

DETERMINANTS OF THE DIMENSIONS OF FINANCING FOR INVESTMENT PROJECTS TO CREATE JOBS DURING THE PERIOD 2002-2013: A QUANTITATIVE STUDY OF THE NATIONAL AGENCY FOR INVESTMENT DEVELOPMENT IN ALGERIA



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Abstract

The study aims to fix the determinants of the financing dimensions of investment projects completed during the period 2002-2013. The purpose of undertaking these investment projects is to reduce unemployment and create new jobs. The study is purely quantitative after a complete database was obtained for each of the 48 states of Algeria, according to the administrative division in that period, from the National Agency for Investment Development (NAID) in Algeria. The determinants of the dimensions of financing for investment projects were obtained after we used the statistical technique of multiple linear regression analysis. From the perspective of the objective database, the methodology used to analyze the data, and complete transparency in dealing with the research process, we can confirm that the research results are honest and reliable, and the results can be generalized and a strategy for promoting investment in Algeria can be drawn up on a correct basis.

1. Introduction

In a world dominated by globalization and the movement of capital, the global economy has become charged with a network of transactions in the form of foreign and local direct investments. These investments are of great importance in helping economic development, creating jobs, and reducing the state's unemployment rate (Ben Chaalan, 2014); Investments not only create jobs, but they also help in technological and technical transformation, controlling modern production techniques, acquiring new administrative and organizational skills, and training and qualifying the local workforce. To encourage foreign and local investment, Algeria provided legal guarantees, judicial guarantees, tax incentives, and an appropriate investment climate, as well as providing government institutions supportive of investments (Ameish, 2017).

Investments, especially foreign investments, are of great importance in the economic advancement of the developing countries that host them. All countries are competing to attract these investments (Al-Qattan, 2022). Algeria, like other of its counterparts in developing countries at the beginning of the 1990s, became aware and realized, following its economic openness and its adoption of the capitalist approach, of the necessity of encouraging private domestic investment and betting on foreign direct investment and other indirect investment in economic recovery and achieving sustainable development. The liberal system was distinguished by providing a favourable investment climate, tax incentives, and establishing a legal system that served national investments as well as foreign investments. Algeria also sought to remove all barriers that hinder

the landing of foreign and local investments on the homeland, according to Hosseini (2015).

Investments help raise the economic level, raise production, develop productivity, enhance the reach of countries' exports to global markets, determine the competitiveness of these products, and determine the competitiveness of the economy of the country hosting these investments, according to Dahmani (2016). If we touch on investment, the issue of financing investments is raised, as it is considered one of the basic building blocks for existing bets on domestic investment in many countries, especially in Algeria, which relied on oil revenues and external debt. We note that fluctuations in fuel prices have a significant impact on the problem of financing investments (Ben Amiroush, 2022). Investment helps raise employment rates, eliminate unemployment, improve individual income, and achieve social welfare (Ben Amiroush, 2021). Investment affects the development of Algerian individual income in the short and long term, and the permanent interaction between investment and income (Laabni, 2001).

As for providing support devices for investments in Algeria, Algeria established governmental and financial bodies, including the establishment of the Algerian Agency for the Promotion of Investment (NAID); The latter has specific tasks entrusted to it by law, it has a presence in all parts of Algeria, it has bodies that manage it, and it seriously seeks to connect it to a digital network, according to Homsy and Makalati (2023). "In Algeria, the National Investment Development Agency (NAID) is one of the active bodies in achieving economic development through its supervision and follow-up of various investments in the country," which made the Algerian legislator reconsider the tasks assigned to it by issuing a new investment law in 2022. This law was restored. Organizing and forming the National Investment Development Agency, changing its name to the Algerian Investment Promotion Agency, and granting it the role of a true promoter and accompaniment of investments by creating a digital platform for the investor as a new mechanism to accompany investors, and manage the portfolio of benefits and incentive systems" (Cossam, 2022).

Following this presentation written above, we have referred to several scenarios and dimensions that make us wonder about the determinants of the financing dimensions for investment projects in order to create jobs during the period 2002-2013, especially in Algeria. We aim to conduct a quantitative study of the National Agency for Investment Development (NAID), using a database that we obtained from this institution itself in its entirety?

2. The Theoretical Framework of the Study

Investment, whatever its form, in developing countries, especially in Arab countries, aims first to create jobs, or rather to generate jobs, which stands at the top of these challenges for developing economies (Al-Asraj, 2010). Foreign direct investment has an effective role in creating job opportunities, reducing the unemployment rate, and increasing the added value of the country hosting it, and this is based on Mun et al. (2008) and Shaari et al. (2012). It should be noted that there are many studies conducted on developing countries indicating that investment in general creates job opportunities for local workers and eliminates high rates of unemployment in these countries, including the study of Ajaga et Nunnekamp (2008), and the study of Karisson et al. (2009), Likewise, the study of Waldkirch et al. (2009).

What the governments of countries around the world fear is the rise in unemployment rates, that is, the decline in employment rates, especially in developing countries such as Algeria, because it threatens social stability, which is followed by sagging political stability, and it is one of the most difficult problems that have imposed themselves strongly in these countries, Chowdhury et Hossain (2014); However, unemployment rates are measured by the ratio of unemployed individuals seeking work and those who are able to do it to the total labour force in that country at a certain age and determined according to the laws of each country (Jhingan, 2001).

At the level of Algeria as a country, it seeks to solve the problem of employment, meaning solving the problem of unemployment is one of the challenges facing its economy. In order to resolve this problem, successive Algerian governments hastened to open the door to investment in all its forms and seek to provide a suitable climate for these investments, in order to give what is hoped for. Including and facilitating the financing of these investments, regardless of their size, in the hope of creating the targeted employment size, according to Omeish (2017). Financing the various investment programs in Algeria is considered a challenge and a bet, because their financing from the beginning of the 1970s to the present day depends on hydrocarbon revenues and external debt. We note that investment financing was volatile, depending on fluctuations in fuel prices, and Algeria is currently looking for other sources of foreign direct investment, Ben Amirouche (2002); creating job positions is the goal of this study. To do this, a group of dimensions has been developed, which are shown below:

2.1. Ownership

Ownership structure is an important factor that affects the financial health and soundness of an enterprise. Besides, the impact of ownership structure on firm performance is an

important issue in the finance theory literature. The type of ownership structure such as concentration of ownership in one hand or a very few people may improve performance, both by reducing the probability of default and by reducing monitoring costs (Shleifer et Vishny, 1986), however, it may also work in the direction The opposite (Zeitun et Gang Tian, 2007).

The relationship between ownership structure and firm performance has been an important research topic over the past three decades and has produced an ongoing debate in the corporate finance literature. The primary motivation behind theoretical and empirical research on the relationship between ownership structure and firm performance has been the separation of ownership and control that Berle and Means (1932) identified from Ownership Classifications: Hong (2004) divided ownership into five categories, which are as follows: international ownership of the institution, ownership of financial institutions, ownership of companies and institutions, ownership of securities investment funds, ownership by other institutional investors, and other ownerships not mentioned. The hypothesis proposed by Shleifer and Vishny (1986) is that the presence of concentrated ownership leads to better management and also better performance, especially when ownership is concentrated in institutions rather than investors, therefore, institutional ownership can increase the performance of the institution.

Besides, the state has long been recognized as primary sources of institutional dependency, Lester et al. (2008) assert that the state can influence economic institutions in several ways, such as obtaining direct ownership in state-owned enterprises, providing direct subsidies, or using regulations and policies, compared to other forms of influence such as taking shares in emerging private enterprises, but state ownership allows Direct broad state control over the organization's operations (Zeitun and Gang Tian, 2007).

Amess and Robert (2017) point out that Foreign Direct Investment (FDI) leads to increased competition for domestic enterprises because multinational firms are able to overcome barriers to entry with superior technology, and that FDI forces inefficient enterprises out of business. The dominant influence depends on the extent of the change in the share of production controlled by foreign firms. Changing the ownership of economic institutions leads to a change in the expected performance of the institution, which means that the ownership structure and the company's performance are truly linked. We wonder if the ownership structure increases the number of work positions in the economic institution, and from this we present the following hypothesis:

Hypothesis 1: Financing according to the ownership dimension (domestic investment, foreign direct investment, and partnership) positively affects the creation of jobs in investment projects supported by the National Agency for Investment Development (NAID) in Algeria.

2.2. Sector of Economic Activity

In the contemporary global economy, the economic activity sector is considered an important phenomenon of economic development, especially in developing economies. To begin with, the services sector attracts the largest share of foreign direct investment in the world. The industries that attracted the bulk of inward FDI during 1990-1992 in the services sector are trading and financing activities. In the manufacturing sector, most of the world's inward foreign direct investment was in the nutrition sector, including food, beverages, mineral products, machinery and equipment (Sutradhar, 2014).

In the case of the manufacturing sector, there has been a decline in the inflow of global FDI from 29.68% during the period 1990-1992 to 24.41% during the period 2008-2010; but the decline in the manufacturing sector was evident in advanced economies and the share of manufacturing in the total FDI inflow fell to only 13.68% during the period 2008-2010. In the case of developing and transition economies, the trend is reversed (Sutradhar, 2014).

In India, it is important that, if the Indian economy wants to maintain sustainable service sector-led growth, it must have a vibrant manufacturing sector, which is only possible by attracting more and more FDI in the manufacturing sector (2014, Sutradhar). As for Portugal, it has been decided with regard to some sectors of activity that the difference in average wages between men and women will increase, depending on the political orientation of the country, Nunes et Cardim (2013). In Jordan, the Jordanian industrial sector is a major sector in the economy due to its multiple fields. The opportunities in this sector are many. It is known that an entrepreneur who maintains legal business compliance is assertive in industrial sectors (Warrad et Al Omari, 2015).

In addition, construction and public works institutions are considered active and important economic actors in every country in the world. Their activity translates into higher employment levels, tax revenues, and the provision of new spaces that require more spending on equipment, thus stimulating consumer spending (Załączna and Wolski, (2017). In the post-socialist era the Baltic states and Croatia (Sun, Mitra and Simon, 2013) began to view residential markets globally as an area for investment (Tsatsaronis and Haibin, 2004; Beblavy Cobham and Odor, 2011); the increase in demand and lag in supply were reflected by

increasing prices, which confirmed the conviction that investments in the residential market were profitable (Dokko et al., 2011). This has contributed to the intensification of construction and public works activity. According to EUR and STAT data, the construction sector in European Union countries has provided job opportunities for 14.8 million workers (11.5% of people working in non-financial sectors) and provided 562 billion euros of value added (9.3% of the total value added attributed to non-financial sectors), according to Wolski et Załączna (2017), and from it we present the hypothesis that affects the economic sector and the extent of its impact on job creation.

Hypothesis 2: Financing according to the economic sector dimension represented by (construction and public works, agriculture, industry, health, transportation, tourism, and services) positively affects the creation of jobs in investment projects supported by the National Agency for Investment Development (NAID) in Algeria.

2.3. Type of Investment

The researchers' classified investment into several types, Chrisos and Gillet (2003) referred to the type of investment according to its nature, while Sarar (2020) referred to investment according to the nationality of the investor and investment according to the period. There is also investment according to legal status, and this is based on Shammout and Kanjo (2010), while Al-Hanafi (1997) touched on investment according to economic, social, or administrative activity, and he also referred to investment in human resources.

As for Karimi and Noun (2023), they showed another type of investments, including commercial investments, industrial investments, construction investments, expansion investments, and rehabilitation investments. However, we would like to point out investment by nationality, which deals with local or national investment that originates within the state by physical or legal persons within the borders of the state itself; It also affects foreign investment, in which we distinguish foreign direct investment and indirect foreign investment, based on Ben Amiroush (2022), and on this basis we present the following hypothesis:

Hypothesis 3: Financing according to the type of investment dimension (construction, expansion, rehabilitation, expansion, rehabilitation, and structuring) positively affects the creation of jobs in investment projects supported by the National Agency for Investment Development (NAID) in Algeria.

2.4. Legal Sector

Since Algeria's economic openness at the beginning of the 1990s, Algeria has been working hard to create a legal climate that encourages and stimulates national investment, especially foreign investment, by providing a stable legal and legislative system (Cossam, 2023). Algeria also seeks to create a suitable investment climate that guarantees the attraction of foreign capital. It is not enough that the investment climate contains stimulating legal legislation, but we also do not exclude the economic, social and political aspects, including political stability, which greatly affects legislative stability. These elements synergize with each other and influence each other, which would be attractive to investment, based on Qarfi (2008).

In terms of laws, previous legal legislation in Algeria proved limited, which prompted Algeria to issue a new investment law in 2022 that is more flexible and aims to attract foreign investment and national investment alike. This law is represented in Law 22-18, which granted more powers to the agency.

Algerian Investment Promotion Company develops Law 22-18 grants financial incentives to investors, tax facilities, and legislative and legal guarantees. These guarantees were built on objective foundations and rules that seek to reject discrimination between national and foreign investors. This law aims to grant full protection to investors (Koussam, 2022).

The element of legal security is very important, especially as it guarantees the enjoyment of the rights and freedoms granted to investors, given the state of legal instability in Algeria, which had a negative impact on attracting investors, which prompted Algeria to enshrine the principle of legal security in the 2020 Constitution, and the latter became a principle. According to Kharshi (2023), the legislator must adhere to this principle in the process of issuing laws related to investment, and from here we present the following hypothesis:

Hypothesis 4: Financing according to the legal sector dimension represented by laws (private, public, and mixed) positively affects the creation of jobs in investment projects supported by the National Agency for Investment Development (ANDI) in Algeria.

2.5. Category of Employment Size and Financing Size

The small and medium enterprises sector occupies great economic importance in the economies of countries, as investments in the form of the small enterprises sector are almost witnessing a significant increase, similar to other large institutions, due to the nature of the size of employment, the

volume of circulating capital, and the characteristics of this sector of institutions distinguished by its flexibility and adaptation in various economic environments. (Julien, 1994; Raja and Kumar, 2008). Since the small enterprise sector is the fastest growing in the economies of countries, it is therefore most suitable for the growth of domestic and foreign investment, small and medium enterprises are considered engines of growth because they provide low-cost job opportunities, and this cost contributes to the fair distribution of wealth among the citizens of one country, and they generally use local raw materials and carry out the manufacturing industry, and they are more compatible with their economic surroundings and business environment, as they provide the ability to withstand disturbances economic and maintain a reasonable growth rate, according to Konopielli et Bell (1998).

Small and medium enterprises are defined by a more quantitative definition, and are classified according to their workforce, which ranges between 49 and 500 workers in France, Canada, and Africa, including Algeria. This is according to some references, and some of them classified it as containing a workforce ranging between 150 and 2000, and that the enterprise Small ones are between 10 and 49 workers. “The World Bank has stated that small or micro enterprises that employ less than 10 employees have a total assets and sales that do not exceed 100 thousand US dollars, and small enterprises that employ a maximum of 50 employees that their total sales and assets do not exceed 3 million dollars. As for enterprises for a medium enterprise whose number of employees does not exceed 300, the volume of sales and capital assets does not exceed 15 million US dollars” (Mahdid and Amer, 2016).

Small and medium enterprises, with their successes in recent years, are considered a reservoir of labor force as they work to solve the problem of unemployment, especially in developing economies. They are also considered a large market for those wishing to finance, as the volume of financing for investment projects is steadily increasing after the return to interest investing. The outcome of the work of this type of institution seeks to achieve integration with major companies by achieving industrial sub-contracting (Hadaji, 2019).

Hypothesis 5: Financing according to the size of employment dimension (less than 9 workers, from 10 to 49 workers, from 50 to 250 workers, and more than 250 workers) positively affects the creation of jobs in investment projects supported by the National Agency for Investment Development (NAID) in Algeria.

Hypothesis 6: Financing according to the size of financing (less than 10 million DZD, from 10 to 50 million DZD, from 50 to 200 million DZD, from 200 to 500 million DZD, and more than 500 million DZD) positively affects the creation of jobs in investment projects supported by the National Agency for Investment Development (NAID) in Algeria.

However, the theoretical model of the research is presented in **Figure 1**.

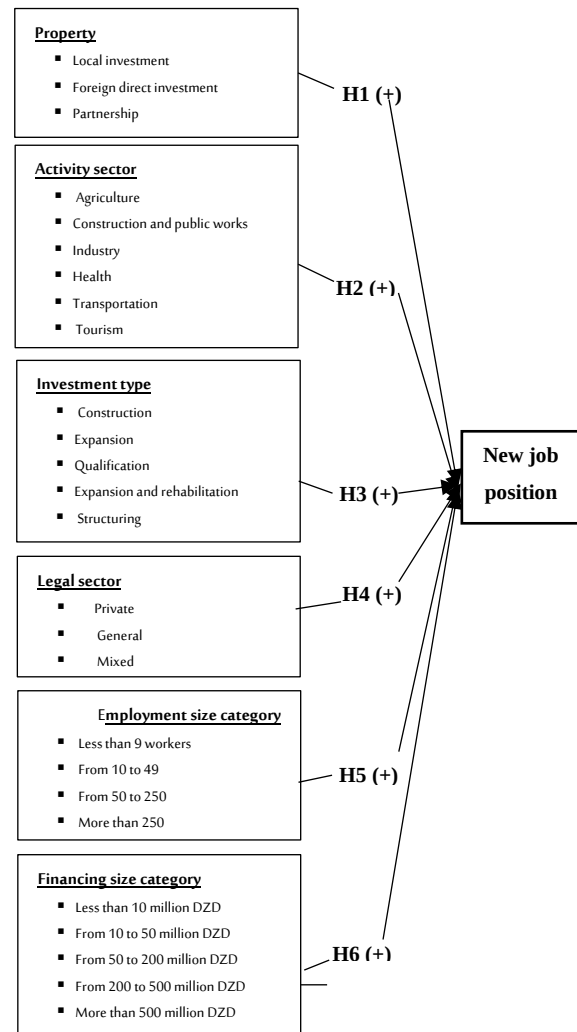


Figure 1. The theoretical model of the study

3. Methodological Framework

The methodological framework contains an explanation of the sample and tools of the study, as well as an account of the reality of the National Agency for Investment Development (NAID), how to manage data, the nature of measuring variables, detailing the statistical techniques used in analyzing the data, and presenting the initial theoretical equations for the statistical technique of multiple linear regression.

3.1. Study Population and Sample

It contains the population and study sample.

3.1.1. Study Population

In our study, we relied on data from the National Agency for Investment Development (NAID) at the national level for the period extending from 2002 to 2013. This data includes 48 observations representing 48 states of Algeria. These observations are projects that the NAID presented various types of support for it in every state of the Algerian national territory.

3.1.1.1. The Reality of the National Agency for Investment Development "NAID"

Through **Table 1** which shows some indicators of investment authorization data in Algeria at the National Agency for Investment Development (NAID) during the period extending from 2002 to 2013, which gives us a glimpse that brings us closer

to knowing the achievements of this body charged with regulating investment during the 12-year period in question.

The study indicated that the data indicated that the agency supported 53,207 investment projects at the national level, and the financial value of the investment projects was estimated at 8,072,490 million dirhams (equivalent to approximately 64.5 billion dollars at the current official exchange rate), so that these projects were able to provide 853,409 new job positions, according to Data from the General Directorate and the National Agency for Investment Development (NAID): Given the value of the funding these projects received, which is disproportionate compared to the size of the jobs generated by them, this is justified by the cost of creating one job, which was estimated at 9.5 million dinars, which is a very large number. It is estimated at 105,555 US dollars according to the average exchange rate compared to the global figure according to the International Labour Office.

Table 1. Investment declaration data at the NAID in Algeria for the period 2002-2013

Number 53207 of projects	Value of projects 10 ⁶ DZD	Job positions created	Cost of creating one job position
53207	8072490	853409	9.5

Source: Prepared by researchers based on data from the General Directorate of the National Agency for Investment Development (NAID).

3.1.1.2. Study sample: Description of the Database

It is also clear that the distribution of the financial value of investment projects according to the activity sector dimension, half of which is directed towards the industrial sector at an estimated rate of 49.97%, which justifies the agency's direction towards strengthening this sector with a large margin at the expense of the rest of the other sectors, as it is the primary sector that creates wealth and employment at the same time. It is also considered the main engine of growth and the development process in any economy.

After that comes the construction and public works sector with a ratio of 14.94% of the total financing volume for the sectors. As for the transportation, tourism, and services sectors, they are almost not significantly different and are close in terms of the financing percentage, which is estimated: 13.33%, 10.98%, and 8.70%, respectively. As for the agriculture and health sectors, their percentage is estimated at 1% each, which is a very weak percentage compared to the importance of the two sectors in the national economy.

As for the distribution of the financial value of investment projects according to the type of investment, we note that the agency focuses on financing the creation of new investment projects primarily at a rate estimated at 57.09% at the expense of the rest of the investment types, which highlights the importance of new investment projects, and the percentage of financing the expansion of investment projects is estimated at 35.55%, which indicates the agency's interest in financing existing projects to develop them and increase their production or service branches. As for the remaining types of investment (rehabilitation, expansion, rehabilitation, structuring), their financing percentage is very weak or almost non-existent.

We also note that the financial value of investment projects according to the legal sector dimension is mostly concentrated in private sector projects at an estimated rate of 57.76%, so that we find that the National Investment Council (NIC), which is considered the highest investment regulatory body in the country, is working on liberating the economic sectors from the public sector's competition with the private sector and enabling.

The latter invests in areas that in the recent past were limited to the state only, by supporting it, providing funding for it, and removing bureaucratic barriers to it, due to the effectiveness of

the private sector, which is considered the primary engine in any economy, regardless of its degree of progress, for its role in steering the wheel of economic growth, as we find.

The percentage of financing for public investment projects is estimated at 30.54%, so that the public sector gains great importance, due to its role in creating competition and balance in any sector to fill the shortage gap in it, as for the mixed sector consisting of local or foreign private projects with the public sector, which is based on the investment base. 49%/51%, we find its financing ratio estimated at 11.07%, which is a very significant percentage compared to the previous two sectors.

As for the distribution of the financial value of investment projects according to the legal form dimension, investment projects are considered to be in the form of a company with shares as the main acquirer of financing at a rate estimated at 56.19%, followed by the form of a limited liability company and the form of a sole proprietorship at a rate estimated at 20.21% and 12.67%, respectively. As for the rest of the formulas, their financing rate is considered weak or almost non-existent compared to the formulas.

As for the distribution of the financial value of investment projects according to the category of employment size, which is divided into four categories, we find that the category with the largest financing percentage is the category of more than 250 workers, which are large-sized investment projects according to the classification of small and medium enterprises in terms of the number of workers, so that the financing percentage for this percentage is estimated Category B is 35.96%, then followed by the category of 10 to 49 workers and the category of 50 to 250 workers with an estimated rate of 30.91% and 23.59%, respectively. As for the percentage of financing investment projects with fewer than 9 workers, it is estimated at 9.54%, so that this percentage is significant because this category of investment projects does not require large financial resources.

As for the last dimension, which is the distribution of the value of financial amounts for investment projects according to the category of financing size, which consists of five categories, we find that the largest percentage of financing is acquired by investment projects with a capital of more than 500 million

dinars, of course, the investment projects that have a large capital are which receives the largest percentage of financing, which is clearly visible for the rest of the categories, so that we notice that the larger the category of capital, the greater the percentage of financing for these investment projects.

3.2. Data management

After analyzing the data of the National Agency for Investment Development (NAID), it became clear that the data we have is the sum of the proceeds of investment projects extending from the year 2002 to the year 2013, and it is arranged according to the states of the national territory (including all states) in the previous administrative division, so that it can be said that it is observations made at the same time in the form of cross-sectional data (Gary, 2012).

It was also shown that all investment projects spanning the period 2002-2013 include sufficient information, meaning there are no missing values, and therefore no observations were deleted. From this standpoint, we will rely on a sample size of 48 observations, and we will also use the statistical program SPSS, version 25, to conduct the statistical analysis for this sample.

3.3. Measuring Variables

This study includes 7 variables, including 6 independent variables and one dependent variable. The first independent variable (after ownership) includes 3 sub-variables (indicators), while the second independent variable (after sector of activity) includes 6 sub-variables, while the third independent variable (after type Investment) includes 5 sub-variables (indicators), while the fourth independent variable (after the legal sector) includes 3 sub-variables, while the fifth independent variable after (the employment size category) includes 4 sub-variables, while the sixth independent variable (after the financing size category) includes 5 sub-variables, and the dependent variable also includes one sub-variable.

In fact, these variables will be measured on a quantitative scale. **Table 2** shows this. This table includes the number of indicators that measure all variables and the name of the variable used to measure these variables.

Table 2. Shows the measures and indicators used to measure the study variables.

Dimensions	Dimensional measurement	Indicators	Dimensions	Dimensional measurement	indicators
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New job positions	01 quantitative (numerical)	Number of job positions created within the framework of investment projects.	Investment type	05 quantitative (Digital 10 ⁶ DZD)	Construction
Ownership	03 Quantitative (Digital 10 ⁶ DZD)	Local investment			Expansion
		Partnership			Qualifying
		Foreign direct investment			Expansion and rehabilitation
Activity sector	07 Quantitative (Digital 10 ⁶ DZD)	Agriculture	Employment size category	04 Quantitative (Digital 10 ⁶ DZD)	Structuring
		Construction and public works			Less than 9 workers
		Industry			From 10 to 49 workers
		The health			From 50 to 250 workers
		Transport			More than 250 workers
		Tourism			Less than 10 million DZD
Legal sector	03 Quantitative (Digital 10 ⁶ DZD)	Services	Financing size category	05 (Digital 10 ⁶ DZD)	From 10 to 50 million DZD
		Especially			From 50 to 200 million DZD
		Generality			From 200 to 500 million DZD
		Mixed			More than 500 million DZD

Source: Prepared by researchers

3.4. Statistical Techniques used in Data

Analysis

In the context of analyzing the study data, we will rely on the inferential statistics method, by using the multiple linear regression analysis technique. This technique can determine the effect of the independent variables on the dependent variable. In addition, we will rely on the descriptive method through the use of frequency distribution. The goal of this is a diagnosis of the reality of the National Agency for Investment Development (NAID) in Algeria.

3.5. Initial Theoretical Equations

In fact, we have formulated preliminary mathematical equations through which we can estimate the values of the dependent variable (the number of job positions created within the framework of investment projects) based on the coefficients of

the non-standard independent variables. We will verify the equations during the data analysis, and this allows us to identify the independent variables that explain the dependent variable, as well as refuting independent variables that do not explain the dependent variable. It should be noted that the theoretical model is classified as a multivariate model.

Our dependent variable includes one variable, and the independent variable includes 6 dimensions that in turn contain 28 indicators. Therefore, 6 preliminary mathematical equations will be formulated that estimate each of the following: the number of job positions created within the framework of investment projects in terms of each dimension (with indicators for each dimension), due to the inability and impossibility of one model to contain 28 complete indicators together due to the fact that we only have 48 observations. Therefore, we will limit ourselves to studying each dimension alone.

- 1) Jobs created (01) = $\beta_0 + \beta_1$ domestic investment + β_2 partnership + β_3 foreign direct investment + ε
- 2) Jobs created (02) = $\beta_0 + \beta_1$ agriculture + β_2 construction and public works + β_3 industry + β_4 health + β_5 transportation + β_6 tourism + β_7 services + ε
- 3) Jobs created (03) = $\beta_0 + \beta_1$ creation + β_2 expansion + β_3 rehabilitation + β_4 expansion and rehabilitation + β_5 structuring + ε
- 4) Jobs created (04) = $\beta_0 + \beta_1$ private + β_2 public + β_3 mixed + ε
- 5) Jobs created (05) = $\beta_0 + \beta_1$ less than 9 workers + β_2 from 10 to 49 + β_3 from 50 to 250 + β_4 more than 250 + ε
- 6) Job creation (06) = $\beta_0 + \beta_1$ less than 10 million DA + β_2 from 10 to 50 million DA + β_3 from 50 to 200 million DA + β_4 from 200 to 500 million DA + β_5 more than 500 million DA + ε

4. Results

The results of the statistical analysis of the data include the following: descriptive analysis of variables, correlation analysis

by correlation matrix, and inferential statistical analysis by multiple linear regression analysis.

4.1. Descriptive Statistics

Through **Table N° (03)**, which shows a set of descriptive statistics for the data indicators of the National Agency for Investment Development (NAID) in Algeria during the period extending from 2002 to 2013, which gives us a picture that brings us closer to knowing the form of distribution that these variables (indicators) follow, so that we note Regarding the index of the number of jobs created, the lowest value is 742 jobs and the highest value is 186,319 jobs, which is a very large difference that highlights the difference between states in the creation of jobs, so that the average creation is estimated at 17,779 jobs for each state, with a standard deviation estimated at 28,111 jobs, which is a very large number that highlights the extent of the dispersion of the values around the mean, which indicates the extent of the divergence of the values of the number of job positions created within the framework of investment projects between the states (from one state to another).

Table 3. Presentation of some descriptive statistics

Standards Indicators	N	Min.	Max.	Mean	Standard	Deviation	Skewness
Number of job positions created	48	742	186319	17779,35	28111,750	4,941	28,483
Local investment	48	3484	1458528	126048,46	218302,994	5,146	30,598
Partnership	48	0	415320	24990,88	67591,337	4,683	24,682
Foreign direct investment	48	0	594553	17137,54	85831,260	6,755	46,316
Agriculture	48	0	11425	1775,98	2267,625	2,310	6,563
Construction and public works	48	1529	176931	25127,83	32977,919	3,320	12,187
Industry	48	1131	658863	84034,77	131662,648	3,363	12,295
The health	48	0	19357	1722,65	3319,749	3,960	18,014
Transport	48	751	482940	22411,48	69030,940	6,587	44,692
Tourism	48	0	581128	18467,63	84126,413	6,650	45,189
Services	48	73	295351	14636,54	43240,066	6,119	39,823
Construction	48	1481	1158118	96014,83	191965,829	4,642	22,891
Expansion	48	2003	873414	59788,00	127453,303	5,813	37,028
Qualifying	48	0	36456	4461,38	7798,691	2,781	8,140
Expansion and rehabilitation	48	0	187783	7823,50	35852,959	4,759	21,653
Structuring	48	0	2486	89,17	419,104	5,095	26,289
N valide (liste)	48						

It also shows the coefficient of skewness (symmetry), which is estimated at 4.941, as it is greater than zero, which represents the

value the skewness coefficient in the normal distribution, meaning that the data is centered on the left side of the

distribution, which means that small values are more than large values. We say that the distribution is skewed towards the right, which indicates that the shape of the distribution of the values of the index of the number of jobs created within the framework of investment projects is asymmetrical. As for the skewness coefficient, it is estimated at 28.483, which is a large number compared to the number 3, which is considered the skewness coefficient of the normal distribution, which indicates that the distribution of the dependent variable is very high, meaning that the data is concentrated or largely clustered in a small area.

We also note from the same table that the local investment index has an average estimated at 126,048 million (DZD), which represents the value of the average cost of local investment projects in each state, with a standard deviation estimated at 218,302 million (DZD), which is a very large number that highlights the extent of the divergence in the cost of investment projects. The local investment index is greater than zero and amounts to 5.146, which indicates that the shape of the distribution for this index is far from moderate and asymmetrical. Likewise, the skewness coefficient for the same index is estimated at 30.598, which indicates that it is highly skewed.

We also notice from the same table that the rest of the indicators under study, according to dimensions, have very large standard deviations, and the skewness coefficient for all indicators is greater than zero, which indicates that these indicators are far from moderation in the distribution and that they are skewed to the right. We also note that the flatness coefficients for all indicators greater than 3 and very high except for the individual institution indicator, which is low, indicating that the data are highly concentrated or clustered in a small area.

There is no doubt that these descriptive statistics tell us about the extent of the variation occurring in the creation of jobs within the framework of investment projects supported by the National Agency for Investment Development (NAID) in Algeria between

the states. We also notice the same thing regarding the cost of financing these investment projects according to all dimensions (ownership), sector of activity, type of investment, legal form, legal sector, category of employment size, category of financing size), which gives us a general and preliminary view that the data does not follow a normal distribution.

4.2. Multiple Linear Regression Analysis

To test the hypotheses of our study, we used multiple linear regression analysis, on the basis that through this statistical technique we can identify variables that have a positive impact on job creation within the framework of investment projects, but given that the weighted least squares (WLS) method will be used, which does not take these assumptions into account (Hasan & Alam, 2018), so that this method gives observations with large differences smaller weights than observations with small differences (Douglas et al, 2012), to give better estimation results, which is the case.

Table 4 includes six models (06) that explain the variance of the dependent variable (the number of jobs created within the framework of investment projects) in terms of the dimensions of financing for investment projects, so that the first model (01) explains the variance of the jobs created in terms of indicators of the ownership dimension, the model The second (02) in terms of indicators after the sector of activity, the third model (03) in terms of indicators after the type of investment, the fourth model (04) in terms of indicators after the legal sector, the fifth model (06) in terms of indicators after the employment size category, the sixth model (07) in terms of Indicators after the financing volume category. All of these models are statistically significant at a significance level of less than 5%. This reflects the ability of the independent variables in each model to predict the values of the dependent variable, as shown in Table No. (04).

Table 4. Shows the summary of the regression analysis.

Analysis of variance		Regression Analysis			Models ^a
Significance Level Sig	F Calculated	Adjusted Coefficient of Determination $\bar{R}^2$	Coefficient of Determination R^2	Correlation r	
0.000	10473.782	0.999	0.999	0.999	01
0.000	3671.192	0.998	0.998	0.999	02
0.000	419.085	0.978	0.980	0.990	03
0.000	21691.482	1.000	1.000	1.000	04
0.000	1606.927	0.990	0.991	0.995	05
0.000	628.736	0.982	0.983	0.992	06

Source: Prepared by researchers based on the outputs of SPSS version 25

Model 01: (fixed value), domestic investment, partnership, foreign direct investment.

Model 02: (fixed value), agriculture, construction and public works, industry, health, transportation, tourism, services.

Model 03: (fixed value), creation, expansion, rehabilitation, expansion and rehabilitation, structuring.

Model 04: (fixed value), private, public, mixed.

Model 05: (fixed value), less than 9 workers, 10 to 49 workers, 50 to 250 workers, more than 250 workers.

Model 06: (fixed value), less than 10 million DZD, from 10 to 50 million DZD, from 50 to 200 million DZD, from 200 to 500 million DZD, more than 500 million DZD.

*All regression models are estimated using the weighted least squares (WLS) method.

The first model (01), the second (02), the third (03), the fifth (05), and the sixth (06) indicate that the relationship between the independent variables in each of these models (indicators) and the dependent variable, the number of jobs created, is a very strong positive and direct relationship with the value of 0.99, and the percentage of variation in the number of new job positions

explained by these variables in each of these models reached 99.9%, 99.8%, 97.8%, 99%, and 98.2%, respectively.

Table (5) shows the results of multiple linear regression according to the six models.

Table 5. Regression analysis result

¹ Important (significant) indicators of the ownership dimension Number of important (significant) indicators / all dimension indicators	The level of significance for the ownership dimension Number of important (significant) indicators, all dimension indicators	Independent variables for the first dimension: <u>Ownership</u>								Statement	Model 01
Local investment Partnership		Foreign direct investment	Partnership	Local investment	Fixed value					"Beta" standard coefficients	
		0.014	0.041	0.116	2096.997					"t" test	
		0.812	6.060	15.319	4.323					"Sig. » Hypothesis testing, probability of error	
		0.421	0.000	0.000	0.000					The decision	
	0.66= 3/2	<u>Non-significant</u>	Significant	Significant						Impact	
		/	+	+						Multiple linear regression analysis equation	
		Job positions created (1) = 2096.997 + 0.116 Local investment + 0.041 Partnership + 0.014 Foreign direct investment + ε									
Indicators indicating the dimension of the activity sector	Significance level for the activity sector dimension	Independent variables for the second dimension: <u>Sector of activity</u>								Statement	Model 02
Industry Health Transportation		Services	Tourism	Transportation	Health	Industry	Construction and public works	Agriculture	Fixed value	"Beta" standard coefficients	
		-0.053	-0.107	0.341	2.837	0.049	0.051	0.460	1878.233	"t" test	
		-0.408	-1.834	3.897	3.875	4.174	1.610	1.414	2.029	"Sig. » Hypothesis testing, probability of error	
		0.685	0.074	0.000	0.000	0.000	0.115	0.165	0.049	The decision	
	0,42= 7/3	<u>Non-significant</u>	<u>Non-significant</u>	Significant	Significant	Significant	<u>Non-significant</u>	<u>Non-significant</u>		Impact	
		/	/	+	+	+	/	/		Multiple linear	
		Job positions created (2) = 1878.233 + 0.460 Agriculture + 0.051 Construction and public works + 0.049 Industry + 2.837 Health + 0.341 Transportation - 0.107 Tourism - 0.053 Services + ε									

								regression analysis equation	
Indicators indicating the type of investment dimension	Significance level for the investment type dimension	Independent variables for the third dimension: <u>Type of investment</u>						Statement	Model 03
Establishment Expansion Expansion and rehabilitation Rehabilitation		Structuring	Expansion and rehabilitation	Rehabilitation	Expansion	Establishment	Fixed value		
		-1.001	-0.023	0.517	0.146	0.046	2645.656	“Beta” instandard coefficients	
		-1.659	-5.384	3.998	12.962	6.157	3.718	“t” test	
		0.105	0.000	0.000	0.000	0.000	0.001	“Sig. » Hypothesis testing, probability of error	
	0,80= 5\4	<u>Non-significant</u>	Significant	Significant	Significant	Significant		The decision	
		/	-	+	+	+		Impact	
		Job positions created (3) = 2645.656 + 0.046 Establishment + 0.146 Expansion + 0.517 Rehabilitation -0.023 Expansion and rehabilitation -1.001 Structuring + ε						Multiple linear regression analysis equation	
Indicators of the legal sector dimension	The significance level of the legal sector dimension	Independent variables for the fifth dimension: <u>The legal sector</u>						Statement	Model 04
Private Mixed		Mixed	Public	Private	Fixed value				
		0.038	0.002	0.147	2408.668		“Beta” standard coefficients		
		8.739	0.586	37.135	3.981		“t” test		
		0.000	0.561	0.000	0.000		“Sig. » Hypothesis testing, probability of error		
	0,33= 3\1	Significant	<u>Non-significant</u>	Significant			The decision		
		+	/	+			Impact		
		Job positions created (4) = 2408.668 + 0.147 Private + 0.002 Public + 0.038 Mixed + ε						Multiple linear regression analysis equation	
Indicators of the employment size category dimension	Significance level for the employment size dimension	Independent variables for the sixth dimension: <u>Employment size category</u>						Statement	Model 05

Less than 9 workers More than 250 workers From 50 to 250 workers		More than 250 workers		From 50 to 250 workers		From 10 to 49 workers	Less than 9 workers		Fixed value					
		0.035		0.091		0.045	0.704		-1532.033		“Beta” standard coefficients			
		4.380		3.807		1.921	7.381		-1.751		“t” test			
		0.000		0.000		0.061	0.000		0.087		“Sig. » Hypothesis testing, probability of error			
	0,75= 4\3	Significant		Significant		Non-significant	Significant				The decision			
		+		+		/	+				Impact			
		Job positions created (5) = -1532.033 + 0.704 Less than 9 workers + 0.045 From 10 to 49 workers + 0.091 From 50 to 250 workers + 0.035 More than 250 workers + ε										Multiple linear regression analysis equation		
Indicators of the financing size category dimension	Significance level for the size of financing dimension		Independent variables for the sixth dimension: <u>Financing size category</u>									Statement		Model 06
From 50 to 200 million DZD More than 500 million DZD		More than 500 million DZD	From 200 to 500 million DZD	From 50 to 200 million DZD	From 10 to 50 million DZD	Less than 10 million DZD	Fixed value							
		0.025	0.507	0.023	0.404	0.256	-713.911				“Beta” standard coefficients			
		4.375	4.759	0.129	1.477	0.644	-0.973				“t” test			
		0.000	0.000	0.898	0.147	0.523	0.336				“Sig. » Hypothesis testing, probability of error			
	0,40= 5\2	Significant	Significant	Non-significant	Non-significant	Non-significant					The decision			
		+	+	/	/	/					Impact			
	Job positions created (5) = -713.911 + 0.256 Less than 10 million DZD + 0.404 From 10 to 50 million DZD + 0.023 From 50 to 200 million DZD + 0.507 From 200 to 500 million DZD + 0.025 More than 500 million DZD + ε										Multiple linear regression analysis equation			

Source: Prepared by researchers based on the outputs of SPSS version 25

The fourth model (04) also indicates that the relationship between the independent variables (indicators) and the dependent variable, the number of job positions created, is a perfect positive and direct relationship with a perfect positive correlation value equal to one, and the percentage of variance in the number of job positions created that is explained by these variables was 100%, so this percentage is considered inflated, i.e. biased, since it is illogical

that these independent variables (indicators) are the only ones capable of explaining the variance of the dependent variable by 100%, which indicates the existence of a standard problem that the model suffers from. When conducting second-order statistical tests, the Variance Inflation Factor test showed the VIF (Variance Inflation Factor), which is used as a standard for detecting linear

interference and identifying the independent variable responsible for it.

The closer the value of the variance inflation factor is to zero, the more evidence there is of the absence of collinearity, so that we notice that all the independent variables (indicators) in the fourth model have a VIF statistic that is much greater than 10, to the point that it exceeds the value of 100 in most variables, as indicated by (Myers, 1986), in this regard, that if the VIF value is greater than 10 and the variance value is smaller than 0.1, which indicates the presence of a collinearity problem, this requires deleting this variable from the model because it is the reason for the existence of the problem, when deleting variables that have a VIF coefficient Great, it became clear to us that the results of the fourth model cannot be taken into account in regression analysis because of the problem of multi-collinearity in most variables, and the inability of the method of eliminating the independent variables responsible for this by relying on the VIF test statistic to solve the problem. For this reason, this model was rejected and excluded and not relied upon in analyzing the impact of financing according to the legal form dimension on job creation, given that this model may give incorrect and biased results.

Table 5 displays the results of the regression analysis. Through these results, we can determine the significance (significance) of the independent variables based on the (Sig.t-Student) test. We notice that most of the variables are statistically significant at the level: P-Value < 0.05, while the value Standard Beta, through which we can rank the strength of the effect of these variables (function) on the dependent variable.

It is clear from the results of the first model (01) shown in **Table 5** that the independent variables for the first dimension, financing according to the ownership dimension (local investment, partnership), have a positive effect on the number of jobs created, and the strength of the effect of these variables on the dependent variable was 0.116, and 0.041, respectively, so that these coefficients show the size of the change in the dependent variable to the change in the independent variable by one unit, meaning that whenever the volume of local investment financing changes by one unit (million DZD), the number of jobs created will increase by 0.116 units (job positions), Also, if the size of the partnership's financing changes by one unit (one million DZD), the number of jobs created will increase by 0.041 units (jobs), which shows that local investment is affected by financing to create jobs more than the partnership by approximately 3 times.

The results of the second model (02) also show that the independent variables of the second dimension, financing according to the activity sector dimension (industry, health,

transportation), positively affect the number of jobs created, and the strength of the effect of these variables on the dependent variable reached 0.049, 2.837, and 0.341 respectively, meaning that whenever the volume of funding for the industrial sector changes by one unit (million DZD), the number of jobs created will increase by 0.049 units (jobs). Likewise, if the volume of funding for the health sector changes by one unit (million DZD), the number of jobs will increase the number of jobs created will increase by 2,837 units (one job), while whenever the volume of funding for the transportation sector changes by one unit (one million DZD), the number of jobs created will increase by 0.341 units (one job), which shows that the health sector is most affected by funding to create job positions the most from other sectors.

As for the third model (03), the independent variables of the third dimension, financing according to the type of investment dimension (establishment, expansion, rehabilitation), have a positive effect on the number of jobs created, meaning that whenever the volume of financing for one of these variables changes by one unit (million DZD), it will The number of jobs created increases by 0.046, 0.146, and 0.517 units (job positions), respectively, and for the independent variable (expansion and qualification), it has an inverse effect, which indicates that if this type of investment is financed with one unit (million DZD), it will suppress creating jobs at 0.023 units (job position).

The fourth model (04) shows that the variables explaining the fifth dimension, financing by legal sector (private, mixed), positively affects the dependent variable, meaning that whenever the volume of financing for one of the two sectors changes by one unit (million DZD), the number of jobs created will increase by 0.147 and 0.038 units (job positions), respectively, which indicates the power of the private sector to create job opportunities in the economy.

As for the fifth model (05), the variables that measure the sixth dimension, financing according to the category of employment size (less than 9 workers, from 50 to 250 workers, and more than 250 workers), positively affect the dependent variable with varying values, the largest of which is the category of 50 to 250 workers. This category of investment projects is positively affected by 0.091 units (job position) if the dependent variable changes by one unit (million DZD).

As for the sixth (06) and final model, the variables that measure this dimension, financing according to the financing size category (from 200 to 500 million DZD, and more than 500 million DZD), have a positive effect on the dependent variable, meaning that the larger the project financing segment, the greater the number of job opportunities it provides, as we can see from Table No. (05),

the category of 200 to 500 million DZD is the largest group that is positively affected by financing for the creation of job positions at an amount of 0.507 units (one job position) for every one unit (million DZD).

4.3. Summary of data analysis

Based on **Table 5** which shows the result of multiple linear regression analysis on the number of job positions created in NAID, in response to the significance threshold shown at the level of hypothesis testing with the probability of error (Sig), we showed the variables that are not statistically significant and those that are statistically significant, meaning that there is a positive effect of these independent variables on the dependent variable (the number of job positions created), from the details of the methodological framework and in the marginal title “Measurement.” Variables: We have a main variable and sub-variables, so the sub-variable explains the main variable. An example of this is the main ownership variable, which is

explained by several sub-variables, namely: (local investment, and partnership).

From this, we conclude that the sub-variables are completely related to the main variable. If the sub-variables are all statistically significant, meaning they have a significant and positive impact, we conclude that the main change (ownership) also has a statistically significant and positive impact. However, if one of the sub-variables, the independent variables are statistically significant and positive, we conclude that the main variable is statistically significant and partially positive, meaning that the (ownership) variable is partially significant, and we must investigate in which sub-variable this positive significance lies.

In light of this proposition and relying on Table N° (05), we place **Table N° (6)**, which shows the hypothesis symbol, and the wording of the hypothesis is verifying the hypothesis. From there, please refer to **Table N° (5)** to find out which sub-variable has partially fulfilled the hypothesis.

Table 6. Displaying the results of hypothesis verification.

Hypothesis symbol	Hypothesis statement	Verification of the hypothesis	Degree of verification	significant determinants
Hypothesis 1:	Financing according to the ownership dimension (domestic investment, foreign direct investment, partnership) positively affects the creation of jobs in investment projects supported by the National Investment Development Agency (NAID) in Algeria.	Partially verified	<u>%66</u>	Local investment Partnership
Hypothesis 2:	Financing according to the economic sector dimension represented in (construction and public works, agriculture, industry, health, transportation, tourism, services) positively affects the creation of jobs in investment projects supported by the National Agency for Investment Development (NAID) in Algeria.	Partially verified	%42	Industry The health Transport
Hypothesis 3:	Financing according to the type of investment dimension (construction, expansion, rehabilitation, expansion and rehabilitation, structuring) positively affects the creation of jobs in investment projects supported by the National Agency for Investment Development (NAID) in Algeria.	Partially verified	<u>%80</u>	Construction Expansion Qualifying Expansion and rehabilitation
Hypothesis 4:	Financing according to the legal sector dimension represented by laws (private, public, mixed) positively affects the creation of jobs in investment projects supported by the National Agency for Investment Development (NAID) in Algeria.	Partially verified	%66	Private Mixed
Hypothesis 5:	Financing according to the size of employment (less than 9 workers, from 10 to 49 workers, from 50 to 250 workers, and more than 250 workers) positively affects the creation of jobs in investment projects supported by the National Agency for Investment Development (NAID) in Algeria. .	Partially verified	<u>%75</u>	Less than 9 workers From 50 to 250 workers

				More than 250 workers
Hypothesis 6:	Financing according to the size of financing (less than 10 million DZD, from 10 to 50 million DZD, from 50 to 200 million DZD, from 200 to 500 million DZD, more than 500 million DZD) positively affects the creation of jobs in investment projects. Supported by the National Agency for Investment Development (NIAD) in Algeria.	Partially verified	%40	More than 500 million DZD From 200 to 50 million DZD

5. Discussion of Results and Conclusion

5.1. Discuss the Results

We note that the study sought, through inferential statistical methods, to determine the determinants of financing for investment projects completed in Algeria in a specific period, extending from 2002 to 2013. These investments were made in order to alleviate unemployment and create jobs, which is why this study was carried out after obtaining a complete database from the National Agency for Investment Development (NAID) in Algeria.

This research included six hypotheses; each hypothesis contains one of the six financing dimensions that are considered independent variables and whose impact we are looking for on the dependent variable, which represents “created job positions.” Each of the six dimensions contains a set of indicators, which are called determinants after inferential statistical processing. These determinants, which the study concluded, are considered positive and strong supports for supporting and developing investment in Algeria. The aim of the study was to identify the determinants of investment financing that are statistically significant that is important indicators that have moral strength.

As for the research hypotheses, they are all partially significant depending on the significant determinants contained in each dimension of the hypotheses, and therefore they are partially fulfilled and to varying degrees, according to the varying level of significance of the total indicators significant for each dimension. Hypothesis 3 is partially significant at a rate of 80%, Hypothesis 5 is partially fulfilled at a rate of 75%, while Hypothesis 1 is significant at a rate of 66%, Hypothesis 4 is at a level of significant significance at a rate of 66%, Hypothesis 2 is significant at a rate of 42%, and finally Hypothesis 6 is significant at a rate of 40%. %.

However, the empirical model of the study is presented in **Figure 2**.

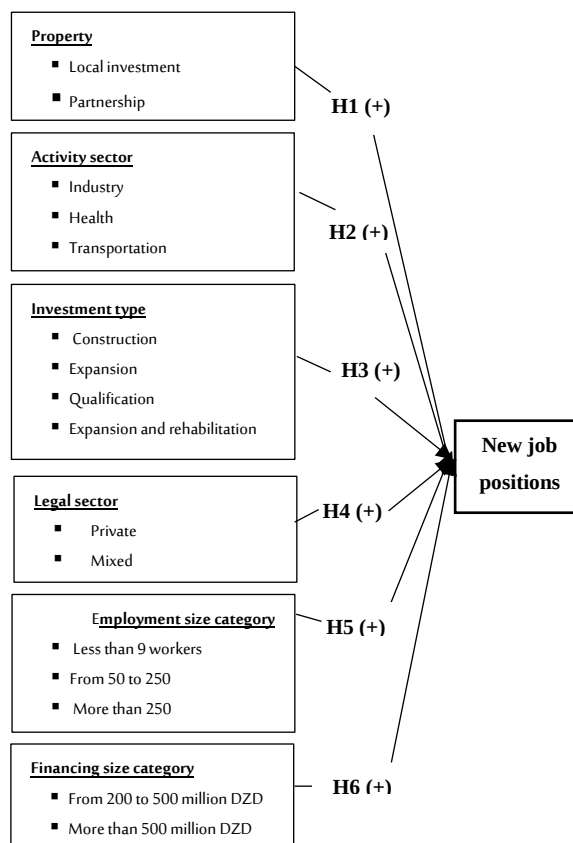


Figure 2. The empirical model of the study

The result in the theoretical model of the study shown in **Figure (1)** is that there are six dimensions containing 28 indicators that are measurements of these six dimensions. Of the results of the study, 16 indicators are of moral significance distributed over six dimensions and therefore are the determinants of the study. These determinants are shown in the model. The experimental study is shown in **Figure 2**. The result of these results is that out of 28 indicators, 16 indicators were produced, that is, 12 indicators were presented that are not statistically significant, that is, they do not have a moral significance. From this, the study identified 16 determinants that have a positive impact on the dependent variable, “creation of job positions.”

We come here to present and discuss the significant determinants for each of the following six dimensions:

Ownership dimension: The three indicators of the ownership dimension are (local investment, foreign direct investment, and partnership). It turns out that there are only two significant determinants, which are: (local investment, and partnership); Local investment means national investment by Algerian natural or legal persons. The ownership here is for an Algerian person, whether natural or legal. The second determinant is that the ownership of the company or institution is shared between Algerian investors and foreign investors of non-Algerian nationalities. As for foreign investment, there is 100% full ownership. There is no and no sign in our study, why? Because the Algerian investment law only allows foreign investors to have specific percentages, a maximum of 49% for the foreign partner and 51% for the Algerian national partner or partners; Among them, Shleifer and Vishny (1986) confirm that the presence of concentrated ownership leads to better management and also better performance, especially when ownership is concentrated in institutions rather than investors. Therefore, institutional ownership can increase the performance of the institution, and this is what prompted the Algerian state to focus on local investment. And by the sole owner, as well as by encouraging foreign direct investment, because according to Amess et Robert (2017), foreign investment leads to increased competition for local institutions and that the ownership structure increases the number of work positions in the economic institution.

Dimension of the economic activity sector: The seven indicators of the economic activity sector dimension (construction and public works, agriculture, industry, health, transportation, tourism, and services). It occurred that there are three morally significant determinants, that is, important, from the seven indicators. These determinants are (industry, health, and transportation), it seems that in Algeria in the period between 2002-2013 there are only three sectors that attract the interest of investors. Algeria has almost solved the problem of transportation for citizens by investing more widely in the transportation sector as it is profitable and does not require huge funds. The health sector indicates the void recorded in this sector, which is a local investment by nationalists. The health sector attracts a highly trained workforce and invests more in real estate, devices, and high-tech equipment. As for investment in the industrial sector, it shows the state's strategic direction to invest intensively in the industrial sector with the aim of raising the percentage of national income in this sector, especially investment in the food industry. This period, 2002-2013, was also characterized by industrial investment in the installation of cars, vehicles, and machinery. In this sector, (Sutradhar, 2014) acknowledged that although Algeria has moved strongly towards industry, it remains below the desired aspirations, trends and prospects for industrial investment flows in the world, especially in developing countries.

After, **type of investment:** The five indicators of the dimension of investment types (construction, expansion, rehabilitation, expansion and rehabilitation, and structuring). It happened that here in particular four of the five determinants are a function of the total of five indicators, and they are (construction, expansion, rehabilitation, expansion, and rehabilitation) meaning all indicators are significant, except for the "structuring" indicator. This indicates that all types of investment are welcome in Algeria. There is a greediness to finance every type of investment except for structuring, which requires great expertise, techniques, and competencies, based on Karimi and Noon (2023) and Chrissos and Gillet (2003).

Dimension of the legal sector: The three indicators of the legal sector dimension (private, public, and mixed). It happened that there are two significant and important determinants, namely (the private sector and the mixed sector). We note that the public investment law does not exist in Algeria, because the Algerian state as a public sector has no longer. It makes investments, but there is a significant decline in public investment in the state, especially in small and medium enterprises, as the departments of the Ministry of Industry and Mines are witnessing a significant decline in the number of small and medium enterprises affiliated with the public sector, that is, the state, since the economic openness of Algeria and the encouragement of investment in the private sector, according to Kosam (2022).

Dimension of the employment size category: The four indicators of the employment size dimension (less than 9 workers, from 10 to 49 workers, from 50 to 250 workers, and more than 250 workers), it turns out that there are three important determinants that encourage investment in Algeria, which are (Less than 9 workers, from 50 to 250 workers, and more than 250 workers). This means that the employment created is more in medium enterprises that extend from 50 to 250 workers and large ones with more than 250 workers, but do not forget about labour creation. In small enterprises with less than 9 workers, this is all confirmed by Konopielli et Bell (1998).

Dimension of the size of financing: the five indicators (less than 10 million DZD, from 10 to 50 million DZD, from 50 to 200 million DZD, from 200 to 500 million DZD, and more than 500 million DZD), data and the semantic statistical analysis process. It produced only two specific indicators from the group of five indicators (from 200 to 500 million DZD, and more than 500 million DZD). This indicates that investment financing in Algeria in the period extending from 2002-2013 by the National Investment Agency (NAID) focuses on huge financial envelopes. This is due to the importance of these investments to the Algerian economy, especially because they create jobs over other financing

with modest and medium financial covers. The latter create few jobs and do not lead to the desired goals.

5.2. Conclusion

The study relied on a complete database containing all investment projects completed in Algeria and in 48 of Algeria's states in the then administrative division for the period 2002-2013. Then we prepared the data matrix according to the Cross-Sectional Data technique, so the number of observations distributed on the matrix was 136 observations. We conducted several statistical tests on the data matrix, and to extract the determinants of the study, we used the statistical technique of multiple linear regressions on the number of jobs created and extracted from 28 indicators distributed over six dimensions of investment financing. 16 important determinants were extracted, that is, statistically significant. The process was completed. With all integrity, accuracy and high scrutiny, this work was carried out with complete honesty, credibility and objectivity, and the results of the study are honest, objective and reliable. Public policy planners of the Algerian state can take these results to draw up strategies to advance the investment sector in Algeria and create job positions. The study has a high degree of reliability and can disseminate the results to society.

In addition to the reliability and validity of the study, it has made a theoretical contribution by developing a theoretical model for the study in Figure 1, this model was constructed based on a theoretical framework based on previous studies in the foreign language for studies of a general nature. As for the investment situation in Algeria, We relied on previous studies in the Arabic language, especially those that dealt with the subject of the study and by Algerian pens.

The study revealed a limit, which is the small sample size of 48 states, i.e. 48 observations, in Algeria during the period from 2002 to 2013. This limit prevented us from using accurate statistical techniques such as modeling with structural equations using LISREL, AMOS, or EQS software. We propose a study that includes all investments during the period of independent Algeria on a large sample and on a large number of indicators, in which we use data analysis using the statistical technique of modeling with structural equations using the LISREL program to extract the most important determinants to allow strategists to draw a plan to advance the investment sector on a strong, honest and reliable basis.

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