The effect of the minimum wage on employment in Algeria

أثر الحد الأدنى للأجور على التشغيل في الجزائر

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Abstract:

This paper attempts to examine the effect of the minimum wage on employment in Algeria over the 1990-2015 period. It disscusses the minimum wage's increase and its implications in labour market, to analyze existence of the effect by apllying Johansen cointegration and Granger causality tests between main variables. The results revealed that there is an indeterminate effect of minimum wage on employment, which tends to support our hypothesis. However, the question of the effect of the minimum wage on employment deserves to be put into general perspective in the context of Algerian labour market policies.

Keys words*: *minimum wage, employment, labour market, public policy ,
***JEL classification codes*:** C12 ; E24 ; J21 ; J31 ; J38 ; J83 ;

ملخص:

يهدف هذا البحث إلى دراسة أثر الحد الأدنى للأجور على التشغيل في الجزائر خلال الفترة 1990-2015. حيث يتطرق إلى الزيادة في الحد الأدنى للأجور وانعكاساته في سوق العمل، وذلك لتحليل أثره من خلال إجراء اختبار جوهانسن للتكامل المشترك واختبار السببية لجرانجر بين المتغيرات الرئيسية. خلصت النتائج إلى عدم تحديد أثر الحد الأدنى للأجور على التشغيل، وهو ما يدعم فرضيتنا. مع ذلك، فإن موضوع أثر الحد الأدنى للأجور على التشغيل لابد أن يحظى بالاهتمام أثناء تحديد الرؤية العامة ضمن السياسات المتعلقة بسوق العمل الجزائري.

الكلمات المفتاحية: الحد الأدنى للأجور، تشغيل، سوق العمل، السياسة العامة،

تصنيف JEL: C12، E24 ، J21 ، J31 ، J38 ، J83 ،

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1.INTRODUCTION

Wage policies have always been at the heart of economic and social policy themes. In order to achieve economic growth and social stability, governments are obliged to pay attention to the minimum wage as an important chapter of the various wage policies. By establishing a minimum wage, governments will no doubt take into account the labour market they intend to organize. This is because labour market grows more and more day-to-day, which makes it difficult to control unemployment. Thus, this helps raise employment and attract workforce to the formal labour market.

Wage, which is considered to be equivalent to productive work, has an impact on several levels in the labour market and its organization, such as the development of production methods in various sectors (industrial, agricultural, services ...). In addition, the impact of wage has an essential role in improving the standard of living. All this, occurs in view of the aspects covered by its impact, whether economic, social, cultural and other.

The interest in employment and the reduction of unemployment are not new in the policies of governments and nations. In recent years, however, the focus has been on economic development indicators that have gone beyond traditional concepts, which have previously limited their interests to the pattern of consumption, the size of invested capital, etc… which now recognizes the level of wages and the mechanisms for determining it. In this view, the same attention must be devoted to the minimum wage, and can also be a way to regulate the labour market.

Minimum wage level is based on the general level of purchasing power, the assessment of the labour force by the wage earners, and mainly on the outcome of consultations and negotiations between the social partners, headed by the government. Consequently, the implications for the labour market in general and employment in particular have to be distinguished. This is what shapes the main purpose of the present study. Thus, the problematic of our research can be stated as follows: “Is there a minimum wage effect on employment in Algeria ?”

This is what leads us to formulate the following hypothesis:

- Minimum wage in Algeria has an indeterminate effect on employement.

2.Minimum wage and its evolution in Algeria

Wage has always been an important factor in determining the relationship between the employee and the employer. In order to determine the level of remuneration or the minimum wage, it must be subject to several organizational and legal measures, in addition to the outcome of consultations between the social partners, headed by the government, which depends on several elements and economic indicators, especially labour market variables (ILO Minimum Wage Fixing Convention N°131, 1970).

Hence, minimum wage can be defined as a salary set by regulation to guarantee, for the most disadvantaged employees, an income corresponding to the subsistence minimum which changes with economic growth and rising prices (Belser & Sobeck, 2012, pp. 132-133).

In our analysis of the history and evolution of the minimum wage, we tried to rely on legislation and laws concerning the regulation of the Algerian labour market and the wage policy. The review of the laws issued in this regard is considered the most important reference to the classification of the stages of evolution of wages policy and minimum wage in particular, and thus can be divided into three phases:

2.1.The first phase:

In the light of a sensitive economic and political reality, the government continued, after independence, to implement the wage system in effect during the colonial era. This was to maintain the minimum formula as stated earlier in French law, the minimum guaranteed wage between Guaranteed minimum interprofessional salary (known as **SMIG**) and the Minimum guaranteed agricultural wage (known as **SMAG**) (Law 62-157, 31-12-1962), Which was aimed at improving income for rural dwellers. In addition to the classification of the Algerian territories, and the distinction between the minimum wage of the sectors (Decree N° 63-159, 25-04-1963) (Decree N°63-205, 14-06-1963), the State sought in the beginning of the 70th s to establish a uniform minimum wage without discrimination of gender of the employee, or of the territory and sector to which it belongs (Decree N°70-107, 25-12-1970); with the sole exception of workers in the agricultural sector, and was adopted in determining its level of workload (Decree N°74-2, 16-01-1974). This phase witnessed several laws relating to the minimum wage policy in general, the main objective of which was to match the living conditions of employees and to cope with the structural economic policies adopted by the post-independence state as well as the liberation from the prevailing French colonial laws (Boutaleb, 2012, pp. 2-5).

2.2.The second phase:

This phase represented an important stage on the assumption that this period embodied independence from the inherited laws of the colonial era and attempted to establish the special features of the independent Algerian state. This was through the adoption of a central policy through national plans of a socialist nature, taking into consideration the differences between the average wage and aiming to classify all jobs in the labour market within a special legal framework under the General Status of Workers at 1978 (Decree N°78-12, 05-08-1978). This law explicitly stipulated in Article n°129 that « *There is a guaranteed national minimum wage (SNMG) for all sectors of activity. When fixing the minimum wage, it was necessary to take into account the evolution of the prices of products and services of first necessity and of wide consumption. For this purpose a budget family type is fixed* ».

In the early 1980's, the National Commission for Wages was established (Decree N°80-118, 12-04-1980), comprising representatives of the executive branch and the one-party FLN, representatives of unions and trade unions, as well as official civic organizations and the most important institutions. This committee has worked on preparing a comprehensive national wage network for all employees according to the classifications of the position and the level that has been adopted nationally and most of which are still to the present (Decree N°82-356, 20-11-1982).

2.3.The third phase:

The period of the end of Eighties was characterized by reform policies that coincided with the specific economic situation related to the decline in oil prices. It also called for the adoption of a market economy and the ratification of

international treaties, which included the necessity of reorganizing the labour market and reforming the local wage system according to international standards (Musette, Bazizi, Bouyacoub, Khaldoun, & Kherbachi, 2003, pp. 10-15). As a result, there were challenges to the government. The employees considered that some of these reforms affect their legal gains, which are supposed to be a natural right under the socialist system. Therefore, social dialogue with social partners should be devoted to reviewing some labour laws and other legislation as an alternative, and the settlement of their disputes (Law N°90-04, 06-02-1990), leading to the enactment of the Monetary and Credit Law in 1990, which brought about an amendment to the provisions of the General Basic Law of the **SGT**, resulting in a new national wage policy that includes the public and private sectors and takes into consideration their characteristics (Boutaleb, 2012, pp. 6-7). The minimum wage has been an important part of this phase, where several changes have occurred in its level as a result of the repercussions of the country's economic and political situation.

Table 1. The evolution of minimum wage's level from 1990 to 2012

YEARS	NGMW	RATE
January 1st 1990	1000	/
January 1st 1991	1800	80,00%
July 1st 1991	2000	11,11%
April 1st1992	2500	25,00%
January 1st 1994	4000	60,00%
May 1st 1997	4800	20,00%
January 1st 1998	5400	12,50%
September 1st 1998	6000	11,11%
January 1st 2001	8000	33,33%
January 1st 2004	10000	25,00%
January 1st 2007	12000	20,00%
January 1st 2010	15000	25,00%
January 1st 2012	18000	20,00%
June 1st 2020	20000*	11,11%

Source: ONS database

According to the data of the Algerian National Office of Statistics, shown in the table above, the minimum wage has changed considerably after adopting a market economy in Algeria. This was evident after a two-fold increase in four years, moving from the 1,000 DZA approved in 1990 to 4,000 DZA in January 1994. This acceleration in changes of minimum wage coincided with the political and economic transformation of Algeria in the early of 1990s. This confirms that the minimum wage was linked to the fundamental shifts in the macroeconomic policy of the State (Ruppert, 1999, pp. 17-18), which is reflected directly on the smallest unit, i.e, the wage.

* Law No. 20-07 of June 4th, 2020 on the complementary Finance Law for 2020

After this period of three years, the minimum wage has not increased since the political situation in the country has had a major impact on the economy. The devaluation of the currency during this period (Guchari, 2012, pp. 102-103) and the high unemployment rates after the wave of rural exodus towards the cities (Khaldoun & Avery, 2019, pp. 2-7), in addition to the budget deficit suffered by the government at the time, did not prevent the decision to increase after consultations of the social partners concerning the revision of the minimum wage and agreed to raise it in three stages. The first is to move from 4000 DZD to 4800 DZD from the beginning of 1997 to May of the same year. The second stage is to move from 4800 DZD to 5400 DZD starting from January 1998. The third and final stage is DZD 6000 in September 1998.

The ratio of indebtedness, the engagement to the structural adjustment plan according to the recommendations of the International Monetary Fund and the trend towards privatization of public firms (Benchellat & Louali, 2017, pp. 169-171) which means layoffs and high unemployment rate, prompted the government to take measures to face the social explosion by approving an increase of 2000 DZA at a minimum and therefore to move to 8000 DZA.

By the end of the 90s, the world oil markets witnessed a recovery and the price of a barrel rose, as did the level of foreign exchange reserves (Kaci & Achouche, 2015, pp. 3-6) which had a positive impact that contributed to raising the minimum wage. The government has also sought to adopt new indicators in determining wages, including the family basket index as a reference in determining the minimum wage in line with inflation rates after syndicates claims, to become 10,000 DZA and then 12,000 DZA in 2007, and finally 15,000 DZA in 2010, then 18,000 DZA in 2012.

The government has recently approved an increment in the minimum wage as per the complementary finance law in June 2020 (Law No. 20-07 , 04-06-2020), raised by a difference of 2000 dinars from the last level. This increment was promised during the elections to improve the standards of living for low income groups. Unfortunately, this piece of information wasn't mentioned in the chronological serie of econometric study in our research paper. This was due to the inability to obtain official employment statistics in Algeria after 2015.

3.Literature review on wage-employment link

There is a disagreement among researchers about the true effect of the minimum wage on employment. Whereas, by reviewing the recent literatures, it has distinguished many aspects of the classification of this debates and the ways in which it is organized to study the effect of raising the minimum wage like employment and unemployment; geographical, demographic and sectoral characteristics; relationship with business cycles (Mărginean & Ştefania, 2013, p. 97).

The high level of unemployment can be explained by a labour market that is too rigid or insufficiently flexible. Among the elements that prevent the return to equilibreum by reduction in wages, neoclassical economics distinguish the

existence of a minimum wage, tax policy or social security contributions, which increase the cost of labour (ILO Global Wage Report, 2014/15, p. 6). As well as the payment of unemployment benefits which do not encourage the persons concerned to seek a new job. All of previous, supporting by other reasons like The union organizations and syndicates which oppose the reduction of wages; the labour law which can regulate and therefore make it more difficult layoffs (T.Law, 1998, p. 57).

According to the neoclassical model of perfect competition, the influence of firms in setting wages and price levels is totally absent. If the minimum wage is set above the level of the equilibrium wage, the demand for labour will decrease by firms, which in theory leads to a decrease in the employment rate of the majority of employees. The latter is paid at the minimum wage, and hence unemployment (Neumark & Washer, 2008, pp. 39-50).

However, regulation theory considers it difficult to explain the relationship between wage and employment, and therefore relies on an institutional theoretical approach to interpreting the effects of changes on wages and employment. In the same context, the accumulation of empirical results allows us to explain why this link is difficult to project, although econometric estimates are very difficult and varied in their results (Boyer, 1999, p. 153).

4.Empirical studies

4.1.Study N°(01)

At the International Economic Conference of Sibiu, Romania held in 2013, on « Post Crisis Economy: Challenges and Opportunities », Silvia Mărginean and Alina Ştefania Chenic, in their communication entiteled «Effects of Raising Minimum Wage: Theory, Evidence and Future Challenges », believed that studies on the effect of raising the minimum wage on employment should be more specific, such as that it has to be conducted at the national or regional level. They argued that the effect depends on the share of minimum wage paid employees, as well as the legal and social framework that includes them.

Some studies focusing on groups of countries are in most cases irrelevant from which the effect of raising the minimum wage based on workforce is low, as the age of the first job in countries like Romania exceed those in developed countries as the United States of America or Canada (Mărginean & Ştefania, 2013, pp. 101-102).

Although raising the minimum wage is a restriction imposed on the labour market, nothing happens immediately on employment and unemployment rates. Rather, the effect extends to other parts of the economy and markets that support the effect. So, some researches in this context are interested to identify the markets and levels which elasticity changes and economy became more sensitive to minimum wage policies.

4.2.Study N°(02)

In their study entitled « The impact of the minimum wage on employment in developing countries: the case of Turkey » Gürdal Aslan and Djamel Kirat

(2015), discussed the minimum wage in Turkey and its role in a labour market marked by very low activity and employment rates and high unemployment, characterized by a dual structure between formal and informal work.

The case of this country is particularly interesting because it obtains encouraging economic results which place it 17th ranking among the economic powers, while certain relative indicators in the labour market tend to position it at the bottom on a global scale. Indeed, the total employment rate including informal work of the population over 15 years is 46% in 2013, the activity rate of the population more is also very low. Informal employment represents 37% of total employment and 23% of non-agricultural employment. In this context, many studies explain the importance of work informal and the low employment rate due to rigidity of the labour market and the high level of wages minimum according to OECD (Aslan & Kirat, 2015, pp. 41-42).

So, the authors empirically assessed the impact of the minimum wage on the number of non agricultural salaried jobs for the period 1988-2013. More specificly, they distinguished the effects of the minimum wage on the employment of men and women and on formal and informal employment. The results showed a negative relationship between total salaried employment and minimum wage for both men and women, but they also showed that if the minimum wage has a negative effect on informal employment, it will have a positive effect on formal employment. They interpreted it by shifting labour supply from the informal to the formal sector, which is one of the public policy objectives.

4.3.Study N°(03)

This study, under the form of technical report, on « the Economic and social impact of the minimum wage in Algeria » was carried out in 2003 by economics resarchers and experts (Musette, Bazizi, Bouyacoub, Khaldoun, & Kherbachi, 2003), following of a technical workshop in Algiers, initiated by the Research Center in Applied Economcs for Development (CREAD) with the support of the International Labour Organization's Office in Algiers.

The research, contains five chapters, which are adressed on the history of the minimum wage in Algeria, the measures related to its determination and the general wage system, in addition to a review of the characteristics of the Algerian labour market and its components. The authors attempted to analyze the economic and social impact of the minimum wage by proposing an examination of the relationship between the minimum wage and GDP and inflation ; therefore, protecting the purchasing power of employees. In the same vein, they estimated the real indicators in determining the minimum wage, and cncluded the following results :

- The labour market situation is highly imbalanced according to the profound changes brought about by the transition period from an administered economy to that of market economy. The increase in the participation rate is attributed to changes in the activity behaviour of social employees, with in particular the massive arrival of women,

formerly inactive, on the labour market. A fundamental change is observed in the structure of employment, wages are falling and as a corollary, there is an increase in self-employment (independant business). The private sector currently dominates the market, but the public sector remains the primary provider of decent and sustainable jobs.

- The authors concluded by their analysis that the economic impact of the minimum wage gives quite interesting results and is specific according to the evolution of economic policy in Algeria. Before liberalization, the minimum wage had only a symbolic function. It was not until the advent of the market economy that its economic function was to recover, but in reality the minimum wage follows the evolution of exchange rate policy. The inflationary phenomenon observed in relation to wages indicates a less chaotic correlation by excluding the oil economy.
- The ratio of the minimum wage in relation to GDP per capita has varied between 4.5% (for the years 1990, 1996 and 2000) and a peak of 7.5% in 1994. The same is true for minimum wage between 1990 and 2002, which grew faster in relation to the rate of inflation and to the average wages of the public industry. And the econometric tests revealed quite contrasting results. The gross value added significantly explains the minimum wage and confirms the exogenous nature of the determination of the minimum wage in Algeria.
- Productivity partly explains the variations in the minimum wage during the period 1989-2001. The consumer price index is positively correlated with the nominal minimum wage and negatively with the real minimum wage. In fact, there is a discrepancy between the indicators retained by the legislator for fixing the minimum wage and the actual methods as it is revealed in analysis.
- The social impact of the minimum wage remains unclear in the Algerian case. As for economics, the social function of the minimum wage was only reestablished with the reform of social protection in the early 1990s.

5.The econometric study

In order to show the type of relationship between the study variables, which are mainly changes in employment levels and minimum wages in Algeria from 1990 to 2015, we relied on the data of the National Bureau of Statistics (www.ons.dz), and we also included changes to the GDP extracted from the World Bank database (www.data.worldbank.org). Using the software « Eviews », we applied cointegration tests according to the method of "Johansen", then discussed the results of this tests output.

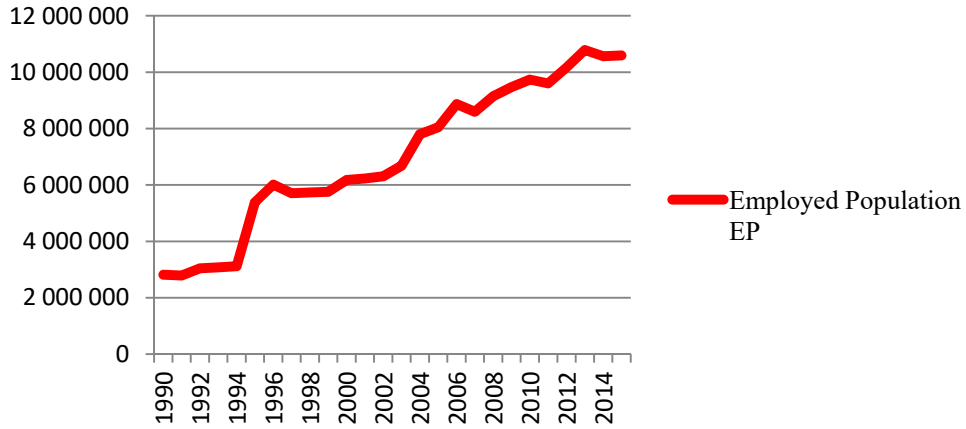
5.1.Johansen Estimate Cointegration Method

Cointegration according to the Johansen methodology “Johansen Multivariate Cointegration Technique MS-VECM” is defined as an association between chronological series of multiple variables (Kouretas & Papadopoulos, 2014, p. 95). Johansen proposed the use of the maximum likelihood method,

under the normality of errors of equation in order to estimate the VECM model as it is the case in our study where variables can be defined as follows :

- Employed Population **EP**

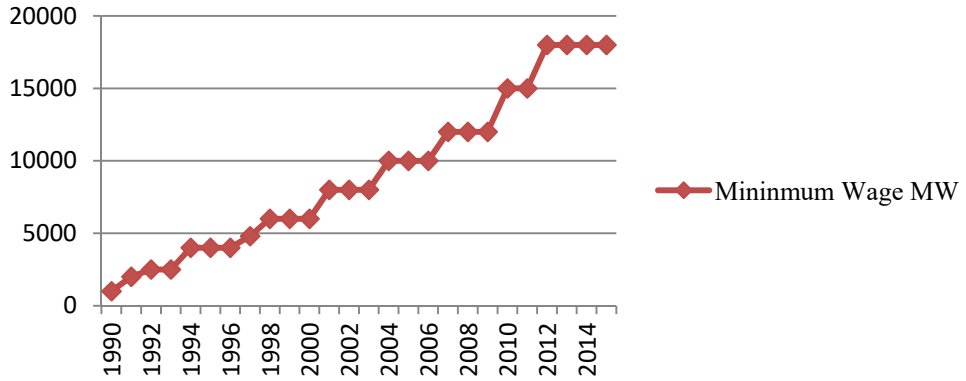
Fig.1. Employed Population **EP**



Source : Established by the researchers applying ONS database

- Mininmum Wage **MW**

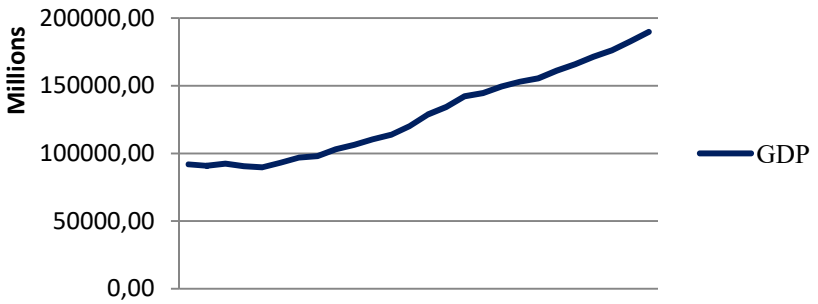
Fig.2. Mininmum Wage **MW**



Source : Established by the researchers applying ONS database

- Growth Domestic Product **GDP**

Fig.3. GDP



Source : Established by the researchers applying World Bank database

The chronological serie in our study spans from 1990 to 2015, giving us 26 observations for this test. We will also define the relationship as the following fonction:

$$Ln\ (EP)= F\{\ MW,\ Ln(GDP)\}$$

5.2.Augmented Dickey-Fuller test statistic

According to Dickie Faller's test, if the calculated absolute value is greater than the tabular absolute value, the series is stationary. On the contrary, if the calculated value is less than the tabular value, then the series is not stationary. In here, we need to go to the first difference, as it is also possible to admitt the comparison between probability test and probability level of 5%.

Table 2. Augmented Dickey-Fuller test results

	variables	**Prob**	**t-Statistic tab**	**t-Statistic cal**	**Decision**
Level	EP	0.4365	-2.263081	-3.612199	Not stationary
	MW	0.1941	-3.603202	-2.849974	Not stationary
	GDP	0.0707	-3.603202	-3.424530	Not stationary
	variables	**Prob**	**t-Statistic tab**	**t-Statistic cal**	**Decision**
1st difference	EP	0.0036	-3.612199	-4.867653	stationary
	MW	0.0000	-3.612199	-7.237679	stationary
	GDP	0.0549	-3.612199	-3.563620	Not stationary
2nd difference	**variables**	**Prob**	**t-Statistic tab**	**t-Statistic cal**	**Decision**
	EP	0.0001	-3.622033	-6.722820	stationary
	MW	0.0000	-3.632896	-8.816112	stationary
	GDP	0.0000	-3.622033	-7.744236	stationary

Source : Established by the researchers applying Eviews output

In table (02), we notice that the chronological series of study variables are not stationary at the level, in addition to that they are not stationary at the first difference too, but after going to the second difference it was found that the series are stationary at the same degree I(2). This condition permits us to test the relationship of cointegration and attempt to estimate the relationship in the long term.

5.3.VAR Lag Order Selection Criteria

Table 3. VAR Lag Order results

VAR Lag Order Selection Criteria
Endogenous variables : EP GDP MW
Exogenous variables : C
Sample : 1 26
Included observation : 22

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-167.3216	NA	1064.584	15.48378	15.63256	15.51883
1	-96.94842	115.156*	4.067529*	**9.904402***	**10.49952***	10.04459*
2	-92.28885	6.353952	6.385320	10.29899	11.34044	10.54432
3	-85.94924	6.915946	9.416124	10.54084	12.02862	10.89132
4	-80.86809	4.157299	18.40062	10.89710	12.83122	11.35272

* Indicates lag order selected by the criterion
LR : sequential modified LR test statistic (each test at 5% level)
FBE : Final prediction error
AIC : Akaike information criterion
SC : Schwarz information criterion
HQ : Hannan-Quinn infomation criterion

Source : Eviews output

According to the above table (03) and the obtained values, it can be said that the appropriate lag order according to the AIC and SC criteria is (P = 2) at the following values in order (AIC = 9.904402) (SC = 10.49952) which will be used for the Johansen test.

5.4.Johansen Cointegration Test

Table 4. Johansen Cointegration test results

Trend assumption : Quadratic deterministic trend
Series : EP GDP MW
Lag interval (in first difference) : 1 to 2
Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. Of CE(s)	**Eigenvalue**	**Trace statistic**	**0.05 Critical value**	**Prob. ****
None *	0.640039	36.26295	35.01090	0.0365
At most 1	0.648988	12.76246	18.39771	0.2561
At most 2	0.118087	2.890236	3.841466	0.0891

Source : Eviews output

Based on the results of the Trace Test shown in table (04) related to the first hypothesis, we find that the p-value (0,0365) which is smaller than the probability (0.05), in addition to comparing the calculated value (trace statistic = 36,262> criitical value = 35,010), we reject the null hypothesis H0 (r = 0) that there is no cointegration relationship and accept the alternative hypothesis H1 (r> 0) that there is a cointegration relationship.

As for the results of the Trace Test related to the second hypothesis, we notice that the p-value (0,2561) is bigger than the probability (0.05), and the

calculated value obtained (trace statistic = 12,762 <criitical value = 18,397). Therefore, we accept the null hypothesis H0 (r = 1) that there is only one cointegration relationship and reject the alternative hypothesis H1 (r> 1) that there is more than one cointegration relationship.

5.5.Estimate the Cointegration relationship between EP and MW

Table 5. Cointegration test results

	Variables	Prob	t-Statistic tab	t-Statistic cal	Decision
Level	RESID01	0.6495	-1.850411	-3.603202	**Not stationary**
1st difference	RESID01	0.0009	-5.513105	-3.612199	**Stationary**

Source : Established by the researchers applying Eviews output

In table (05), after taking the first difference for the ADF test, we notice that the p-value (0,0009) which is smaller than the probability (0,05), thus the residue series **RESID01** extracted from the regression equation estimate between the **EP** and **MW** variables is stationary, which means that there is a cointegration relationship between them, which indicates a long term relationship between employment **EP** and minimum wage **MW**.(Please see Appendices for informations on more test's results)

5.6.Granger causality tests

By using the Granger causality method (Bourbonnais, 2015, pp. 292-293) between **EP** and **MW** variables, the results were as follows:

Table 8. Granger causality test results

Pairwise Granger Causality Tests
Sample : 1 26
Lags : 2

Null Hypothesis	Obs	F-Statistic	Prob
MW does not Granger Cause EP	24	0.94858	0.4049
EP does not Granger Cause MW		0.84941	0.4433

Source : Eviews output

We notice from the results obtained after apllying the Causality Test shown in the above table (08) that the value of (F-statistic = 0.94858) and the probability (prob = 0.4049) is bigger than the level at 5%, therefore we accept the null hypothesis H0 which states that the minimum wage **MW** does not cause changes in employement **EP.**

As for the second relationship, we also notice the values of (F-statistic = 0.84941) and the probability (prob = 0.4433) which is bigger than the level at 5%, therefore we accept the null hypothesis H0, which states that the **EP** employement's changes do not cause an increase in the minimum wage **MW**.

6. CONCLUSION

After recalling the Algerian legislative and institutional historical framework on the minimum wage, followed by literature review of the standard model of neoclassical and regulation theory concerning the employment when the minimum wage increases, the results of the econometric study tend to validate our proposed hypothesis which stated that the minimum wage in Algeria has an indeterminate effect on employement during this study period.

Following the outputs of econometric tests, it has been found that there is no causality in both directions between employment and the minimum wage; while, the two variables have a cointegration relationship in long term, which makes this cointegration insignficant. Whereas, this results generally go in line with the studies that have looked at this question.

We justify this results based on the specificities of Algerian economic policies that interpreted the relationship of cointegration between employment and the minimum wage by the common general tendency of the two series over time, as the updating or raising of the minimum wage by the government has coincided with the adoption of policies of its basic content raising the level of employment and its promotion. Through facilities and privileges, they are offered in the form of preferential packages for benefit of the labour market.

The effects of the minimum wage on employment in a context of transition are quite specific. Overall, we can observe a persistent imbalance in the labour market. The imbalance of the market manifests itself in a weakness of opportunity for salaried jobs for multiple reasons. Most of the new jobs created during this period are temporary or informal in the private sector or self-business under various public employment plans. The public sector has only been able to offer seasonal jobs within the framework of the active labour market policy while cutting permanent salaried jobs following the dissolution of loss-making companies or reducing the workforce in companies in difficulty in order to reduce wage costs.

Afterwards, in the absence of a statistical information system on wages, it is practically impossible to measure the effects of readjustments of the minimum wage on employment, in particular movement in the labour market, monitoring the job strategy over a long period. The existing statistics are global data consolidated at central national level without specific details of persons or companies.

Therefore, the question of the effects of the minimum wage on employment deserves to be put into perspective in the context of Algerian labour market, particularly for the period observed. The minimum wage, contrary to the regulatory system, is neither linked to productivity nor to the purchasing power of employees.

Thus, we can conclude that the analysis of the effect of the minimum wage on employment should depend particularly on the level at which the minimum wages are set, how many employees are directly affected by this measure whom earning at the minimum wage or slightly above, and how well

they are enforced. Because amiss determination of Minimum wage that are set too high can, in principle, reduce employment levels. At the same time, minimum wages that are set too low would fail to protect employees.

Finally, studies on the minimum wage in particular countries as Algeria with instable general state of economy show that there are no definitive answers on the questions of the minimum wage. Minimum wage increases are specific to each economy. They depend on the functioning of the labour market, the development of productivity, the institutional framework which set the degree and quality of conventional relations between social partners, and the involvement of public authorities.

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8.Appendices

Appendix 1. test results

EP = 15.0161113018 + 7.3327374352e-05*MW

Dependent Variable : EP
Method : Least Squares
Sample : 1 26
Included observation : 26

Variable	Coefficient	Std.Error	t-statistic	Prob
C	15.01611	0.075629	198.5500	0.0000
MW	7.33 E-05	7.20 E-06	10.18054	0.0000
R-squared	0.811976	Mean dependent var		15.67831
Adjusted R-squared	0.804142	S.D. dependent var		0.444557
S.E of regression	0.196743	Akaike info criterion		-0.340038
Sum squared resid	0.928983	Schwarz criterion		-0.340038
Log likelihood	6.420492	Hannan-Quinn criter		-0.312170
F-statistic	103.6434	Durbin-Watson stat		0.530842
Prob (F-statistic)	0.000000			

Source : Eviews output

Appendix 2. test results

DEP = 0.0588476612796 - 6.73351762299e-06*DMW - 0.198756483751*E(-1)

Dependent Variable : DEP
Method : Least Squares
Sample (adjusted) : 2 26
Included observations : 25 after adjustement

Variable	Coefficient	Std. Error	t-statistic	Prob
C	0.058848	0.027115	2.170312	0.0411
DMW	-6.73 E-06	2.32 E-05	-0.290262	0.7743
E(-1)	-0.198756	0.119692	-1.660566	0.1110
R-squared	0.127616	Mean dependent var		0.052995
Adjusted R-squared	0.048308	S.D dependent var		0.113593
S.E of regression	0.110815	Akaike info criterion		-1.449745
Sum squared resid	0.270158	Schwarz criterion		-1.303480
Log likelihood	21.12182	Hannan-Quinn criter		-1.409178
F-statistic	1.609127	Durbin-Watson stat		1.779794
Prob (F-statistic)	0.222733			

Source : Eviews output