

The impact of government subsidy for Micro and Small Enterprises (MSEs) in job creation: An empirical evidence-case of Algeria (1997-2017)

أثر الدعم الحكومي للمؤسسات الصغيرة والمصغرة في خلق فرص العمل:

دراسة قياسية لحالة الجزائر خلال الفترة 1997-2017

Hamidi Aissa¹, Laboratory of economic strategies and policies in Algeria,
(University of M'sila), aissa.hamidi@univ-msila.dz

Received in	2020-03-30	accepted in	2020-10-14
-------------	------------	-------------	------------

Abstract:

This study aims to measure the size of the impact of government subsidy provided to Micro and Small Enterprises (MSEs) by The National Youth Employment Support Agency (NYESA/ANSEJ) on job creation in Algeria, from the perspective of econometrics. Data panel (for 08 sectors) covers a twenty-one-year time horizon, from 1997 to 2017. The data was processed using the technique of multiple linear regression. The estimation was made by the Ordinary Least Squares method (OLS), using the Pooled Regression Model (PRM). The results of the study denoted: the loans subsidized affect positively the creation of job opportunities. While the tax breaks do not affect job creation.

Key Words: Tax breaks, Financial incentives, Government subsidy, MSEs, Job creation.

المخلص:

تهدف هذه الدراسة إلى قياس حجم تأثير الدعم الحكومي المقدم إلى المؤسسات الصغيرة والمصغرة (MSEs) من قبل الوكالة الوطنية لدعم تشغيل الشباب (NYESA/ANSEJ) على خلق فرص العمل في الجزائر، بواسطة نموذج قياسي. تغطي البيانات الطولية (08 قطاعات) أفقا زمنيا مدته 21 عاما، خلال الفترة الممتدة من 1997 إلى غاية 2017. تمت معالجة البيانات باستخدام تقنية تحليل الانحدار الخطي المتعدد (نموذج الانحدار التجمعي PRM)، تم التقدير باستخدام طريقة المربعات الصغرى العادية (OLS). وفي إطار تحليل البيانات أشارت نتائج الدراسة إلى أن القروض المدعومة تؤثر إيجابيا على خلق فرص العمل. في حين أن الإعفاءات الضريبية لا تؤثر على خلق فرص العمل.

الكلمات المفتاحية:

الإعفاءات الضريبية، حوافز التمويل، الدعم الحكومي، المؤسسات الصغيرة والمصغرة، خلق فرص العمل.

Introduction:

Different countries, developed and developing alike, aim to adopt sectoral economic policies. It hopes behind them to achieve high levels of sustainable development in various aspects of economic life. However, achieving this goal faces many challenges, perhaps the most important of them is the creation of job opportunities. Since the Great Depression in 1929, when the major industrial economies entered into a recession followed by the loss of many jobs, and the inability of advanced economies to provide employment opportunities commensurate with the rates of economic growth (jobless growth). Since then, economic theories have emerged, which have attempted to explain the factors affecting job creation, and establishing policies and programs that aim to help stimulate job creation.

From the mid-1980s to the early 1990s, in all OECD countries, small establishments (fewer than 100 employees) displayed more rapid net employment growth than larger ones. It is not surprising that small enterprise establishments play an important role in the job creation process since they account for between 40 and 80 percent of total manufacturing employment. However, for a number of countries, it was found that the highest net job creation rates were among very small firms. Also, establishments employing fewer than 20 workers to account for between 45 and 65 percent of new job gains (OCED, 1997, pp. 07-08). In addition, another new ILO report found that these so-called ‘small economic units’ together account for 70 per cent of total employment in the sample of 99 countries covered by the database countries, making them by far the most important drivers of employment. In many countries, the two smallest economic units; the self-employed and micro enterprises make up more than 50 per cent of total employment (ILO, 2019, p. 22).

A World Bank report (2013) estimates that an additional 600 million additional jobs are needed over the next 15 years to keep pace with new arrivals to the job market (World Bank, 2013, p. 04). At the current rates of labour force participation, Algeria will need to create 2.3 million jobs by 2030 to absorb the new entrants into the workforce (IMF, 2014, p. 44). In Algeria, the government provide subsidy to create Micro and Small Enterprises (MSEs) through government subsidy institutions, in order to motivate it to create more job opportunities. Youth Employment Support Agency⁽ⁱ⁾ (Agence Nationale de Soutien à l’ Emploi des Jeunes ANSEJ) – has been created in 1996 by executive decree (Law n° 96-296, 1996) to support entrepreneurship among young people. Between 2007 and 2013 it supported a total of 292,186 from micro and Small enterprises (Oxford Business Group, 2018, p. 105). This study aims to investigate the impact of government subsidy for Micro and Small Enterprises (MSEs) by Youth Employment Support Agency (NYESA/ANSEJ) on job creation in Algeria. The following problem has been formulated in this regard:

How effective is a government subsidy for Micro and Small Enterprises (MSEs) by The National Youth Employment Support Agency (NYESA/ANSEJ) in creating job opportunities in Algeria during the period 1997-2017?

Literature and hypotheses development

To answer the research question, we have formulated (02) hypotheses, these hypotheses were formulated from literary studies. We will include in this section some evidence to formulate the hypotheses, about the impact of government subsidies form of tax breaks and loans subsidized for Micro and Small Enterprises (MSEs) in job creation.

Tax breaks: Almost all industrialized countries use government subsidies to support economic development in specific sectors to create jobs (Fuest & Huber, 2000, p. 171), Taxes have long been an important means of public policy, whether subject to classical or Keynesian economic thought. The establishment of a tax system is usually an option that governments choose to implement incentive policies in favour of specific goals (Zatla & Djelil, 2015, p. 74). In this regard, Parker indicates that general tax cuts may be a powerful means of stimulating job creation (Parker, 2018, p. 509). For example, Low rates of value-added tax (VAT) allow more significant investment, thus contributing to further increase growth and employment. In 2016, 6 years after the (VAT) reduction in Germany from 19 to 7% in the housing sector, an additional 46,666 job opportunities were created, representing an increase of 18.5%, which is a large percentage compared to a rise of 14.6% in the overall economy in the same period. In the same vein, after reducing the value-added tax (VAT) from 25 to 12% in 2012, Sweden experienced an 8% increase in employment (HOTREC, 2017, p. 15). In Algeria, Zaid and Taibi found that tax breaks more specifically represent an important component of the investment decision (Zaid & Taibi, 2019, p. 85). In another study Taleb concluded that the tax breaks that the Algerian government provided during the period 1993-2015 affect the increase in job creation (Taleb, 2017, p. 598). Based on the above, we will formulate the first hypothesis related to the effect of the tax breaks in job creation as follows:

H1: The tax breaks granted to Micro and Small Enterprises (MSEs) by NYESA/ANSEJ have a positive impact on job creation.

Loans subsidized: In addition to the impact of tax breaks in job creation, there are other incentives (Zaid & Taibi, 2019, p. 85), which are called financial incentives, such as government credit support (Loans subsidised). In other words, credit support can be considered as financial support from government or bank loans (Biru, 2014, p. 182). Credit guarantee schemes help reduce the risk premium associated with SMEs, thus enhancing lender confidence. Studies have found that this type of programme has proved particularly useful because it merges government funding and management capacities with credit risk assessments and financial expertise (Escudero, Horne, Kühn, & al, 2015, p. 26). Access to finance is a recurring challenge for Micro and Small Enterprises (MSEs), and it influences their job creation efforts. On this basis, offering funding sources that provide an alternative to

The impact of government subsidy for Micro and Small Enterprises (MSEs) in job creation: An empirical evidence-case of Algeria (1997-2017)

traditional banking credit (Eurofound, 2016, p. 91). In a study that used two complementary data sets; cross-sectional micro-level data set covering over 50,000 firms across 70 developing countries and a panel micro-level data set covering fewer developing countries but over 4.3 million observations. It found that increasing access to finance leads to an increase in job growth in the developing countries, and the relationship between access to finance and employment growth is strong (Ayyagari, Juarros, Martinez Peria, & Singh, 2016, p. 27). In another study from Ethiopia, Biru comes up with the result that SMEs' initial capital, credit accessibility, affect SMEs employment growth positively (Biru, 2014, p. 186). Based on the above, we will formulate the second hypothesis related to the effect of the loans subsidized in job creation as follows:

H2: The loans subsidized granted to Micro and Small Enterprises (MSEs) by NYESA/ANSEJ have a positive impact on job creation.

Objective

This article aims to quantify the impact of government subsidy for Micro and Small Enterprises (MSEs) by The National Youth Employment Support Agency (NYESA/ANSEJ) in job creation in Algeria, from an econometric perspective. Panel data (08 sectors) covers a 21-year horizon, from 1997 to 2017.

1. Background

Countries' intervention in the economy is the result of the Great Depression in 1929, in which economist John Maynard Keynes in his famous book "The Theory of Employment and Money" in 1936 called for the necessity of state intervention through fiscal policy tools in economic activity. Economists, especially liberals (the principle of non-interference), are trying to move away from the idea of subsidies because they hinder the mechanisms of the natural economic system and distort prices (Keynes, 1964, p. 121)⁽ⁱⁱ⁾. Government subsidy is a valuable financial tool, the main objective of which is to increase resource allocation among alternative uses of many private individuals from the private sector (Break, 1972, p. 01). Government subsidies are defined by Schwartz and Clements "any governmental assistance that allows consumers to purchase goods and services at prices lower than those offered by a perfectly competitive private sector, or raises producers' incomes beyond those that would be earned without this intervention" (Schwartz & Clements, 1999, p. 120).

There are several schools of thought on policies to help new and small firms (OCED, 1997, p. 09). Given that it is one of the primary sources of job creation in economies (Koski & Pajarinen, 2013, p. 206). On average, all subsidies relate positively to the contemporary employment growth for both start-ups and incumbents (Koski & Pajarinen, 2013, p. 196). That is, the establishment of government-sponsored instruments are justified because public funds are focussed on job creation (Cancino, Bonilla, & Vergara, 2015, p. 1742). There are many

reasons why policymakers choose to use subsidies as a tool for their governmental policies. From an economic point of view, the main purpose of subsidies usually focuses on three main categories: compensation of various market defects; economic exploitation of production; achievement of social policy goals, including the increasing or maintaining jobs (Schwartz & Clements, 1999, p. 120).

Working in micro, small and medium enterprises (MSMEs) is the most prevalent way to make a living in low- and middle-income countries (LMICs). The International Monetary Fund (IMF) estimates that across the 132 economies covered, there are about 125 million formal MSMEs of which 89 million operate in low- and middle-income countries (LMICs) and of which the overwhelming majority, about 83%, are micro-enterprises, including the self-employed (Reeg, 2015, p. 13). A study conducted by Birch between 1969 and 1976 revealed that, on average, about 60 percent of all jobs in the United States are created by companies with 20 or fewer employees, while about 50 percent of all jobs are created by independent and young entrepreneurs (Birch, 1979, p. 29). In the European context, Audretsch (2003) and De Kok et al (2011) similarly concluded that small companies are the job engine of Europe (Eurofound, 2016, p. 05). In 2014, SMEs were responsible for 71% of employment growth in the non-financial business economy (Eurofound, 2015, p. 01).

Generally, Micro and Small Enterprises (MSEs) can contribute to job creation in two ways: (1) job contributions that arise by the creation of new Micro and Small Enterprises (MSEs), such as through start-ups and the self-employed (enterprise creation), In this case, an increase in the total number of Micro and Small Enterprises (MSEs) entering the market, tends to occur when the economy is weak and provides only a few opportunities for wage employment. In this case, there is an enormous pressure on individuals to start their jobs as a necessary business, even though these yields only marginal returns. And (2) Employment creation as the emergence of new jobs in existing Micro and Small Enterprises (MSEs) (enterprise growth), if an economy is competitive and strong. (Reeg, 2015, p. 23). So, most OECD countries have programs that support small and medium-sized enterprises (SMEs). Germany, Iceland, Japan, and New Zealand dedicated more than 50 percent of their entire public support programs to small and medium-sized enterprises (SMEs). In 1993, a total of US\$ 3.75 billion of public money was paid to help start-ups, in the form of direct grants, tax concessions, low-interest rate loans or loan guarantees (OCED, 1997, p. 04).

According to OECD data, public support grew by 25 percent in nominal terms from 1989 to 1993. Support to small and medium-sized enterprises (SMEs) ranked fourth at both the beginning and the end of the period. In terms of Net Cost to Government (NCG), Support to small and medium-sized enterprises (SMEs) support accounted for US\$5.4 billion in 1989 and US\$6.0 billion in 1990, before steadily dropping back to US\$3.7 billion in 1993. These figures underscore that the persisting importance of subsidies as an instrument of structural policy in OECD Member

The impact of government subsidy for Micro and Small Enterprises (MSEs) in job creation: An empirical evidence-case of Algeria (1997-2017)

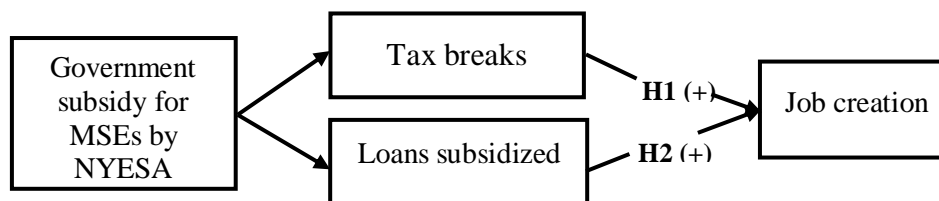
countries was largely outweighed by stronger support in all other areas (OCED, 1997, p. 25).

In the developed countries (the United States, Canada, and Britain), many government-sponsored assistance programs target primarily new enterprises and small and medium-sized enterprises (SMEs) (Morgan, 2019, p. 139). For example, the Canada Small Business Financing Programme is a joint program in which "Industry Canada" pays up to 85 percent of a bank's net losses in case of default. Also, Ireland established the Microfinance Loan Fund in early 2012 as part of the Action Plan for Jobs, providing unsecured loans of up to €25,000 to SMEs (Escudero, Horne, Kühn, & al, 2015, p. 26). As for developing economies, such as Ethiopia, for example, the government with the cooperation of government banks and other financial and intermediary banks provides credit access to micro and small enterprises at low or no interest rates to support various aspects of SMEs such as employment creation (Biru, 2014, p. 182).

In Algeria, several institutions provide government support for Micro and Small Enterprises (MSEs), among them an agency—the Youth Employment Support Agency (Agence Nationale de Soutien à l' Emploi des Jeunes, ANSEJ). NYESA provides grants and access to loans with subsidized interest rates for projects of up to 10 Million Algerian Dinars (€72,600) in value (Oxford Business Group, 2018, p. 105; ANSEJ, 2020). There are also many fiscal advantages in the stage of realization or operating such as tax breaks from tax value-added, tax property, tax on corporate profits, and tax on professional activity (ANSEJ, 2020).

Form (1) shows the theoretical model of the study.

Form (1): Theoretical model of the study



Source: Prepared by the researcher.

2. Materials and methods

2.1 Type and scope of the search

In this study, we will examine a possible relationship between government subsidy for Micro and Small Enterprises (MSEs) and job creation in these Enterprises, from an econometric perspective. To measure this value, we use the number of jobs provided by new Micro and Small Enterprises (MSEs) annually. To test the study hypotheses, the last variable is taken as a dependent variable.

In the following pages, we will list the independent variables based on the government subsidies procedures approved by The National Youth Employment Support Agency (NYESA/ANSEJ) in Algeria.

2.2 Sample: Choice and justification

As part of this study, we will focus on Micro and Small Enterprises (MSEs) that received government subsidies by The National Youth Employment Support Agency (NYESA/ANSEJ), since it is one of the most important active support institutions in Algeria, charged with the task of providing government subsidies and facilities for Micro and Small Enterprises (MSEs), by providing tax concessions, whether in the stage of realization or operating. It is also responsible for providing grants and access to loans with subsidized interest rates from the banking sector. During the period from 1997 to 2017, this sample was chosen as the longest possible period in which sufficient statistical data are available for the study.

2.3 Data collection

The data approved in this study was collected from two sources. The data of Job creation and loans subsidized was obtained by the General Directorate of The National Youth Employment Support Agency (NYESA/ANSEJ). As for the data of tax breaks granted, was obtained by the Bureau of Statistics, Directorate of Tax Operations, General Directorate of Taxes, and Algerian Ministry of Finance, Citing: (Melikaoui, 2010, p. 179; Zinet, 2019, p. 149).

The data studied was formed as "Panel data" (longitudinal data) structure (Balanced Panel) by economic sectors, which was defined by Baltagi as follows: "the term panel data or longitudinal data refers to the pooling of observations on a cross-section of households, countries, firms, etc. Over several periods" (Baltagi, 2005, p. 01). After diagnosing the data, we found that it does not contain full data, that is, there are 24 missing values. From this point of view, we will draw on a sample of 144 observations. So, we analyzed 144 observations spread over 21 years, categorized by sector of activity (08 sectors: Agriculture, Arts and crafts, construction and public works, Industry and maintenance, Liberal professions, Services, TIC, Transport). This form of data was used to obtain a homogeneous statistical series to reduce bias, and Baltagi also indicated that "Time-series and cross-section studies not controlling this heterogeneity run the risk of obtaining biased results" (Baltagi, 2005, p. 04). We will also use statistical software (Stata) version 15 for statistical analysis of this sample.

2.4 Measurement of variables

Regarding the measurement of independent variables, we used the information mentioned previously in the databases. At the end, the variables are coded appropriately. Table (1) shows the summary of measures and sources of dependent and independent variables.

Table (1): Summary of measures and sources of variables

Dimensions	Variable	Symbol	Data Source	Measure
Job creation by new MSEs	Job creation	JC	General directorate of NYESA/ANSEJ	Number of jobs created by new MSEs yearly
	Tax breaks	TB	Directorate of Tax Operations, Citing: (Melikaoui, 2010; Zinet, 2019)	Total value of tax breaks granted to new MSEs yearly
	Loans subsidized	LS	General directorate of NYESA/ANSEJ	Total amounts of Loans subsidized granted from the banking sector and NYESA/ANSEJ to new MSEs yearly

Source: Prepared by the researcher.

2.5 Empirical model

The analysis will be based on a multivariate model to explain the impact of government subsidy for Micro and Small Enterprises (MSEs) in job creation. We have formulated elementary mathematical equations that permit us to estimate the values of the dependent variable (Job creation by new MSEs) by independent variables (Tax breaks, Loans subsidized). From above, we can define the job creation model in the form of a regression equation as follows:

$$JC = \beta_0 + \beta_1 TB + \beta_2 LS + \varepsilon$$

The above formula helps us to analyze data by relying on non-standard parameters of independent variables. It also helps us define the independent variables that explain the dependent variable and those that do not explain it.

3. Results

Statistical analysis of the data includes the following: Data analysis approaches, descriptive analysis of the variables, correlation analysis of the job creation Model, and statistical analysis by multiple regression.

3.1 Data and descriptive

Although the main approach of data analysis is the technique of statistical analysis using multiple regression to test the accuracy of hypotheses, secondary statistical analysis is useful before using this regression. This will allow us to know the statistical aspects of the sample, which give a rougher picture to know the shape of the distribution followed by the model of variables.

Table (2) describes the minimum and maximum values, mean standard deviation of each variable and the observation number for each variable.

Table (2): Descriptive statistics of the variables' model for job creation

Variable	Obs	Minimum	Maximum	Mean	Mean Std. Deviation	Skewness	Kurtosis
JC	168	2	43167	5286.125	6769.088	2.598486	11.34807
TB	144	0	48596	14976.17	14586.66	1.058478	2.803285
LS	168	131.6041	213741.7	56131.23	59592.92	1.310404	3.488491

Source: Prepared by the researcher. Depending on software Stata outputs. Version (15.0).

It appears from the table that job creation (JC) is the most volatile of all variables. The coefficient of variance exceeds 100% in this variable. This is due to the large range between the minimum and maximum observed variables, but other variables appear to be relatively stable from year to year. However, as presented in Table (2), the number "Obs" of valid observations for this study is 168 for each of the two variables job creation (JC) and loans subsidized (LS), and 144 for tax breaks (TB) variable.

The study of the distribution of variables in the model is based on the normal distribution test. The shape of the distribution measured by the "skewness and kurtosis".

The coefficient of skewness explains asymmetric data around the mean. According to Table (2), the deviation value for all variables approximates the value zero (0), and from it, we conclude that the distribution is symmetric around the average, according to Karl Pearson.

The kurtosis coefficient is used to measure the peak or stability of the curve. It must be within the valid values in the range $[-3,3]$. When a kurtosis value equals to 3, the distribution is mesokurtic and corresponds to a normal distribution of data according to Carl Pearson, as per Table (2). The value of kurtosis for all variables is close to the value 3, except for the job creation (JC) variable.

3.2 Main results

The use of multiple linear regression in Table (3) allows us to see the explanatory power of the model. Estimation using the Ordinary Least Squares (OLS) Method, by the Pooled Regression Model (PRM). The test of the model includes variables (TB, LS). These variables contain 168 observations for loans subsidized

The impact of government subsidy for Micro and Small Enterprises (MSEs) in job creation: An empirical evidence-case of Algeria (1997-2017)

(LS), and 144 observations for tax breaks (TB) variable, distributed across all activity sectors over the twenty-one years represented for the sample period (1997 - 2017).

Table (3): Regression analysis summary and regression variance analysis

Regression analysis summary			Regression variance analysis		
r	R^2	\bar{R}^2	df	F	Sig F
0,5726	0.3279	0.3184	(2, 141)	34.39	0.0000

Model: (Constant), TB, LS.

Source: Prepared by the researcher. Depending on software Stata outputs. Version (15.0).

Now, let us test the overall significance of the regression model. The explanatory power of the model or the proportion of explained variance R^2 is 32.79%. It is interesting to note here that the Fischer statistical value of the model $F = 34.39$. This difference represents a variance of very high significance “ $F(5, 134) = 34.39$, $\text{Sig } F = .0000 < .05$ ”. The relationship between the coefficients (r) of the model is acceptable since it is 0.5726. Therefore, it was concluded that the regression model is significant, as the set of independent variables does reliably predict the dependent variable, and the sample used in regression analysis is homogeneous and variation of the distributed data over the twenty-one years has no effect on data consistency.

Table (4) shows the result of the regression analysis. From these results, we can determine the importance of the independent variables based on the test ($\text{Sig } t\text{-Student}, P > |t|$). Where the standard Beta value is comb used to arrange the force of influence of these variables (signification) on the dependent variable.

Table (4): Regression analysis result (Job creation)

Model	Coef.	Std. Err.	t	$P > t $
Constant	1746.872	700.3174	2.49	0.014
TB	0.0034454	0.1293256	0.03	0.979
LS	0.0650201	0.0308285	2.11	0.037

Source: Prepared by the researcher. Depending on software Stata outputs. Version (15.0).

Now, let us check the significance of the variables' parameters. The result of the multiple linear regression model appears as follows:

The (LS) coefficient (0.0650201) is significantly different from (0) using 0.05 level of significance because its value (p) is equal to 0.037, and it is smaller than 0.05

($P > |t| = 0.037 < 0.05$). This means that the variable of loans subsidized (LS) affects positively job creation, and the strength of this effect is 6.5%.

Statistically, the (TB) coefficient (0.0034454) does not differ significantly from (0) using 0.05 level of significance its value (p) is definitely 0.979 greater than 0.05 ($P > |t| = 0.979 > 0.05$). This means that the variable of tax breaks (TB) does not affect job creation.

3.3 Additional tests

Based on the results of multiple linear regression analysis, we will analyze the significant variable (loans subsidized "LS") at confidence level 5%. Also, we will comment on the insignificant variable (tax breaks "TB"), on the dependent variable (job creation) according to the model, indicating the direction of impact (negative or positive) as shown in Table (5). We will also present in this part the experimental regression model that presented in the following experimental equation:

$$JC (\text{job creation}) = 1746.872 + 0.0034454 TB + 0.0650201 LS + \varepsilon$$

Table (5): Study results summary

Hypothesis	Variable	$P > t $	Decision	Expected direction of the relationship	Direction of relationship according to the results	Test result of the hypothesis
H1	TB	0.979	Not Significant	+	...	Not supported
H2	LS	0.037	Significant	+	+	Supported

Source: Prepared by the researcher. Depending on software Stata outputs. Version (15.0).

Conclusion

To address the research problem, which focused on the following question: "How effective is a government subsidy for Micro and Small Enterprises (MSEs) by The National Youth Employment Support Agency (NYESA/ANSEJ) in creating job opportunities in Algeria during the period 1997-2017?", we built a theoretical model and formulated 02 hypotheses based on what was stated in previous literature. To verify the theoretical model and the hypotheses, we relied on data for Micro and Small Enterprises (MSEs) that received government subsidy by The National Youth Employment Support Agency (NYESA/ANSEJ) in Algeria for the period from 1997 to 2017. These data include 144 observations in the form of the "Panel data" structure (Balanced Panel) by sectors of activity (08 sectors: Agriculture, Arts and crafts, construction and public works, Industry and maintenance, Liberal professions, Services, TIC, and Transport). The sample's size was sufficient for statistical analysis. This data was processed using the technique of multiple

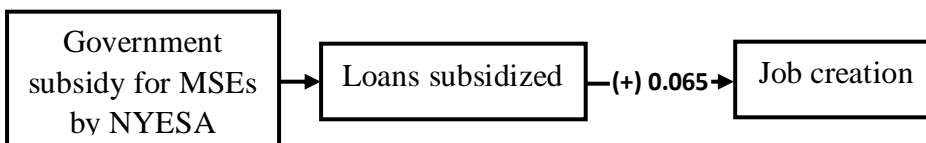
The impact of government subsidy for Micro and Small Enterprises (MSEs) in job creation: An empirical evidence-case of Algeria (1997-2017)

linear regression analysis, while the Ordinary Least Squares method (OLS) was used in the estimation process by Pooled Regression Model (PRM), using the Stata version program (15.0).

Discussion of the results

In the context of verifying the theoretical model of the study, it was found that the loans subsidized (LS) variable affect job creation. When comparing the theoretical model with the experimental model, we notice that the tax breaks (TB) variable does not affect job creation. We will present the effect of the independent variable and the direction of influence on job creation in detail while discussing the hypotheses. Form (2) shows the experimental model of the study that includes the independent variable which affects job creation.

Form (2): Empirical model of the study



Source: Prepared by the researcher.

In the framework of testing the two research hypotheses, we found that the first hypothesis which indicates a positive effect of the tax breaks granted to Micro and Small Enterprises (MSEs) by NYESA/ANSEJ in job creation, the results of the study were against its expectations. As there is no statistically significant relationship between tax breaks and job creation. Thus, this hypothesis is rejected. This result was the opposite of the findings of Taleb's study (Taleb, 2017).

As for the second hypothesis, which says, "the loans subsidized granted to Micro and Small Enterprises (MSEs) by NYESA/ANSEJ have a positive impact on job creation," the results of the study indicated a positive relationship of statistical significance between the loans subsidized granted to Micro and Small Enterprises (MSEs) and job creation, and the strength of this effect was (0.0650201). That is, whenever the loans subsidized are changed by one unit (one million Algerian Dinars), the job creation in Micro and Small Enterprises (MSEs) will increase by 0.065 units (jobs). Consequently, the second hypothesis is accepted according to the results of the study. This result is consistent with those of both (Biru, 2014) and (Ayyagari, Juarros, Martinez Peria, & Singh, 2016).

Finally, we will present in Table (6), the summary of the study results that check the two previous hypotheses.

Table (6): Summary of the results of checking the study hypotheses

N° hypothesis	Formulate the hypothesis	Test result
H1	The tax breaks granted to Micro and Small Enterprises (MSEs) by NYESA/ANSEJ have a positive impact on job creation.	Not achieved
H2	The loans subsidized granted to Micro and Small Enterprises (MSEs) by NYESA/ANSEJ have a positive impact on job creation.	Achieved

Source: Prepared by the researcher.

Recommendations

- Reassessment of government subsidy for Micro and Small Enterprises (MSEs) in the form of tax breaks, as it has a counter (negative) impact on job creation, based on the results of the study;
- The National Youth Employment Support Agency (NYESA/ANSEJ) should focus more on loans subsidized, as it is the only influencing factor in job creation according to the results of this study;
- Providing a special database at the level of government support institutions, related to government subsidy for Micro and Small Enterprises (MSEs) in more detail, to facilitate the study of the impact and effectiveness of government subsidy policy.

Bibliographie

- ANSEJ. (2020, 02 15). *Agence Nationale de Soutien à l'Emploi des Jeunes*. Retrieved from <http://www.ansej.org.dz/index.php/fr/>
- Ayyagari, M., Juarros, P. F., Martinez Peria, M. S., & Singh, S. (2016). Access to finance and job growth: firm-level evidence across developing countries. Retrieved from <http://documents.worldbank.org/curated/en/804781467990954208/Access-to-finance-and-job-growth-firm-level-evidence-across-developing-countries>
- Baltagi, B. (2005). *Econometric analysis of panel data* (3th Edition ed.). John Wiley & Sons Ltd.
- Birch, D. G. (1979). The Job Generation Process. *MIT Program on Neighborhood and Regional Change*. Retrieved from Available at SSRN: <https://ssrn.com/abstract=1510007>

The impact of government subsidy for Micro and Small Enterprises (MSEs) in job creation: An empirical evidence-case of Algeria (1997-2017)

-
- Biru, A. (2014, May 14). he Impact of Subsidy on the Growth of Small and Medium Enterprises (SMEs). *Journal of Economics and Sustainable Development*, 05(03), 178-188. Retrieved from <https://ssrn.com/abstract=3177967>
 - Break, G. F. (1972). Subsidies as an instrument for achieving public economy goals. In : US Congress, Joint Economic Committee, The Economics of Federal Subsidy Programs—A Compendium of Papers. *Volume 1, Partie 1, 92d Congress, 2d session*, 01-06. Washington. D.C, United States: Government Printing Office.
 - Cancino, C., Bonilla, C., & Vergara, M. (2015). The impact of government support programs for the development of businesses in Chile. *Management Decision*, 53(08), 1736 -1754. Retrieved from <http://dx.doi.org/10.1108/MD-06-2014-0428>
 - Escudero, V., Horne, R., Kühn, S., & al. (2015). *An employment-oriented investment strategy for Europe, Studies on Growth with Equity*. International Labour Office, Research Department, ILO , Geneva. Retrieved from https://www.ilo.org/global/publications/books/WCMS_340482/lang--en/index.htm
 - Eurofound. (2015). *Job creation in SMEs*. European Foundation for the Improvement of Living and Working Conditions. Luxembourg: Publications Office of the European. Retrieved from <https://www.eurofound.europa.eu/publications/resume/2015/labour-market-business/job-creation-in-smes-resume>
 - Eurofound. (2016). *Job creation in SMEs: ERM annual report 2015*. European Foundation for the Improvement of Living and Working Conditions. Luxembourg: Publications Office of the European. doi:10.2806/342142.
 - Fuest, C., & Huber, B. (2000). Why do governments subsidise investment and not employment? *Journal of Public Economics*, 78(1–2), 171-192. doi:10.1016/S0047-2727(99)00115-2
 - HOTREC. (2017, May 04). *report on the benefits of low vat on job creation and competitiveness in the EU*. Policy Reports Publications.
 - ILO. (2019). *Small Matters: Global evidence on the contribution to employment by the self-employed, micro-enterprises and SMEs*. International Labour Organization (ILO). Retrieved from https://www.ilo.org/global/publications/books/WCMS_723282/lang-en/index.htm
 - IMF. (2014, December 11). Algeria : Selected Issues Paper. *IMF Country Report No. 14/342*. Washington, D.C: International Monetary Fund. Middle East and Central Asia Dept. Retrieved from <https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Algeria-Selected-Issues-Paper-42512>
 - Keynes, J. M. (1964). *The General Theory of Employment, Interest and Money*. London: Macmillan & Co. LTD, (first published 1936).

- Koski, H., & Pajarinen, M. (2013). The role of business subsidies in job creation of start-ups, gazelles and incumbents. *Small Business Economics*, 41(01), 195–214. Retrieved from <https://doi.org/10.1007/s11187-012-9420-5>
- Law n° 96-296. (1996). Executive decree, relating to creating and fixing the statutes of the national youth employment support agency. *Presidency of republic, People's Democratic Republic of Algeria, Official Gazette, Issue 52, dated on 24 Rabie-Ethani 1417 corresponding to September 08, 1996. Issued on 27 Rabie-Ethani 1417 corresponding to September 11, 1996*, 03-12.
- Melikaoui, M. (2010). Tax Spending in Algeria between the Prospects of Investment Induction and the Challenges of Tax Evasion from the period 1992-2008, M.A. Thesis (unpublished), (in Arabic). Faculty of Economics and Management Sciences, University of Algiers 03, Algeria: University of Algiers 03. Retrieved from <https://www.ccdz.cerist.dz/admin/notice.php?id=0000000000000711985000539>.
- Morgan, H. M. (2019). *Underdog Entrepreneurs: A Framework of Success for Marginalized and Minority Innovators*. Springer Nature. doi:10.1007/978-3-030-20408-2
- OCED. (1997). *Small Businesses, Job Creation and Growth: Facts, Obstacles and Best Practices*. Organisation for Economic Co-operation and Development (OCDE) Publishing. Retrieved from <https://www.semanticscholar.org/paper/SMALL-BUSINESSES-%2C-JOB-CREATION-AND-GROWTH-%3A-FACTS/d712b9c55dc8f5a7ae599da3905b02993b4a96c8>
- Oxford Business Group. (2018). *The Report: Algeria 2018*. Oxford Business Group. Retrieved from <https://oxfordbusinessgroup.com/algeria-2018>
- Parker, S. (2018). Rent-Seeking, Entrepreneurial Effort and Employment Creation. In *In the Economics of Entrepreneurship* (2nd ed ed., pp. 472-517). Cambridge: Cambridge University Press. doi:10.1017/9781316756706.015.
- Reeg, C. (2015). Micro and small enterprises as drivers for job creation and decent work. *Discussion Papers* 10/2015. Retrieved from <https://ideas.repec.org/p/zbw/diedps/102015.html>
- Schwartz, G., & Clements, B. (1999). Government Subsidies. *Journal of Economic Surveys*, 13(02), 119-148. doi:10.1111/1467-6419.00079
- Taleb, M. A.-A. (2017). The role of tax incentives in the provision of jobs in Algeria during the period (1993-2015), (in Arabic). *Journal of Humanities*, 01(04), 599-584. Retrieved from <https://www.asjp.cerist.dz/en/article/24277>
- World Bank. (2013). *World development report 2013 : jobs (English)*. Washington, DC: World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/263351468330025810/World-development-report-2013-jobs>

The impact of government subsidy for Micro and Small Enterprises (MSEs) in job creation: An empirical evidence-case of Algeria (1997-2017)

- Zaid , H., & Taibi, H. (2019). The impact of tax incentives for investment in Algeria (1995-2016), (in French). *Journal Of North African Economies*, 15(20), 73-85. Retrieved from https://www.univ-chlef.dz/renaf/Articles_Renaf_N_20/7.HIZIA.pdf
- Zatlal, N., & Djelil, Z. (2015). Overview of tax expenditures in Algeria, (in French). *Algerian Journal of Public Finances*, 05(01), 63-77.
- Zinet, A. (2019). Evaluation of the Effectiveness of Taxation incentives and Their Impact on Investment Energizing, Case Study of Algeria in the Period (2001-2016), Ph.D. Thesis (Unpublished), (in Arabic). Faculty of Economic Sciences, Commercial Sciences and Management Sciences, University of Algeria 03, Algeria: University of Algeria 03. Retrieved from <https://www.ccdz.cerist.dz/admin/notice.php?id=0000000000000937615000940&pub=1>.

Notes

(i) The National Youth Employment Support Agency - NYESA (Agence Nationale de Soutien à l'Emploi des Jeunes, ANSEJ), by the abbreviation ANSEJ, created in 1996 by the executive decree n° 96-296, is a specific public body, endowed with legal personality and financial autonomy. ANSEJ supports project leaders for the creation and extension of micro-enterprises for the production of goods and services. ANSEJ has a network of 51 branches, located in all the wilayas of the country, as well as annexes located in large localities (ANSEJ, 2020).

The ANSEJ's missions are:

- Support, advise and accompany young promoters in the creation of activities.
- Provide training on the micro-enterprise management technique for the benefit of young promoters.
- Encourage all other forms of actions and measures to promote the creation and extension of activity (ANSEJ, 2020).

(ii) We use the edition 1964 from Macmillan & Co. LTD, London.