THE PUBLIC-PRIVATE PARTNERSHIP (PPP) AS A MODE OF PROJECT FINANCING

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Abstract

This article aims to present the most common mode of project financing, namely the public-private partnership (PPP) with a focus on the Algerian case. The study shows that despites some limits of the PPP, it offers many advantages that allow this mode to be a successful project financing alternative, especially in developing countries such as Algeria, which is facing a critical economic situation.

Keywords*: project financing, public-private partnership, Algeria***.**

الملخص

يهدف هذا المقال إلى التعريف بالنمط الأكثر شيوعا لتمويل المشاريع الضخمة ألا و هو الشراكة بين القطاعين العام و الخاص مع التركيز على حالة الجزائر. تظهر الدراسة انه على رغم بعض سلبيات هذه الشراكة إلا أنها تحمل محاسن و ايجابيات التي تسمح لها أن تكون بديل ناجح فيما يخص تمويل المشاريع الضخمة خاصة في بلدان العالم الثالث كمثل الجزائر التي تواجه حاليا أوضاع اقتصادية حساسة.

الكلمات المفتاحية :تمويل المشاريع- شراكة القطاعين العام و الخاص- الجزائر.

INTRODUCTION

The important role of infrastructure, industry, mine, transportation, telecommunication, water, and other sectors in any economy and the peculiarity of their financing require a constant search for new means of fund-raising and their financing. The traditional source of funding have been for a long time based on the public sector, but because of the limits of this type of financing and the challenge of growing demand for better and new services that governments have to face, the public-private partnership (PPP) is considered as an attractive alternative that returns from beneficial to the public sector as well as the private sector.

Algeria, who faces a critical economic situation due to the drop in oil prices, has a project financing problem and it is in freeze of some projects. However, the use of PPP seems to be a good opportunity for Algeria that is looking for financing alternative and financing strategies. Thus, the purpose of this article is, through a descriptive approach, to present, in the first part of the paper, the PPP mode of project financing, its typology and economic theories that explained the main reasons of its use. The second part is related to the Algerian's PPP case study, with a focus on the first partnership (which was in the water sector), namely the SEAAL & Suez Environnement case.

I PROJECT FINANCING: THE CASE OF PUBLIC-PRIVATE PARTNERSHIP

I.1.Understanding project financing

Project financing had been presented by many authors, such as ***Nevitt & Fabozzi (2000)***, ***McMillen (2000)***, ***Yescombe (2002)***, ***Fight (2006)***, ***Finnerty (2007)***, ***Khan & Parra (2003)*** and ***Gatti (2013)***, and this was through different approaches and different context that ***Kayser (2013)*** identified in classified into four main areas of research: *(i)* Contractual arrangements and legal framework of project finance; *(ii)* Project risk measurement and project selection modes; *(iii)* Globalization and regulation of project development; and *(iv)* Projects under the Kyoto protocol and renewable energy projects.

For instance, ***Finnerty.J.D (2007)*** defines project financing as the raising of funds on a limited-recourse or nonrecourse basis to finance an economically separable capital investment project in which the providers of the funds look primarily to the cash flow from the project as the source of funds to service their loans and provide the return of and a return on their equity invested in the project. It is a tool which allows financing projects include pipelines, refineries, electric generating facilities, hydroelectric projects, dock facilities, mines toll roads, and mineral processing facilities. For ***Yescombe.E.R (2002),*** project finance is a method of raising long term debt financing for major projects through "financial engineering", based on lending against the cash flow generated by the project alone; it depends on a detailed evaluation of project's construction, operating and revenue risks, and their allocation between investors, lenders, and other parties through contractual and other arrangements.

From the above definitions and others (***Nevitt and Fabozzi, 2000; McMillen, 2000; Khan.M.F.Z and Parra.R.J, 2003; Fight.A, 2006; Gatti.S, 2013***), we note that there is no "standard project financing" since each deal has its own unique characteristics and the concept of "project financing" is based on some elements, namely: the financing of huge projects financing (infrastructures, mines, hydrocarbons ...), a long term projects, financial engineering, risk-taking, and looking to cash flows. ***Fight (2006***) presents two types of project financing:

- *Nonrecourse project financing:* it means that there is no recourse to the project sponsor's assets for the debts or liabilities of an individual project; and

- *Limited recourse project financing*: it means that there are limited obligations and responsibilities of the project sponsor.

It should also important to distinguish between *corporate financing* and project, and the main differences are presented in the table 1.

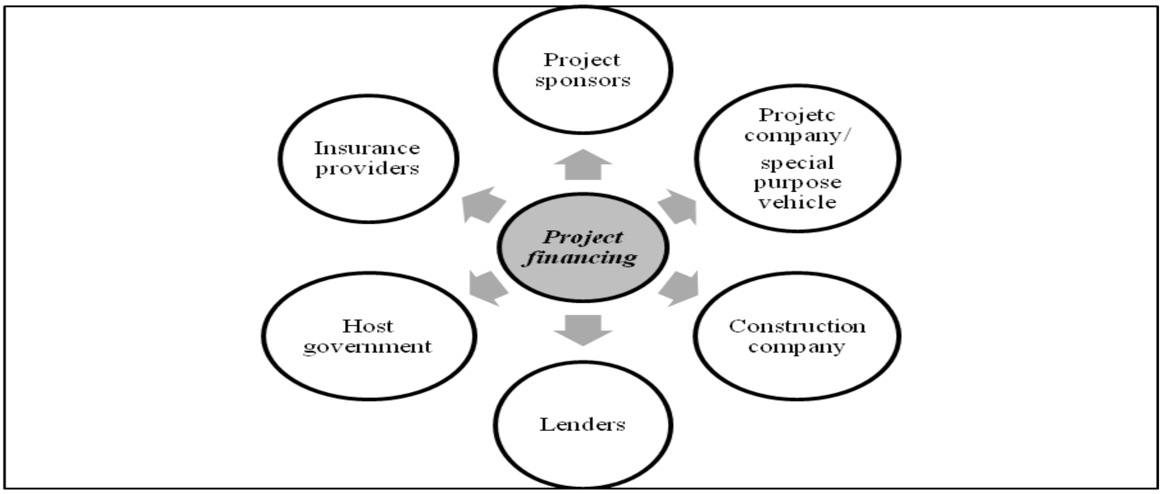
Table 1: Main differences between corporate financing and project financing

1.1. Factors	1.2. Corporate financing	1.3. Project financing
1.4. Guarantees for financing	1.5. Assets of the borrower (already-in-place firms)	1.6. Project assets
1.7. Effect on financial elasticity	1.8. Reduction of financial elasticity for the borrower	1.9. No or heavy reduced effect for sponsors
1.10. Accounting treatment	1.11. On-balance sheet	1.12. Off-balance sheet (the only effect will be either disbursement to subscribe equity in the SPV or for subordinated loans)
1.13. Main variables underlying the granting of financing	1.14. Customer relations 1.15. Solidity of balance sheet 1.16. Profitability	1.17. Future cash flows
1.18. Degree of leverage utilizable	1.19. Depends on effects on borrower(s balance sheet	1.20. Depends on cash flows generated by the project (leverage is usually much higher)

Source: Gatti Stepheno, (2013), "*Project finance in theory and practice: Designing, structuring and financing private and public projects*", Academic Press edition, London, UK; p 3.

The complexity of funding a large-scale project involves a fundraising with multiple entities. Many studies ***(Yescombe, 2002; Davis, 2005; Fernnety, 2006; Fight, 2006, Tan, 2007; …)*** give an overview of the principle parties that contribute to project financing and that we summarize in the figure 1.

Figure1: principles parties to a project financing



Source: Author from the above references.

I.2. The public-private partnership (PPP)

“Public-Private Partnership (PPP)”, is considered as the most common mode of project financing, and the ***OECD (2008)*** defines it as “an arrangement between government and one or more private sector partners (which may include the operators and the financiers) according to which the private partners deliver the service in such manner that the service delivery objective of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners.”

The public partners in a PPP are government entities, including ministries, departments, municipalities, or state-owned enterprises. The private partners can be local or international and may include businesses or investors which technical or financial expertise relevant to the project. PPP may also include nongovernment organizations 5NGOs) and/or community-based organizations (CBOs) who represent stakeholders directly affected by the project ***(Asia Development Bank, nd)***.

It is more common, nowadays that governments turn increasingly to the private sector for providing infrastructure services in energy and power, communication, transport and water sectors that ware formerly delivered by the public sector. The collaboration with the private public in developing and providing infrastructure services is based on several reasons, including ***United Nations, (2011)***:

- Lack of government funding;
- Increased efficiency in project delivery, and operation and management;
- Transfer of many project risks to the private sector;
- Availability of additional resources to meet the growing needs of investment in the sector; and
- Access to advanced technology (both hardware and software).

Properly executed planning and development of a project also allows better screening of options, and helps in deciding appropriate project structure and choice of technology consideration cost over the whole life cycle of the project.

I.3. PPP typologies

Several types of PPP models have emerged and vary according to the ownership of capital assets, the responsibility for investment, the assumption of risk, and the duration of contract. The classification of the PPP models is based, generally but not always, on increased involvement and assumption of risks by the private sector. Each model has many variants and a combination between them is possible, such as the BOT and lease. The table 2 presents a summary of the PPP models and their characteristics.

Table 2: Classification of PPP models

1.21. Broad category	1.22. Main variants	1.23. Ownership of capital assets	1.24. Responsibility of investment	1.25. Assumption of risk	1.26. Duration of contract (years)
1.27. Supply and management contract	1.28. Outsourcing	1.29. Public	1.30. Public	1.31. Public 1.32. Private /public	1.33. 1-3
	1.34. Maintenance management	1.35. Public	1.36. Public/ private	1.37. Public	1.38. 3-5
	1.39. Operational management	1.40. Public	1.41. Public	1.42. Private /public	1.43. 3-5
1.44. Turnkey	1.45.	1.46. Public	1.47. Public	1.48. Private /public	1.49. 1-3
1.50. Affermage/lease	1.51. Affermage	1.52. Public	1.53. Public	1.54. Private /public	1.55. 5-20
	1.56. Lease[1]	1.57. Public	1.58. Public	1.59. Private /public	1.60. 5-20
1.61. Concessions	1.62. Franchise	1.63. Public/ private	1.64. Private /public	1.65. Private /public	1.66. 3-10
	1.67. BOT[2]	1.68. Public/ private	1.69. Private /public	1.70. Private /public	1.71. 15-30
1.72. Private ownership of assets and PFI type	1.73. BOO/ DBFO	1.74. Private	1.75. Private	1.76. Private	1.77. Indefinite
	1.78. PFI[3]	1.79. Private /public	1.80. Private	1.81. Private /public	1.82. 10-20
	1.83. Divestiture	1.84. Private	1.85. Private	1.86. Private	1.87. Indefinite

Source: United Nations, (2011), "*A guidebook on Public-Private Partnership in infrastructure*", Economic and Social Commission for Asia and The Pacific (ESCAP), Bangkok-Thailand, p 5.

[1] Build-Lease-Transfer (BLT) is a variant

[2] Build -Operate-Transfer (BOT) has many other variants such Build-Transfer-Operate (BTO), Build-Own-Operate6Transfer (BOOT) and Build-Rehabilitate-Operate-Transfer (BROT).

[3] The Private Finance Initiative (PFI) model has many other names. In some cases, asset ownership may be transferred to, or retained by the public sector.

I.4. PPP theoretical foundation

Many theories tried to explain the use of the PPP and the main theoretical foundation of PPP may be summarized in three major approaches: transaction cost theory, agency theory, the, and the new public management theory ***(Maatala et.al, 2017; Yaya, 2005)***.

❖ **Transaction cost theory**

The PPP is a long-term contact and it is considered as an association and partnership agreement in which transaction cost is evoked to justify the fact that public organizations are inefficient because they are not able to minimize transaction costs (i.e. information, negotiation, contract enforcement) unlike private firms that, in addition to minimizing costs, realize economies of scale.

One of the arguments of the theory of transaction costs is that within public organizations, the rigidity of the structures, the decision-making process and the bureaucratic vicious circles impose a delegation of powers, which, due in particular imperfection of information and opportunistic behaviour of agents, expensive structures and costly monitory measures.

The heavy public projects realized in the PPP framework are, in their majority, marked by a high level of specificity. The concept of “specificity” is particularly important since it has a very substantial influence on transaction costs, but also on the nature of the product and technology that will be the subject of the transaction.

❖ **Agency theory**

PPP can be analyzed according to the agency theory because the partnership contract is a principal-agent relationship, the principal of which is the public partner and the agent is the private partner. The public partner is obliged to face a two-phase information asymmetry vis-à-vis private companies:

- The first, it faces a problem of " anti-selection " because of the difficulty of choosing the most successful companies; and
- The second concerns the shading of the private companies’ behaviour, which creates a problem of moral hazard (the public partner finds it difficult to determine whether the private partner puts all the efforts and the necessary means to succeed in offering a best service with the lowest cost possible.

Limited rationality and opportunism engender asymmetry of information between the public and the private parts of the contract and its sharing and transfer will entail costs. Also, to ensure the quality of the effort of his agent, the principal must establish an incentive system; a least expensive incentive system must then be chosen.

❖ **The new public management theory**

The New Public Management appears for many as one of the reforms having implicitly preceded and precipitated public-private partnerships. It goes from the idea that the modernization of the public administration, the improvement of the management of the public organizations until the reform of the State are processes that must be engaged in order to reconnect with efficiency and the elimination of the enormous deficits accumulated by the public services.

While New Public Management can be seen as a sort of response to the public finance crisis, it also advocates logic of efficiency and effectiveness of public organizations that involves the decentralization of responsibilities and resources and proposes a normative framework orienting the activities of all public enterprises towards results rather than procedures.

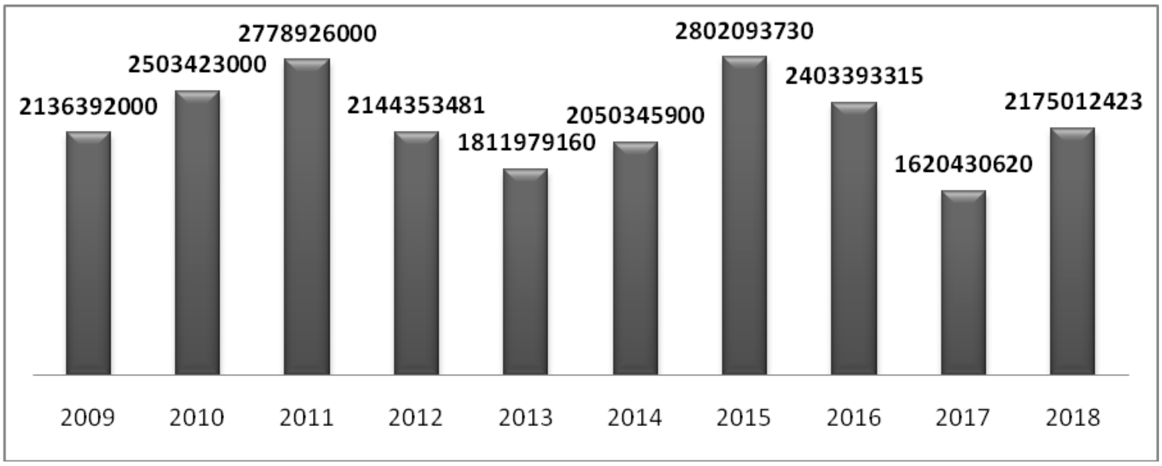
It should be noted that this new approach, in its principles, has greatly facilitated the emergence of public-private partnerships that make efficiency a dogma in the management of public affairs.

II THE ALGERIAN CASE STUDY

II.1. Project financing in Algeria: an overview

The downward trend in oil prices has had a major impact on producing and exporting countries, notably the annuitant countries like Algeria. In fact, this decline has pushed the Algerian government to lower its expenditure, including investment expenses (following the figures announced in the Official Journals), as well as a freeze on a number of projects, such as the extension of the Algiers metro and trams, and a referral to financing by the capital market of the extension of Algiers airport and the new port centre. Indeed, as it can be seen in the figure 2, the Algerian public investments have seen a significant decline since already 2012, which could be explained by, in the first place, a decline in the trade balance, despite an increase in 2015, qui which has resumed its decline since 2016. Thus, Public investment dropped by 22.38 % between 2015 and 2018, and a 34.22% from 2017 to 2018, which could be explained by the government strategy in terms of lowering of import expenditure.

Figure 2: Algerian public investments 2009-2018 (m.u: 1000 DZD)



Source: Author from Algerian Finance Law (2009-2018). In http://www.mf.gov.dz

This explains the need to consider financing alternatives to raise funds, especially to allocate funds for projects, and public-private partnership could seem like a motivating solution. The benefits of PPP in the case of Algeria can be summarized, according to ***Teldji (2015)***, as following:

- attract alternative sources of funding to the stats budget;
- put the dynamism of the private sector at the service of the public sector;

- better control of project implementation in terms of costs and deadlines;
- optimization of risk sharing between partners;
- spread of state capital expenditure over a long period; and
- sanctuary of operating expenses (by contracts).

II.2. PPP's legal and institutional framework

According to the Law/ Decree No. 207 (Presidential Decree No. 15-247): the legal entity of public law responsible for a public service may, unless otherwise provided by law, entrust its management to a delegate. The remuneration of the delegate is ensured substantially by the exploiting of the public service. Public service delegation may, depending on the level of delegation, risk taken by the delegate and control of the delegating authority, the form of concession, leasing, governance or management (art. 210).

Nevertheless, the Algeria's recourse to the public-private partnership is still very limited and this is seen in its legal and institutional framework. The Algerian PPP law and other applicable texts are[4]:

- Presidential Decree No. 15-247 of 2 Dhou el-Hidja 1436, corresponding to 16 September 2015 on the regulation of public contracts and public service delegations;
- Law No. 99-09 of 28 July 1999 on the control of energy;
- Law No. 02-01 of February 5, 2002, on Electricity and Public Distribution of Gas by Pipeline;
- Law No. 04-09 of 14 August 2004 on the promotion of renewable energies in the context of sustainable development;
- Executive Decree No. 13-424 of 18 December 2013: amending and supplementing Executive Decree No. 05-495 of 26 December 2005 concerning the energy audit of major energy-consuming establishments;
- Ministerial Decrees of February 02, 2014: fixing the guaranteed purchase rates for the production of electricity from installations using the photovoltaic industry and the conditions of their application;
- Ministerial Decrees of 02 February 2014: fixing the guaranteed purchase rates for the production of electricity from installations using the wind energy sector and the conditions of their application; and
- Law No. 2005-12 of 4 August 2005 on water.

However, they are waiting for the executive decree the following points: mode of award / choice of the private partner, project evaluation, negotiation and signing of the PPP contract, rights and obligations of the public partner, rights and obligations of the private partner, and right and obligations of both partners.

II.3. Presentation of the pilot case: SEAAL & Suez Environnement

Following the poor situation of the water distribution network in the capital Algiers, the authorities have decided to solve this problem of water supply, which has persisted for several years by launching a major modernization program for existing tools and facilities, and this in a short time to ensure rapid improvement. This initiative led the State to call on an operator with the necessary know-how to manage the project: *Suez Environnement*. A complete

[4] https://ppp.worldbank.org/public-private-partnership/ppp-legal-framework-snapshots-0

diagnosis on the state of the installations was carried out by the partners in order to propose appropriate solutions, to determine the means in financing and competences, to fix the deadlines to guarantee an improvement of the service as well as the living environment of the populations

The project was launched in October 2002, and was formalized in February 2003 by "*La Société Algérienne des Eaux (ADE)*" and "*l'Office National de l'Assainissement (ONA)*" on the one hand, and Suez Environnement on the other hand. The results allowed the ONA managers and the ADE to develop an action plan over a period of 5.5 years. One of the aspects of the implementation of this agreement was the creation of an Algerian public company of SPA type under Algerian law in 2006 called: *Société des Eaux et d'Assainissement d'Alger (SEAAL)*, in charge of the management of water and wastewater services throughout the Wilaya (department) of Algiers. The conclusion of the agreements between the project's stakeholders led to the signing of the first management contract in the form of PPP, which came into effect in February 2006.

After the satisfactory results of the first management contract of SEAAL 1 (2006-2011) in compliance with the business plan, the Algerian authorities and Suez Environnement have renewed the SEAAL 2 contract. The rate of access to drinking water in 2012 was 100% compared to 6% in 2006. The sanitation treatment capacity increased to 53% in 2012 compared to 6% in 2006. This management contract of the company SEAAL 2 has been concluded for a period of 5 years (2011-2016). It was provided for the support by Suez Environnement of the modernization of the water and sanitation services of the city of Algiers as well as the city of Tipaza for an amount expressed in cumulated turnover of 105 Million Euros. ***(Hadjar, 2014)***

CONCLUSION

The large scale and huge projects, i.e. project financing, such as infrastructure, transportation, telecommunication, and oil ..., require significant funding and expertise that the public sector alone cannot afford. Thereby, the public-private partnership (PPP) seems to be an appropriate alternative, which presents many advantages for the public partner as well as for the private partner. Thus, in this article, we tried to give an overview on the PPP, which is considered as a mode, among others, of project financing through giving a meaning of this concept, presenting its main typology and describing the major economic theories that explained the use of the PPP. We also tried to present the use of the PPP in Algeria, as a good alternative of project financing modes, especially during its current economic situation and context.

However, it is to note that despite the different PPP's advantages, there are some limits that need to be into consideration in the use of this mode of project financing, such as ***(United Nations, 2011)***:

- Not all projects are feasible (for various reasons: political, legal, commercial viability, etc.);
- The private sector may not take interest in a project due to perceived high risks or may lack technical, financial or managerial capacity to implement the project;
- A PPP project may be more costly unless additional costs (due to higher transaction and financing costs) can be off-set through efficiency gains;
- Change in operation and management control of an infrastructure asset through a PPP may not be sufficient to improve its economic performance unless other necessary conditions are met; and
- Often, the success of PPP depends on regulatory efficiency.

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