

## Evaluation of public-private partnership (PPP) projects in the Algerian context: An overview of seven Joint Ventures active in particular sectors

Nour El-houda BOUHEROUR<sup>1,\*</sup>, Mohamed Abderraouf ZEBOUCHI<sup>2</sup>

<sup>1</sup> The School of High Commercial Studies, EHEC Algiers (Algeria)  
([bhr.nour@gmail.com](mailto:bhr.nour@gmail.com))

<sup>2</sup> The School of High Commercial Studies, EHEC Algiers (Algeria)  
([ma.zebouchi@hec.dz](mailto:ma.zebouchi@hec.dz))

Received: 15/01/2022 ; Revised: 15/01/2022 ; Accepted: 26/02/2022

**Summary:** In the last two decades, the Algerian government has shown a remarkable interest for public-private partnership (PPP) projects. This paper aims to highlight Joint Venture (JV) arrangements in the context of PPP mechanism operating in the mechanical industry, urban transport, pharmaceutical and gas production sectors. Face-to-face semi structured interviews with practitioners from the public sector were conducted. The results show that despite the instability of the political, financial, regulatory and market situation, most of the JV has recorded positive results regarding technology and know-how transfer or even the ability to penetrate the international markets through exports. Because of the different perception of PPP arrangements in the view of public and private practitioners, more research should be conducted to further investigate the point of view of the private actors. It should be noted also that through this article we intend to conduct qualitative approach, in depth quantitative study evaluating the critical success factors of more Joint Ventures might be subject of a separate article.

**Keywords:** Public-private partnership; Joint Ventures; public sector; technology transfer; know-how.

**Jel Classification Codes :** O33 ; O34 ; F230 ; L16 ; L65 ;.

\* Nour El-houda BOUHEROUR([bhr.nour@gmail.com](mailto:bhr.nour@gmail.com))

### I-Introduction:

Industry is a colossal driver in job creation and the dissemination of innovation; it provides a boost to the nation's competitiveness both internationally and nationally. The potentialities and capacities of the Algerian industry are very important, especially in terms of its natural resources. Algeria has paid particular attention to the industrial sector, the development plans launched since the 1970s bear witness to this, the aim is to build a national industrial base that is independent and enables economic development<sup>1</sup>. As reported by the ministry of industry, from the first years of the nation's independence, the country gave priority to the establishment of a diversified industrial base because the production was exclusively intended for the domestic market. Indeed, in 2007, an industrial strategy has been implemented. The latter aimed endogenous growth, where the goal is to acquire market shares in the production of goods and services with high added value, The Priority Branches are six: industries relative to iron and steel, metallurgy, electrical industries, mechanics and metal constructions, the organic chemistry industry, fertilizers, mineral chemistry, pharmaceutical industries, agro-food industries<sup>2</sup>. Within the framework of this industrial strategy, four main areas were the center of the government's concerns:

- The upgrading of enterprises;
- Innovation, development of human resources;

- The promotion and anchoring of foreign direct investment in the industrial field; and
- The dissemination of their external effects for the benefit of national companies.

Other majors sectors that are supported by the government, namely, transport sector. In fact, a Government approach translated into a 2020-2024 action plan, pays particular attention to the use of digital technologies practically at all levels, the objective is to improve the governance of the central administration and management of the transport sectors, to facilitate and simplify the daily life of citizens, and to stimulate, encourage and promote innovation in the transport sectors, in particular urban transport<sup>3</sup>.

In addition, the pharmaceutical industry, presented by the leader SAIDAL, has taken positive steps in terms of innovation and development strategies. As part of the action plan of the Ministry of the Pharmaceutical Industry which revolves around four main areas, namely<sup>4</sup>:

- Guarantee the continuous availability of pharmaceutical products, especially essential drugs;
- Establishment of tools and a regulatory mechanism guaranteeing quality, efficiency and safety;
- Build the national pharmaceutical industry into a wealth-creating sector; and
- Guarantee the economic accessibility of pharmaceutical products to all citizens.

Indeed, the Algerian state has implemented special mechanism to promote the economic national sectors through public-private partnerships mechanism, and are mostly part of a Joint Venture (JV) cooperation. Those emerging partnership based on technology transfer are expected to be a major axis and an essential lever for acquiring the know-how, skills and mastery of innovative technologies to achieve development objectives.

Therefore, the objective of this paper is to highlight the JVs arrangements operating in the mechanical industry, urban transport, pharmaceutical and gas production sectors, focusing on two principal dimensions: Success of JV and the associated risks. To reach this objective, and relying on various studies, we started our research by the following interrogation:

**In a public-private partnership perspective, are these JV providing positive and reliable results? and what are the principal impacts resulting such strategic implementation ?**

### **I.1. Brief history**

Different forms of PPP were applied in the period of Antiquity, where we find mainly in Rome and Greece evidence of the construction of public infrastructure that resulted from a partnership according to the concession model<sup>5</sup>. The PPP is well established in the history where the royal powers called on the private partner in the field of the construction of the cities<sup>6</sup>. Later, the industrial revolution led to rapid urbanization which necessitated the immediate expansion of public transport, energy and sewage systems, this was been facilitated through concession agreements made with the private sector<sup>7</sup>. Then, In United Kingdom, private finance contracts were been signed in 1992 when the Conservative government established the first contract of this model, and predicts that the financing of public infrastructure is provided by the private actor<sup>8</sup>. It was from this time (the 1990s) that PPP took off and spread around the world as an ideal model for the design of inter-organizational relationships in public sector management<sup>9</sup>, where the number of partnership contracts had experienced remarkable increases between the years 1990 and 1997<sup>10</sup> known both as a tool for development and economic recovery, and to confront the drastic depletion of public funds.

### **I. 2. Proposing a definition:**

The term of PPP seems to originate from the United States, it was originally linked to the joint funding of the public and private sectors for educational programs<sup>11</sup>. Several countries, especially those in the developing world, favor more and more those methods of financing which rely on the potential of the private sector to be able to face the insufficiency of public funds and particularly to boost existing resources. Indeed, when we confront the expression “Public-Private Partnership”, we generally refer to the financing contracts that have developed in Europe, i.e., PFI contracts, the later represents only one form of the PPP strategy. It does not have a precise common and legal definition<sup>12</sup>. That is to say, there is no universally accepted definition of the concept, but all definitions extend to the fact that such an agreement involves the sharing of risks and responsibilities between the two partners. However, many authors have agreed to establish some

commonalities, serving as a definitional repository helping countries to draw their perspectives of the concept that they deem appropriate.

In fact, PPP is a contractual cooperation between public authorities and the business world, through which the private sector contributes either its resources or its management skills and capacities, or both. The skills and objectives of the two sectors are contradictory. Indeed, the private sector ultimately seeks profitability, in return for its counterpart, which works to improve the quality of life's citizens and the accessibility of public services. Although this difference is significant, it could indeed constitute a sufficient reason for the two spheres to complement and reinforce each other, especially with the complex developments that have created a need for joint decision-making in a mixed sphere<sup>13</sup>. We could multiply the definitions but that does not represent our objective. Obviously, this previous definition seems very broad, but we can deduce that alliances are considered long-term agreements between the public and the private sphere while ensuring "a win-win situation", this fair scenario should ensure compatibility in the achievement of the objectives.

### I. 3. Risk allocation in PPP context:

Even though the benefits of such a strategic choice, i.e. PPP, are considerable so are the associated risks. It is an attractive alternative for improving the supply and delivery of public infrastructure and services, but it should not be seen as a miracle solution or a panacea to remedy all the ills suffered by the public sector, because, it can be inappropriate for certain governments and for certain projects<sup>14</sup>. The PPP mechanism appears suitable in the face of the complexity and urgency constraints of public projects in a context of fiscal tightening. Although, this mechanism offers speed and quality of implementation of projects, economic risks may appear<sup>15</sup>. Based on the data generated by Web Of Science platform, Research on risk management related to public-private partnership projects dates from 2007, this is the first year that several researchers have published articles and have nourished the debate on this topic adopting distinct methodologies, it is also the most studied object<sup>16</sup>.

As a matter of fact, the nature of public sector projects comprises major risks in their implementation, these risks are identified as "project-related, government-related, client-related, design-related, contractor-related, consultant-related, and market-related risk factors", and however, adopting PPP in implementing public sector projects, these risks can be managed effectively by allocating them between the public and the private sector<sup>17</sup>. Therefore, it is admitted that risk transfer is a critical element of PPP. In fact, the private partner is considered better capable to assume responsibilities for delivering public infrastructure and services that should be transferred from the public sector, other benefits can be generated including "improved delivery of projects and maintenance of infrastructure, elimination of over-specification, and better delivery of services"<sup>18</sup>.

In reality, some risks cannot be transferred and some ones must be shared, this why both partners must work together and eventually find common ground about how risks are to be transferred and managed from/to public and private sector<sup>19</sup>. Noting that it is challenging to achieve such agreement because it is evident that some private partners may be reluctant to carry certain risks<sup>20</sup>. Furthermore, those involved parties typically have different perceptions of proper risk allocation<sup>21</sup>, so for attaining successful development of PPP projects, the public sector needs to establish effective strategies of risk transfer process<sup>22</sup>.

Actually, risk allocation refers to a primary measure of assignment between the projects' direct participants that is between the public and private sector<sup>23</sup>. Several research regarding on risk allocation in PPP studied world widely had achieved that the public and private sector partners need to accept primarily risk allocation scheme before the contract is awarded<sup>24</sup>. Nevertheless, before the risk being allocated, risk factor must be identified in advance, they have to anticipate the

risk, so it will be more organized and prepared, and they are mainly clustered into ten groups namely<sup>25</sup>:

- *“Political risk due to legal changes and unsupportive government policies or application of new regulations and laws;*
- *Construction risk due to faulty construction techniques, cost escalation and delays in construction and land acquisition;*
- *Legal risk due change in tax regulation when local government inconsistent when apply the tax regulation, corruption and lack of respect of law, and legislation change/inconsistence when there is a change of law and regulation that will cause the increase of project costs and decrease the revenue;*
- *Economic risk due poor financial market and inflation;*
- *Operation risk due to higher operating and maintenance cost;*
- *Market risk, due to the demand or price for a service that vary from forecast levels generating less revenue than user expectation;*
- *Project selection risk due to the demand of project from public due to different local living standards, values, culture, social system etc.;*
- *Relationship risk due to organization, coordination, responsibilities and commitment of the involved parties;*
- *Project finance risk due to arising from inadequate hedging of revenue streams and financing costs;*
- *Natural risk due to adverse environmental impacts and hazards (Force majeure), that are out of control of both foreign and local partners such as flood, fires, storms, epidemic diseases, war...”*

Thus, several PPPs have been carried out, but others could fail, because these projects are susceptible to risks, so rather than blindly encouraging their adoption, governments should focus first on the risks that could be associated with it. So, risk allocation is one of the great advantages of adopting such strategy, it helps both the public and the private partner to share their risks and attain equal level of acceptability of each risk, their responsibilities and commitments. This is why it is crucial that risk allocation must be obviously communicated and accepted among the actors.

#### **I.4.Evaluating and measuring project success: PPP perspective**

The literature has shown growing interest in the subject of project success over the past two decades. The success of a project is an abstract concept, and determining whether a project is a success or a failure is much more complex<sup>26, 27</sup>. The concept is difficult to define, it is an ambiguous, vague, inclusive and multidimensional<sup>28</sup>; we can nevertheless frame its definition in other terms such as efficiency and effectiveness as described by the famous American author Peter Drucker: *“Project success therefore corresponds to a project’s efficiency and effectiveness”*.

Indeed, the cost-quality-time triangle seems to continue to be the most preferred criterion for measuring the success of a project, and remains the main purpose of it<sup>29</sup>. It is also called "the Iron Triangle"<sup>30</sup> or "the Eternal Triangle"<sup>31</sup>, some consider it as a criterion for the success of project management<sup>32</sup> while others asserts that the success or failure of projects is linked to project management practices<sup>33</sup>. On the other hand, the issue of project success turned out to be much more subtle than that, there are other criteria that can be identified<sup>34</sup>. However, researchers had confirmed the inadequacy of time and costs with the perceived success of a project, therefore they supports the idea that the measurement of progress, costs and quality is undoubtedly a crucial part of project control, but this activity should certainly not be confused with the measurement of success<sup>35</sup>.

Therefore, an objective measure of the success of a project remains difficult, fuzzy and ambiguous, some favor the equation "project success = successful project management", and some others favor the cost-quality-deadline triangle. Alternatively, the project could appear successful for one part and failure for another, it thus depends on the time and phases of development, it can be perceived as successful in the design phase and failed in its implementation. However, no methodology has proven to be the most adequate or universal due to the nature and complexity of

the different project contexts -in this particular instance, PPP projects. The lack of conceptual clarity in measuring success has therefore led several researchers to use different methodological approaches to study and measure the success of projects. The mixed results observed and the problems encountered in the implementation of PPP projects have prompted many researchers to study these projects' success<sup>36</sup>. Besides, the success of PPP projects is defined using three different perspectives: first, the traditional project management perspective to measure success relative to "time, cost and quality". Second, it corresponds to the position of stakeholders in terms of project success (public sector, private sector and users) and third, contract management regarding contract, process and results<sup>37</sup>. Nevertheless, a successful PPP - pursuing the win-win principle - should meet the needs of the community, the government and the private actor<sup>38</sup>. This success have a large extent determined by the ability to maintain a high level of service quality throughout the life of the project<sup>39</sup>. Moreover, others have resorted to the concept of key success factors<sup>40,41,42</sup>.

### **I.5. Joint Venture as a part of a PPP approach**

Joint ventures (JV) had been the subject of a great deal of literature, it shows that the agreement which forms a Joint Venture or common subsidiary covers central assets, arises from a strategic perspective in the long-term<sup>43</sup>. They are also known as an institutional partnership, their main characteristic is the ownership of capital. They are formed "*when two or more partners bring a certain number of assets to an independent legal entity which are remunerated in proportion to their contribution with the profits generated by this entity*", this alliance is also privileged in the sense that it allows penetration into foreign markets).

As strategic alliance, they have become a popular means to satisfy the objectives of both of the allies. They can provide an opportunity for each partner to benefit from the comparative advantages of the other: "*Local partners bring knowledge of the domestic market; familiarity with government bureaucracies and regulations; understanding of local labor markets; and, possibly, existing manufacturing facilities. Foreign partners can offer advanced process and product technologies, management know-how, and access to export markets*"<sup>44</sup>. A number of reasons for entering into a JV, and some Potential risks that can face a partnership relationship are demonstrated in the table cited below in the appendices (Table (1)).

JV are often treated in a special way and are assimilated to longer-term commitments<sup>45</sup>. They are the dominant form of multinational enterprises in the developing countries, however, their characteristics in those countries differ from those in developed countries, these differences are in terms of the stability of the relationship, autonomy ownership and sharing of capital, reasons and motivations for the creation of the JV and management control<sup>46</sup>. In some case, this alliance can be a transitional step towards a complete divestiture, while preserving the possibility of lasting cooperation<sup>47</sup>.

However, in PPP perspective, they are a form of cooperation strategy between a public and private company where they create another autonomous subsidiary of mixed capital in order to combine and pool their resources and capacities<sup>48</sup>. In that sense, it means that the public and private sectors pool their assets, finance and expertise under joint management. In fact, the attractiveness of JV is a function of both the revenue-enhancing and cost-reducing opportunities<sup>49</sup>. In some particular circumstances, it might be the adequate investment arrangement where each partner retains its independence, interests and autonomy. However, as any investment, negative aspects and perils can be diagnosed, hence, managers of JV are in the obligation to apply meticulous diligence and attentive planning in order to overcome those downsides and risks.

Nonetheless, the failure rate of this cooperation remains high, according to some studies; it varies between 30% and more than 70% in certain situations<sup>50</sup>. Therefore, it is important to pay more attention to the success factors of JV in order to mitigate the risks of failure, ensure its stability and in particular to maintain this coalition over the long term. This provides sufficient reasons to revise the motives for establishing a joint relationship; those motives must be robust in order to assure its success as long as there is rare available information suggesting notoriety for instability and failure<sup>51</sup>.

### **I.6. PPP projects in Algeria: The legal frame**

The first PPP projects in Algeria saw the light of day in 2006, they were concluded with the French partner, for example, in the sector of public water and sanitation services with Suez

Environnement company, in the airport sector with the ADPM company, and then in 2011, in the urban transport sector with RATP Dev company<sup>52</sup>. In Algeria, four main actors who work in close collaboration for the realization of a PPP project<sup>53</sup>

- The Ministry of Finance, which grants budgets and therefore plays an important role in the decision-making process of PPP;
- The National Commission of Markets that has a crucial role in the management of PPP;
- The National Equipment and Development Fund, which monitors the implementation of major projects, enhances the evaluation and broadens the sources of financing; and
- Local entities and service sectors, such as universities and hospitals, able to procure major projects.

PPP are practiced as a regular means of delivering projects, but there are no specific laws to support PPPs<sup>54</sup>. However, there are sectoral laws (electricity, water, transport and public works), and the accommodating nature of the existing legal framework demonstrated by successful transactions in the energy, water and transport sector allowing these projects to be carried out<sup>55</sup>. In fact, a draft law is being prepared (during the 2021 PLF debate) in the sense that they make it possible to alleviate the pressures on public finances, therefore a promulgation of a law explaining the modalities of this operation is necessary<sup>56</sup>.

In addition, in December 2017, and at the headquarters of the Central Syndicate, a charter on corporate partnership was signed by the Government, the General Union of Algerian Workers (UGTA) and the Patronage. It highlights the practices of PPP, which will allow national companies in both sectors to capitalize on the managerial capacities that the private sector can provide in the conduct of business and the effective revival of the national economy. The charter also highlights and designates the shares in the share capital of the relevant partnership company. Indeed, when the partnership is concluded with one or more resident national partners, it is the 66/34% rule that seals this partnership, that is to say, the share of the public company must be at minimum 34% of the share capital. On the other hand, when the partnership includes one or more resident partners and one or more non-resident partners, it follows the 51/49% rule which the share of the latter cannot exceed 49% of the capital, while the share of the company must be at least 51% of the capital<sup>57</sup>.

According to the Algerian commerce department, the 66/34% rule was introduced by Law n° 15-18 of December 30, 2015 on the finance law for 2016, art 62. Subsequently, the 51/49% rule was dictated by: Ordinance n° 09-01 of July 22, 2009 on the complementary finance law for 2009 art 58, Law n° 13-08 of December 30, 2013 on the finance law for 2014, Art. 55 and Law n° 15-18 of December 30, 2015 on the finance law for 2016, art. 66.

However, to promote the business climate and the attractiveness of the national economy, especially due to the COVID-19 pandemic that may sharply exacerbate the slowdown in foreign direct investment flows; the government have adapted its legislative framework to make it more attractive to foreign investment. Indeed, the 49/51% share capital distribution rule governing foreign investment has been removed under the 2020 PLF for certain so-called non-strategic sectors. With the exception of the purchase and resale of products and those of a strategic nature, it is still in force<sup>58</sup>.

Algerian authorities, like others in developing countries, have realized that engaging their companies in alliances with foreign firms is a necessary step in accessing technical and managerial skills<sup>59</sup>. The Algerian experience clearly showed that, despite the pessimistic prediction made by the literature, JV between developing countries enterprises and multinational companies can operate successfully<sup>60</sup>.

## **II– Methods and Materials:**

The data collection technique used in our study is the qualitative approach. We adopted face-to-face semi-structured interviews as the preferred means of data collection in order to have a better understanding of these arrangements. A list of open-ended questions was carefully compiled to investigate different aspects of PPP projects and specially to allow the interviewees freedom in sharing their experience and knowledge.

For the interview respondents, we collected our sample through a purposive non-probability sampling method, also called quota, subjective or critical sampling. The selection of units is subjective since the researcher relies on his experience and judgment<sup>61</sup>. This choice of this sampling technique is therefore not random, because, from the beginning, we have identified the choice characteristics where each unit of the population does not necessarily have a non-zero probability of being sampled and all participants do not have an equal opportunity to be included. Therefore, the interviewees were chosen (Table (2)) based on their ability to give us information through our interview guide appended at the end of the study.

We have in fact interviewed the senior officials linked to the public sector. In order to obtain the most representative sample possible, while ensuring anonymity, we opted to interview the first managers (the general/Unit manager), also the commercial, technical, HR, and financial managers. Knowing that our study was carried out at the end of 2020, some companies expressed the non-availability of certain managers due to work at the end of the year operations, so we were obliged to choose other managers located at other levels, in this case, quality managers and assistant to the investment department.

The study was carried out on seven case studies (Table (3)) by combining two dimensions, namely: Success of PPP; and Risks of PPP.

Our interview guide is based on three main axes in each of them we aim, presented down below, to achieve specific objectives using the content analysis method. The latter advocate a rigorous and systematic approach to the explanation and interpretation of the data collected, by which a reading is carried out to identify the elements of the used analysis grid<sup>62</sup>. In terms of analysis and interpretation, we have proceeded to a factual interpretation by which we comment on the obtained results from the survey by appealing to a diagnosis of the information analyzed, and a thematic analysis based on two main steps:

- The thematisation of the corpus according to a classificatory logic while organizing and fragmenting the obtained data;
- The examination and interpretation of the themes where the objective is to attribute meaning to this collected data.

### **III- Results and discussion:**

#### **Axis 01: Description and identification of the interviewee's profile**

The aim of this axis is to obtain general information about the interviewee relating to his job, his missions and his experience.

##### **1.1. *Can you explain to us what is your role is in this entity and what position do you currently hold?*** (Figure (1) and (2))

The results show that 26.67% of the respondents hold the role of the first person in charge which consists of managing the company in all its aspects, ensuring its sustainability and success, and ensuring the achievement of the objectives which are set beforehand.

15.56% coordinate between the various departments constituting the technical direction, carry out the production program including the integration process, and ensure preventive and corrective maintenance and security.

13.33% manage the finances of the company and allow it to have a monthly photograph of budgets and commitments. 24.24% have a commercial role, which aims to supply the inputs, sell products / services and guarantee after-sales services.

4.44% watch over the development of the company in terms of investments, 6.67% have a role of staff training mainly new recruits, skills development, career management, and 8.89% control and monitor the quality of all products throughout the production process.

##### **1.2. *How many years have you worked for this organization?***

The answers reveal that more than half of our sample has more than 15 years of experience in the public sector and at least 6 years of experience in PPP projects. Indeed, 60% of the people interviewed work on behalf of the public partner long before the creation of the JVs for a period of

time that varies between 15 and 32 years. Of this percentage, 33.33% have transferred to the latter since their creation in 2007, 2012, 2013, 2014, and 13.34% after one and two years of their creation respectively. This means that employees of public enterprises can benefit from development and training opportunities throughout their professional careers. While 40% have started working in these JVs since 2007, 2012, 2013, 2014, 2015.

**1.3. Tell us about your experience in PPP projects/ what are the PPP projects in which you participated before joining this organization?** (Figure (3))

72% of those surveyed have never participated in PPP projects. In contrast, 20% have experience for a period that varies between 1 to 2 years of participation in projects resulting from agreements concluded with foreign private partners. 8% have already worked for a multinational with the participation of a public group and foreign groups for a period of 6 months to a year. This reveals that in Algeria, PPP arrangement have started to experience rapid growth only from the last two decades.

**Axis 02: Progress and success of the PPP project:**

The objective of the present axis is firstly to know the organization of the interviewees, the initiator of the cooperation, the reasons and the criteria for the choice of the foreign private partner. Secondly, to perceive if the partnership records positive or negative results and the criteria on which this judgment was rendered.

**2.1. Could you briefly describe your organization** (Figure (4))

82.76% of the studied cases are Joint Ventures of which three cases follow the 51-49% rule; only one case applies the 60/40% rule; and another with 66/34% in which the foreign partner has the majority of the shareholder.

6.90% is a technical assistance contract which will soon be transformed into an autonomous JV. 6.90% are group subsidiaries that are the main shareholders of the studied JVs. Finally, 3.45% is a group that is the main shareholder of three JVs that are not included in our survey sample for confidentiality reasons.

**2.2. What are the reasons that prompted the Algerian partner to adopt this partnership?** (Figure (5))

9.60% of respondents mention that these partnerships are the results of purely political decisions, while 38.36% stressed the importance of technology and innovation to ensure the sustainability of public enterprises. Technologically speaking, the products have become obsolete, and they regressed precipitously where the idea of appealing partnership, therefore the need for a transfer of a new technology and new know-how was undeniable. In addition, bringing in a technological, knowledgeable and experienced partner was a necessity in setting up a new investment that the country is not familiar with.

52.05% of the interviewees mention other reasons correlated to the wave of privatization which affected a large number of enterprises operating in the public sector, to the reduction of the import bill, to the improvement of product quality, modernization of managerial activities, to the penetration of the international market through exports, the development of the public sector, and finally to meet an increasingly demanding demand.

**2.3. Did your organization who initiate this cooperation?** (Figure (6))

19.23% of the studied sample admit that this partnership was made possible by a mutual decision of the two parties.

50% declare that it was the local partner who triggered this public-private alliance through a call for tenders or a call for expressions of interest, or even through negotiations conducted directly between the parties involved, while 30.77% evocate that it is a political decision involving a cooperation agreement between the two partner countries.

**2.4. Based on what criteria was this choice made?** (Figure (7))

81.97% of the respondents agreed that the partner's position of Leader, its reputation and notoriety, its successful experience and its know-how are the main criteria for choosing the partner.

18.03% indicate that the history with the current partner, which results in a commercial contract / license transfer, constitutes a foundation of the partnership agreement, that was the reason to maintain and evolve this relationship where it is became a shareholder and participates in the elaboration of the development strategy of the new entity created.

**2.5. Considering the level of progress of the contract, do you deem that this partnership is a (potential) success?** (Figure (8))



53.49% of the respondents affirm that, regard the progress level of the contract, this partnership records a success or a potential success, while 46.51%, which represents a significant percentage, consider that despite the efforts that have been provided; including financial, material and immaterial resources, unsatisfactory results have been observed.

### **2.6. Based on what criteria do you judge this success? (Figure (9))**

64.36% of the interviewees declare that this success is evaluated by: well trained and experienced staff, a transfer of technology and know-how have occurred, the products / services accomplished properly their functions, the partner continues to provide its technical assistance, exportation of the products abroad and transfer the acquired experience, and obtaining ISO certification. Therefore, the forecasts are reassuring in terms of achieving the objectives and the continuity of the partnership arrangement.

On the other hand, 35.64% evoke that there are always constraints that impede the success of any project. some criteria were presented on which this partnership is considered unsuccessful, namely: dependence on the partner, the crisis and the impact of exogenous factors relating to the instability of the local market and the devaluation of dinars, the non-achievement of the stated objectives, unsatisfactory financial results, poor sales of products, the non-participation of the partner in the development of the JV, and the COVID-19 pandemic.

### **2.7. From a global point of view, what are the main risks that can involve in a public-private partnership relationship? (Figure (10))**

17.75% of respondents declare that among the risks that can associated a partnership relationship, especially public-private, we find the relational risks inherent to the lack of mutual trust, conflict of interest, or having divergent perceptions in terms of decision-making autonomy.

58.06% of the interviewed admit that the main risks facing this partnership are those linked to the instability of the political situation due to the reshuffle of the Algerian government; to the instability of the economic situation relative to the instability of the market, to the devaluation of the dinar, to the economic crisis; and to the regulatory instability in relation to perpetual changes in laws and policies.

24.19% cite other risks, namely: internal resistance of the entity where staff refuse to work with a foreign partner; the bankruptcy of one of the partners; the risk of failure or of terminating the partnership contract despite the investments that have been made in terms of equipment and staff training; the centralization and bureaucracy that characterizes the majority of Algerian public enterprises and the adaptation of a Western international management model / standards to a local culture.

### **Axis 03: Conclusion and perspectives**

The last part gives the interviewees the opportunity to express their views on the use of PPPs in the country, the risks that may be associated with them, and the conditions under which these mechanisms contribute to the recovery of the country's economy.

#### **3.1. What is your opinion on the increasing use of public-private partnership (PPP) in different types of public projects/ service in Algeria? (Figure (11))**

59.57% of the interviewees say that PPPs are advantageous and added value mechanisms especially with the country's transition to the market economy. 29.79% agree that those coalitions have become a necessity to promote and stimulate the local economy, develop the industrial sector, limit imports and consider exports, reasonably create wealth than depend on oil rent.

However, 10.64% evoke that PPP is a double-edged weapon, knowing that the two actors belong to different contexts; essentially the economic, regulatory and social context; they provide appreciable benefits, but crucial risks can also arise. This is why applying a rigorous risk management approach is therefore primordial in order to be able to mitigate their impact on the survival of the partnership relationship.

At the end, managers insist that this relationship is above all a commitment that must be well thought out and matured whose return on investment is on time and estimated forecasts, and the risks are properly identified. Indeed, they provide some recommendations by which the PPP constitute a solution for a real economic recovery:

-The PPP option may be the best solution for an economic recovery only when the foreign partner honors its commitments in terms of advancing the level of investment and continuous renovation;

- As an autonomous entity, managers are no longer constrained by the rigid organization that public companies know, applying horizontal management is therefore recommended, the latter will reduce the centralized mode and hierarchy, where all staff become collaborators and take responsibility without having a rigorous control from the top managers;
- The stability of the political, economic and regulatory situation; developing a clear, transparent and stable long-term strategy; as well as the creation of favorable legal mechanisms constitute prerequisite to attract foreign investment;
- Investing more in human capital is a real key to success; it is the engine of any business regardless of its type or activity;
- The lack of experience of the local banking sector in terms of PPP financing has created the need to review and strengthen the financial role played by banks, this should be more suitable and more efficient because the current banking system does not promote revival of the national economy;
- It is recommended to promote local industries so as to encourage cooperation between large public sector companies and private SMEs / SMIs within the country in order to minimize imports of production parts which negatively impact the process integration or localization;
- Public-private partnerships are strongly recommended in the field of research and development where there is no mastery of the subject in terms of technology and innovation;
- The contract must be negotiated deeply in such a way that both parties are win-win, because there are partnerships that are concluded just for the manufacture or marketing of the product without starting the follow-up, for example the granting of the necessary documentation in order to make changes without going to the partner, especially in the case of contract termination;
- Insofar as these are not sensitive areas (strategically speaking), the option of public-private partnerships is the best solution, especially when the private sector supports the public sector to solve problems related to financing, effectiveness and efficiency in an environment which evolves at an ever accelerating pace;
- Internal instability of the company influences negatively the performance in all its aspects;
- Boost state control through powerful mechanisms over all public sector companies, especially those that are in partnership with a foreign operator allow to combat against corruption manager's opportunistic behavior (local and / or foreign).

The analysis of the data collected allowed us to reach certain conclusions. Regarding the first dimension of success, our analysis shows that the Algerian partner remains relatively satisfied with the fact that the results obtained did not match the initial ambitions. As reported by the practitioners, *"theoretically we will record a success, but in reality, there are constraints which do not let things run in a safe way"*. Those constraints are relative to the achieving integration objectives set out in the business plan; economic crisis; political, regulatory, and financial issues existing in the host government; managerial complications; and in special cases, problems with the foreign partner itself where the latter is demanding, it no longer contribute to develop skills of planning and execution of tasks.

However, the local partners underline certain positive aspects particularly in terms of:

- The foreign partner's technical assistance, resulted in his cooperation and collaboration. It took the form of information and expertise sharing, instruction and training sessions, transmission of operational knowledge and advisory services focusing on the needs and priorities identified by the local partner during the negotiation phase. The ultimate objective of this technical assistance is to empower the national actor to develop an autonomous technology adopted to their needs;
- The increase in the notoriety of the national company where the product is sold under very favorable conditions and met the partner's expectations and the quality standards. In addition, a door to the international market has been opened through exportation in order to penetrate the foreign market;
- Technology transfer, which is considered a crucial and dynamic factor for this partnership relationship. In this aspect, industrial processes and information have been transmitted; skills and knowledge to use and exploit the technology have been transferred as well as all the related strategies necessary for the achievement of the objectives prefixed in the contract especially those related to the integration process;
- A transferable and transferred new know-how and skills necessary for the performance and the carrying out of tasks.

-Well-trained and experienced staff based on the needs identified, it involved continuous learning, acquisition and strengthening of practices and technical knowledge specific and requisite to the proper and effective functioning of the industrial activity.

Regarding the second dimension, which are the associated risks, it is revealed that the main risks that can associate to a public-private partnership relationship are:

- Partners have different perceptions of the importance of decision-making autonomy;
- Risk of political and regulatory instability due to the continuous changes in laws and regulations specially in the past two years where some productions of which have been blocked
- Centralization and bureaucracy where all administrative decisions adopted emanating from the central power, which implies delay in the realization of the basic investments;
- Economic instability of the host country due to the national crisis dating from year 2014 (heavy oil dependency)
- Differences in objectives and interests conflict where the involved actors have divergences in goals, values and skills;
- Financial risk due to bank indebtedness which lead to increasing cost of financing;
- Risk of the exogenous factors due to market instability which implies declining demand for the product comparing to the competitors
- Risk of not having mutual trust between partners;
- Risk of terminating the contract despite the investments that have been committed (equipment, staff training...)
- The COVID-19 pandemic that greatly exacerbate the current circumstances like everywhere else in the world, this might paralyze efforts to promote the industrialization strategy.

Through these observations, we have found out that although the risks, JV may work in a positive way, but some points should be considered in order to overcome the encountered obstacles. PPP is the solution for the country's economic recovery under the pretext that public funds are increasingly restricted, hence the obligation to involve private finance to be able to cover public expenditure and the transfer of certain risks. It is supposed to be beneficial but it requires focused guidance from high authorities to be able to compete with other subsidiaries of the foreign partner in terms of quality level and especially the fulfillment of forecasts.

Above all, this relationship is a marriage of two different cultures, it must be well thought out and matured in a way that the return of investment is on time and in the submitted forecasts. It is beneficial in terms of improving the quality of the product; especially at some point when it has become obsolete, so their upgrading was a priority in order to promote the sustainability of the JV . From the beginning of the negotiations, it is highly recommended the partnership must be well studied and defined; the details have to be completely surrounded. It must be negotiated in a way that all the stakeholders are winners, while some cooperations are concluded just for the manufacture of the product without starting the unplanned events. For example, documentation or license are requested, because in particular circumstances local partner need to update changes without going to the foreign partner that could slow down the production pace especially after contract termination. It is also suggested to boost the financial supporting role of Banks by facilitating granting of loans for strategic sectors. Besides, it is necessarily to revise the regulation applicability; in fact, practitioners are faced with laws that are not clear in terms of their application .

One major remark that we could make is that in Algeria there are no local robust industries operating in the private sector that meet the public sector's requirements, the latter is forced to move towards importation, therefore, it does not bring important added value for the integration process. Thus, high authorities are under a growing obligation to promote the industrial capacities of the private sector and orient them in such a way as to support the public sector as a part of the cooperation between the two sectors.

#### **IV-Conclusion:**

To conclude, the Algerian market is a very favorable ground for investments, however a recourse to PPP arrangements must have more advantages than a recourse to a public contract. Under the current economic circumstances, some local companies cannot perform effectively, because they do not have the necessary skills to maintain at the level of the major world builders. PPP have therefore become a necessity especially when it comes to a new project that requires external experience, or a transfer of technology or know-how and skills, or to deal with product obsolescence. Through PPP, the country will be able to innovate and flourish the domestic market, and to upgrade local products according to international standards and requirements so that public sector companies regain their position as national leader.

Despite the considerable attributes that these partnerships can offer, they remain double-edged weapons where the practitioners insist on a very critical point concerning the advancement of the contract. They confirm that from the outset and during the negotiations, it must be flexible to cover unforeseen and unexpected events, adequately studied and congruently analyzed in the sense that it identifies and frames all the deep aspects of the cohesion in a win-win perspective.

Indeed, most of the partner companies have benefited from the know-how of the foreign actor and they have reached a degree of maturity on the technical and managerial level, this has given very good satisfaction thanks to the feedback, the willingness and the ambition of staff.

However, in any project there is always what is aspired and what has been brought to fruition. According to the respondents, there was a period of crisis; which continues until now; by associating that to several causes, so they try as best they can to make the partnership live under the most favorable conditions. In terms of goal achievement, the studied sample encounters three possible cases:

- ✓ According to forecasts, the partnership will achieve the objectives;
- ✓ The objectives are achieved and excellence is aimed;
- ✓ The objectives are not achieved but the partnership still survives despite the paralyzing factors that persist.

The human resources is crucial factor. The local managers has the confidence in local staff. According to them, it is essential to support them to take the initiative, and provide them the necessary means and favorable working conditions to practice their skills, and consequently companies could fully benefit from his potential and his creativity.

This study used in-depth interviews to uncover the concept of success and the associated risks in JV arrangements. The results obtained are considered positive without going so far as to qualify it as totally successful. The obtained results show that Algeria represents a very interesting sales market where JV from different fields may achieve fortunate results despite all the obstacles, risks and uncertainty and instability situations. With the exception of this year (due to COVID-19 pandemic), the forecasts are much more reassuring for the sustainability of the studied cases.

The findings revealed are impactful for both practice and literature in a way that provides significant insights into JV's success and risks assessing in PPP alliance, and contribute the formulation of pertinent hypothesis for further investigations. Like any research, one of the observed and the apparent limits is that the private perception had not been investigated. Therefore, more studies should be conducted in order to investigate the private participation's perspective to deeper asses the success of those coalitions.

## - Appendices:

Table (1): Major reasons and risks of JV alliance

<b>Reasons</b>	<b>Risks</b>
<ul style="list-style-type: none"> <li>-Fast entry into local markets;</li> <li>-Low market entry costs;</li> <li>-Strong local player (e.g., market presence)</li> <li>-Economical long-term resource commitment with shared risks;</li> <li>-Diminished political risk (e.g., government interference)</li> <li>-No suitable acquisition targets or greenfield projects (e.g., establishment of wholly owned subsidiary) due to cost, local cultural resistance, foreign ownership restrictions, and other factors.</li> </ul>	<ul style="list-style-type: none"> <li>-Cultural differences between parties from different jurisdictions can lead to significant misunderstandings and inefficiencies;</li> <li>-Misalignment or divergence of strategies can result in losses and a failure to achieve overall business objectives;</li> <li>-Operational problems, whether the result of strategic differences, production issues, management control issues or otherwise, can limit the effectiveness of the venture;</li> <li>-Lack of trust between the parties can limit cooperation;</li> <li>-Decision-making and dispute resolution processes can be lengthy and costly, depending upon what mechanisms are agreed in the joint venture documentation and what practices have evolved;</li> <li>-Service and contribution agreements, which are often seen as ancillary to the relationship, can create a dependency of the joint venture on a particular party,</li> <li>-Exit upon termination can be expensive or difficult.</li> </ul>

The source: BAKER &McKENZIE,(2015), **International Joint Ventures Handbook**. Edition Baker & McKenzie, pp.02-04.

Table (2): Presentation of the interviewees

<b>Designation</b>	<b>Number</b>	<b>The average length of the interview</b>
<b>Director general</b>	5	54 minutes
<b>Technical director</b>	4	30 minutes
<b>Financial officer</b>	4	37 minutes
<b>Commercial director</b>	4	50 minutes
<b>Quality manager</b>	3	26 minutes
<b>Human resources manager</b>	2	50 minutes
<b>Assistant to the investment department</b>	1	56 minutes

The source: Developed by us

Table (3): Presentation of the sample

<b>Producer / service provider</b>	<b>Principal activity</b>	<b>Denomination</b>
SOMATEL-LIEBHERR- ENMTP	The manufacture of high-tech public works machinery under the LIEBHERR label.	Joint venture (51% held by Epe-SOMATEL JSC, a subsidiary of EPE - ENMTP JSC; and 49% by LIEBHERR EMTeC GMBH)
Backloader Manufacturing Company (SOFARE) - ENMTP	Manufacture of public works equipment	JSC and subsidiary of the ENMTP group
EUROPACTOR-ALGERIE	Manufacture, renovation and marketing of compaction machinery and other public works machinery	Joint-venture (of which EPE SOFARE JSC is the majority 60%, and the 40% is held by AECOMHEL SL)
Algerian Tractor Company (ATC)	Manufacturing of new generation of agricultural tractors	Joint venture whose share capital is held by the three shareholders as follows: AGCO Massey Ferguson: 49% ETRAG: 36%; PMAT 15%
SETRAM-Constantine operational unit	Operation and maintenance of trams	The shares are divided between 51% EMA, 8% RATP el Djazair and 41 RATP Dev
Agricultural Tractor Company (ETRAG)	The manufacture of the agricultural tractor	EPE JSC, subsidiary of the AGM Holding group
Mechanical Industry Promotion Group (GPIM)	The design, development and manufacture of vehicles and engines intended in particular for the needs of the Ministry of National Defense	Industry group
Linde Gas-Constantine unit	Production, packaging, marketing and distribution of industrial food and medical gases.	Joint Stock Company Linde Gas Algeria. (66% Linde shares, 34% Sonatrach ACS).
SAIDAL- Constantine unit	Insulin production	Technical assistance contract/ in the project phase of creating a joint venture between SAIDAL (Constantine

		unit) and Novo Nordisk
--	--	------------------------

The source: Developed by us according to internal documentation.

**Interview guide**

**Axis 1: Identification of the interviewee profile**

- Q1: What position do you currently hold?
- Q2: Can you explain to us what your role in this entity?
- Q3: How many years have you worked for this organization?
- Q4: Tell us about your experience in PPP projects.

What are the PPP projects in which you participated before joining this organization?

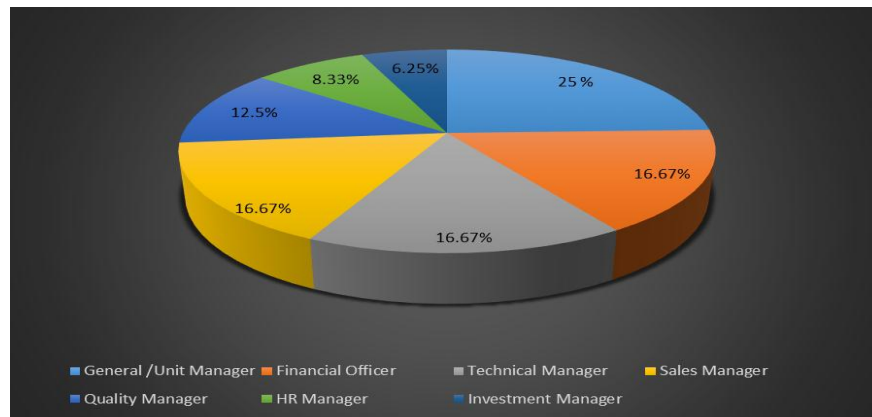
**Axis 2: Development and success of the public-private partnership**

- Q1: Could you briefly describe your organization.
- Q2: What are the reasons that prompted the Algerian partner to adopt this partnership?
- Q3: Did your organization who initiate this cooperation?
- Q4: Based on what criteria was this choice made?
- Q5: Considering the level of progress of the contract, do you deem that this partnership is a (potential) success?
- Q6: Based on what criteria do you judge this success?
- Q7: From a global point of view, what are the main risks that can involve in a public-private partnership relationship?

**Axis 4: Perspectives and Conclusion**

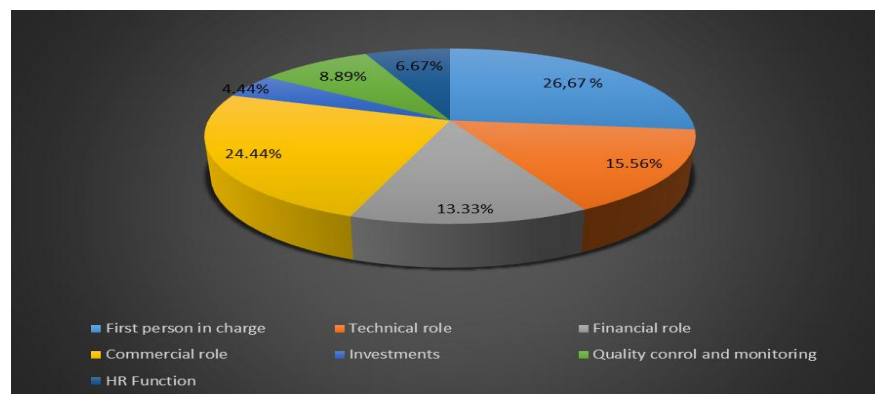
- Q 1: What is your opinion on the increasing use of public-private partnership (PPP) in different types of public projects/ service in Algeria?
- Q 2: Do you have anything else to add

Figure (1): Presentation of the interviewees



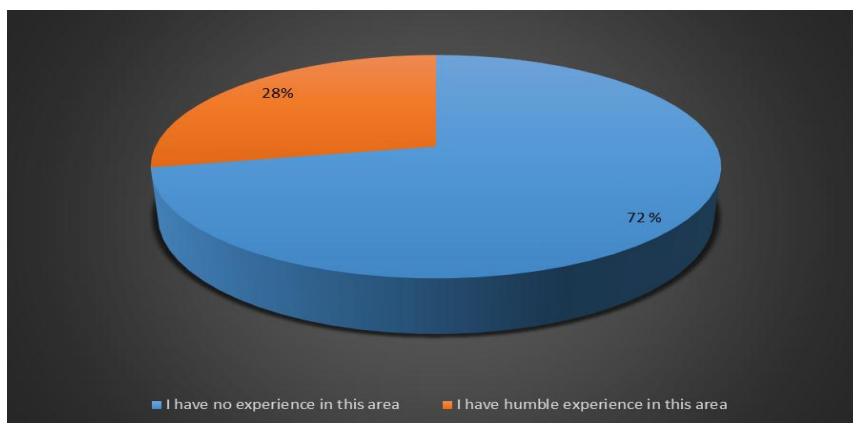
The source: Developed by us

Figure (2): The interviewees' role within the company



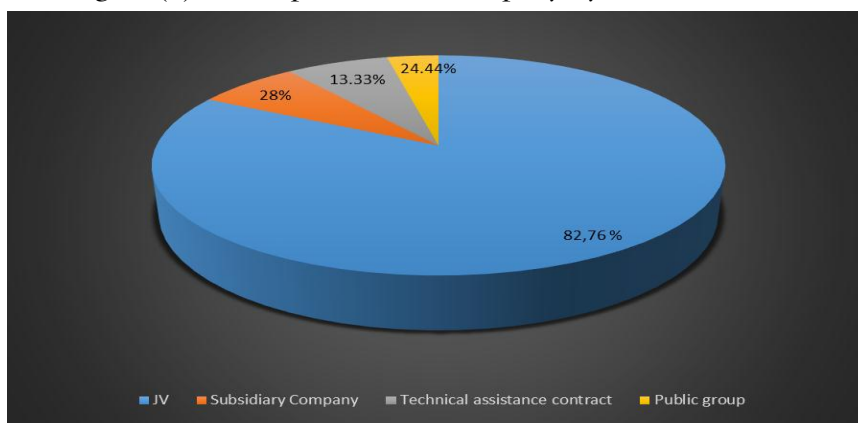
The source: Developed by us.

Figure (3): The experience of the interviewees regarding PPP



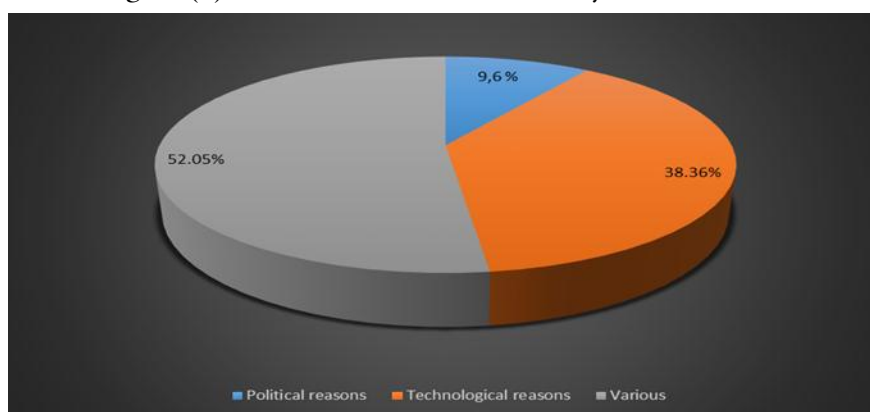
The source: Developed by us

Figure (4): Description of the company by the interviewees



The source: Developed by us

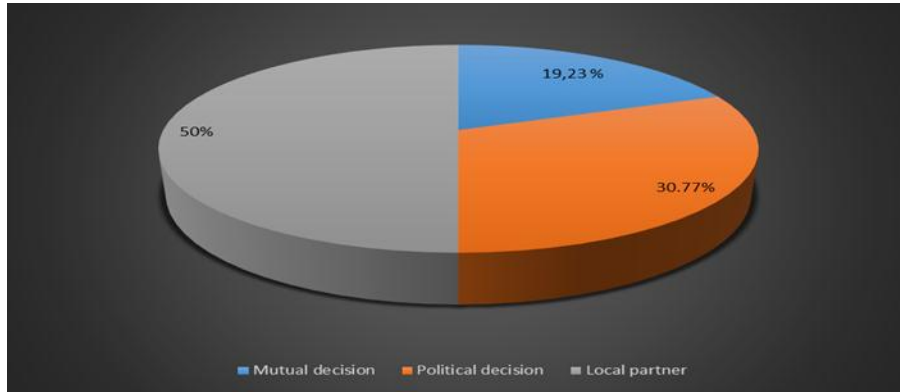
Figure (5): The reasons for PPP cited by the interviews



The source: Developed by us

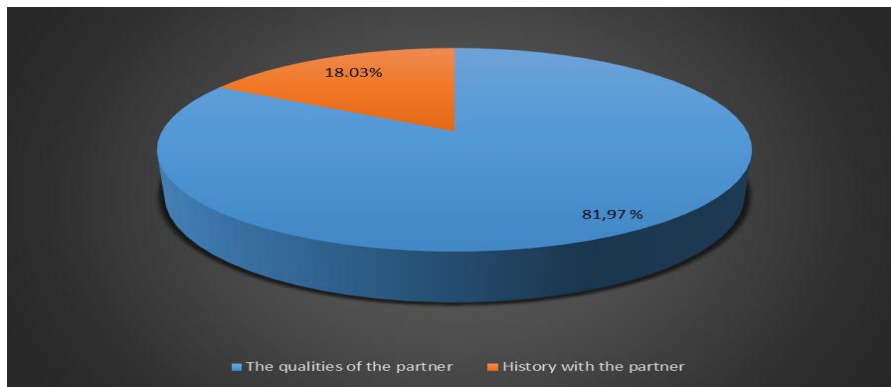


Figure (6): The initiator of the public-private partnership relationship



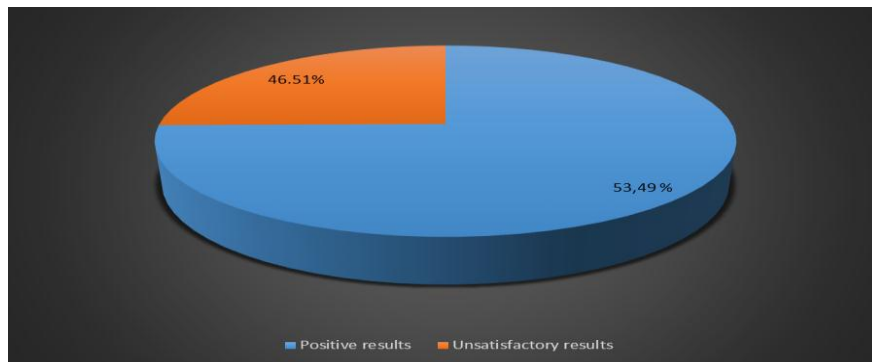
The source: Developed by us

Figure (7): The criteria for choosing the foreigner partner cited by the interviewees



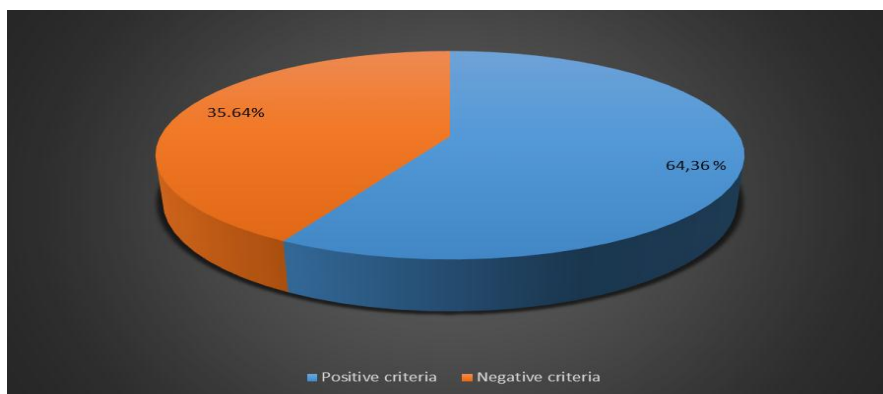
The source: Developed by us

Figure (8): Judgment of the interviewees on the success of the PPP contract



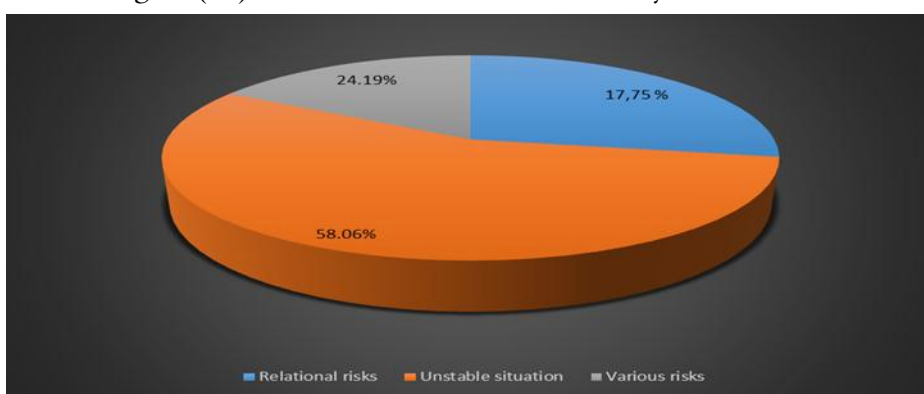
The source: Developed by us

Figure (9): The criteria for judging success quoted by the interviewees



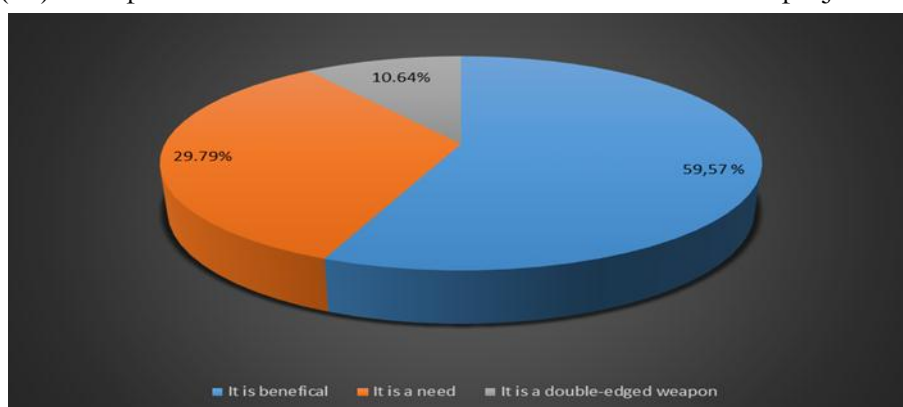
The source: Developed by us

Figure (10): The risks of PPPs mentioned by interviewees



The source: Developed by us

Figure (11): The point of view of the interviewees on the use of PPP projects in Algeria



The source: Developed by us

## Referrals and references:

- <sup>1</sup> HARRAR S., GHOMARI MALTI S., (2016), « **Le secteur industriel algérien : Analyse des facteurs de compétitivité des petites et moyennes industries. Cas de la wilaya de Tlemcen** », Les cahiers du MECAS, p276.
- <sup>2</sup> BOUKHDOUNI O., (2014), « **La Nouvelle stratégie industrielle (NSI) en Algérie : réalités et perspectives** », Recherches économiques et managériales, N°16, pp02-03.
- <sup>3</sup> Ministère du Transport, « **Plan d'actions 2020-2024** », Juillet 2020, p04, Visited : 15/01/2022 : <http://www.mt.gov.dz/mt/Plan%20actions%20MT%20finale.pdf>.
- <sup>4</sup> Le site officiel du Ministère de l'Industrie Pharmaceutique, « **Le plan d'action du Ministère de l'Industrie** ». Visited : 13/08/2021 <https://www.miph-dz.org/>
- <sup>5</sup> PERRIER N., TORO M., PELLERIN R., (2004), « **Une revue de la littérature de partenariat public privé en gestion de projet** », CIRRELT-2014-04, p02.
- <sup>6</sup> CHATRIE I. et UHALDEBORD J.M., (1995), « **Introduction. Les chemins de traverse du partenariat public-privé face au développement territorial** », in Revue d'économie financière Hors-série, 1995. Partenariat public-privé et développement territorial, 1995, p11.
- <sup>7</sup> EPS-PEAKS , (2017). **Public-Private Partnerships: A Basic Introduction for Non-Specialist**, Nathan Associates, p11.  
Visited:15/08/2019, [https://assets.publishing.service.gov.uk/media/5977576ee5274a289a000031/Topic\\_Guide\\_Public-Private\\_Partnerships.pdf](https://assets.publishing.service.gov.uk/media/5977576ee5274a289a000031/Topic_Guide_Public-Private_Partnerships.pdf)
- <sup>8</sup> COMPAGNAC E., (2009), « **Contribution à l'analyse des contrats de Partenariat public-privé en France et au Royaume Uni** », in Revue française d'administration publique, N°130 : École nationale d'administration, pp371-372.
- <sup>9</sup> BAHRI C.N. et RAFLA, H., « **freins et facteurs de réussite des partenariats public-privé : cas de deux entreprises opérant dans le secteur des TIC** », Association Internationale de Management Stratégique, XXV conférence internationale de Management stratégique, p03.
- <sup>10</sup> MARTY F., VOISIN A., (2005), « **Les Partenariats Public-privé dans les pays en développement : les enjeux contractuels** », Document de travail N° 2005-9 : l'Université de Nice Sophia-Antipolis, p05.
- <sup>11</sup> YESCOMBE E.R., (2007). **Public-Private Partnerships : Principle of Policy and finance**, Butterworth Heinemann, Elsevier science, 2nd edition: Oxford, p02.
- <sup>12</sup> DELZANGLES H., CHAMMING'S G., (2014), « **Le contrat de partenariat en France : Sujet de controverses et objet de paradoxes** », in Business Management Review, MDI Insitute, vol 4/ n°1, p47.
- <sup>13</sup> OLE HELBY PETERSEN, (2001), **Public-Private Partnerships: Policy and Regulation**, PhD-dissertation Department of Business and Politics: Copenhagen Business School, P13.
- <sup>14</sup> Visited: 08/06/2020 [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2723132](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2723132)
- <sup>15</sup> FRANCOIS A., MARSAC A., (2014), « **Les risques des partenariats public-privé dans le financement et l'exploitation des stades en France** », in Revue française de gestion, N° 245, p02.
- <sup>16</sup> Benarbi M.A., Tammine L., (2019). « **Analyse d'impact des articles sur la gestion des risques liés aux Partenariats Public-Privé (PPP)** », in Revue Internationale des Sciences de Gestion, Numéro 4, pp577-583.
- <sup>17</sup> SHEN L.Y., PLATTEN A., DENG X.P., (2006), **Role of public private partnerships to manage risks in public sector projects in Hong Kong**. International Journal of Project Management 24, p593

<sup>18</sup>DIXON T, POTTINGER G., JORDAN A., (2005), **Lessons from the private finance initiative in the UK Benefits, problems and critical success factors.** Journal of Property Investment & Finance, Vol. 23 No. 5, p414.

<sup>19</sup>DEMIRAG I., KHADAROO I., STAPLETON P., Stevenson C.,(2010), **Public private partnership financiers' perceptions of risks.** First Published: The Institute of Chartered Accountants of Scotland, p24.

<sup>20</sup>SINGH L.B., KALIDINDI S.N., (2006), **Traffic revenue risk management through Annuity Model of PPP road projects in India.** International Journal of Project Management 24, p606.

<sup>21</sup>ABEDNEGO M.P., OGUNLANA S.O. (2006), **Good project governance for proper risk allocation in public-private partnerships in Indonesia.** International Journal of Project Management, 24n, p622.

<sup>22</sup>NISAR T.M., (2007), **Risk Management in Public-Private Partnership Contracts.** Public Organization, Rev 7, p01.

<sup>23</sup>BING L., AKINTOYE A., EDWARDS P.J, HARDCASTLE C., (2005), **The allocation of risk in PPP/PFI construction projects in the UK.** International Journal of Project Management 23, p26.

<sup>24, 25</sup>NUR ALKAF ABD KARIM, (2011), **Risk allocation in public-private partnership (PPP) project: A review on risk factors,** International Journal of Sustainable Construction Engineering & Technology, Vol 2, Issue 2, pp13-14.

<sup>26</sup>CHAN A.P.C., SCOTT D., LAM E.W.M, (2002). **Framework of Success Criteria for Design/Build Projects,** Journal of Management in Engineering, Vol. 18, N°3, p120.

<sup>27</sup>DE WIT A., (1988), **Measurement of project success.** International Journal of Project Management, Vol 6, Issue 3, p169.

<sup>28</sup>IKA A.L., (2009), **Project Success as a Topic in Project Management Journals.** Project Management Journal, Wiley Interscience, p07.

<sup>29</sup>CHAN A.P.C., SCOTT D., LAM E.W.M, (2002), **Framework of Success Criteria for Design/Build Projects.** Journal of Management in Engineering, Vol. 18, N°3, p120.

<sup>30</sup>Atkinson R., (1999), **Project management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria.** International Journal of Project Management, Vol. 17, N°6, p337.

<sup>31</sup>NEWCOMBE R., (2000), **The anatomy of two projects: a comparative analysis approach.** International Journal of Project Management 18, p191.

<sup>32</sup>Atkinson R., (1999), **Project management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria.** International Journal of Project Management, Vol. 17, N°6, pp337-342.

<sup>33</sup>BROWN A., ADAMS J., (2000), **Measuring the effect of project management on construction outputs: a new approach.** International Journal of Project Management 18, p328.

<sup>34</sup>WESTERVELD E., (2003), **The Project Excellence Model: linking success criteria and critical success factors.** International Journal of Project Management 21, p412.

<sup>35</sup>DE WIT A., (1988), **Measurement of project success.** International Journal of Project Management, Vol 6, Issue 3, pp164-169.

<sup>36</sup>Zayyanu M, Johar F., (2018), **Critical success factors of public-private Partnership projects: a comparative analysis of the housing sector between Malaysia and Nigeria.** International Journal of Construction Management, 2018, p03.

<sup>37</sup>CHAMPIKA LIYANAGE, FELIX VILLALBA-ROMERO, (2015), **Measuring Success of PPP Transport Projects: A Cross-Case Analysis of Toll Road.** Transport Reviews, Vol. 35, N°2, pp149-151.

- <sup>38</sup>Ng S.T., Wong Y.M.W., Wong J.M.W., (2010). **A Structural Equation Model of Feasibility Evaluation and Project Success for Public-Private Partnerships in Hong Kong**. IEEE Transactions on Engineering Management, Vol 57, N°2, pp310-321.
- <sup>39</sup>Akintoye A., Hardcastle C., Beck M., Chinyio E., Asenova D., (2003). **Achieving best value in private finance initiative project procurement**. Construction Management and Economics, 21:5, p464.
- <sup>40</sup>TIONG R.L.K, YEO K.T., McCARTHY S.C., (1992), **Critical success factors in winning BOT contracts**.Journal of Construction Engineering and Management, Vol. 118, N°2, pp222-228.
- <sup>41</sup>Chua D. K. H., Kog Y.C., Loh P.K., (1999), **Critical success factors for different project objectives**. The Journal of Construction Engineering and Management, Vol. 125, N°3, pp142-150.
- <sup>42</sup>CHENG E.W.L, LI H., LOVE P.E.D., (2000), **Establishment of critical success factors for construction partnering**. Journal of Management in Engineering, Vol 16, N°2, pp84-91.
- <sup>43</sup>BELLAHCENE-BELKHEMSA O., (2015), « **Les accords de partenariat industriels en Algérie : problématique générale et analyse de l'expérience du secteur de l'industrie pharmaceutique** », Thèse de Doctorat en science économique : l'Université MOULOUD MAMMERI TIZI-OUZOU, p24.
- <sup>44</sup>TRIKI D., MOALLA E., (2013), « **Les conditions de réussites des Joints Ventures internationales : le cas d'un groupe français dans le secteur industriel** », in Revue Management & Avenir, n° 65, p15.
- <sup>45</sup>MILLER R., Glen J., Jaspersen F., Karmokolias Y., (1997), **International Joint Ventures in Developing Countries**. Finance & Development, p26.
- <sup>46</sup>CHERIET F., LE ROY F., RASTOIN J.L., (2008), « **Les alliances stratégiques asymétriques entre multinationales et PME. Le cas de Danone - Djurdjura en Algérie** », Revue internationale P.M.E., vol. 21, no 1, p39.
- <sup>47</sup>BEAMISH P.W., BANKS J.C., (1987), **Equity joint venture and the theory of multinational enterprise**. Journal of International Business Studies, vol. 18, n°2, pp01-09.
- <sup>48</sup>HARITI Y., BOUKHEZAR N., (2020), « **La performance des alliances stratégiques : Références au cas de l'Algérie** », in Revue des sciences humaines et sociales, Volume 6, Numéro 2, p540.
- <sup>49</sup>DEREK F. CHANNON, SAMMUT-BONNICI T., (2014), **Joint-Ventures**. Wiley Encyclopedia of Management, p01.
- <sup>50</sup>BRESSON V., (2015), **Gestion des risques d'échec d'une JV entre PME française et une structure chinoise. Le cas d'un leader du vélo pliant en Europe** », Mémoire de Master en économie et gestion : l'Université de Montpellier, p05.
- <sup>51</sup>MILLER R., Glen J., Jaspersen F., Karmokolias Y., (1997), **International Joint Ventures in Developing Countries**. Finance & Development, p03.
- <sup>52</sup>AMROUN S., CHAIBET D., (2018), « **Partenariat Public-Privé, analyse du transfert de savoir-faire, cas SEAL (Algérie) et SUEZ Environnement (France)** », Mémoire de Master : l'Université MOULOUD MAMMERI DE TIZI-OUZOU, p02.
- <sup>53</sup>BOUGRIOU M.N., BENTERKI A., (2018), **Investing opportunities through public-private partnerships in Algerian economy**. Journal of Economic & Financial Research, Vol 5, Issue 1, pp874-875.
- <sup>54</sup>EUROPEAN INVESTMENT BANK, (2011), **Study on PPP Legal & Financial Frameworks in the Mediterranean Partner Countries**. Volume 1, p16.
- <sup>55</sup>TELIDJI M.S., (2015), « **Encadrement et promotion des PPP en Algérie** », Atelier Partenariat Public-Privé (PPP) : CNED, IFC, p08

<sup>56</sup> Visited : 25/11/2020 <http://www.aps.dz/economie/112680-benabderrahmane-preparation-d-un-projet-de-loi-sur-le-partenariat-public-privé>

<sup>57</sup> **CHARTE RELATIVE AU PARTENARIAT DES SOCIETES**, (2017), p09

<sup>58</sup> Visited: 23/11/2020 [https://www.douane.gov.dz/IMG/pdf/loi\\_no20-07\\_du\\_04\\_juin\\_2020\\_portant\\_loi\\_de\\_finances\\_complementaire\\_pour\\_2020.pdf](https://www.douane.gov.dz/IMG/pdf/loi_no20-07_du_04_juin_2020_portant_loi_de_finances_complementaire_pour_2020.pdf)

<sup>59</sup> BOUACIDA M., (2018), « **Les conditions de réussite des joint-ventures internationales en Algérie** », Collection Business Science Institute : Presses de l'Université du Québec.

<sup>60</sup> HAMOUTENE A., (2009), **International joint ventures in algeria: factors in their success and failure**. In La Revue des Sciences Commerciales, Volume 8, Numéro 1, p46.

<sup>61</sup> Guarte J.M., Barrios E.B., (2006). **Estimation Under Purposive Sampling**. Communications in Statistics Simulation and Computation, 35, p277.

<sup>62</sup> DESMARAIS C., MOSCAROLA J., (2004), « **Analyse de contenu et analyse lexicale, Le cas d'une étude en management public** », Actes du colloque L'analyse de données textuelles : De l'enquête aux corpus littéraires, p03.

#### How to cite this article by the APA method:

Nour el houda BOUHEROUR, Mohamed Abderraouf ZEBOUCHI (2022), **Evaluation of public-private partnership (PPP) projects in the Algerian context: An overview of seven Joint Ventures active in particular sectors**, Algerian review of economic development, Volume 09 (Number 01), Algeria: Kasdi Marbah University Ouargla, pp. 429-450.



The copyrights of all papers published in this journal are retained by the respective authors as per the **Creative Commons Attribution License**.



Algerian Review of Economic Development is licensed under a **Creative Commons Attribution-Non Commercial license** (CC BY-NC 4.0).