

The Contribution of Economic Diversification in the Control in Oil Price Changes in Algeria: An analytical Study (2000-2020)

Narimane Aissaoui ¹, Nassima Cherrati ²

¹*Yahia Fares, Medea University (Algeria), Sustainable Local Development Laboratory, aissaoui.narimane@univ-medea.dz*

²*Yahia Fares, Medea University (Algeria), Laboratory of macroeconomics and international finance, Cheratti.nassima@univ-medea.dz*

Article Information

Article history

Received: 28 April 2025

Accepted: 21 June 2025

Published: 30 June 2025

Corresponding Author

Narimane Aissaoui

Email: aissaoui.narimane@univ-medea.dz

Copyright © 2025, University Center of Abdelhafid Bousof, Mila. This is an open-access article under the CC BY-NC-ND license.

Suggested Citation

Aissaoui, N & Cherrati, N. (2025). The Contribution of Economic Diversification to the Control of the Oil Price Changes in Algeria: an analytical Study (2000-2020), Finance and Business Economics Review, Vol. 9, No. 2, pp. 103-113.

DOI : 10.58205/fber.v9i2.1979

Abstract: The study aimed to highlight the importance of economic diversification in Algeria in light of the fluctuations in oil prices during the period (2000-2020) and the necessity of adopting it as an option to move out of the mono-economy into economic diversification.

The study concluded that Algeria still suffers from economic dependency on the hydrocarbons sector, despite recent attempts to achieve economic diversification. It must adopt effective long-term economic policies to make the economic diversification process successful.

Keywords: Oil; Economic Diversification; Herfindahl-Hirschman Coefficient; Mono-Economy; Algerian Economy.

1. Introduction

FBER

103

The topic of economic diversification has grown in importance in most countries around the world, particularly in oil-exporting countries that have relied on the hydrocarbon sector as a source of income for decades, making them more vulnerable to oil shocks caused by global market fluctuations in oil prices, as happened in the 2004 and 2008 crises, the late 2014 crisis, and the most recent Covid-19 crisis in 2020. This spurred rentier economies to pursue an economic diversification policy based on other industries to reduce reliance on oil riches while also achieving a more stable and balanced economy on the other side.

Like other oil-producing countries, Algeria seeks economic diversification by establishing effective measures to minimize reliance on hydrocarbons and increase the contribution of various productive sectors, such as agriculture, industry, and tourism. It also intends to expand exports beyond the oil industry to transition from a single to a diversified economy.

1.1. Research Problematic

To what extent has economic diversification contributed to controlling oil price fluctuations

in Algeria during the period 2000–2020?

1.2. Study objectives

The study aims to emphasize the theoretical components of economic diversification and examine its indicators in Algeria from 2000 to 2020. It is based on some of the economy's general indices, such as GDP, exports, and public revenues, and uses the Herfindahl-Hirschman coefficient to assess economic diversification.

2. Oil price fluctuations

2.1. Definition of oil price

"It is the value of the petroleum material or commodity expressed in money, as the amount and level of oil prices are subject to and affected in varying ways by the forces of economic or political factors or the nature of the prevailing market" (Bin Al-Zain & Ronqa, 2006, p. 87)

The price of oil is also defined as "the monetary value of a barrel of crude oil, measured in US dollars, consisting of 159 liters of oil, equivalent to 42 gallons". (Zhenbou, Jodie, & Dirk, 2015, pp. 10-11)

2.2. Factors affecting oil price fluctuations

Oil price variations indicate the presence of a significant increase or drop in oil prices over time. As a result of volatility, oil markets are subject to substantial variations in their pricing, which is reflected in the oil income of exporting and producing nations. (Belgharbi & Madahi, 2022, p. 605). These oscillations occur due to characteristics that influence Supply and demand dynamics, such as structural changes in the industry, population size, economic development rates, and oil reserve ratio, some of which are tied to political or climatic factors. We will attempt to provide the most significant of these elements below:

A. Oil demand: The demand for crude oil is subject to a set of determinants, including (Sajid & Al-Marsoumi, 2021)

- Global economic growth rates and the expansion of oil-based industry;
- Competitive prices of alternative energies such as fuel and refined petroleum products;
- Population growth rates;
- Political stability, as political unrest is a major cause of reducing oil supplies.

B. Supply of oil: Supply of oil is subject to a set of determinants, including: (Qatoush & Ben Loukil, 2017, p. 183)

- Demand for oil and future expectations of its prices.
- Policies of producing countries.
- Available production capabilities, reserves, and exploration and drilling operations.
- The time required to develop alternative energy sources in sufficient quantities and their high cost.

C. Other factors: Concerned with producers, consumers, speculators, and investors, not to mention exogenous variables like natural disasters and conflicts. Oil price variations indicate a significant spike or decline over time. Oil markets are vulnerable to price changes owing to instability, which is reflected in the oil income of exporting and producing countries. (Belgharbi & Madahi, 2022, p. 605).

2.3. The most essential oil shocks during the period (2000-2020)

2.3.1. *The oil shock of 2004:* This year saw an extraordinary surge in global oil prices, which reached \$42 per barrel in the second quarter and continued to grow until they topped \$50 per

barrel in the fourth quarter. (Al-Moussawi, 2005, pp. 17-21). Among the most important causes of this crisis are:

- Political unrest in Iraq, Venezuela, and Nigeria.
- Hurricane Ivan in the Gulf of Mexico.
- Increased growth rates in Asian countries and China.

2.3.2. The 2008 Oil Shock: Oil prices peaked at \$92.7 per barrel in early 2008. They remained steadily rising until they reached their highest levels for the first time in July of the same year, at around \$147 per barrel, as a result of a group of economic and geopolitical factors, such as the emergence of China and India as economic powers and the growing interest in Iran's missile tests. (Al-Quraishi, 2020, p. 120). However, oil prices plummeted to \$52.5 per barrel in the fourth quarter of the same year due to the worldwide economic downturn induced by the subprime mortgage crisis in September 2008.

2.3.3. The Oil Shock of 2014: The global economy experienced a second oil shock from mid-2014 to the end of 2015 when oil prices began to fall from \$105.4 per barrel in June 2014 to \$96 per barrel in September. It dropped till it hit \$44.4 per barrel in January 2015. Thus, it saw a 60.3% decline compared to January 2014. (Bin Isma'in & Zaidi, 2016, p. 218). The crisis is caused by several factors, including a slowdown in economic growth rates in China and Asia, as well as an economic recession in the Eurozone, where the International Monetary Fund estimated global growth rates at 3.6% in 2015, in addition to a glut of global oil supply, which resulted in a significant drop in oil prices.

2.3.4. The Oil Shock of the 2020 COVID-19 Virus: In late 2019 and early 2020, the globe witnessed an extraordinary COVID-19 coronavirus pandemic. It initially surfaced in the Chinese city of Wuhan, causing alarm and anxiety owing to its quick spread. It caused a health and economic catastrophe that touched all parts of the world, prompting the International Monetary Fund to label it the greatest crisis in modern economic history owing to its widespread consequences in such a short period. The globe endured a catastrophic economic crisis, registering an unprecedented loss of 4.3 percent in 2020. (Bin Musa, 2022, p. 88)

The oil market was also subjected to two consecutive shocks, the first of which was the decline in global oil demand, which began in China as a result of the significant lockdown and preventive measures implemented by all countries around the world to limit the spread of the coronavirus 19 COVID-19 pandemic, resulting in a substantial drop in oil demand from 90.3 million barrels per day in 2019 to 9.2 million barrels per day by 2020. The second shock was the drop in oil prices due to failed talks between OPEC and its partners. Saudi Arabia's leadership led a conference in Vienna on March 5 and 6, 2020, to discuss cutting output in the second quarter of 2020. (Muhammed Osama, 2021, p. 38) This marks the worst performance since 1991.

3. Economic diversification and its indicators

3.1. The concept of economic diversification

Many concepts related to economic diversification differ from each other according to the field from which this phenomenon is viewed.

According to Jean Claude Berthéley: "An economy is diversified if the production structure is divided into a large number of different activities according to the nature of the goods and services produced." (Barthélemy, 2005, p. 599)

The Arab Planning Institute in Kuwait defines economic diversification as:

"The development policy that seeks to decrease economic risk, produce additional value, and raise income levels by steering the economy toward varied or new sectors or markets rather than relying on a single market, sector, or product."

Diversification is also defined as:

"Distributing investment across different sectors of the economy, to reduce the risks of excessive dependence on one resource or one sector or very few sectors". (Nouy, 2017, p. 119)

For countries that rely on the oil sector, economic diversification is: "A process that aims to reduce the contribution of oil to the GDP and government revenues through developing non-oil sectors, reducing the role of the government sector, and increasing the contribution of the private sector to economic activity." (Balaa & Dahman, 2020, p. 11) According to the foregoing, economic diversification entails minimizing reliance on a single resource and pursuing the most significant number of sources of revenue that will enhance and diversify the components of the country's GDP.

3.2. Indicators for Measuring Economic Diversification

There are many statistical and economic indicators for economic diversification, including:

3.2.1. Herfindahl-Hirshman Index: The Herfindahl-Hirshman index is the most extensively used metric for assessing economic diversity. The coefficient is calculated by considering the content and structure of many variables and their variety. This measure was also used by the United Nations Conference on Trade and Development (UNCTAD) to assess the variety of the export industry. The Herfindahl-Hirshman coefficient is defined by the following mathematical formula (Qarrouf, 2011, p. 121)

$$H = \frac{\sqrt{\sum_i^N \left(\frac{x_i}{x}\right)^2} - \sqrt{\frac{1}{N}}}{1 - \sqrt{\frac{1}{N}}}$$

Where:

N: represents the number of activities.

X_i: the value of the variable in activity i.

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

The value of the Herfindahl Hirschman coefficient ranges between zero and one $0 \leq H \leq 1$

If $H = 0$, there is complete diversity in the economy.

If $H = 1$, the amount of diversity is zero.

This means that the closer the value of the Herfindahl-Hirschman coefficient is to one, the more evidence there is of weak economic diversification.

3.2.2. Concentration Coefficient: It depends on estimating the examined phenomena' concentration and uneven distribution. The Gini Coefficient is regarded as one of the best and easiest measurements used to quantify the concentration of the studied phenomenon. (Awad Al-Khatib, 2011, pp. 211-212) The following mathematical formula gives it:

$$G = A - \sum_{k=1}^N (x_k - x_{k-1})(y_k + y_{k-1})$$

Where:

G: Gini coefficient

X_k: Ascending relative aggregate frequency of the overall variable (sectoral share of GDP)

Y_k: Ascending relative aggregate frequency (number of sectors)

n: Number of sectors

3.2.3. Export concentration index: Also called the Diversification Index.

This indicator compares a country's exports of its key commodities to domestic exports of those primary commodities in global exports. (Bouras , 2013, p. 249). The following mathematical formula gives it:

$$D_J = \frac{\sum_i |Hi_J - H|}{2}$$

Where:

Hij: represents the exports of commodity I from the total exports of country J

H: represents the share of the exports of the commodity in the total world exports

4. Analysis of the reality of economic diversification in Algeria during the period (2000-2020)

4.1. Contribution of productive sectors to the gross domestic product

This statistic shows the economy's rate, degree of structural change, and variety. It depicts the most significant production sectors that contribute to Algeria's GDP growth using the variables hydrocarbons, agriculture, industry, construction and public works, services, rights, and import fees.

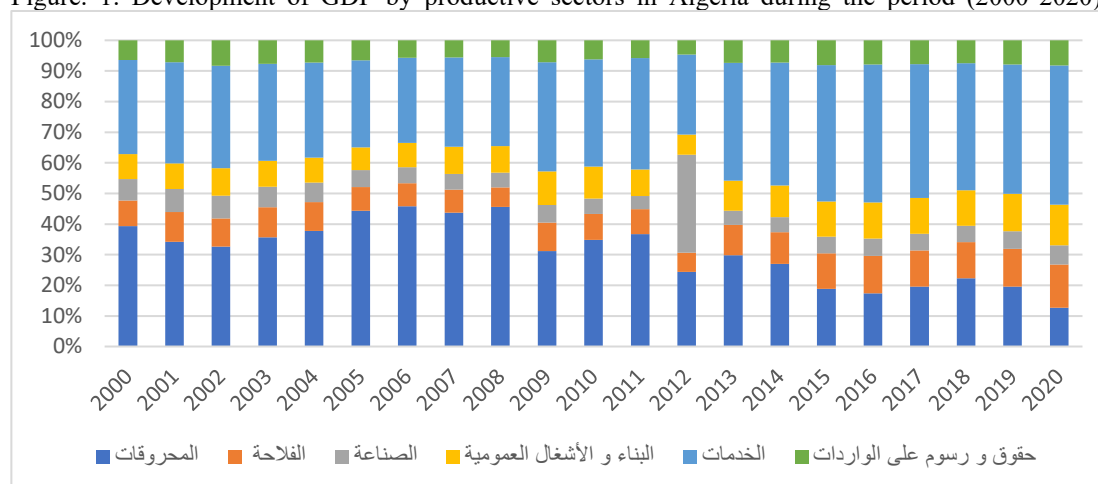
It is worth mentioning that the services sector contains three businesses that are critical to Algeria's economic diversification between 2000 and 2020: tourism, transportation, and communications. This is shown in the following Table and Figure

Table.1. Development of the gross domestic product according to the productive sectors in Algeria during the period (2000-2020)

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Fuel	39.2	34.1	32.6	35.5	37.7	44.3	45.6	43.5	45.3	31	34.7
Agriculture	8.4	9.7	9.2	9.8	9.4	7.7	7.5	7.5	6.4	9.3	8.4
Industry	7.0	7.4	7.4	6.7	6.3	5.6	5.2	5.1	4.7	5.7	5.0
Construction And Public Works	8.1	8.4	9.0	8.4	8.2	7.4	7.9	8.8	8.7	10.9	10.4
Services	30.7	32.9	33.4	31.6	31	28.4	27.7	29.0	28.8	35.5	34.8
Import duties and fees	6.4	7.1	8.3	7.6	7.2	6.5	5.7	5.6	5.5	7.1	7.1
Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Average
Fuel	36.7	34.2	29.8	27.0	18.8	17.4	19.6	22.2	19.5	12.7	31.49
Agriculture	8.2	8.8	9.9	10.3	11.6	12.3	11.8	11.8	12.4	14.1	9.74
Industry	4.3	4.5	4.6	4.9	5.4	5.6	5.5	5.4	5.7	6.3	5.64
Construction And Public Works	8.6	9.2	9.8	10.4	11.5	11.9	11.7	11.5	12.2	3.2	9.82
Services	36.4	36.7	38.4	40.1	44.5	45.1	43.7	41.4	42.2	45.5	34.25
Import duties and fees	5.8	6.6	7.4	7.2	8.1	7.9	7.8	7.5	7.9	8.2	7.03

Source: Prepared by researchers based on: (Office, 2000-2008)
(Bank of Algeria, 2008, 2011, 2016, 2020, pp. 232-214-146-147).

Figure. 1. Development of GDP by productive sectors in Algeria during the period (2000-2020)



Source: Prepared by the researchers based on the previous Table

Table (1) and Figure (1) show the dominance of the hydrocarbons and services sectors by 31.49% and 34.25%, respectively, followed by the construction and public works sectors by 9.82% and the agricultural industry by 9.74%, so the industrial sector is the least influential in the gross domestic product with a weak contribution rate compared to the hydrocarbons and services sectors, where it reached 5.64% duri.

FBER

108

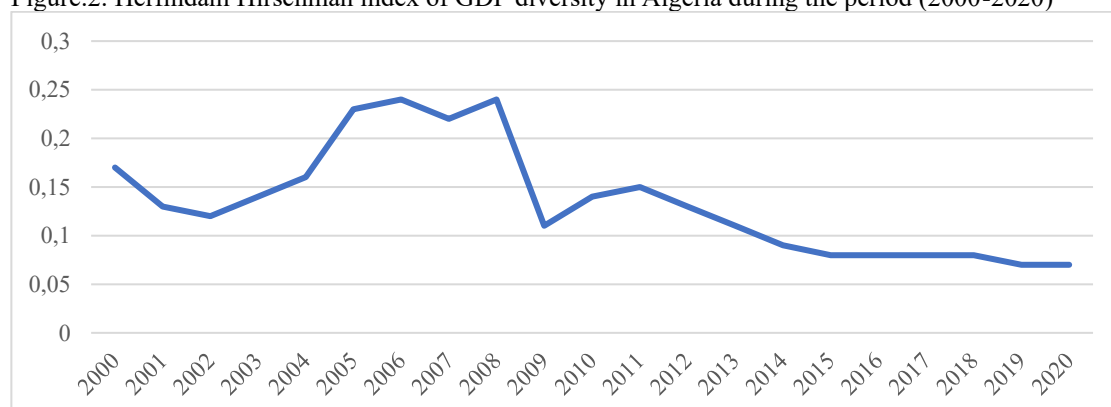
To assess the economic diversity accomplished in the production structure, the Herfindahl-Hirschman coefficient was calculated for the period (2000-2020), and the estimation results are displayed in the Table below:

Table. 2. Herfindahl-Hirschman index for the diversity of the gross domestic product in Algeria during the period (2000-2020)

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
HH	0.17	0.13	0.12	0.14	0.16	0.23	0.24	0.22	0.24	0.11	0.14
Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Avera
HH	0.15	0.13	0.11	0.09	0.08	0.08	0.08	0.08	0.07	0.07	/

Source: Prepared by researchers based on Microsoft Excel and Table No. 1

Figure.2. Herfindahl Hirschman index of GDP diversity in Algeria during the period (2000-2020)



Source: Prepared by the researchers based on the previous Table

Through Table No. (2) and Figure No. (2) We can evaluate the economic diversification index as follows:

- The period (2000-2010): We notice during this period that the value of the index rose from

0.17 in 2000 to 0.24 in 2008, and this shows a decrease in diversification in the structure of the economy as a result of the dominance of the hydrocarbon sector and the increase in its contribution to the gross domestic product during the study period, as the contribution of the oil sector reached 45.30% in 2008, and in 2010 the value of the index decreased to 0.14, thus declining.

- The period (2011-2020): During this period, the index value moved from 0.15 in 2011 to 0.07 in 2020, indicating an increase in diversification in the economy's structure as a result of some sectors recovering and contributing slightly to GDP, as well as a decrease in dependence on the oil sector, which fell from 36.7% in 2011 to 12.7% by 2020. The agricultural sector increased from 8.4% in 2000 to 14.1% in 2020, a +5.7% rise, whilst the industrial sector decreased from 7% in 2000 to 6.3% in 2020, a -0.7% change. On the other hand, the services sector has experienced exceptional development, expanding from 30.7% in 2000 to 45.5%.

4.2. Export structure diversification

The export diversification index is regarded as one of the most critical measures of change in the export structure. This indicator is significant for the economies of oil-exporting countries because it shows the extent of diversification achieved by other sectors outside of hydrocarbons on the one hand and, on the other, the danger of relying on one type of export more than others. The following Table depicts the evolution of Algeria's export structure from 2000-2020.

FBER

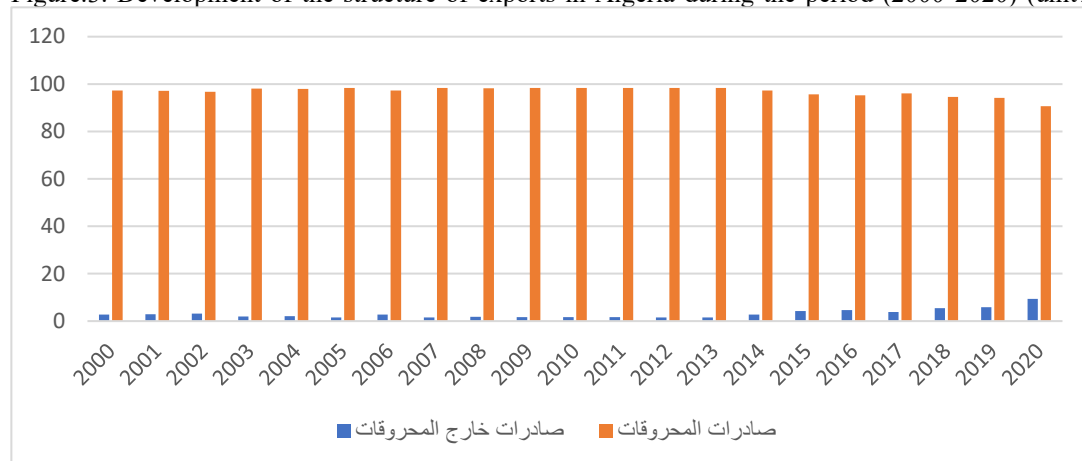
109

Table.2. Development of the export structure in Algeria during the period (2000-2020) (unit%)

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Non-hydrocarbon exports	2.7	2.9	3.2	1.9	2.1	1.6	2.7	1.6	1.8	1.7	1.7
Hydrocarbon exports	97.3	97.1	96.8	98.1	97.9	98.4	97.3	98.4	98.2	98.3	98.3
Total Exports	100	100	100	100	100	100	100	100	100	100	100
Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Average
Non-hydrocarbon exports	1.7	1.6	1.6	2.7	4.3	4.7	3.9	5.4	5.8	9.4	3.09
Hydrocarbon exports	98.3	98.4	98.4	97.3	95.7	95.3	96.1	94.6	94.2	90.6	96.91
Total Exports	100	100	100	100	100	100	100	100	100	100	/

Source: Prepared by researchers based on (Bank of Algeria, 2008, 2011, 2016, 2020)

Figure.3. Development of the structure of exports in Algeria during the period (2000-2020) (unit%)



Source: Prepared by researchers based on the previous Table

According to Table No. (3) and Figure No. (3) Hydrocarbon exports accounted for 97.3% of total exports in 2000 but will drop to 90.6% by 2020. As an intermediate percentage during the period (2000-2020), it reached 96.91%, while non-hydrocarbon exports to total exports ranged between 2.7% in 2000 and 9.4% in 2020, or intermediate percentage during the period (2000-2020), reached 3.09%, indicating no diversity in the structure of Algerian exports and reliance on exporting only one product - hydrocarbons.

From this, we conclude that the Algerian economy is still single and dependent on the hydrocarbons sector.

FBER

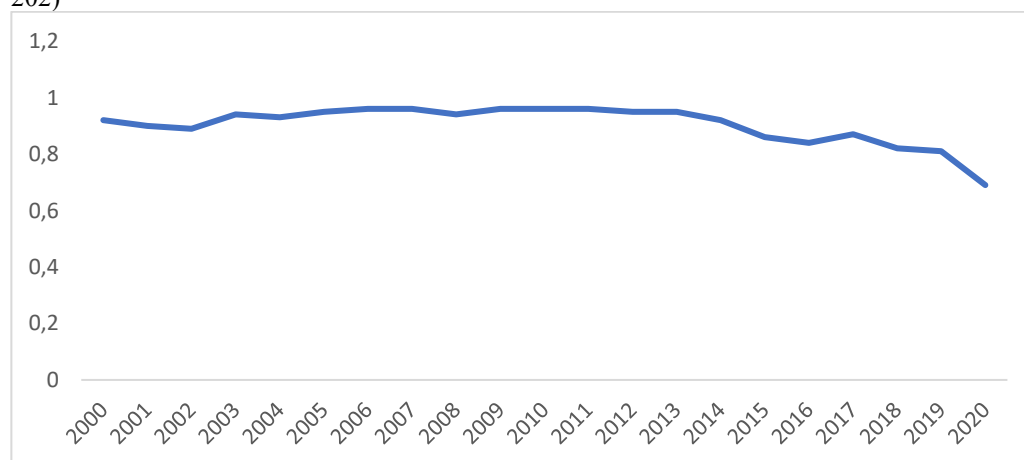
110

Table .4. Herfindahl-Hirschman index for diversification of exports in Algeria during the period(2000-2020)

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
HH	0.92	0.90	0.89	0.94	0.93	0.95	0.96	0.96	0.94	0.96	0.96
Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Avera
HH	0.96	0.95	0.95	0.92	0.86	0.84	0.87	0.82	0.81	0.69	/

Source: Prepared by researchers based on Microsoft Excel and Table No. 2

Figure.4. Herfindahl-Hirschman Index for Export Diversification in Algeria during the period (2000-2020)



Source: Prepared by researchers based on the previous Table

From Table No. (4) and Figure No. (4) we can divide the export diversity index into:

The era (2000-2014): During this period, the index's value increased from 0.92 in 2000 to 0.96 in 2011, then decreased to 0.92 in 2014, near the value of 1. According to the Herfindahl-Hirschman index, this number shows a need for more diversification in Algerian exports since hydrocarbon exports dominate overall exports.

The timeframe (2015-2020): During this time, we see a decrease in the value of the export diversity index from 0.86 in 2015 to 0.69 in 2020, owing to a relative fall in the oil sector's dominance over Algerian exports. This demonstrates the state's attempts to boost the diversification of exports beyond the oil industry.

4.3. Diversification of the public revenue structure

This metric represents economic diversification by lowering reliance on a single source of revenue and generating a broad income base across many industries. This indicator is significant in oil-exporting nations because it indicates the amount of economic diversification by lowering reliance on hydrocarbon revenues and increasing the contribution of non-hydrocarbon income to public revenue finance.

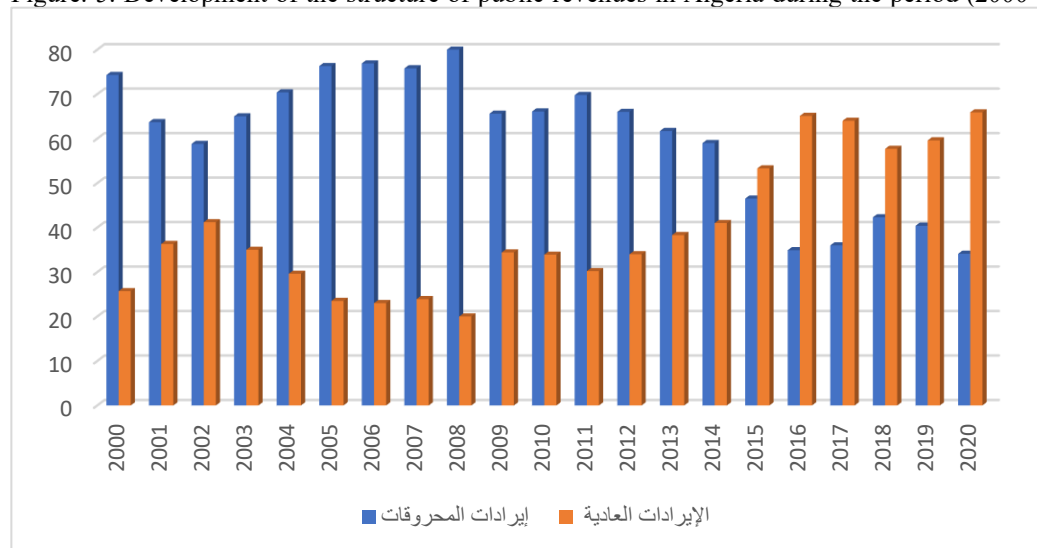
This is what the following Table and Figure show us:

Table. 3. Development of the public revenue structure in Algeria during the period (2000-2020)
(unit%)

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Fuel revenues	74.3	63.7	58.8	65	70.4	76.3	75.8	80	65.6	66.1	69.8
Regular revenue	25.7	36.3	41.2	35	29.6	23.5	23.01	23.9	20	34.4	33.9
Total Exports	100	100	100	100	100	100	100	100	100	100	100
Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Avera
Fuel revenues	69.8	66	61.7	59	46.5	34.9	36	42.3	40.4	34.1	60.17
Regular revenue	30.2	34	38.3	41	53.3	65.1	64	57.7	59.6	65.9	39.80
Total Exports	100	100	100	100	100	100	100	100	100	100	/

Source: Prepared by researchers based on (Bank of Algeria, 2008, 2011, 2016, 2020)

Figure. 5. Development of the structure of public revenues in Algeria during the period (2000-2020)



Source: Prepared by the researchers based on the previous Table

From Table No. (5) and Figure No. (5), it becomes clear to us that:

- From 2000 to 2020, the percentage of oil income reached 74.3% in 2000, fell to 58.8% in 2002, and then rose to 80% in 2008, the highest rate recorded throughout the research period. This is owing to an increase in oil prices, with the barrel cost reaching \$99.1 in the same year. In contrast, the percentage of regular earnings reached 25.7% in 2000, then increased to 41.2% in 2002 before falling to 20% in 2008, the lowest rate throughout the research period due to rising oil prices.

The timeframe (2011-2020): The ratio of oil income reached 69.8% in 2011, but fell to 34.1% in 2020. This reflects a fall in the proportion of oil income relative to state revenues, which climbed from 30.2% in 2011 to

4. Conclusion

The study focused on economic diversification and its importance in dealing with oil price fluctuations, particularly for oil-exporting countries looking to transition from a monopoly economy to a diversified economy, such as Algeria, which sought to activate and stimulate productive sectors outside of the hydrocarbon sector to avoid external shocks and variables and achieve a more stable and balanced economy. However, using the Herfindahl-Hirschman index revealed that Algeria's economy is still heavily reliant on the oil industry, with little evidence of economic diversification. The most significant conclusions that may be reached are the following:

- The Algerian economy is still characterized by the weak contribution of productive sectors outside the hydrocarbon sector to the GDP.
- The weak contribution of the agricultural and industrial sectors to the GDP.
- The dominance of oil exports at an average rate estimated at 96.1% of total exports, while exports outside the hydrocarbon sector reached an average rate of 3.09% throughout the study period, and the export diversification index confirmed this, as its value ranged between 0.69 and 0.95 during the study period, which is a value close to the value 1, which indicates the absence of diversity in exports.
- Public revenues achieved diversity in private income during the last years of the study period, as regular revenues ranged between 25.7% and 65.9% during the period (2000-2020), and oil revenues reached a percentage ranging between 74.3% and 34.1% during the same period. This shows us the efforts and measures taken by the Algerian state to create sources and expand its revenue base.
- Economic diversification is a long-term process that requires long-term development strategies and policies to achieve balance and diversity in the economy.

• Suggestions

- Attracting local and foreign investments by providing an appropriate environment for them.
- Optimize the use of oil revenues and direct them towards marginalized sectors, such as industry, agriculture, and tourism, to achieve added value in the gross domestic product.
- Exploiting renewable energies such as solar energy and wind energy.
- Benefiting from the success of countries' experiences in terms of economic diversification policies.

5. References

- Al-Moussawi, D. (2005). *Oil Price Revolution*. University Publications Office.
- Al-Quraishi, H. (2020). *Oil Economics* (éd. 1). Baghdad: Dar Al-Kutub and Al-Watha'iq.
- Awad Al-Khatib, M. (2011). The Impact of Economic Diversification on Growth in the Saudi Non-Oil Sector. *Arab Journal of Administrative Sciences, Scientific Publication*

Council, Volume 18, Issue 02.

Balaa, A., & Dahman, A. (2020). Economic Diversification Policies in Arab Oil Exporting Countries. *Journal of Environmental Economics, Volume 03, Issue 01.*

Bank of Algeria. (2008, 2011, 2016, 2020). *Annual Economic and Monetary Report of Algeria*, Retrieved from www.Bank.of Algeria.Dz. Algeria.

Barthélemy, J. (2005). commerce international et diversification économique. *Revue d'économie politique, Volume 115, Issue 05.*

Belgharbi, F., & Madahi, M. (2022). The Impact of oil Price Fluctuations on the Algerian Balance, An Econometric Study During the Period (1990-2020). *Shuaa Journal of Economic Studies, Volume 06, Issue 02.*

Bin Al-Zain, H., & Ronqa, W. (2006, December). The Impact of oil price Developments on Fiscal Policy in Algeria during the period 2000-2015. *Algerian Journal of Accounting and Financial Studies, Volume 02, Issue 02.*

Bin Isma'in, H., & Zaidi, H. (2016, June). The Oil Price Crisis 2015 and Its Effects on Macroeconomic Variables in Algeria. *Economic Researcher Magazine, Issue 05.*

Bin Musa, N. (2022, January). The repercussions of oil and natural gas price fluctuations due to the COVID-19 pandemic on the economies of Arab oil and gas exporting countries. *Algerian Journal of Security and Development, Volume 11, Issue 01.*

Bouras, H. (2013). Specialization and imperative of diversification for Tunisian economics. *Journal of business management and economics, Volume 04, Issue 11.*

Muhammed Osama, H. (2021, February). The Implications of Oil Price Fluctuations on the Arab Gulf States and the Need for Economic Diversification. *International Journal of Economic Studies, Issue 15.*

Nouy, N. (2017). Strategy for Developing Manufacturing Industries to Achieve Economic Diversification Outside Oil – The United Arab Emirates as a Model. *Journal of the Institute of Economic Sciences, Volume 20, Issue 03.*

Office, N. S. (2000-2008). Algeria.

Qarrouf, M. (2011). Economic Diversification in Algeria: Measurement and Approach to Rules and Evidence. *Journal of Law and Human Sciences - Economic Studies, Volume 25, Issue 02.*

Qatoush, R., & Ben Loukil, R. (2017). Oil Price Fluctuations and Their Impact on the Labor Market in Algeria, An Analytical Approach. *North African Economic Journal, Issue 17.*

Sajid, S., & Al-Marsoumi, M. (2021). A future vision to confront oil price fluctuations in Iraq. *Al-Kut Journal of Economic and Administrative Sciences, Volume 13, Issue 42.*

Zhenbou, H., Jodie, K., & Dirk, W. (2015, March). The oil price shock of 2014 Drivers, impacts, and policy implications. *Overseas Development Institute UK, Issue 415.*