## ECONOMIC DIVERSIFICATION IN ALGERIA: REALITY, CHALLENGES AND PROSPECTS

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#### Abstract:

Economic diversification is a strategic choice to achieve sustainable development in oil economies. Algeria is among the countries that have aimed to adopt several plans to activate this diversification in various economic sectors to reduce the oil dependence sector and optimize its agricultural and industrial abilities. This study aims to present the reality of the economic diversification strategy in Algeria. period 2008-2020, over the Herfindahl-Hirschman index to measure magnitude of diversification of the national economy by considering macroeconomic indicators that reflect economic performance. The study shows that, despite the efforts made by the government to diversify the national economy, it still suffers from the dominance of its hydrocarbon sector, in this regard; the urgent need to adopt an integrated and more effective economic diversification.

#### Le résumé

La diversification économique est une option stratégique pour parvenir à un développement durable dans les économies pétrolières, et l'Algérie fait partie des pays qui ont cherché à adopter plusieurs stratégies pour activer cette diversification dans divers secteurs économiques afin de réduire la dépendance au secteur pétrolier et d'optimiser l'utilisation de ses ressources agricoles et industrielles. Cette étude vise à présenter la réalité de la stratégie de diversification économique en Algérie, en mettant en évidence le parcours de cette diversification entre 2008-2020, Et cela en se basant sur l'indice de Herfindahl-Hirschman pour mesurer le degré de diversification de l'économie nationale en termes d'indicateurs macroéconomiques qui reflètent la performance économique. L'étude a conclu que malgré les efforts déployés par l'État pour diversifier l'économie nationale, celle-ci souffre encore de la concentration dans le secteur.

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#### **Introduction:**

In light of the economic changes and successive crises that have affected the global oil markets, economic diversification has become one of the most important contemporary issues, especially in developing countries, particularly rentier states, which rely on a single resource for economic growth stemming from their possession of significant natural resources, primarily oil, which is considered a non-renewable hydrocarbon. It is worth noting that the prices of these resources are subject to fluctuations and instability in global markets due to geopolitical situations and other factors related to supply and demand. Algeria, like other oil-producing countries, is compelled to diversify its economic activity and rely on other sectors due to the fragility of its economic structure, which has suffered for over 60 years from the dominance of hydrocarbon export revenues, especially oil, to finance the country's economic development programs. This was evident over the past two decades when oil prices reached peak levels in global markets (Driouche, Attouchi, Chenini, & Benbouziane, 2020), in addition to the primary role played by this sector in adjusting to macroeconomic changes without generating wealth in other non-oil sectors.

In this context, we have decided that the problem statement of our research should be as follows: To what extent would the Algerian economy succeed in diversifying its macroeconomic indicators? We have attempted to develop hypotheses for this study as follows:

- The Algerian economy has not recorded clear growth in macroeconomic indicators outside the hydrocarbon sector.
- Economic diversification can only be achieved by adopting an integrated and effective development strategy that preserves Algeria's energy potential, leverages its strengths as a point of economic revival, and improves its various aggregate indicators.

This study aims to measure the level of economic diversification through a set of macroeconomic indicators: Gross Domestic Product (GDP), exports, imports, public revenues, and gross fixed capital formation, for the period from 2008 to 2020.

In order to analyze the level and reality of diversification of economic activity in Algeria, this study relied on a descriptive analytical approach, referring to various theoretical and empirical literatures.

#### 1. Previous studies:

There have been numerous previous studies that addressed the issue of economic diversification in Algeria using the Herfindahl-Hirschman Index. For instance, (2016 قروف) aimed to explore to what extent the Algerian national economy could achieve a higher degree of diversification in its sources of revenue. The results of this study, which relied on the economic diversification indicator in Algeria during the period from 1980 to

2014, measured by the Herfindahl-Hirschman Index, concluded that there is a weakness in the degree of diversification across various dimensions of the index, thus emphasizing the continued dependency of the Algerian economy on oil, its revenues, and exports.

(2019 کورتان) also examined the course of economic diversification in Algeria using the same index during the period from 2011 to 2017. The study concluded that oil economies, including the Algerian economy, must break their absolute dependence on oil as the main resource for sustainable development and adopt economic diversification to create new sources of non-oil revenue.

The study by (2020 ، فويدري و مزوزي), which also utilized the same index, found that the export sector continues to suffer from a focus on the hydrocarbon sector despite all efforts made by Algeria to diversify the sector. This study also concluded that foreign direct investment, trade openness, business environment, small and medium-sized enterprises, the private sector, and the adoption of a comprehensive economic reform program are essential for diversifying exports.

Furthermore, the study by (2020 ' أحباغ ) aimed to evaluate and understand the reality of economic diversification strategy in Algeria. It found that Algeria has adopted several strategies to activate economic diversification in various economic sectors through multiple policies and strategies despite the Algerian economy's dependency on the hydrocarbon sector.

Researchers (Maliki, Si Mohammed, Hassaine, & Hartani, 2021) conducted a study to measure the effects of economic diversification on growth in Algeria using the Herfindahl-Hirschman Index for the period from 1974 to 2014. The results demonstrated a degree of economic diversification with an indicator of 0.24, a rate that remains high compared to other countries like the European Union, which have rates below 5%. It is also noteworthy that this rate is likely to increase over time, and the decline in economic diversification in Algeria confirms the dominance of the hydrocarbon sector over other sectors.

## 2. The Algerian Oil Sector:

Algeria heavily relies on the hydrocarbon sector, with public revenues closely tied to oil revenues, posing a threat to its economy due to fluctuations in oil prices in global markets. This situation necessitates urgent economic diversification to reduce the near-total dependence on the oil sector. With significant oil potential, Algeria holds a prominent position in the global market, a position supported and confirmed by the following statistics:

## 2.1 Evolution of Oil Production Capacity:

Table (1): Evolution of oil production capacity in Algeria during the period 1970-2020

	Perrous as a second
Years	Production (Unit: 1000 barrels per day
1970	1029.1
1980	1091.9
1990	783.5
2000	796
2010	1189.8
2020	898.7

Source: (OPEC, Annuel Statistical Bulletin, 2021, p. 25)

From the statistics in the table above, it can be observed that the growth of daily production capacity experienced a slight increase between the years 1970 and 1980, followed by a decline in the subsequent period until 2010, when Algeria experienced its highest production capacity, specifically in 2008. This was due to the high global demand for oil at the beginning of that year, coupled with the increase in the number of wells discovered during that period. However, the world subsequently experienced stagnation and a decline in oil demand, leading to a decrease in production capacity, reaching 898.7 million barrels in 2020.

## 2.2 Evolution of Oil Export Capacity:

Table (2) shows an increase in oil export capacity year by year until 2007 due to the rising global demand and the growth of production capacity mainly directed towards the external market. From 2008 onwards, the volume of exports experienced a notable decline due to the decrease in global demand following the global economic crisis.

Table (2): Evolution of oil export capacity in Algeria during the period 2000-2020 (Unit: 1000 barrels per day)

	period 2000-2020 (emit. 1000 barrels per day)												
Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		
Exports	461.1	441.5	566.2	741	893.2	970.3	947	1253	841	747	709		
Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	-		
Exportations	843	809	744	623	642.2	668.3	632.6	571	584.2	438.7	-		

Source: (OPEC, Annuel Statistical Bulletin, 2021, p. 46)

#### 2.3 Evolution of Oil Reserves:

Algeria has significant oil reserves, as indicated by the statistics in the following table:

Table (3): Evolution of oil reserves in Algeria during the period 2000-2020 (Unit: Millions of barrels)

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Reserves	11314	11314	11314	11800	11350	12270	12200	12200	12200	12200	12200
Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	-
Reserves	12200	12200	12200	12200	12200	12200	12200	12200	12200	124560	-

Source: (OPEC, 2005, 2010, 2015, 2021, p. 22)

From the above table, it is evident that proven oil reserves remained stable during the period 2000, 2001, and 2002, followed by an increase

that peaked in 2005 at 12,270 million barrels per year. As for the period from 2006 to 2019, the volume of oil reserves remained stable, estimated at 12,200 million barrels, despite the increase in production due to new oil well discoveries, leading to a significant increase starting from 2020. In this regard, it is important to emphasize that the requirements of sustainable development and the preservation of the rights of future generations to benefit from natural resources require a policy of optimal exploitation of reserves through the rationalization of production and the need to work towards increasing exploratory capacities.

# **2.4** Evolution of Oil Prices and Their Impact on Revenues in Algeria:

All the economic and financial events that Algeria experienced between 2000 and 2010 affected its oil revenues, mainly linked to the evolution of oil prices and the development of production and export capacity. Political and economic conditions forced oil prices in Algeria to go through many different stages, as shown in the table below, which represents the fluctuations in oil prices during the period from 2000 to 2020.

Table (4): Evolution of average oil prices in Algeria during the period 2000-2020 (Unit: Dollars per barrel)

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Oil Price	27.6	23.1	24.3	28.2	36	50.6	61	69.1	94.4	61	77.4
Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Oil Price	107.5	109.5	96.2	49.2	26.5	43	52.5	69.7	64.04	42.12	ı

Source: (OPEC, 2021, p. 60)

In this table, we can observe that the year 2001 saw a decrease in oil prices, with the barrel reaching \$23.1, a decline of \$5.3 compared to 2000. This was due to several reasons, including the events of September 11, 2001, in the USA. In 2003, oil prices began to trend upwards due to strong global demand for oil on one hand and concerns about a potential oil supply shortage due to tensions in the Middle East region on the other hand. In 2004, oil prices saw a significant increase after the Russian oil company Yukos announced it would halt its oil production.

Prices continued to rise until 2008, when they experienced the largest surge in oil history, only to collapse in the fourth quarter of the same year and into early 2009 due to the global economic and financial crisis. This situation persisted until 2011. In 2013, oil prices were characterized by relative stability despite a decline, but this stability didn't last long as the most significant drop in oil prices occurred in 2015. Since February 2016, oil prices rebounded to \$50 by late 2016. These prices remained

between \$50 and \$64 until the end of 2018, only to decline in 2020 due to the global health crisis, COVID-19.

According to the International Energy Agency, in 2019, the increase in oil production in the United States and the return of concerns regarding the surplus of black gold due to the normalization of Saudi Arabia's production after the country's production decrease the same year contributed to the decline in crude oil prices.

### 3. The reality of economic diversification in Algeria:

Economic diversification is a major concern for various countries due to the extent of its benefits and economic contributions, especially for resource-rich countries. It is defined as: The process that allows for an increasing range of products/practices within an economic activity ((ie)) (2018. In order to measure economic diversification, several indicators have been used, including the Ogive index, Entropy index, Herfindahl-Hirschman index, and the Input-Output (IO) model.

However, the Herfindahl-Hirschman index is one of the most commonly used indicators to measure economic diversification, as this indicator depends on measuring the composition, structure, and extent of diversity of a number of variables: Gross Domestic Product (GDP), exports, imports, public revenues, and gross fixed capital formation. This indicator has been used by the United Nations Conference on Trade and Development (UNCTAD) to determine the extent of diversity in the export sector. This indicator is expressed by the following formula (UNCTAD, 2008):

$$H = \frac{\sqrt{\sum_{i=1}^{n} \left(\frac{X_i}{X}\right)^2} - \sqrt{\frac{1}{N}}}{1 - \sqrt{\frac{1}{N}}}$$

N: Number of activities.

Xi: The value of the variable in the activity.

X: The total value of the variable in all activities.

The value of the Herfindahl-Hirschman coefficient varies from zero to one: If H=0, then there is complete diversification of the economy, and if H=1, then the amount of diversity is zero. In other words, whenever the value of the Herfindahl-Hirschman index is close to 1, it indicates low economic diversification.

## 3.1 Productive activities diversification (Gross Domestic Product):

The analysis of Gross Domestic Product (GDP) diversification depends on the distribution of this production across six sectors, namely: the hydrocarbon sector, the agricultural sector, the industrial sector, the construction and public works sector, the services sector, and the rights and taxes sector on imports. The following table shows the contribution of different sectors to GDP in Algeria:

Table (5): Contribution of different sectors to GDP in Algeria during the period 2008-2020 (%)

Years	Hydrocarbon	Agriculture	Industry	Construction and Public	Services	Rights and Taxes on	Gross Domestic
1 cars	Sector	Agriculture	industry	Works	Services	Imports	Product
2008	45.25	6.59	4.70	8.66	28.87	5.92	100
2009	31.19	9.34	5.73	10.98	35.58	7.18	100
2010	34.86	8.47	5.15	10.49	34.80	6.24	100
2011	35.93	8.11	4.55	9.14	36.41	5.86	100
2012	34.15	8.77	4.50	9.20	36.73	6.65	100
2013	29.84	9.85	4.64	9.78	38.45	7.45	100
2014	27.04	10.29	4.86	10.41	40.19	7.21	100
2015	18.75	11.58	5.50	11.47	44.59	8.10	100
2016	17.27	12.22	5.59	11.84	45.11	7.97	100
2017	19.60	11.76	5.51	11.67	43.63	7.83	100
2018	22.24	11.84	5.42	11.47	41.47	7.55	100
2019	19.53	12.38	5.71	12.20	42.28	7.90	100
2020	12.70	14.05	6.27	13.14	45.59	8.25	100

Source: (Bank of Algeria, 2008-2021, p. 26)

The table illustrates the decreasing contribution of non-hydrocarbon production sectors to the GDP, along with changes in Algeria's economic infrastructure. The largest share of the sector was 45.66% in 2006, but it decreased in 2009 following the global economic crisis of 2008. This downward trend continued to experience a significant decline from 2015 onward, while other sectors saw a slight recovery, including agriculture, services, and construction. Therefore, it can be concluded that the contribution of the hydrocarbon sector decreased, while that of other sectors increased to varying degrees.

To assess the actual economic diversification in Algeria within its productive structure, the Herfindahl-Hirschman Index was calculated for the period from 2008 to 2020 for the GDP sectors, as shown in the following table.

Table (6): Herfindahl-Hirschman Index of GDP Diversification in Algeria during the Period 2008-2020 (%)

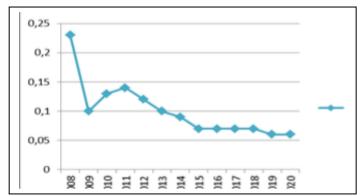
Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Herfindahl-													
Hirschman	0.23	0.10	0.13	0.14	0.12	0.10	0.09	0.07	0.07	0.07	0.07	0.06	0.06
Index													

Source: Compiled by the authors based on data from Table (5)

After calculating the Herfindahl-Hirschman index of GDP diversification, it becomes evident that the relative contribution of sectors is dominated by the petroleum sector to the greatest extent. However, what can be observed is that this index has experienced a continuous decline after being estimated at 0.14 in 2011 and 0.06 in 2020, indicating a slight diversification in the structure of the Gross

Domestic Product (GDP). Nevertheless, the percentage contribution of the petroleum sector to the GDP remains higher than the percentage contribution of the rest of the sectors. The following figure illustrates the evolution of the Herfindahl-Hirschman index of GDP diversification in Algeria:

Figure (1): Evolution of the Herfindahl-Hirschman Index of GDP Diversification in Algeria



Source: Prepared by the authors based on the data from Table (6) and using Excel 10

## 3.2 Export Diversification:

One of the prerequisites for achieving economic diversification is to diversify the export structure, which stimulates economic growth and avoids dependence on oil exports, making the economy vulnerable to economic issues resulting from oil price fluctuations. The analysis of export diversification relies on the structure of raw material exports divided into seven groups, namely: hydrocarbons, foodstuffs, raw materials, semi-finished products, agricultural equipment, industrial equipment, and consumer goods, as shown in the following table:

Table (7): Contribution to the total exports of Algeria during the period 2008-2020 (%)

Years	Exports of hydrocarbons as a percentage of total exports	Non-hydrocarbon exports as a percentage of total non-hydrocarbon export	Total exports
2008	98.22	1.78	100
2009	98.29	1.71	100
2010	98.30	1.70	100
2011	98.32	1.68	100
2012	98.39	1.61	100
2013	98.38	1.62	100
2014	97.23	2.77	100
2015	95.70	4.30	100
2016	95.25	4.75	100
2017	96.05	3.95	100
2018	94.60	5.40	100
2019	94.14	5.86	100
2020	90.54	9.46	100

Source: (Bank of Algeria, 2008-2021, p. 28)

We note that Algerian exports are concentrated in hydrocarbons and largely dominate the overall exports, despite the slight decline in energy exports starting from the year 2014. They remain the primary dominant force in Algerian exports

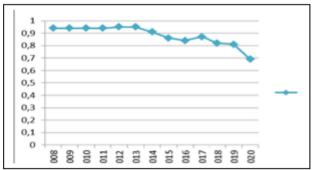
Table (8): Herfindahl-Hirschmann Index of Export Diversification in Algeria during the period 2008-2020 (%)

					<del>-</del>	P				. ( , . ,			
Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Herfindahl-													
Hirschmann	0.94	0.94	0.94	0.94	0.95	0.95	0.91	0.86	0.84	0.87	0.82	0.81	0.69
Index													

Source: Prepared by the authors based on the data from Table (7)

Through the value of the Herfindahl-Hirschmann index, it is evident that the diversification of exports, primarily concentrated on hydrocarbons, is low. Despite all efforts to encourage non-hydrocarbon exports, we conclude that there is no significant diversification in the trading structure of Algerian exports. The value of the index ranged from 0.94 to 0.69 during the study period. These values are close to 1, indicating that the Algerian economy is heavily reliant on a single export. The following figure illustrates the evolution of the Herfindahl-Hirschmann index of export diversification in Algeria:

Figure (2): Evolution of the Herfindahl-Hirschmann Index of Export Diversification in Algeria



Source: Prepared by the authors based on data from Table (8) and using Excel 10

## 3.3 Import Diversification:

Regarding import diversification, it expresses to what extent the local economy relies on foreign markets to meet its needs for goods and services. The following table summarizes the structure of Algerian imports during the period from 2008 to 2020:

Table (9): Structure of Algerian imports during the period 2008-2020 (%)

					<i>5)</i>		
Years	Energy	Foodstuffs	Raw materials	Semi- finished products	Agricultural equipment s	Industrial equipment	Consumer goods
2008	1.26	16.43	2.83	24.60	0.13	41.40	13.37
2009	1.40	14.92	3.06	25.87	0.60	38.53	15.64
2010	2.35	14.99	3.50	24.73	0.82	38.73	14.89
2011	2.46	20.73	3.75	22.05	0.48	33.72	16.79
2012	9.84	17.91	3.65	21.10	0.65	27	19.84
2013	7.93	17.43	3.22	19.69	0.82	28.68	22.23
2014	4.89	18.87	3.23	21.84	1.13	32.41	17.64
2015	4.55	18.06	2.92	22.29	1.12	32.13	18.92
2016	2.76	17.60	3.34	24.57	1.07	32.94	17.71
2017	4.32	18.32	3.32	23.85	1.33	30.38	18.48
2018	2.20	18.56	4.11	23.72	1.22	29.08	21.12
2019	4.82	19.23	6.05	23.55	1.27	25.80	19.28
2020	3.50	22.98	7.44	22.92	1.01	25.47	16.68

Source: (Bank of Algeria, 2008-2021, p. 28)

The table shows that there is diversity in the structure of imports, highlighting industrial equipment, semi-finished products, and foodstuffs, which represent a large proportion of total Algerian imports, thus reflecting the weakness of the industrial and productive system in Algeria. This weakness is confirmed by the Herfindahl-Hirschman index of Algerian import diversification.

Table (10): Herfindahl-Hirschman index of import diversification in Algeria during the period 2008-2020 (%)

			8			P				(,,,			
Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Herfindahl-													
Hirschman	0.18	0.17	0.20	0.19	0.14	0.13	0.16	0.15	0.14	0.13	0.15	0.13	0.14
index													

Source: Prepared by the authors based on data from Table (9)

#### 3.4 Government Revenue Diversification:

Based on statistics, it can be concluded that public revenues in Algeria heavily depend on oil revenues, as diversification occurs in public revenues if the contribution of non-oil revenues to the financing of state public revenues increases. This is illustrated by the following table, which summarizes the variation in the relative contribution to the structure of public revenues:

Table (11): Evolution of the relative variation in the structure of public revenues during the period 2008 - 2020 (%)

	2008	2020	Variation
Oil Revenues	77.13	27.27	- 49.86
Other Revenues	22.87	72.73	49.86
Total	100	100	0

Source: Prepared by the authors based on annual reports from the General Treasury Directorate, Algeria (2008-2020)

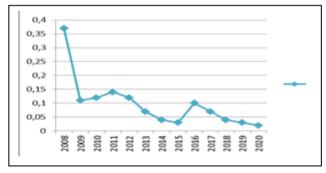
The data from the preceding table confirm that public revenues in Algeria are closely linked to oil revenues, as the contribution of oil taxation to public revenues reached 77.13% in 2008, falling to 27.27% in 2020 due to the decline in oil prices. The calculation of the Herfindahl-Hirschman index for the diversification of public revenues confirms this situation.

Table (12): Herfindahl-Hirschman index of diversification of Algerian government revenues during the period 2008-2020 (%)

	8	<del> 8</del> · ·	·					P				(,,,	
Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Herfindahl-													
Hirschman	0.37	0.11	0.12	0.14	0.12	0.07	0.04	0.03	0.10	0.07	0.04	0.03	0.02
index													

Source: Prepared by the authors based on annual reports from the General Treasury Directorate, Algeria (2008-2020)

Figure (4): Evolution of the Herfindahl-Hirschman index of diversification of Algerian government revenues



Source: Prepared by the authors based on data from Table (12) and using Excel 10

## 3.5 Diversification of Gross Fixed Capital Formation:

Gross fixed capital formation is one of the most important variables reflecting investment decision orientations. Gross fixed capital formation includes total expenditures devoted to increasing fixed assets plus net changes in the level of stocks, as shown in the following table:

Table (13): Percentage distribution of gross fixed capital formation in Algeria during the period 2008 - 2018 (%)

Gross Fixed Capital Formation	2008	2018	Variation
Gross Accumulation of Fixed Assets	78.23	85.94	7.71
Stock Variation	21.77	14.06	- 7.71
Total	100	100	0

Source: Prepared by the authors based on data from the National Office of Statistics of Algeria/ONS Algeria: <a href="https://www.ons.dz">https://www.ons.dz</a>

The table above indicates that the gross accumulation of fixed assets increased from 78.23% of total formation in 2008 to 85.94% in 2018, reflecting the relative diversification of fixed capital, which still shows a general trend towards supporting expenditures aimed at increasing the economy's fixed assets. To verify this, the Herfindahl-Hirschman index of diversification of gross fixed capital formation was calculated:

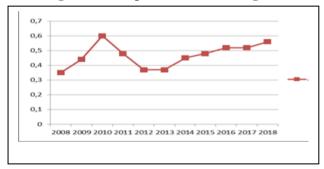
Table (14): Herfindahl-Hirschman index of diversification of gross fixed capital formation in Algeria during the period 2008-2018 (%)

Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Herfindahl-											
Hirschman	0.35	0.44	0.60	0.48	0.37	0.37	0.45	0.48	0.52	0.52	0.56
index											

Source: Prepared by the authors based on data from the National Office of Statistics of Algeria/ONS Algeria: https://www.ons.dz

After calculating the Herfindahl-Hirschman index, it was found that its value fluctuated over the studied period. However, it recorded a remarkable increase, rising from 0.35 in 2008 to 0.56 in 2018, as shown in the following figure

Figure (5): Evolution of the Herfindahl-Hirschman index of diversification of gross fixed capital formation in Algeria



Source: Prepared by the authors based on data from Table (14) and using Excel 10

#### **Conclusion:**

The issue of economic diversification has received significant attention in recent years, particularly among oil-producing countries. Algeria, like other nations, has made significant efforts in this field, which has become an inevitable objective for most economies.

This study aimed to measure the degree of diversification of the national economy based on the Herfindahl-Hirschman index of a set of variables represented by Gross Domestic Product (GDP), exports, imports, public revenues, and gross fixed capital formation.

The results of the study have shown the weakness of economic diversification indicators in Algeria and the consequent failure to achieve a relative and significant diversification of the national economy, despite all the possibilities available to the Algerian economy and the efforts that authorities have made to translate them into strategic objectives through enormous development programs that have impacted all economic sectors.

Algeria still suffers from the fragility of its economy and has not succeeded in diversifying the economic base and improving macroeconomic indicators outside the hydrocarbon sector, due to the weakness of the production base, particularly the industrial and agricultural sectors, thus validating the first hypothesis.

On the other hand, achieving economic diversification requires adopting a strategy that reduces imports by focusing only on products that cannot be produced locally, and developing non-hydrocarbon exports, which will create new and diversified sources of state revenue and direct oil revenues towards investments in various sectors.

Therefore, it can be emphasized that economic diversification can only be achieved by adopting an integrated and effective development strategy that preserves Algeria's energy potential, leveraging its strengths as a point of economic revival, and improving the country's various macroeconomic indicators, thus proving the validity of the second hypothesis.

In the same vein, here are some recommendations to diversify the Algerian economy:

- Formulate appropriate policies aimed at diversifying Algeria's economy exports.
- Diversify the production structure of the local economy by supporting the economic growth of promising sectors, studying the foreign market and its

requirements, and paying attention to effective marketing techniques for local products.

- Support the private sector and small and medium-sized enterprises while investing in human capital.
- Assess the strengths and weaknesses of non-hydrocarbon sectors to develop them.
- Move away from current and temporary economic diversification policies and adopt a long-term strategy.

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