Journal of Financial, Accounting and Managerial Studies
ISSN 2352-9962/E-ISSN 2572-0147
Vol 08, Number 03 – December 2021

OEB Univ. Publish.

The Reality of Diversifying the Algerian Economy outside The Hydrocarbon Sectorm :Standard analytical study for the period (1990-2020)

واقع تنويع الاقتصاد الجزائري خارج قطاع المحروقات:دراسة قياسية تحليلية للفترة (1990–2020)

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Date of receipt: 04/05/2021 Date of revision: 14/08/2021 Date of acceptation: 21/10/2021

Abstract

This study aims to assess and measure the level of diversification of the Algerian economy, by highlighting the impact and contribution of sectors outside the hydrocarbon sector to support economic growth and measuring the degree of diversification of the Algerian economy by adopting the Herfindahl-Hirschman Index of GDP diversity.

The study found that the degree of economic diversification in the Algerian economy is weak, with a common integration relationship between the variables of the study in the long term, and that interest in diversifying products in various sectors of industry, agriculture, and the service sector inevitably leads to the appreciation of GDP.

Keywords : Economic diversification, economic growth, hydrocarbon sector, Algerian economy.

ملخص

تهدف هذه الدراسة إلي تقييم وقياس مستوى تنويع الاقتصاد الجزائري، من خلال إبراز تأثير ومساهمة القطاعات خارج قطاع المحروقات في دعم النمو الاقتصادي، وقياس درجة تنويع الاقتصاد الجزائري.

توصلت الدراسة إلي ضعف درجة التنويع الاقتصادي في الاقتصاد الجزائري، مع وجود علاقة تكامل مشترك بين متغيرات الدراسة في الأجل الطويل، وان الاهتمام بتنويع المنتجات في مختلف القطاعات الصناعة والزراعة وقطاع الخدمات يؤدي حتما إلي الرفع من قيمة الناتج المحلي الإجمالي.

الكلمات المفتاحية: التنويع الاقتصادي، النمو الاقتصادي، قطاع المحروقات، الاقتصاد الجزائري.

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1. INTRODUCTION

In recent years, the global economy has undergone significant changes, making economic diversification particularly important in rent-based economies characterized by instability because of their fragility of production structures and weak economic bases because of their large reliance on a single major resource as a source of revenue, which has been hampering their growth. Algeria is one of the leading countries whose economy depends heavily on fuel revenues, which accounts for 60% of domestic crude output, and oil exports exceed 96% of total exports, as the rise in the prices of the latter in previous years effectively reflected on the country's economy, which led to high rates of economic growth to the extent that contributed to the advancement of economic development and achieving euphoria and well-being, i.e.more than 50% of the public revenues come from the petroleum levy, but in return The deterioration in its prices has had a severe impact on the Algerian economy since 2014, where the severe volatility of the prices of these raw materials caused the slow pace of economic growth and revealed the fragility of Algeria's economy in the face of shocks, and the manifestations of the crisis were demonstrated from the policy of austerity first to the deterioration of many economic indicators, highlighting the need for a structural shift in the structure of the Algerian economy, and the issue of diversification of the economy became a major priority within the post-crisis economic reforms and the problem is to know how to revive and encourage the diversification process in order to support growth and improving the competitiveness of the Algerian economy, this proposition leads us to the following problem:

How much do growth-specific sectors contribute to the diversification of Algeria's economy during the period 1990-2019?

To answer this key question, we ask the following sub-questions:

- What is the reality of economic diversification in Algeria?
- What is the relationship between economic diversification and economic growth in Algeria?

1.1 The importance of the study:

The importance of the study lies in whether there is diversity in the Algerian economy or focused by highlighting the impact and contribution of

sectors outside the hydrocarbon sector to support economic growth, by diversifying sources of income through the different productive base of all sectors, including agriculture, industry, and services, and trying to figure out what sector is dependent on to drive growth in the Algerian economy.

1.2 The methodology of the study:

Due to the nature of the subject under study and the problematic presented, the methods used were diversified according to the requirements of our research, where the descriptive approach was used by addressing the concepts of diversification and its relationship to economic growth, and the analytical approach in an attempt to evaluate the diversification strategy The economy and its reality in Algeria, in addition to the standard approach for measuring the level of diversification of GDP (Gross Domestic Product) based on the (Herfindahl-Hirschman index), and measuring the impact and contribution of sectors outside the hydrocarbon sector to economic growth, based on the statistics program EVIEWS$_{10}$

1.3 Study divisions: To address this study, it was divided into the following axes:

- The first axis: the relationship of economic diversification to economic growth.
- The second axis: assessing and analyzing the reality of diversification of the Algerian economy.
- The third axis: a record study of the impact of key sectors outside the hydrocarbon sector on economic growth in Algeria.

2. The relationship of economic diversification to economic growth

2.1 The theoretical framework for economic diversification:

Economic diversification is a complex and long process that requires structural changes through the opening of new non-hydrocarbon economic sectors for development such as services, finance and tourism or by reducing investment from sector to sector, often from the primary to secondary sector (Mishrif & Al Balushi, 2018, p. 4), where many economists differed on giving an accurate definition of diversification due to the different vision seen, and one of the most important definitions we mention:

- **Economic Diversification:** It is the process by which reliance on the sole resource is reduced and the transition to the stage of strengthening the industrial and agricultural economic base and creating a productive base means building a healthy local economy that is geared towards self-sufficiency in more than one sector. (Martin, 2013, p. 4)

- **Economic Diversification:**is the diversification of sources of income and reducing the great dependence on oil natural gas, through the development of the non-oil economy and exports and non-oil revenues (Aissaoui, 2009, p. 6), i.e. the desire to collect the largest major sources of income of thecountry; (Cuberesi & Jerzmanowsk, 2009, p. 12)

- **Economic Diversification:** A complex and long process that requires structural changes by opening new non-hydrocarbon economic sectors for development such as services, finance, and tourism or by shifting investment from one sector to another, often from the primary to secondary sector. (Mishrif & Al Balushi, 2018, p. 4)

Through previous tariffs, we conclude that economic diversification is the transition to a more diversified production structure that involves the introduction of new or expansionist products, including meaningful products, which means strengthening the industrial and agricultural economic base and creating a production base.

2.2 Explaining the relationship of diversification to economic growth:

There are two main trends in explaining the relationship between economic growth and first economic diversification: David Ricardo's theory of comparative advantages, which sees the low degree of economic diversification as a catalyst and source of economic growth, and the second trend it is represented in several studies, the most important of which are:

- **According toKilian and Hady1988:** Diversification is expected to increase the stability of domestic economies and enhance their growth capacity (Johne, 2000, p. 3) and the Romer model found that there is a positive impact of savings diversification on growth, i.e., diversification can be seen as an important factor in improving

productivity efficiency. Also, Several experimental studies of many economists on different samples of countries have shown that growth and labor productivity are positive rather than negative with the diversification of the economy.

- **According to (Michaely 1977) and (Fider 1989):**Export diversification positively affects growth, through positive external impacts on growth as well as on non-commercial sectors, which are associated with more efficient management patterns, i.e. countries with diverse exports benefit from external influences and incentives for capital formation, which leads to an increase in growth. (Mejía & Juan, 2011, p. 33)

- **According to (Agosin 2006):** Export diversification does not necessarily require diversification of the export of manufactured goods, i.e. exports can be diversified by developing primary commodities that develop for natural resource-based industries, i.e., some countries can benefit from the comparative advantage of most sectors associated with natural resources. (Mejía & Juan, 2011, p. 32).

- **According to (Lederman and Maloney 2007):** There is a negative relationship between export concentration and GDP growth per capita, which shows that industrial production performs a dynamic process to improve productivity and income, and diversification provides more information, especially in foreign markets, and improves their ability to develop their own potential. (Suut & Mahmut, 2011, p. 4)

3. Assessing andanalyzingthe reality of diversification of the Algerian economy

3.1 The contribution of productive sectors to economic diversification during the period (2001-2019):

It has become necessary for Algeria to get rid of the dependency on oil revenues due to the constant increase in oil shocks, which has had a direct impact on the economic situation, so the government should move towards the new model of activating the sectors of dubbing in order to complete the

necessary revenues and achieve high levels of growth, considering that the contribution of productive sectors to GDP is one of the most important indicators of measuring diversification in the Algerian economy, we will try to summarize them in the table following:

Table.1. Contributions of productive sectors to GDP diversification (2001-2019)

Unity: 1 billion Algerian dinars

Years	(2001-2004)	(2005-2009)	(2010-2014)	(2015-2019)	(2001-2019)
Gross Domestic Product (Billion DJs)	18852.7	465575.3	76490.2	78079.3	143508
Rights and duties on imports (%)	8.11	6.20	6.75	7.71	7.27
Public Services Departments (%)	11.28	9.53	15.58	16.49	13.55
Services outside public administrations(%)	23.08	20.78	21.88	26.87	24.39
Construction and public works (%)	9.13	8.84	9.82	11.79	10.48
Industry(%)	7.42	5.23	4.65	5.62	5.73
Agriculture(%)	10.21	7.7	9.19	12.12	10.44
Other sectors (%)	61.07	52.08	61.11	72.89	64.58
Fuel(%)	30.82	41.72	32.14	19.4	28.15

Source: Bank of Algeria's Triple Statistical Bulletins1-46:Available on https://www.bank-of-algeria.dz/html/bulletin_statistique_AR.htm

Through the table above, we find that the hydrocarbon sector experienced significant increases in its contribution rate during the study period, where we note that the percentage of the disadvantage reached (30.82%) during the period (2001-2004), rising to (41.72%) during the period (2005- 2009) due to the rise in oil prices in the world markets, then to decline and contraction by an estimated 1.40 during the period (2015-2019) due to the deterioration in the internal and external economic situation, and we noticed that the industrial sector occupies the back of the rankings due to its contribution by (5.73%) during the period (2001- 2019),which is very low compared to the possibilities and tax exemptions granted to this sector, similar to the services sector outside public revenues, which achieved a high percentage close to the hydrocarbon sector by 24.39% during the period (2001-2019), due to the huge financial closure allocated to this sector within the framework of public equipment programs related to the economic growth, as for the agricultural sector, despite all the efforts made and the financial envelopes allocated to it, the percentage of its contribution to the GDP was estimated at (10.44%) during the period (2001-2019), which imposed the need to activate it by developing plans and strategies in the medium and the long level in order to promote this sector, which is an alternative sector to diversify the Algerian economy.

3.2 Measuring the degree of diversification of the Algerian economy:

To measure the level of diversification of the Algerian economy, the Herfindahl-Hirschman index was relied upon, relying on the components of GDP for the period (1990-2018), and the following equation: (Benazza, 2019, p. 138)

$$H.H = \frac{\sqrt{\sum_{i=1}^{n}(x_i/x)^2 - \sqrt{1/N}}}{1-\sqrt{1/N}} \text{..... (01)}$$

- H.H: It takes the value (0) when there is a complete diversification of all sectors contributing to economic growth at the same rate as the studied variable and takes value (1) when the amount of diversity is zero, a situation in which the output is concentrated in one sector only.
- Xi: GDP in sector i.
- X: PIB GDP.

- N: Number of output components (number of sectors that make up the structure studied). (BOUSSALEM & Elhannani, 2018, p. 58)

The following table show the results obtained:

Table.2. Hirschman GDP Diversity Index during the period (2001-2018)

Years	2001	2002	2003	2004	2005	2006	2007	2008	2009
H-H	0.18	0.16	0.19	0.21	0.29	0.30	0.28	0.30	0.15
Years	2010	2011	2012	2013	2014	2015	2016	2017	2018
H-H	0.20	0.23	0.21	0.16	0.13	0.08	0.13	0.08	0.11

Source: Preparedby the two researchers based on the statistics of the Bank of Algeria reports, and equationNo(1).

Through the results of the Herfindahl-Hirschman index, it is clear that GDP growth is taking a fluctuating trend during the period 2000-2018, as its value increased following the third oil boom from 0.19 in 2003 to 0.30 years 2008,which means the transition from GDP diversification to concentration as a result of the increased contribution of the oil sector to GDP, the value returns to decline in 2009 following the global financial crisis and the fall in oil prices where it was estimated at about 0.15 which It has risen in the following years, but with the fall in oil prices in the second half of 2014, the oil sector's contribution to GDP fell to 0.08 in 2015, the lowest level in the entire period, rising slightly in recent years to reach 0.13 in 2016 and 0.11 in 2018, but its value remains close to one which means GDP concentration and no output in terms of GDP diversification in 17 full years. That is, the Algerian economy is still focusing on the oil sector and its revenues.

4.Record study of the impact of key sectorson economic growth in Algeriaduring the period (1990-2019)

1.4 Standard model description:

Through this study, we try to measure the impact of independent variables, namely, the added value of the sector (industrial, agricultural, and service) as well as export and import variables, on the dependent variable (GDP), where the linear model of use of the $Eviews_{10}$ standard program is

studied, and then attempt to reveal the possibility of a common integration relationship between these variables during the period (1990-2019) and table (03) is explaining this:

Table.3. Economic variable data used in the standard study

GDP (%)	Value added for agriculture (PIB%)	The added value of the industry from (PIB%)	Exports from (PIB%)	Imports from (PIB %)	Added value for services from (PIB %)	Years
0,8	11,36	48,16	23,44	24,93	40,47	1990
-1,2	10,17	53,16	29,11	23,59	36,67	1991
1,8	12,13	49,71	25,31	23,86	38,16	1992
-2,1	912	48,64	21,78	23,13	39,26	1993
-0,89	10,06	48,96	22,53	26,05	40,98	1994
3,79	10,5	50,4	26,19	28,99	39,1	1995
4,09	11,7	51,23	29,76	23,94	37	1996
1,09	9,48	52,23	30,9	21,34	38,21	1997
5,1	12,53	46,15	22,57	22,52	41,32	1998
3,2	11,11	48	28,14	22,78	37,86	1999
3,8	8,4	54,37	42,07	20,79	32,24	2000
3	9,75	50,1	36,68	22,01	34,79	2001
5,6	9,23	49,19	35,5	25,63	34,89	2002
7,2	9,81	50,82	38,25	23,88	33,61	2003
4,3	9,44	52,3	40,053	25,65	32,73	2004
5,9	7,69	57,33	47,205	24,07	30,19	2005
1,7	7,54	58,88	48,81	21,91	30,18	2006
3,4	7,57	57,67	47,06	24,86	32,42	2007
2,4	6,59	58,61	47,97	28,71	32,5	2008
1,6	9,34	47,89	35,37	35,95	39,63	2009
3,6	8,47	50,49	38,44	31,42	38,18	2010
2,9	8,11	49,63	38,78	28,68	39,39	2011

3,39	8,77	47,85	36,89	28,51	39,51	2012
2,8	9,85	44,25	33,2	30,4	41,18	2013
3,8	10,28	42,31	30,21	31,92	42,87	2014
3,7	11,57	35,72	23,17	36,52	47,35	2015
3,2	12,21	34,7	20,87	35,05	48,09	2016
1,29	11,94	37,4	22,66	33,21	45,65	2017
1,4	11,985	39,59	25,62	32,34	43,99	2018
0,8	11,97	37,41	22,57	29,47	45,93	2019

Source: World Bank website:www.albankaldawli.org;

The following symbols of the study variables will also be relied upon as follows:

- VAGR: Agriculture sector (% value added of GDP)
- VIND: Industry sector (% value added of GDP) ;
- VSER: Services sector (% value added of GDP);
- EXPO: Exports (% of GDP);
- IMPO: Imports (% of GDP).

☞ **as for the linear regression equation is As follows:**

$$PIBt=C0+C1(VAGR)t+C2(VIND)t+C3(VSER)t + C4(EXPO)t+C5(IMPO)t+ \varepsilon$$

2.4 Linear regression equation estimate:

The parallel table illustrates the outcomes of the standard economy by studying the impact of independent variables on the dependent variable:

Table.4. Between the impact of independent variables on the dependent variable

Dependent Variable: PIB
Method: Least Squares
Date: 03/27/21 Time: 00:06
Sample: 1990 2019
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-13.38713	11.49934	-1.164165	0.2558
VAGR	1.153145	0.438012	2.632678	0.0146
VSER	-0.000128	0.000323	-0.395381	0.6961
VIND	-0.134441	0.137845	-0.975309	0.3391
IMPO	-0.003493	0.137476	-0.025410	0.9799
EXPO	0.352578	0.079010	4.462438	0.0002

R-squared	0.469300	Mean dependent var	2.715333
Adjusted R-squared	0.358738	S.D. dependent var	2.067045
S.E. of regression	1.655266	Akaike info criterion	4.022657
Sum squared resid	65.75771	Schwarz criterion	4.302896
Log likelihood	-54.33985	Hannan-Quinn criter.	4.112308
F-statistic	4.244662	Durbin-Watson stat	1.436379
Prob(F-statistic)	0.006608		

Source: Prepared by the student based on software out puts (EVIEWS$_{10}$).

Through Table 04, the following have been reached:

- Reaching an estimated equation that reflects the balance relationship between the variables of the study**:**

GDP =-13.38+1.1531* VAGR -0.0001* VSER – 0.1344* SOLD -0.0034* IMPO + 0.3525* EXPO

- **Determining Coefficient $R^{2:}$** The economic growth model is interpreted by 46% by the interpretive variables included in the study model, while 54% is due to other factors not included, as confirmed by the value of the R2 selection coefficient, that there is a strong link between the (PIB) variable and the interpretive variables (VAGR, VIND, VSER, IMPO, EXPO)

- **T.STUDENT Statistical Test:** For the (B1) factor of the explanatory variable added to the agricultural sector that the probability value(0.0146)is less than (5%),therefore we reject the hypothesis of nothingness (H0) and accept the hypothesis of alternative (H1),i.e. that (B1) is significant and we conclude that the variable of the agricultural sector has a statistical significance at a significant level (5%)in the interpretation of GDP during the period (1990-2019), and for the coefficient (B2) for the explanatory variable, the added value of the services sector, is that the potential value (0.6961) is greater than (5%), and therefore we accept the null hypothesis (H0) and we reject the alternative hypothesis (H1), that

is, (B2) is not significant, and from it we conclude that the industrial sector variable has no Statistical significance at the level of significance (5%) in explaining the GDP, and for the (B3) parameter of the explanatory variable for the industrial sector that the probability value (0.6961) is greater than (5%), and therefore we accept the null hypothesis (H0) and reject the alternative hypothesis (H1), That is, (B3) is not significant, and from it we conclude that the industrial sector variable has no statistical significance at a significant level (5%) in explaining the GDP.

- **Fisher Statistical Test (T. FISHER):**We note that the probability value of F is equal to (0.006608) and is less than 0.05, which means that at least one statistically acceptable parameter exists, i.e., there is at least one explanatory variable that has an impact on the variable, i.e. The overall moral model.

3.4 Economic explanation of the results:

- The positive signal of the variables studied explains the expulsion relationship between each variable and its impact on GDP and vice versa, as one increase in the added value of the agricultural sector leads to an increase in GDP by (1.15)units, which corresponds to economic theory, and one increase of added value of the service sector and the industrial sector lead to a decline in output of (0.0001)and (0.13), which is contrary to economic theory, and proves the importance of the agricultural sector as a strategic alternative to economic diversification, and the weakness of the contribution of the industrial and service sector to economic activity ;

- On the other hand, exports lead to an increase of 0.35 units of GDP, which is considered weak compared to the actual import sector's imports in the national economy, but the contribution of imports is negative by 0.003units on GDP, which corresponds to Economic theory, although very weak, as imports contribute significantly to the country's economic capacity, all this shows that the value added ratio of economic sectors is very weak, i.e. their contribution to GDP

is non-existent due to the absence of development plans that contribute significantly to investment.

4.4 Simultaneous Integration Model Error Correction:

Joint integration determines the relationship between variables in the long term, as the time chains under study may be unstable in the short term, but they settle in the long term i.e. there is a fixed relationship between them, by conducting a unit root test and then testing a long-term balance relationship using the Johansen test.

4.4.1 Time Series Stability Test: The developed Dickie Fuller test will be adopted as one of the most important time series stability tests and then determine the degree of integration and the next table (03) explains the results of this test:

Table .5. Dickie Fuller's developer test results and the degree of integration of the chains studied for study variables

Variables	At the level.			At the first difference			Degree of integration
	Hard	Direction and constant	Don hard and direction	Hard	Direction and constant	Don hard and direction	
PIB	0.0280	0.1217	0.2806	0.0000	0.0000	0.0000	I(1)
VSER	0.5359	0.8522	0.2106	0.045	0.1153	0.0013	I(1)
Find	0.7280	0.6681	0.4176	0.0000	0.0003	0.0000	I(1)
VAGR	0.1258	0.3641	0.5733	0.0000	0.3186	0.0000	I(1)
IMPO	0.4354	0.1246	0.06808	0.0008	0.0056	0.0000	I(1)

EXPO	0.4842	0.8497	0.5227	0.0002	0.0022	0.000	**I(1)**

Source: Prepared by researchers based on outputs (EVIEWS$_{10}$)

Through the above table, we notice that the stability test according to Dickie Fuller, the ADF developer, that the probability value corresponding to the existence of the unit root for all the strings at the level is greater than 5%, and therefore we accept the null hypothesis, i.e. all the strings contain the unit root, it is not stable, but by the number of taking the first difference, we notice that the probability value of the existence of a unit root is less than 5%, and therefore we reject the null hypothesis and accept the alternative hypothesis, meaning that the time series under study do not contain the root of a unit then they are stable, and that each variable separately is considered an integral of the first degree.

4.4.2 Johansen test: In light of the previous unit root test, it became clear that each variable is individually integrated first-class, i.e. it is not static at the level at the first difference, and the following table shows the relationship of common integration using Johansen:

Table.6. The relationship of shared integration using johansentest

Date: 3/28/21 Time: 13:32
Sample (adjusted): 1992 2019
Included observations: 28 after adjustments
Trend assumption: Linear deterministic trend
Series: VSER VIND VAGR PIB IMPO EXPO
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.802476	102.5459	95.75366	0.0157
At most 1	0.609382	57.13282	69.81889	0.3338
At most 2	0.387556	30.81212	47.85613	0.6765
At most 3	0.277303	17.08377	29.79707	0.6339
At most 4	0.221844	7.990348	15.49471	0.4664
At most 5	0.033951	0.967149	3.841466	0.3254

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.802476	45.41304	40.07757	0.0114
At most 1	0.609382	26.32069	33.87687	0.3015
At most 2	0.387556	13.72835	27.58434	0.8409
At most 3	0.277303	9.093423	21.13162	0.8248
At most 4	0.221844	7.023198	14.26460	0.4864
At most 5	0.033951	0.967149	3.841466	0.3254

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Source: Prepared by researchers based on outputs (EVIEWS$_{10}$)

It is clear from Table No. (06) that the results of the trace test show that the value of the greatest computed probability 102.54 is greater than the tabular value of 95.75 and the associated probability is less than 5%, i.e. (0.0157<5%). Therefore, we reject the null hypothesis, and accept the alternative hypothesis of the existence of at least a common complementarity relationship, as for the second null hypothesis that proves the existence of a single long-term joint integration relationship, it remains acceptable because the impact value is less than the critical value (57.13<69.81) and the associated probability is greater than 5%, meaning there is one joint integration relationship between the studied variables. , The alternative test is the MAX,which tests the hypothesis that the number of isometric vectors is r, versus the alternative hypothesis r + 1, and that the calculated probability value (102.54) is greater than the tabular value of

95.75 at the level of 5%, so we reject the null hypothesis and accept the alternative hypothesis that there is at least a common complementarity relationship because (57.13<69.81), which proves the existence of a long-term co-integration relationship between the variables of the study, which is written as follows

5. Errorcorrection form

After confirming that there is a common integration relationship between the study's variables, it is necessary to correct the error, to study the possibility of a short-term shared integration relationship, which considers the value of slow errors to one degree,

The following table shows the results of the error correction test.

Table.7. Common Integration Relationship using JohansenTest

Dependent Variable: D(PIB)
Method: Least Squares
Date: 03/28/21 Time: 16:24
Sample (adjusted): 1991 2019
Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.073424	0.321035	-0.228711	0.8212
D(VIND)	-0.303960	0.334361	-0.909078	0.3732
D(VAGR)	1.242143	0.314648	3.947716	0.0007
D(IMPO)	0.085541	0.149791	0.571069	0.5737
D(EXPO)	0.501622	0.216401	2.318022	0.0301
D(VSER)	-0.000120	0.000337	-0.354941	0.7260
E(-1)	-0.758494	0.238545	-3.179669	0.0043

R-squared	0.569516	Mean dependent var	-1.53E-17
Adjusted R-squared	0.452112	S.D. dependent var	2.189056
S.E. of regression	1.620328	Akaike info criterion	4.009639
Sum squared resid	57.76016	Schwarz criterion	4.339676
Log likelihood	-51.13977	Hannan-Quinn criter.	4.113003
F-statistic	4.850882	Durbin-Watson stat	2.059060
Prob(F-statistic)	0.002698		

Source: Prepared by researchers based on outputs (EVIEWS$_{10}$)

Through table 07 results, we get the following results:

- We came up with the discretionary equation
- DPIB=-0.07-0.30*DVIND+1.24*VAGR- 0.0001*DVSER - 0.50*DEXPO + 0.08*DIMPO - 0.075*E(-1)

- It turns out that the process of correcting the error contributes to raising the morale of the model, to equal 99%, i.e. the variables studied contribute to explaining the model studied at that estimated rate.

- The value of the error is negative and equal to (-0.75) and is moral at critical value levels because the corresponding probability is (0.0042) less than 1%,5%,10%, respectively, and the negative signal explains the proof of a long-term balance relationship between the variables studied, reflecting the parameter The speed of adjustment model to move from short-term imbalances to long-term balance towards balance value in each period of time which is equivalent to 75.84%,which means that when GDP deviates in the short period,(t-1) at its balance value, the equivalent of 75.84% is corrected in the period(t);

- The positive reference to teachers notes the agricultural sector and exports, which corresponds to economic theory, unlike the industrial sector and my services and imports, its signal is negative and contradicts economic theory.

- The document confirmed the new economic growth model, a number of the exact objectives in the second phase 2020-2030, consisted of achieving a path of growth outside of hydrocarbons for GDP in addition to doubling GDP per capita and modernizing the agricultural sector, allowing access to the goals of food sufficiency, diversification of exports, to achieve economic diversification.

- The contribution of the industry and services sector to raising levels of economic growth, where its parameters have appeared negative, which translates into the inability of the two sectors to cover the volume of financial allocations directed at the stimulus process.

- The contribution of the agriculture sector to raising levels of economic growth has improved because of the policies adopted to promote this sector, where the study showed us the existence of an expelled relationship of the agricultural sector and GDP by1.15 units, which corresponds to economic theory.

- Exports contribute an increase of (0.35) units of GDP, which are considered weak compared to the actual importance of the export sector in the national economy.

- The contribution of imports is negative by 0.003 units on GDP, which corresponds to economic theory although it is very weak, as imports contribute significantly to the multiple economic capacity of the country, all this shows that the value added ratio of economic sectors is very weak, i.e. their contribution to GDP is non-existent due to the absence of development plans that contribute significantly to the wheel of investments.

- A common integration relationship between the long-term variables of the study translates into the importance of sectors (industrial agriculture, services) in improving the economic situation of the country.

Based on the above-mentioned results, the following recommendations can be proposed in order to activate Algeria's economic diversification strategy:

- The need to activate the role of the State in the diversification process, as it requires active policies from the Government, with the aim of stimulating strong developments that the market alone cannot automatically produce by allocating resources to achieve the goal of economic diversification.

- Improving an investment climate, both foreign and domestic direct, including non-oil industry, by reducing the conditions of activity, creating investment promotion intermediaries, and simplifying tax structures.

- The need to take advantage of successful international experiences in economic diversification.

- Identify sectors and activities with inherent and untapped comparative advantage.

- Completion of development studies of economic institutions belonging to the state, especially industrial, service, and agricultural companies in order to improve the level of management and upgrade the work systems and techniques used, in order to become these

institutions with reasonable performance to increase their profitability.

6.Conclusion:

The study revealed that the model of growth prevailing in Algeria, which depends on rent, about the weakness of the degree of diversification of the economy despite the attempts of the state to achieve this, while the latter became an imperative to be lifted under the prevailing conditions, which are heading towards the end of rent and push the need to enter into the policy of diversification of sources of national income. The success of this endeavor remains dependent on the role of the State in removing restrictions that limit the diversification of the production base and thus create competitive products of high value.

This research paper has concluded with a set of results:

- Through the results of the Herfindahl-Hirschman index, it became clear that GDP growth remained close to one, which meant GDP concentration and no output in terms of GDP diversification in 17 full years. That is, the Algerian economy is still focusing on the oil sector and its revenues;
- The contribution of the industry and services sector to raising levels of economic growth, where its parameters have appeared negative, which translates into the inability of the two sectors to cover the volume of financial allocations directed at the stimulus process;
- The contribution of the agriculture sector to raising levels of economic growth has improved because of the policies adopted to promote this sector, where the study showed us the existence of an expelled relationship of the agricultural sector and GDP by1.15 units, which corresponds to economic theory;
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