analysis and therefore allow the understanding of value creation in PPPs. This supports further the need for process research to look into PPPs and makes the coevolution perspective a promising framework in this new research trend.

3. On PPPs in the MENA region

As stated earlier, the MENA countries have been engaging in PPPs a while ago under different forms and regulatory frameworks, but studies published in this regards are still scarce. These new ventures are challenged by high uncertainties prevailing the region. In recent years a number of political and economic shifts have proliferated in conflicts and tremendously increased economic pressures. It will be interesting to have further knowledge on how PPPs shape up in such contexts.

In the end, the institutionalization process of PPPs remains a particularly promising field to explore. In this sense, the findings of this research illuminate the dynamics of this process in its preliminary stages and sets the ground for further developments in this direction of discovering PPPs as institutions and not only as collaborative ventures. As variables of the economic and political environments are changing at different rates and social needs are continuously evolving, PPP institutions progressing routes remain a rich field to explore in developing economies.

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APPENDIX A – LEBANON’S HISTORY OF UTILIZING PPPs-LIKE FORMS

The following list was extracted from a report prepared by Fransa Invest Bank Research, dated September 2017.

Beirut-Damascus road (Concession, 1958)	Amongst the first successful PPP-like concessions in the history of the Middle East.
Beirut Port (Concession, 1960)	A 30-year concession was given to a Lebanese company called "Compagnie de Gestion et d'Exploitation du Port de Beyrouth" to expand and develop the port.
Electricity of Zahle (Concession, 1960s)	Founded in the 1920s, Electricité de Zahlé (EDZ) is a private electric utility that operates under a concession agreement with the Lebanese government. But following a decree issued in late 1960s by the government and Electricité du Liban, EDZ turned into an electrical distribution utility that develops, operates and maintains the electric power networks in Zahle and 15 surrounding regions.
Libancell and FTML (BOT, 1994)	The BOT license in 1994 was granted to LibanCell and FTML which built GSM networks in the country. These operations contributed significantly to Lebanon’s GDP.
Solidere (1994)	For the development and re-construction of Beirut City District (BCD) following the Lebanese civil war which destroyed much of the infrastructure, Solidere was established as a private company in 1994, listed in 1996. Against financing and construction of the infrastructure and public domain for the entire BCD on behalf of the State, Solidere was granted ownership of 291,800 sq m of development land in the New Waterfront District.
LibanPost (BOT, 1998)	Through a BOT agreement with Canada Post and SNC Lavalin, the National Postal Services was transformed from an inefficient government-owned entity into a private multi-service operator.
Tripoli Water Authority (Management Contract, 2002)	The Ministry of Energy and Water and the Council for Development and Reconstruction (CDR) awarded Ondea, a French organization, a 4-year management contract for the Tripoli Water Authority in December 2002 at a cost of 8.9 million euros, financed by the French Development Agency.
Beirut International Airport (Concession, 2000)	Several concessions were agreed on to expand the airport, including the car park and the aircraft refueling facilities, completed on the basis of a concession in the year 2000.
Mecanique (BOT, 2003)	Awarded in 2003 to the Saudi company FAL, this 10-year DBOT contract consisted of financing, building and operating a vehicle inspection facility for 10 years, based on a 30% revenue share of the inspection fees collected. In 2012, the contract was extended on a 6-monthly basis.
Mecanique (BOT, 2016)	The tender was launched in April 2015, and following multiple delays, it was awarded in August 2016 to Autospect/SGS/Securitest/Autosécurité. This 10year contract consists of modernizing the 47 centers for vehicle inspection and building 10 new centers and operating and maintaining them.
Mobile Operators (Management Contract, 2004)	A 4-year renewable Management contract for Lebanon’s mobile operators, Touch and Alfa, which are operated by Kuwait-based Zain Group and Egypt’s Orascom, respectively.
Power-Generating ships (Lease, 2012)	Lebanon decided in February 2012 to lease power-generating ships to help reduce severe electricity rationing in the country. Karpowership was awarded a contract by the Lebanese Electricity Utility (EdL) to provide 2 Powerships totalling 270 MW of base load generation capacity. In 2016, EdL increased the contract capacity to receive over 370 MW of reliable power from the Powerships for another 2 years. This lease came with a sovereign guarantee.

Jeita Grotto (BOT, 1994)	Awarded in 1994, for an initial duration of 21 years, and renewed for 4 years (twice) with an expected expiry in 2022, to MAPAS company to restore, expand, and operate the Jeita touristic complex. Based on a revenue sharing arrangement, the Ministry's share stands at 35%, while the municipality receives a share of 10%-15%. This project was awarded based on a decision issued by the Minister of Tourism, and was not backed by any law or decree.
Solid waste treatment plant in Saida (BOT, 2002)	The contract was signed between the municipality of Saida and IBC in 2002 for a 20-year period.
Beirut Port container terminal (Management Contract, 2004)	The contract was awarded to Beirut Container Terminal Consortium (BCTC) in 2004 (4 years after the construction of facilities was completed). In 2005, the port began handling transshipment vessels for the first time in the history of Lebanon. The management contract is based on a per container fee paid to the operator with a guarantee of handling 500,000 containers annually. Current traffic exceeds 1.2 million containers annually and necessitates the expansion of the container terminal very soon

APPENDIX B - DATA COLLECTION - EXISTING MATERIAL - INTERNAL DOCUMENTS

Category	Title	Language	Description	Date	Source
DSP Contract	DSP Prequalification documents	English	DSP Bidding Documents	August, 2010	EdL
DSP Contract	Form of the contract	English	Annex B to DSP bidding documents	August, 2010	EdL
DSP Contract	DSP General Conditions	English	DSP general conditions of the contract	August, 2010	EdL
DSP Contract	Terms and Procedures of Payment Appendix	English	Appendix 2 to the General Conditions	August, 2010	EdL
DSP Contract	Scope of Services	English	Appendix 3A to the General Conditions	August, 2010	EdL
DSP Contract	Area Subdivision Appendix	English	Appendix 4 to the General Conditions, geographical area subdivisions	August, 2010	EdL
DSP Contract	Performance Monitoring and Compensation Appendix	English	Appendix 7 to the General Conditions	August, 2010	EdL
DSP Quarterly reports	Quarterly Progress Report no. 6	English	Covering DSP activities for the period Jul – Aug – Sep (2013) – 106 pages	October, 2013	EdL/PM1
DSP Quarterly reports	Quarterly Progress Report no. 10	English	Covering DSP activities for the period Jul – Aug – Sep (2014) – 107 pages	October, 2014	EdL/PM1
DSP Quarterly reports	Quarterly Progress Report no. 12	English	Covering DSP activities for the period Jan – Feb – Mar (2015) – 107 pages	April, 2015	EdL/PM1
DSP Quarterly reports	Quarterly Progress Report no. 13	English	Covering DSP activities for the period Apr – May – June (2015) – 139 pages	July, 2015	EdL/PM1
DSP Quarterly reports	Quarterly Progress Report no. 14	English	Covering DSP activities for the period Jul – Aug – Sep (2015) – 115 pages	October, 2015	EdL/PM1
DSP Quarterly reports	Quarterly Progress Report no. 15	English	Covering DSP activities for the period Oct – Nov – Dec (2015) – 141 pages	January, 2016	EdL/PM1
DSP Quarterly reports	Quarterly Progress Report no. 19	English	Covering DSP activities for the period Oct – Nov – Dec (2016) – 114 pages	January, 2017	EdL/PM2
DSP Quarterly reports	Quarterly Progress Report no. 21	English	Covering DSP activities for the period Apr – May – June (2017) – 281 pages	July, 2018	EdL/PM2
DSP Quarterly reports	Quarterly Progress Report no. 23	English	Covering DSP activities for the period Oct – Nov – Dec (2017) – 288 pages	January, 2018	EdL/PM2

Category	Title	Language	Description	Date	Source
DSP Quarterly reports	Quarterly Progress Report no. 27	English	Covering DSP activities for the period Oct – Nov – Dec (2018) – 1015 pages	January, 2019	EdL/PM2
MOU 1	Memorandum of understanding 1	English	Signed by partnering actors at some point of the DSP evolution for the resolution of issues related to contract extension, delayed payments...	August, 2016	EdL
MOU 2	Memorandum of understanding 2	English	Signed by partnering actors at some point of the DSP evolution for the resolution of issues related to contract extension, delayed payments...	December, 2016	EdL
Ministerial decree	SPs Contracts extension	Arabic	Approval on contract extension for BUS and KVA till December 2021.	October, 2017	EdL
Ministerial decision	SPs Contracts extension and appointment of a new SP	Arabic	Approval on contract extension for NEUC till December 2021, with agreement to allocated South Division Activities (Service Area 3B) to MRAD as a new SP	May, 2018	MoEW
EdL BoD decision	NEUC and MRAD Agreement	English	Agreement on general terms and conditions with respect to the allocation of the DSP Contract South Division Activities to be carried out by MRAD, in accordance with the terms of general conditions of the DSP contract and CoM decision	June, 2018	EdL
Power Point Presentation	MVV Adjustment of payment method	English	Demonstration of improvement done at the bill collection process	May, 2017	MVVdecon
Power Point Presentation	BUS experience within the DSP	English	Different aspects of BUS contribution to the DSP	December, 2017	BUS
Internal memos	Divers content	Arabic	Conflicts and ambiguities related to DSP contract interpretation	December, 2017	

APPENDIX C – DATA COLLECTION / PARTICIPANTS

Ref	Initials	Position	Category	Organization	Date	Duration (min)
1	MC	Financial consultant	Public institution	HCP	20-Jul-16	75
2	AJ	PPP transaction advisor	International agency	World Bank	25-Jul-16	47
3	CD	Financial advisor	Private financial institution	BlomInvest	24-Nov-17	63
4	IM	President of DSP PM committee	Public utility	EdL	25-Feb-17	87
5	CL	DSP Consultant (2)	Private consultant	MVV	3-May-17	76
6	MAJ	PMO General Manager	Private partner	BUS	7-Jun-17	62
7	RA	PMO Consultant	Private partner	BUS	7-Jun-17	55
8	MI	PMO General Manager	Private partner	KVA	14-Jun-17	68
9	MC	Financial consultant	Public institution	HCP	19-Oct-17	72
10	CA	PMO General Manager	Private partner	NEUC	25-Oct-17	69
11	AD	PMO Construction Engeneering	Private partner	NEUC	31-Oct-17	59
12	HS	PMO Engeneering consultant	Private partner	NEUC	31-Oct-17	44
13	JSe	PMO IT manager	Private partner	NEUC	2-Nov-17	55
14	JSa	PMO Procurement manager	Private partner	NEUC	2-Nov-17	55
15	SB	PMO Assistant Manager	Private partner	NEUC	7-Nov-17	68
16	IM	President of DSP PM committee	Public utility	EdL	18-Nov-17	105
17	IM	President of DSP PM committee	Public utility	EdL	22-Nov-17	63
18	IM	President of DSP PM committee	Public utility	EdL	5-Dec-17	47
19	MAJ	PMO General Manager	Private partner	BUS	6-Dec-17	85
20	IM	President of DSP PM committee	Public utility	EdL	3-Mar-18	110
21	LK	Legal Advisor & Senior Associate	Private law firm	C-K law firm	5-Mar-18	48
22	RR	DSP Consultant (1)	Private consultant	NEEDS	19-Mar-18	86
23	MC	Financial consultant	Public institution	HCP	23-Mar-18	76
24	KH	General Director Assistant	Public utility	EdL	12-Apr-18	107
25	IM	President of DSP PM committee	Public utility	EdL	12-Apr-18	90
26	IM	President of DSP PM committee	Public utility	EdL	13-Jul-18	77
27	CL	DSP Consultant (2)	Private consultant	MVV	18-Jul-18	46
28	MC	Financial consultant	Public institution	HCP	26-Jul-18	150
29	CA	PMO General Manager	Private partner	NEUC	19-Feb-19	72
30	SB	PMO Assistant Manager	Private partner	NEUC	19-Feb-19	81
31	MC	Financial consultant	Public institution	HCP	20-Feb-19	50
32	MAJ	PMO General Manager	Private partner	BUS	22-Feb-19	70
33	IM	President of DSP PM committee	Public utility	EdL	22-Feb-19	100
34	IM	President of DSP PM committee	Public utility	EdL	15-Jun-19	88
35	RA	PMO Consultant	Private partner	BUS	17-Jun-19	47
36	MI	PMO General Manager	Private partner	KVA	17-Jun-19	35

APPENDIX D – SAMPLE OF A CODED INTERVIEW

Interview Ref	#4 – Round 1
Participant Name	[REDACTED]
Category	DSP level
Sector	Public
Company	EdL
Position	President, DSP PM Committee
Date	February 25, 2017 @ 11:00 am
Duration	87 min
Use in the project	
Documents provided/ persons referred to / other note	- Contract documents (General conditions and appendices) - Contact with Managing directors of SP1, SP2 and SP3

<p>Q: The DSP project, where does it stand now, in what phase?</p> <p>A: It was extended. Extended through a Memorandum of understanding (MOU), we received a letter from the Minister of Energy to continue the project. He asked EDL to re-negotiate with the companies, since the project was not accomplished yet, especially they did not reach the step of the project where the smart meters need to be installed, which is a very important part of the project. It was agreed that it is simpler to re-negotiate with the existing companies instead of launching a new tender with new companies. So MOU2 extended the project till end of December 2021. A conflicting decision on the extensions duration, 36 or 48 months, but the Ministry of Energy accepted the extension of 48 months while the Ministry of Finance refused. I think it's a political issue, both ministers are from opposing political parties. We took a decision at the EDL board of direction and we need the approval of the government. In the general regulations for the public entity (EdL) the art. No. 4517, states that if one of the two ministries had restrictions in regards of a bid launched by EDL, the cabinet in this case needs to take the decision. The project is huge, it values \$800Millions, with the main aim is to install smart meters. The MOU, extends the mandate of the existing companies and stipulates that the project shall continues for 4 years. [...] A parallel projects are conducted for improving the generation and the transmission of the electricity. The steps usually for electricity to reach the customers are three main steps: generation, transmission and distribution. The DSP project covers only the distribution, but related to the project of the policy for transmission and generation. [...]</p> <p>Q. In order to focus the study on this project, where should I start , who are the key persons ? who is responsible of the performance, monitoring, KPIs?</p> <p>This project is managed by a committee presided by me, the contract gives a main role for the project manager (PM), in the contract there s</p>	<p>MOU for project extension</p> <p>Re-negotiation with SPs for contract renewal</p> <p>Project reaching financial closure but objectives not achieved yet</p> <p>Conflicts on extension duration</p> <p>Approval of the CoM for contract extension</p> <p>Decision-making relevant to the CoM (or at the level of the CoM) in case of conflict between MoWE and MoF</p> <p>Project management and governance design</p>
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<p>a big role to the PM, and in public institutions there are decrees precisising the role of each department and head of division which are difficult to be altered, modified or canceled by the terms and stipulations (or scope of services) of a contract. The role of the PM cannot prevail these decrees.</p> <p>There is a conflict with the private companies who consider that the PM should make the task easy for the companies.</p> <p>The KPIs are calculated by us (the PM). But the problem is that there are always external or internal factors, these factors should be always taken into consideration. For instance, if there's a task to be accomplished in a certain region, there's the KPI10 which evaluate the performance of this task, and based on which the payment or compensation of the private companies should be made. This KPI should be equal to 1 (upon the formula set in the contract) in order to make a full payment for the contracting company, otherwise the company will get 80 or 90% of his invoice. A planning for each quarter is done, this planning should be approved by the EDL in a period of 14 days. The private actor then calculates the cost of the planned tasks, and prioritize them, then get a final approval from the EDL, based on this the KPI is set. Back to the task to be accomplished, let's suppose it was mentioned in the planning of quarter 2 (April – June), for each quarter the company issues an invoice. In this invoice the company states all projects accomplished during the past quarter. For instance: if the project that the actor decides to work on costs \$1M and it was accomplished during the quarter. We assess based on this. We are both committed through this to each others. During the completion of the tasks planned for the quarter, some external factors interfere here: municipalities for instance, head of divisions departments, or EDL is not facilitating the task and the jobs accomplished on the ground (road excavations or others...) all these cause a delay in the tasks previously accomplished which might exceed the end of the quarter . The company is then not being paid accordingly. A conflict arises then, investigations begin. All these factors causing delays are investigated. The delays are removed. This impacts the cost (i.e if the estimation was 1\$M and the actual is \$700.000), and the variance is included in the KPI calculation. We are using KPIs for the first time ever, we were not familiar with this type of evaluation and compensation [interruption].</p> <p>Q. Who set the KPIs? How were they set?</p> <p>A. KPIs were put in the initial specifications, targets are set on a yearly basis (Performance monitoring document, appendix 12). The specifications were set by NEEDS, a consultancy company, performance indicators calculation is very complex. [a document was handed stating all 13 KPIs of the project]. SAIFI and SAIDI are not applicable yet.</p> <p>Q. Do you think these KPIs are not appropriate to the Lebanese context?</p> <p>A. right.</p>	<p>Roles and functions of departments head and division head are defined by decrees and cannot be altered by contractual terms</p> <p>Conflict with private companies on the role of the PM</p> <p>KPIs calculated by PM</p> <p>Internal and external factors impacting KPI calculation</p> <p>Compensation calculation for the private companies based on KPIs</p> <p>Quarterly evaluation and invoicing of activities accomplished</p> <p>Delays in accomplishing activities due to external factors: municipalities, head of divisions...</p> <p>Performance monitoring and measurement as set by the contract</p> <p>Some KPIs are not applicable</p>
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<p>Q: as if they adopted the KPIs from international institutions without customizing them to the Lebanese context.</p> <p>A: yes from Dubai or Abu Dhabi. The minister of electricity in 2012 claimed that the electricity in Lebanon will be available 24/24. They set the KPIs considering that starting Year 3 or Year 4 these KPIs will be applicable. So in 2015-2016 the electricity should have been available 24/24, then we can apply the first two KPIs SAIFI and SAIDI (frequency of fault and duration of fault), these KPIs were still not applicable. I will get you copies of these appendices [the soft copies of the KPIs were given on a USB]. Annex 12 – Performance indicators - These are the KPIs, the depart, the feeder utilization, the transformer, the losses on the network, the delay to take to transfer to customers, the maintenance, the customer complaints (per each 1000 customers), should decrease each year, complaints as well, the work completed on time, the cost per KW. Then year 2, the year 3 and 4 there's a weight. Depending on the percentage, if it is within the range, the compensation is 100%...[check the documents]. Then also in the formula you have the performance of bill collection and it is linked to the constructions PIS I and PIS II, it is 30% of the entire invoice, then here's the formula on how he will get paid [while showing the formulas] [...] I will introduce you to MVV , NEEDS left on a bad relation with the EDL. Claudia (representative of MVV) she is the project manager representing the consultant. [...documents being copied to the USB...].</p> <p>Q. Who are the three companies and how can we reach them?</p> <p>A. What do you need to know from them? Here are the documents that you need. If you want you can talk to the three DSP providers then there is no problem with this [...] After NEEDS prepared the specifications, they were the PM, if you read the general conditions on the contract you find the PM responsibilities as well as responsibilities of each SP. Also the document Scope of services clarifies the DSP activities [...documents to be sent by mail ...]. We did not know anything about how this project might be conducted, NEEDS did much of the effort, they designed all aspects of the project [searching in the documents] scope of services, performance monitoring and compensation for the KPIs, a document for the markets, raw material prices might change, area subdivision for each DSP: Beirut and Bekaa will be handled by KVA, the north area is for BUS and the South is with NEU. The names of the managers in each company phone contact: BUS [FAJ], KVA, [MA] (I think he's a bit afraid of giving info), NEU [CA] Each one is qualified in his own way. KVA and NEU have lots of claims and we have conflicts we them. BUS at a less degree. We also had a third party who studied the conflicts FConsult because we had conflicts between the different parties: private, EDL and NEEDS. the MVV decon as well is a consultant. FAJ is more working on this project from a patriotic commitment. BUS also did a survey and collected data about what has been accomplished. The SPs are very advanced technologically, they have well-organized data, especially from the call center, GIS, IT platform, data treated. And also how they provide the data and calculate their KPIs (BUS are calculating this internally). He likes to succeed in his work and would</p>	<p>KPIs adopted from other projects in other countries</p> <p>Description and explanation of the contract</p> <p>Consultant being the project manger</p> <p>Service providers allocated to regions</p> <p>Each SP is qualified in his own way Conflicts with SPs</p> <p>BUS have a sense of patriotism in approaching the project</p> <p>Variant strategies for each SP SPs are technologically advanced</p>
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<p>like the project to succeed, and can provide a lot of data especially in his conflict with the public sector. They have plans and designs, and an IT platform very important. The group their data and have a full monitoring on the projects. The TJ-terrain jardin- floor has lots of documents. In the scope of services details the PM responsibilities. Two third of our staff are above 50 years old, and most of them were employed through 'wasta'. Fresh graduates are not interested in working at EdL. On the administration level we are overstaffed but with no fresh blood to innovate in daily practices and processes; on the technical level we mostly rely on daily workers who get paid on hourly basis</p> <p>One of the problems and obstacles we had with the private companies was that the contact between the private companies and EDL should be done through a single entity, however, practically things are different, there is a lot of decisions and authorizations to be given by the head of divisions in each geographical area. SPs was very frustrated about this, they cannot administer a project with everyone, there must be some kind of centralization. The head of divisions have signatures and authority. BUS would have not entered the project initially or would have at least modified their offer or even would have had different expectations in terms of payment and compensation delay. This created lots of problems. The scope of services clarifies the role of the committee among which: monitoring and approval of KPIs. The scheme is very well organized. Three months before the end of the year we have to agree on the KPI targets for the next year, this is done through a meeting with the DSPs, in order for the DSP to know how to perform and what is the level to be reached. If the DSP refuses, you can impose a 10% improvement based on data. We are weak in terms of data management, we are continuously trying to stay updated, and this is held by the DSP. If you want we can meet with MVV decon, the consultant company, with NEEDS it is very difficult now, but I think the information could be given by Claudia Lakkis, the person in charge of MVV. We have a chaos here. I have reports from NEEDS, it is important for your study to have a summary. I can provide you with a quarterly report presented by NEEDS, it is representative of all quarterly reports that were submitted. As if you saw the all quarterly reports of all the project during the 4 years. I also have a detailed report from NEEDS before they left. It is 115 pages, very detailed. It also mentions the project constratints and challenges, the owner PM challenges, DSP challenges and what are the recommendations of the consultant. You will find that in this report they have "put the finger on the wound" [Arabic expression to say that they could precise and identify what constitutes a weakness and a challenge for the project to be maintained.]. There are lots of things where we failed. For instance, here they mention the raise in the cost of living, they started to have claims. They suggested an MOU, we did not take it seriously. Another example of conflicts the companies remuneration, the public institution never pays on time, there s always a delay in this. This has to be solved. Another example: agreement with DSP on year 3 KPI targets, we also had a delay in this. When companies start</p>	<p>EdL administrative and human resources challenges</p> <p>lot of decisions and authorizations to be given by the head of divisions in each geographical area SPs are frustrated, impossible to administer a project with everyone</p> <p>head of divisions have signatures and authority</p> <p>Scope of services clarifying the roles</p> <p>Agreeing on the KPIs of the next year</p> <p>EDL weakness in terms of data management</p> <p>We have a chaos here</p> <p>Quarterly reports detailing the activities, cnstraints and challenges of the DSP</p> <p>Project's failures</p> <p>Public institutions never pay on time</p> <p>If companies start talking about their problems they would not finish private companies take advantage of these weaknesses in the management practices of the public sector to make</p>
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<p>talking about the problems, they would not finish. But at the same time we suffered from strikes, which was causing delays. But the private companies take advantage of these weaknesses in the management practices of the public sector, this is my conviction. They take advantage of this to make claims and to accuse the public sector of failing. We are not as bad as they are claiming. But it is not our fault! Sometimes they ask us for help. But they are better than us in terms of planning and organization. We do not have these facilities, and not the proper equipment for this. Our workplace is weak and we have lots of shortages.</p> <p>Q: These conflicts are everywhere; there is often an underperformance at the level of public administrations in Lebanon.</p> <p>A: take this example “Accelerate the provision for the DSP approval”, we are causing them delays, the overall duration of the contract is 4 years, we cannot have delays in each quarter. This will accumulate delays with times, so we have penalized the company for many quarters. One day KVA had a complaint: they have presented an estimation of their initial investment for the 4 years to the amount of 200millions LBP, expecting to have a profit in return. When the EDL have delays in decisions, this amount will not be spent entirely as expected, therefore the profit expected based on the initial investment will not be reached as well. He will not be able to accomplish projects, install AMIs...therefore will not spend the entire expenses and will not realize the estimated profit. The initial investment for the DSP: premises, warehouses, equipment, cars, labor... So they mentioned the loss of profit! Which is logical and makes total sense.</p> <p>On another hand: correction of invoices, based on numbers provided by the DSP. Everything is inter-related and very complex! This is interesting, quarter 14, which is mid-2015. Then at the end of the report you have the recommendations and challenges. NEEDS did a great job. But we had a conflict with them, and they left.[...interruption...] When you read it you can find many interesting things. For the KPI calculation I advise you to go to BUS, they are very good at this. [...] We are always late in setting targets...But at the end of each year we make a kind of reconciliation. [...]</p>	<p>claims and to accuse the public sector of failing</p> <p>EDL is causing project delays</p> <p>EDL delays may cause delays in project activities and investments</p> <p>Inability to accomplish tasks planned and realize estimated profit</p> <p>Everything is complex</p> <p>NEEDS did a great job</p> <p>Consultancy left the project</p>
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APPENDIX E – EXTRACT OF CODING GRID – (PPP legislation and emergence of a regulating body – Codes & Verbatim)

Source Type	Ref	1st-Order codes / Verbatim / Extract from existing material	2nd-order codes	Aggregate dimensions
Interview	18	Foreign investors need to have a PPP mechanism so they can be secured	Attracting credible private investors	(1) Need for PPPs regulation
Interview	18	International partnerships are sophisticated	Attracting credible private investors	(1) Need for PPPs regulation
Interview	18	Local firms do not have enough expertise	Attracting credible private investors	(1) Need for PPPs regulation
Interview	18	PPP financing: it is important to be listed in order to be credible	Attracting credible private investors	(1) Need for PPPs regulation
Interview	18	Banks are conservative, they ask to secure equipments, lands, buildings and are concerned with cashflows	Attracting credible private investors	(1) Need for PPPs regulation
Interview	18	We encourage corporate finance and foreign investors because of the more favorable financing conditions they have and their expertise	Attracting credible private investors	(1) Need for PPPs regulation
Interview	18	Energy efficiencies, technologies and green building are encouraged and subsidized by the central bank	Attracting credible private investors	(1) Need for PPPs regulation
Interview	2	EDL desperately needs PPP	Attracting credible private investors	(1) Need for PPPs regulation
Interview	2	Lebanese financial institutions have liquidity to invest in PPPs	Attracting credible private investors	(1) Need for PPPs regulation
Interview	2	Private sector complaining about political interferences in the procurement process which is wrecked	Attracting credible private investors	(1) Need for PPPs regulation
Interview	2	Private sector does not trust line ministries, neither HCP nor any other governmental institution in handling procurement responsibility.	Attracting credible private investors	(1) Need for PPPs regulation
Interview	2	Private sector only trusts the Central Bank	Attracting credible private investors	(1) Need for PPPs regulation
Interview	4	Partnership identity and need	Attracting credible private investors	(1) Need for PPPs regulation
Interview	27	Getting engaged in PPP projects under PPP law	Attracting credible private investors	(1) Need for PPPs regulation
Interview	18	4-years BOT contract is weird and is similar to a management contract than a PPP	Prevailing practices	(1) Need for PPPs regulation
Interview	18	Concessions are popular because of their simplicity	Prevailing practices	(1) Need for PPPs regulation
Interview	18	HCP empowerment, before they were not aware of the deals taking place	Prevailing practices	(1) Need for PPPs regulation
Interview	1	Limited roles of the HCP in projects privatization	Prevailing practices	(1) Need for PPPs regulation
Interview	1	Management is done at the ministries level	Prevailing practices	(1) Need for PPPs regulation
Interview	1	HCP role limited to advisory/observation	Prevailing practices	(1) Need for PPPs regulation
Interview	2	Few of the existing projects present the characteristics of PPPs	Prevailing practices	(1) Need for PPPs regulation
Interview	21	Challenges in Lebanon: no PPP law, laws governing public procurement are obsolete and divers	Prevailing practices	(1) Need for PPPs regulation
Interview	30	Deficiencies in specifications and tendering procurement in previous PPP-like projects	Prevailing practices	(1) Need for PPPs regulation
Interview	1	Failed past projects	Prevailing practices	(1) Need for PPPs regulation
Interview	15	Obsolete and heterogenous set of laws	Prevailing practices	(1) Need for PPPs regulation
Interview	21	WB study on Benchmarking PPP procurement	rallying international support	(1) Need for PPPs regulation
EVENT	1	Paris I, II , III, CEDRE and CIP	rallying international support	(1) Need for PPPs regulation
Interview	1	Advisory services are outsourced by HCP to technical and legal advisors	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	1	Setting framework for PPP projects procurement	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	2	World Bank assisting Lebanon in regulating PPPs	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	2	HCP are trying to minimize centralization and implement more transparency	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	2	No unique framework can be applied to all developing countries	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	2	The diagnosis is to give the government a kind of action plan that addresses its unique challenges	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	2	No PPP framework is the same in every country	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	21	PPP Law in the making since 2010	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	21	Concerns of international organizations: transparency, publications, justifying the rejection of bidders...	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	21	Doubts around ministries willingness to cooperate and participate in WB studies	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	30	Government formation delay	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	30	More transparency and involvement of multiple stakeholders in PPP procurement	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	30	Accumulation of knowledge and experience at the heart of the HCP	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	30	More comfort to the investors	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	30	Absence of grievance redress mechanism	Legislation process and emergence of regulating body	(2) Emergence of PPP regulatory framework
Interview	2	Attracting projects is a challenge	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	2	No PPP experience in the Lebanese market	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework

Interview	2	Need to coordinate with line ministries because they have the projects	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	21	Financing, monitoring and many other aspects of the project are not addressed by the law.	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	21	Focus on the PPP procurement process which takes too long, although the needs are imminent	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	21	No precisions about the implementation, the right of the government to continuously monitor...	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	21	Articles are general, lack of precision at many levels	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	26	Projects entrusted to HCP	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	26	Projects in the pipeline for feasibility study	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	26	PPP unit role: to coordinate with consultants	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	26	PPP Unit understaffed, advisors are very engaged	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	26	Trainings needs to be focused on selected projects	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	26	Role of PPP unit focused on the procurement phase	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	30	WB Financing mechanism for PPPs at the municipalities level	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	30	World Bank program to support municipalities engaging in PPP projects (financing and know-how)	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	30	World Bank is the guarantee for private sector payment	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	30	HCP is understaffed	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	15	Little awareness about the PPP law	PPP law implementation and capacity building	(2) Emergence of PPP regulatory framework
Interview	18	Need for a PPP Law but ministers are reluctant in order not to lose power over PPP projects	political actors opposing PPP law	(3) Political power game
Interview	18	Line ministers are involved in projects selection according to the law	political actors opposing PPP law	(3) Political power game
Interview	1	PPP law draft and lobbying to pass it	political actors opposing PPP law	(3) Political power game
Interview	1	PPP law draft since 2007 under discussion with parliamentary committee	political actors opposing PPP law	(3) Political power game
Interview	2	Political challenges limiting real improvements in PPP legislation	political actors opposing PPP law	(3) Political power game
Interview	2	Line ministries are skeptical	political actors opposing PPP law	(3) Political power game
Interview	2	Line ministries do not want to delegate or lose control	political actors opposing PPP law	(3) Political power game
Interview	2	PPP law centralizes lot of responsibilities within the HCP taking them away from line ministries	political actors opposing PPP law	(3) Political power game
Interview	30	No coordination with line ministries during law elaboration	political actors opposing PPP law	(3) Political power game
Interview	18	Not knowing about PPPs done at the MoEW because of political considerations	political actors reluctant in applying PPP law	(3) Political power game
Interview	1	Ministers working independently from HCP	political actors reluctant in applying PPP law	(3) Political power game
Interview	1	Ministers working on PPP projects independently from HCP	political actors reluctant in applying PPP law	(3) Political power game
Interview	2	Line ministries do not want to work with HCP	political actors reluctant in applying PPP law	(3) Political power game
Interview	2	Need to have a law enforcing line ministries to work with HCP	political actors reluctant in applying PPP law	(3) Political power game
Interview	21	Not sure about EDL transparency and availability of details on the DSP project	political actors reluctant in applying PPP law	(3) Political power game
Interview	21	This project is very controversial	political actors reluctant in applying PPP law	(3) Political power game
Interview	21	No incentive or obligation for municipalities or public institutions to apply the law or do a PPP under HCP	political actors reluctant in applying PPP law	(3) Political power game
Interview	26	Non-cooperation from MoF	political actors reluctant in applying PPP law	(3) Political power game
Interview	26	Reluctance of MoE in cooperating with HCP	political actors reluctant in applying PPP law	(3) Political power game
Interview	26	Transparency issues in procurement process	political actors reluctant in applying PPP law	(3) Political power game
Interview	26	Law is not enforced on ministries	political actors reluctant in applying PPP law	(3) Political power game
Interview	30	Line ministries showing reluctance in collaboration with PPP unit	political actors reluctant in applying PPP law	(3) Political power game
Interview	30	Political considerations and power centralization	political actors reluctant in applying PPP law	(3) Political power game
Interview	30	Constitutional rights allowing ministries to do PPP	political actors reluctant in applying PPP law	(3) Political power game
Interview	30	Conflict of authorities induced by the enacted PPP law	political actors reluctant in applying PPP law	(3) Political power game
Interview	19	DSP has nothing to do with PPP entity and law	political actors reluctant in applying PPP law	(3) Political power game
Interview	30	Resignation of the Secretary General	political actors reluctant in applying PPP law	(4) Development of PPP as collaboration
Interview	30	Slow down and risk of freezing in HCP activities	Slow-down and activity suspension	(4) Development of PPP as collaboration
Interview	30	Pipeline of projects on the pre-feasibility stage	Slow-down and activity suspension	(4) Development of PPP as collaboration
Interview	30	Pipeline of projects on the pre-feasibility stage	Slow-down and activity suspension	(4) Development of PPP as collaboration
Interview	30	Objectives and limits of the law	Slow-down and activity suspension	(4) Development of PPP as collaboration

APPENDIX F – EXTRACT OF CODING GRID – (Crafting a PPP for energy distribution – Codes & Verbatim of dimensions 1, 2 and 3)

Source Type	Ref	1st-Order codes / Verbatim / Extract from existing material	2nd-order codes	Aggregate dimensions (final)
Interview	6	Lack of computer literacy at EDL employees and extensive training provided to public workers	Sector's administrative and human resources challenges	(1) Need for technical and administrative reform
Interview	6	People failing to adhere to health and safety regulations and not aware of its importance	Sector's administrative and human resources challenges	(1) Need for technical and administrative reform
Interview	4	EdL employees are not young	Sector's administrative and human resources challenges	(1) Need for technical and administrative reform
Interview	4	Fresh graduates are not interested in working at EdL	Sector's administrative and human resources challenges	(1) Need for technical and administrative reform
Interview	4	Recruitment at EdL is based on 'wasta'	Sector's administrative and human resources challenges	(1) Need for technical and administrative reform
Interview	4	EDL weakness in terms of data management	Sector's technical and financial deficiencies	(1) Need for technical and administrative reform
Interview	4	We have a chaos here	Sector's technical and financial deficiencies	(1) Need for technical and administrative reform
Interview	6	project triggers and reform of the energy sector	Sector's technical and financial deficiencies	(1) Need for technical and administrative reform
Interview	6	technical and non-technical losses	Sector's technical and financial deficiencies	(1) Need for technical and administrative reform
Interview	6	Project as part of the energy sector policy paper	Sector's technical and financial deficiencies	(1) Need for technical and administrative reform
Interview	6	Obsolete technology used at EDL	Sector's technical and financial deficiencies	(1) Need for technical and administrative reform
Interview	6	Studies on how to reduce technical losses	Sector's technical and financial deficiencies	(1) Need for technical and administrative reform
Interview	4	Each SP is qualified in his own way	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	4	SPs are technologically advanced	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	6	15 expat from ERDF and ATKearney assisted the project and provided the know-how	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	6	Creation of a technical facility for training "centre d'excellence"	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	6	Integration of daily workers and creating a sense of commitment as a great social achievement	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	6	Health and safety concerns handled by BUS	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	6	Cultural, social, technical and integrity achievements	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	6	Reducing widespread bribery and corruption practices	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	7	Smart meters as the innovative aspect of the project and a new concept in Lebanon an innovation	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	22	Project design and objectives: smart meters at the heart of the project	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	22	Bringing in the international experience into the Lebanese market	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	22	Bringing in international standards and experiences to Lebanon	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	22	Necessity to install smart meters to reduce losses	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	22	Local companies are familiar with national context	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	27	Benefits for daily workers to integrate DSP	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	27	Being fair and empathic towards daily workers	Addressing technical, financial and human capital issues	(2) framing partnership design
Interview	4	Project management done by a committee (PM)	Contract design	(2) framing partnership design
Interview	4	Service providers allocated to regions	Contract design	(2) framing partnership design
Interview	4	Scope of services clarifying the roles	Contract design	(2) framing partnership design
Interview	4	Agreeing on the KPIs of the next year	Contract design	(2) framing partnership design
Interview	4	Quarterly reports detailing the activities, constraints and challenges of the DSP	Contract design	(2) framing partnership design
Interview	5	American partner to assist in the contract design	Contract design	(2) framing partnership design
Interview	5	Activities divided into services and engineering	Contract design	(2) framing partnership design
Interview	6	The project is important but very controversial	Contract design	(2) framing partnership design
Interview	6	We consider this as a first PPP experience in Lebanon	Contract design	(2) framing partnership design
Interview	6	Studies for preparing and implementing the project.	Contract design	(2) framing partnership design
Interview	22	Strategic project and decisions should be taken at the national level	Contract design	(2) framing partnership design
Interview	22	The project looks ideal in its design	Contract design	(2) framing partnership design
Interview	22	Technical assistance by international companies	Contract design	(2) framing partnership design
Contract document			Contract design	(2) framing partnership design
Interview	4	Compensation calculation for the private companies based on KPIs	Monitoring and evaluating performance	(2) framing partnership design
Interview	4	Quarterly evaluation and invoicing of activities accomplished	Monitoring and evaluating performance	(2) framing partnership design
Interview	4	Performance monitoring and measurement as set by the contract	Monitoring and evaluating performance	(2) framing partnership design
Interview	5	Performance-based contract	Monitoring and evaluating performance	(2) framing partnership design

Interview	5	KPIs being the main pillar of the contract	Monitoring and evaluating performance	(2) framing partnership design
Interview	5	Private sector performing under the monitoring of public sector	Monitoring and evaluating performance	(2) framing partnership design
Interview	5	Incentive or penalization	Monitoring and evaluating performance	(2) framing partnership design
Interview	5	Setting yearly targets	Monitoring and evaluating performance	(2) framing partnership design
Interview	5	Setting targets and baselines for coming year based on performance of previous year	Monitoring and evaluating performance	(2) framing partnership design
Interview	5	KPIs are the mirror of the quality	Monitoring and evaluating performance	(2) framing partnership design
Interview	5	KPIs are technically oriented	Monitoring and evaluating performance	(2) framing partnership design
Interview	7	KPIs in PPPs imply clear responsibilities for private partners accountability	Monitoring and evaluating performance	(2) framing partnership design
Interview	6	Daily workers not taking part in strikes	Obstacles and rising tension	(3) Resisting private participation
Interview	6	Old-school public employees (fear, resistance to change)	Obstacles and rising tension	(3) Resisting private participation
Interview	15	Different levels of skills and competencies among daily workers	Obstacles and rising tension	(3) Resisting private participation
Interview	15	Political considerations among daily workers	Obstacles and rising tension	(3) Resisting private participation
Interview	15	Overstaffing from daily workers hiring	Obstacles and rising tension	(3) Resisting private participation
Interview	27	DSP temporary solution for daily workers waiting for a political compromise and a permanent solution	Obstacles and rising tension	(3) Resisting private participation
Interview	27	Daily workers perceived DSP as a way to kick them out	Obstacles and rising tension	(3) Resisting private participation
Interview	27	Forcing daily workers into DSP to solve (unregulated) overstaffing issues	Obstacles and rising tension	(3) Resisting private participation
Interview	27	Obligation to integrate excessive number of daily workers	Obstacles and rising tension	(3) Resisting private participation
Interview	27	Fear from private participation	Obstacles and rising tension	(3) Resisting private participation
Interview	27	For daily workers, public employment is more appealing than private	Obstacles and rising tension	(3) Resisting private participation
Interview	27	Social movement, strikes and EDL headquarters shutdown	Obstacles and rising tension	(3) Resisting private participation
Interview	11	Blocks and strikes	Obstacles and rising tension	(3) Resisting private participation

EXECUTIVE SUMMARY

The Distribution Service Provider Project is in its final quarter of implementation, as per the contractual Time for Completion of 48 months stipulated in the Contract, whereby the project is set to expire on April 1, 2016. The DSP Project has experienced numerous internal and external elements which have impacted its progress and the project's ability to reach its goals. With the objective to resolve all major issues in the Project and provide the needed visibility for moving the project forward, a breakthrough was achieved in the agreement reached by the [redacted] on November 10, 2015, ratified in the [redacted] for resolving all major issues of the project by January 31, 2016.

This report provides a full assessment of the DSP Project, as stipulated in the aforementioned Road Map, presents project achievements, physical and financial progress made, outstanding issues raised by the DSP's for resolution, in addition to presenting the possible options for moving forward with the project against the proposed scenarios submitted by the DSP's. In terms of achievements, the DSP's have reached significant levels of achievement in some tracks such as Mobilization, Network Survey, and Construction. However, for other tracks, mainly AMI activities, negligible progress has been achieved in terms of implementation at the customer metering level although comprehensive preparatory and testing progress over 25 sites is completed and deployment of MV Feeder meters is mostly completed.

With regards to DSP achieved physical progress (BoQ amounts vs. contract price), [redacted] has achieved [redacted] progress to date, whereas [redacted] progress vs. elapsed project time, and [redacted] progress vs. elapsed project time. However, in terms of PM approved financial progress, [redacted] of the contract price vs. the same elapsed times above. An overall difference of [redacted] between the first submitted DSP invoices and approved amounts resulted from the detailed review of DSP submitted QPRs by the PM, with the purpose of safeguarding EIDL interests in the project based on strict compliance to project contract terms.

In terms of moving forward with the project, four possible options have been identified and detailed in Section 3 of the report. These options are:

- (1) Project Closure within the Contractual Time Frame [redacted]
- (2) Project Extension till [redacted]
- (3) Project Extension within the Original Contract Price,
- (4) Project Extension for Two Years in order to complete the project objectives.

In turn, the DSP's submitted their proposed scenarios within the Executive Detailed Plans, whereby these scenarios were also assessed in relation to the possible options. DSP's submitted various scenarios that corresponded to the possible options. [redacted] submitted 4 scenarios related to Options 1, 3 (2 scenarios) and 4. [redacted] submitted 2 scenarios related to Options 1 and 4; whereas [redacted] submitted 3 scenarios related to Options 1, 2, and 4.

Assessment of DSP proposed scenarios led to the conclusion that all scenarios submitted by the DSP's related to Options 1, 2 and 3 will not lead to the completion of project terms and objectives. The proposed scenarios for Option 4 require an extension for two years, including additional costs exceeding the contract price. Moreover, Option 2 is not considered a viable option since the approval of [redacted] was based on the rescheduling of the Time for Completion of all services as stipulated under [redacted], which did not occur mainly due to the second strike event in August [redacted] and is thus not contractually binding to [redacted]. Moreover, Option 3 was proposed [redacted], as stated in [redacted] letter dated [redacted] without any supporting evidence, in reference to the Contract terms. Thus, only Options 1 and 4 are eligible for further consideration.

With respect to the [redacted] of [redacted] several actions have been undertaken by PM and DSP to resolve these issues. As submitted in the Executive Detailed Plans, [redacted] whereby 1 has been resolved; [redacted] whereby 1 has been resolved; [redacted] whereby 2 have been resolved.

This Assessment Report presents the overall status of the project from a technical, financial and contractual perspective, while depicting the project's achievements, progress of activities, outstanding issues, and the possible options to be considered for moving the project forward in terms of visibility and viability of the DSP's' proposed scenarios. Further to the analyses and assessments presented in this report, it can be concluded that:

1. The DSP's [redacted] of the time frame.
2. More than [redacted] of which only 4 have been resolved since the inception of the Road Map in [redacted]
3. Options 2 and 3 with limited time extension will not lead to the completion of a number of project tracks or to the full implementation of the core project component [redacted]
4. Option 4 to extend the project that may lead to achieving project objectives, including implementation of the AMI metering, [redacted] price and resolving 24 outstanding issues as reported till date by the DSP's. The additional cost is associated with the additional services and construction projects needed to synchronize all project activities, and to assure compliance to project KPI's.

APPENDIX H – MEMORANDUM OF UNDERSTANDING 1 (MOU-1)

10/14/2010

MEMORANDUM OF UNDERSTANDING 1 (MOU-1)
DATE: 10/14/2010

The purpose of this Memorandum of Understanding (MOU) is to establish the terms and conditions for the use of the [redacted] system by the [redacted] and the [redacted].

The [redacted] and the [redacted] agree to the following terms and conditions:

ARTICLE I - PURPOSE AND SCOPE

The purpose of this MOU is to establish the terms and conditions for the use of the [redacted] system by the [redacted] and the [redacted].

ARTICLE II - DEFINITIONS

The following definitions apply to this MOU:

- [redacted]
- [redacted]
- [redacted]

ARTICLE III - SCOPE OF USE

The [redacted] system shall be used for the following purposes:

- [redacted]
- [redacted]
- [redacted]

ARTICLE IV - SECURITY AND ACCESS

The [redacted] system shall be secured in accordance with the following requirements:

- [redacted]
- [redacted]
- [redacted]

ARTICLE V - DATA RETENTION

The [redacted] system shall retain data for the following periods:

- [redacted]
- [redacted]
- [redacted]

ARTICLE VI - DISPUTE RESOLUTION

Any dispute arising out of this MOU shall be resolved through the following process:

- [redacted]
- [redacted]
- [redacted]

ARTICLE VII - MISCELLANEOUS

This MOU shall be governed by the following provisions:

- [redacted]
- [redacted]
- [redacted]

10/14/2010

MEMORANDUM OF UNDERSTANDING 1 (MOU-1)
DATE: 10/14/2010

The purpose of this Memorandum of Understanding (MOU) is to establish the terms and conditions for the use of the [redacted] system by the [redacted] and the [redacted].

The [redacted] and the [redacted] agree to the following terms and conditions:

ARTICLE I - PURPOSE AND SCOPE

The purpose of this MOU is to establish the terms and conditions for the use of the [redacted] system by the [redacted] and the [redacted].

ARTICLE II - DEFINITIONS

The following definitions apply to this MOU:

- [redacted]
- [redacted]
- [redacted]

ARTICLE III - SCOPE OF USE

The [redacted] system shall be used for the following purposes:

- [redacted]
- [redacted]
- [redacted]

ARTICLE IV - SECURITY AND ACCESS

The [redacted] system shall be secured in accordance with the following requirements:

- [redacted]
- [redacted]
- [redacted]

ARTICLE V - DATA RETENTION

The [redacted] system shall retain data for the following periods:

- [redacted]
- [redacted]
- [redacted]

ARTICLE VI - DISPUTE RESOLUTION

Any dispute arising out of this MOU shall be resolved through the following process:

- [redacted]
- [redacted]
- [redacted]

ARTICLE VII - MISCELLANEOUS

This MOU shall be governed by the following provisions:

- [redacted]
- [redacted]
- [redacted]

APPENDIX I – MEMORANDUM OF UNDERSTANDING 2 (MOU-2)

MEMORANDUM OF UNDERSTANDING
ARTICLE 1. PURPOSE AND SCOPE
1.1 PURPOSE
 The purpose of this Memorandum of Understanding is to establish a framework for the cooperation and collaboration between the University of Toronto and the Government of Ontario in the area of research and innovation in the field of [redacted].

1.2 SCOPE
 This Memorandum of Understanding applies to the [redacted] and [redacted] of the University of Toronto and the Government of Ontario.

1.3 DEFINITIONS
 The following definitions apply to this Memorandum of Understanding:
 "University" means the University of Toronto;
 "Government" means the Government of Ontario;
 "Parties" means the University and the Government.

1.4 GOVERNANCE
 This Memorandum of Understanding shall be governed by the laws of the Province of Ontario.

1.5 TERM AND TERMINATION
 This Memorandum of Understanding shall remain in effect for a period of [redacted] years, unless terminated earlier in writing by either Party.

1.6 ENTIRE AGREEMENT
 This Memorandum of Understanding constitutes the entire agreement between the Parties regarding the subject matter hereof.

1.7 SIGNATURES
 This Memorandum of Understanding has been signed and accepted by the authorized representatives of the Parties as of this day of [redacted], 20[redacted].

ARTICLE 2. FINANCIAL ARRANGEMENTS
 The Government of Ontario shall provide funding to the University of Toronto for the [redacted] of the [redacted] program. The funding shall be provided in the form of [redacted] grants and [redacted] support.

ARTICLE 3. INTELLECTUAL PROPERTY
 All intellectual property developed by the University of Toronto as a result of the [redacted] program shall be owned by the University of Toronto. The Government of Ontario shall have a non-exclusive license to use such intellectual property for [redacted] purposes.

ARTICLE 4. CONFIDENTIALITY
 The Parties agree to maintain the confidentiality of all information disclosed in connection with this Memorandum of Understanding, except where disclosure is required by law.

ARTICLE 5. DISPUTE RESOLUTION
 Any dispute arising out of or in connection with this Memorandum of Understanding shall be resolved by arbitration in accordance with the rules of the [redacted] Arbitration Institute.

ARTICLE 6. MISCELLANEOUS
 This Memorandum of Understanding shall be executed in duplicate, with each Party retaining one copy. All copies shall be deemed to be original and shall have the same legal effect.

ARTICLE 7. SIGNATURES
 This Memorandum of Understanding has been signed and accepted by the authorized representatives of the Parties as of this day of [redacted], 20[redacted].

ARTICLE 8. CONTACT INFORMATION
 The contact information for the Parties is as follows:
 University of Toronto: [redacted]
 Government of Ontario: [redacted]

Name	Title/Position	Signature	Organization
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

APPENDIX L – INACCESSIBLE AREAS TO DSP PROJECT

In this short paragraph we briefly explain the reasons why some regions on the Lebanese territory were labelled as “inaccessible area” by the project stakeholders.

Lebanon has known a long history of weak governments and many political analysts have advanced that ineffective national institutions are a direct result of the weak state interference in some regions on the Lebanese territory where ruling elites and political parties have the largest sectarian groups and a great political power and influence. Within these regions the sovereignty of the state is weakened. A focus on Hezbollah, the Shia organization that has gradually become powerful in military, social and political terms in the last two decades, brings insight on how government sovereignty is challenged in those regions where the majority of Hezbollah partisans live.

According to CIA 2018 estimated demographic data, Shia constitute 30.5% of the Lebanese population and are concentrated in the southern Lebanon, the Bekaa Valley and Beirut suburbs, where Hezbollah has established educational, healthcare and social institutions, which makes its role in those areas much more important than the one of local public administrations. Labelled by political analysts as ‘a state within a state’, Hezbollah enjoys a great domestic and military autonomy within the Lebanese state. In addition to its social role the Shia, pro-Iranian military party, considered to be one of the most powerful non-state armed forces worldwide, possess warehouses of weaponry on the Lebanese territory, and runs a performant and expanded military communication network that covers most of Hezbollah’s areas of operation. This communication architecture and network have increasingly evolved into sophisticated ones to respond to the needs of transmitting great volumes of information securely across a growing organization that spans several countries in the region. Naturally, this network is designed to be highly secured and attack-resistant, which makes the access to infrastructure in these areas largely restricted to Hezbollah supporters; even government authorities are often “banned” from this access.

In regards to the DSP, the deployment of a great part of its activities was made almost impossible in areas where Hezbollah has established its military and communication network. This was an obstacle even to preliminary activities at the preparatory stages of the project, namely the ‘Network Survey’ which could not be accomplished, ‘constructions activities’ which necessitate excavation works, and especially the installment of smart meters readers which were considered to be a potential threat to the communication network of Hezbollah.

The existence of ‘Inaccessible areas’ had a significant impact on the execution of DSP activities in concerned areas, mainly Lot 3, as well as on the relation between the SP in charge and the Owner/PM of the project.

Sources

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3. Early, B. R. (2006). "Larger than a party, yet smaller than a state": locating Hezbollah's place within Lebanon's state and society. *World Affairs*, 168(3), 115-12