

How to Cite:

Djaber, S., Abdennasser, B., & Hassiba, S. (2025). Dynamics of oil price fluctuations and their impact on the Algerian Economy (2009-2022). *International Journal of Economic Perspectives*, 19(5), 2257–2270. Retrieved from <https://ijeponline.org/index.php/journal/article/view/1048>

Dynamics of oil price fluctuations and their impact on the Algerian Economy (2009-2022)

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Abstract---The objective of this research is to analyze the impact of the oil price fluctuation on Algerian economy during the period 2005-2017, knowing that the oil prices have been characterized by frequent changes, to do so, we have used the descriptive analytical approach, the results indicate that oil prices have a strong impact on: revenues, public expenditures, Gross Domestic Product GDP, balance of payments and Algeria's foreign currency reserves, so that, Algeria is still dependent on hydrocarbons sector, despite the policies and procedures applied by the government during the last three years (2015-2017) aiming to reduce this dependence and diversify the Algerian economy.

Keywords---Oil prices, Gross Domestic Product, Public Revenues, Public Expenditures, Balance of Payments.

Introduction

The oil sector holds great importance in the economies of world countries. It has been one of the most significant sources of non-renewable energy since the beginning of the 20th century. It has become the economic artery for both exporting and importing countries, and a strategic resource for the daily lives of people worldwide. The petroleum industry is the largest in the world in terms of turnover, investment, and profits. This has made it a subject of conflict between

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Submitted: 27 March 2025, Revised: 18 April 2025, Accepted: 09 May 2025

various players in the market (exporting countries, importing countries, international companies), where each party aims to protect its position and secure a fair share of the generated profits.

Global oil markets, unlike other markets, are characterized by volatility and instability. Their prices are subject to sudden and sharp changes from time to time, affecting the economies of both exporting and importing countries. Given that Algeria is among the exporting countries, any change in its prices will be reflected in its economy.

Since independence, Algeria has relied on oil as a primary source of finance, whether for its general budget or development plans. This has made oil revenues the main engine around which all inputs and outputs of the national economy revolve. Continued reliance on this source was encouraged by the rise in oil prices from the beginning of the new millennium, exceeding 130 dollars per barrel in 2008. This gave Algeria significant comfort during that period, allowing it to utilize accumulated financial surpluses to fund planned economic projects. However, in mid-2014, oil prices fell suddenly and sharply, reaching a threshold of 41 dollars per barrel in 2016.

Therefore, in a rentier economy that depends on oil revenues as a primary source of finance on one hand, and sudden and sharp fluctuations in oil prices on the other hand, the following question arises:

What are the impacts of the decline in oil prices on the Algerian economy?

This question will be answered through two main axes:

- **First Axis: Conceptual and Definitional Framework of the Energy Sector in Algeria.**
- **Second Axis: Impacts of Oil Prices on the Algerian Economy during the period 2009-2022.**

First Axis: Conceptual and Definitional Framework of the Energy Sector in Algeria

The energy sector in Algeria is a fundamental pillar of the national economy and the primary source of the country's hard currency reserves. Despite the sector's diversity, with historical dominance by hydrocarbons (oil and natural gas), officials in recent years are working towards developing renewable energy sources.

Thus, the energy sector in Algeria is considered the driving force for all other branches of the national economy, thanks to the significant hydrocarbon resources and natural wealth that the country possesses. Hydrocarbons account for approximately 35% of GDP, 97% of export revenues, and more than 60% of state budget revenues¹.

1. Strategic Importance of the Hydrocarbon Sector in Algeria:

First: Oil

Algeria possesses significant reserves of crude oil and is a prominent member of the Organization of the Petroleum Exporting Countries (OPEC) and the Gas

¹ **Arab Energy Conference** (10th; 2014: Abu Dhabi). *Energy and Arab Cooperation: Country paper of the People's Democratic Republic of Algeria*, p. 3.

Exporting Countries Forum. Oil is a major source of export revenues. Algerian oil is distinguished by its good quality compared to other types of oil exported by OPEC members. Crude extracted from the first well discovered in Wadi Qitireni is known for its high purity, with a density estimated at 0.83. The most famous petroleum products in Algeria are condensates associated with natural gas extraction. They are considered among the best types of oil, and Algeria is a key producing and exporting country. Algeria's primary oil, known as Saharan Blend, is a light crude, almost free of sulfur, containing only 0.14% sulfur. This distinguishes it among OPEC countries and makes it one of the best types of crude for producing light distillates which are in high demand².

Largest Importers of Algerian Crude Oil in 2024

South Korea topped the list of the largest importers of seaborne Algerian crude oil in 2024, as shown in the following list³:

- South Korea: 120,000 barrels per day.
- France: 103,000 barrels per day.
- United States: 71,000 barrels per day.
- Spain: 66,000 barrels per day.
- Italy: 62,000 barrels per day.

Second: Natural Gas: Algeria is considered one of the largest producers and exporters of natural gas globally, either via pipelines (primarily to Europe) or as liquefied natural gas (GNL). It possesses vast reserves of both conventional and unconventional (shale) gas⁵.

Largest Importers of Algerian LNG in 2024⁴

European countries continued their dominance in importing Algerian LNG in 2024, led by Turkey and France. These two countries alone accounted for 63% of total shipments, according to the report "Updates on Arab and Global LNG Markets in 2024," issued by the Energy Studies Unit.

Turkey ranked first among the largest importers of Algerian LNG in 2024, despite a decrease in volume to 4.05 million tons, compared to 4.45 million tons in 2023. France came in second place, with import volumes from Algeria increasing to 3.26 million tons compared to 3.2 million tons in the previous year. Spain followed with about 1.66 million tons, compared to 1.47 million tons in 2023. Italy ranked fourth, with a decrease in its imports of Algerian LNG to 1.39 million tons in the past year, compared to 1.8 million tons in 2023. Fifth place went to the United Kingdom with import volumes of 0.39 million tons during 2024, compared to 0.34 million tons in the previous year. Around 0.86 million tons of Algeria's LNG exports in 2024 went to other countries.

2. Key Players in the Hydrocarbon Sector in Algeria: Sonatrach National Company

² Ben Ramadan, Anisa. "The Energy Sector in Algeria...", *Algerian Journal of Comparative Law*, Issue 02, p. 187.

³ <https://attaqa.net/2025/01/13>

⁴ <https://attaqa.net/2025/01/23>

- It is the national hydrocarbon company and is considered the largest company in Africa.
- It dominates all stages of the oil and gas industry in Algeria, from exploration and production to transportation, refining, and marketing.
- It forms partnerships with international energy companies to develop fields and increase production.

Company	Original Country	Date of Agreement
AGIP	Italy	1991/12/17
PETRO CANADA	Canada	1993/4/26
BP	UK	1995/12/23
TOTAL	France	1996/01/28
ARCO	USA	1996/04/15
PETRONAS	Malaysia	1996/12/14
BHP	Australia	1997/05/31
AMOKO	USA	1998/7/29

Sonatrach has undertaken a broad restructuring process, which led to the establishment of 17 subsidiaries, including industrial, service, commercial, and implementation companies⁵

Industrial Entities:

- NAFTAL: Refining and Distribution of Hydrocarbons
- ENIP: Petrochemical Industry
- ENPC: Plastics and Rubber Industry
- ASMIDAL: Fertilizers

Implementation Companies:

- ENGTP: Major Oil Works
- ENGCB: Civil Engineering and Construction
- ENAC: Pipelines

Oil Service Companies:

- ENAGEO: Geophysics
- ENAFOR, ENTP: Drilling
- ENSP: Well Services
- ENEP: Petroleum Engineering
- CERHYD: Hydrocarbon Research Center

3. Infrastructure of the Hydrocarbon Sector:

- **Production Fields:** Mainly concentrated in the Algerian Sahara. Hydrocarbon reserves are primarily located in Hassi Messaoud with the highest percentage, estimated at 41%, followed by the Illizi Basin at 14%, Ghard El Namous at 9%, and Ahnet Timimoun at 4%.⁸ Burkina Faso

⁵ Sonatrach Magazine, Issue 12, 2010, p. 13.

basin accounts for 3%. As for natural gas, it is located in varying proportions in Hassi R'mel, Hassi Touareg, Qassi Touil, Ghard El Namous, and Hassi Ramel basins, as well as several other fields. Algeria ranks seventh in the Arab world for crude oil reserves and fourth in the Arab world for natural gas reserves as of the 2018 OPEC report.⁶

- **Pipelines:** An extensive network for transporting crude oil and natural gas to export ports, refineries, and power generation stations. Natural gas is exported to European markets via the following natural gas pipelines⁷
 - **Enrico Mattei Pipeline (Trans-Med):** Extends from Hassi R'mel to Italy via Tunisia. Construction began in 1983 with a capacity of 18 billion cubic meters per year. It was expanded in 1995 to reach a capacity exceeding 24 billion cubic meters per year.
 - **Pedro Durán Farrell Pipeline (Maghreb–Europe Gas Pipeline - MEG):** Extends from Algeria to Spain via Morocco. Construction began in 1996 with a capacity of 8 billion cubic meters per year. Morocco receives amounts of gas estimated at approximately 600 million cubic meters as transit fees across its territory.
 - **Medgaz Pipeline:** Extends from Béni Saf in Algeria to Almería in Spain. The offshore section is approximately 200 km long, while the onshore section is 218 km long. Its export capacity is estimated at 8 billion cubic meters per year.

New projects are underway to increase Algeria's natural gas exports, including:

- **Galsi Project:** This project aims to export 8 billion cubic meters of natural gas per year to Sardinia, Italy. It has a length of 850 km.
- **Trans-Saharan Gas Pipeline (TSGP):** To study the possibility of building a gas pipeline connecting Nigeria to Algeria, aimed at supplying Southern Europe with natural gas. The project's capacity is estimated at 20-30 billion cubic meters per year with a total length of 4188 km, including 2310 km within Algerian territory.
- **Refineries:** To meet a portion of domestic demand for petroleum products. According to OPEC data, Algeria has 6 oil refineries, the most prominent being Skikda refinery with a processing capacity of 355,000 barrels per day.
 - Hassi Messaoud refinery with a refining capacity of 1.2 million tons per year.
 - Algiers refinery with a refining capacity of 2.7 million tons per year.
 - Arzew refinery with a refining capacity of 2.5 million tons per year.

Algeria also has the Skikda condensate refinery with a capacity of up to 122,000 barrels per day, as well as the Arzew refinery with a capacity of 87,000 barrels per day.

Algeria also hosts the Algiers refinery with a refining capacity of 78,000 barrels per day, the Hassi Messaoud refinery with a capacity of 22,000 barrels per day, and the Adrar refinery with a capacity of 13,000 barrels per day.

⁶ Hasiba Shetahouna, Nadhir Ghania: *The Impact of Crude Oil Price Fluctuations on Energy Consumption in Algeria – An Econometric Study for the Period 1980–2018*, p. 29

⁷ Ben Ramadan, Anisa. *op. cit.*, p. 202.

- **Gas Liquefaction Plants:** For converting natural gas into liquefied natural gas (LNG) transportable by carriers. Algeria was a pioneer in LNG production, building the first natural gas liquefaction plant in Algeria, GL4 Z, in the Arzew industrial zone in 1964. Algeria currently owns approximately four LNG complexes.

4. Challenges Facing the Hydrocarbon Sector in Algeria:

Volatility of Global Oil and Gas Prices: This is primarily due to a decrease in demand, which can be summarized in three main points: First, the decline in global demand for energy in the past decade of this century due to the slowdown of the economies of major countries, and increased domestic consumption in energy-producing countries, especially large countries like Russia, the United States, etc. Additionally, the shift of European countries towards renewable energy sources has led to a decrease in oil prices due to the supply surplus exceeding millions, and the slowdown in energy, especially in Asian markets⁸.

Depletion of Some Old Fields and the Need for Large Investments in Exploration and Development of New Fields and Enhanced Recovery Technologies: Hydrocarbons are non-renewable energy resources, requiring millions of years to form. The available quantity of this energy in nature is fixed and estimated in the amounts of latent reserves in countries. Therefore, the extraction by the state, whether for domestic consumption or foreign export, is an ongoing depletion of its estimated reserves, causing them to decrease and decline, especially if they are not replenished by exploration and discovery operations.⁹

Increasing Domestic Energy Consumption, Which Reduces Available Export Quantities: Some estimates indicate that Algeria will consume all of its energy production by 2035, leaving nothing for export, especially given the state's support for energy prices in the local market, which costs the state 10% of hydrocarbon GDP.¹³ The level of petroleum product prices in the Algerian domestic market is the lowest at international levels.¹⁰

Developing Shale Gas Faces Environmental, Technical, and Social Challenges: The environmental challenge lies in the demand for large quantities of water, as hydraulic fracturing requires enormous amounts of water, which puts pressure on water resources, especially in arid regions. There are also fears of chemical fluid leakage (which contains chemical materials) or the natural gas itself into groundwater layers. The technical challenge appears in the geological complexity of shale rocks. Shale rocks have low permeability, making gas extraction from them difficult, requiring advanced techniques like horizontal drilling and multi-stage hydraulic fracturing. This necessitates sophisticated drilling and fracturing techniques. The social challenge lies in societal opposition due to fears of the negative impacts of this operation.

⁸ Attar, Abdel Majeed. "The Decline in Oil Prices and Its Impact on the Algerian Economy: Implications of Falling Oil Prices for Oil-Exporting Countries" Arab Center for Research and Policy Studies, Doha, 2016, pp. 1, 15.

⁹ Organization of Arab Petroleum Exporting Countries. "Energy Support Policies..." April 2015, p. 7.

¹⁰ Mezian Mimmas. "Challenges of the Hydrocarbon Economy..." Algerian Journal of Political Science and International Relations, Issue 13, December 2019, p. 119

Second Axis: Impacts of Oil Prices on the Algerian Economy During the Period 2009-2022

The Algerian economy relies heavily on oil exports, and these exports are directly linked to global oil prices. Therefore, any rise or fall in the price will be reflected in the Algerian economy.

First: Oil Production in Algeria during the period 2009-2022

Below, Table 01 provides data on Algeria's crude oil production in thousand barrels per day over the specified period, highlighting the stability and modest fluctuations characteristic of oil production figures compared to price volatility.

Table 01: Evolution of Oil Production in Algeria during the Period 2009-2022

Year	Volume (Thousand barrels/day)	Year	Volume (Thousand barrels/day)
2009	1221	2016	1146
2010	1190	2017	1061
2011	1162	2018	970
2012	1203	2019	954
2013	1203	2020	839
2014	1193	2021	849
2015	1157	2022	1020

Source: *Organization of Arab Petroleum Exporting Countries, Annual Statistical Reports.*

Table 01 illustrates Algeria's crude oil production volumes from 2009 to 2022. Despite the significant fluctuations in oil prices observed during this period (as seen in subsequent tables), Algeria's production figures show a relatively stable baseline, hovering around 1.1 to 1.2 million barrels per day in the earlier years (2009-2015). A noticeable decline begins around 2017, dropping significantly in 2020 (down to 839 thousand bpd) before slightly recovering. This indicates that while production volumes exhibit variations, they do not mirror the dramatic year-on-year percentage changes typically seen in prices. Factors influencing production are often structural (field maturity, investment levels, OPEC quotas) rather than solely reactive to short-term price movements. Thus, the impact of price on *production volume* within a single year is less direct than its impact on *value* or *revenues*.

Second: Evolution of Algeria's Crude Oil Prices and Exports During the Period 2009-2022

Table 02 directly compares the average crude oil price per barrel with the total value of Algeria's petroleum exports in billions of dollars over the defined timeframe, illustrating their intertwined movement.

Table 02: Value of Algeria's Crude Oil Exports and Their Prices During the Period 2009-2022

Year	Average Price per Barrel (USD)	Value of Petroleum Exports (Billion USD)
2009	61	21.497
2010	77.4	28.089
2011	107.5	37.289
2012	109.5	34.662
2013	105.9	29.807
2014	96.3	26.976
2015	49.5	13.661
2016	40.7	11.352
2017	52.5	12.478
2018	69.8	15.9
2019	64	13.6
2020	41.5	5.5
2021	69.9	12.4
2022	100.1	21.3

Source: Arab Monetary Fund, *Unified Arab Economic Report*, various issues, 2010-2024.

This table starkly illustrates the direct and strong positive correlation between average crude oil prices and the value of Algeria's petroleum exports. When oil prices were high in the early part of the period (2011-2014, peaking above \$100/barrel), export values were also at their peak, ranging from approximately \$27 billion to over \$37 billion. As oil prices collapsed in 2015-2016 (falling to around \$40-50/barrel), the value of exports plummeted proportionally, reaching lows of \$11-13 billion. A slight price recovery in the following years saw a modest increase in export value. The drop in 2020 to \$5.5 billion highlights the combined impact of a price dip and possibly reduced demand/production linked to the global context (e.g., the pandemic). The strong rebound in prices to \$100.1/barrel in 2022 led to a significant jump in export value to \$21.3 billion, though still below the pre-2014 highs despite a similar price level (likely due to lower production volumes compared to the earlier period). This table is key evidence for Algeria's economic vulnerability stemming from its reliance on hydrocarbon exports.

Third: Impacts of Oil Prices on Gross Domestic Product (GDP)

Table 03 juxtaposes Algeria's nominal Gross Domestic Product (GDP) in billions of dollars with the average oil price per barrel for each year, allowing for a visual comparison of their trends.

Table 03: Comparison of Gross Domestic Product with Oil Prices During the Period 2009-2022

Year	Average Oil Price (USD/Barrel)	Gross Domestic Product (Billion USD)
2009	61	137.21
2010	77.4	161.21
2011	107.5	200.02
2012	109.5	209.06
2013	105.9	209.75
2014	96.3	213.81
2015	49.5	165.87
2016	40.7	159.05
2017	52.5	170.37
2018	69.8	174.8
2019	64	193.4
2020	41.5	164.8
2021	69.9	186.2
2022	100.1	225.1

Source: International Monetary Fund.

Table 03 illustrates the close relationship between average oil prices and Algeria's nominal GDP. During the period of high oil prices (2011-2014), Algeria's GDP showed robust growth, reaching a peak of over \$213 billion in 2014. The sharp decline in oil prices in 2015-2016 coincided with a significant contraction in GDP, which fell to around \$159-165 billion. Subsequent price recovery in the later years (2017-2019 and 2021-2022) correlated with a gradual recovery and then growth in GDP, reaching over \$225 billion in 2022 when oil prices exceeded \$100. The temporary price slump in 2020 was also reflected in a dip in GDP. This indicates that oil prices are a major determinant of Algeria's nominal GDP trajectory, reflecting the substantial contribution of the hydrocarbon sector and related activities to the national income.

Fourth: Impacts of Oil Prices on the State Budget

The state budget consists of two sides: revenues and expenditures. Petroleum taxation (Jebaya Petrolia) is the most important source of state general revenues. Therefore, it is natural for these revenues to be affected by any change in global oil prices.

Table 04 provides a detailed look at Algeria's state budget figures, including average oil price, government revenues, government expenditures, and the resulting budget balance (deficit or surplus), all measured in billion US dollars for the specified period.

Table 04: Comparison of Algeria's State Budget with Oil Prices During the Period 2009-2022

Year	Average Price per Barrel (USD)	Public Revenues (Billion USD)	Public Expenditures (Billion USD)	Budget Deficit or Surplus (Billion USD)
2009	61	50.603	60.42	-9.816
2010	77.4	59.042	61.904	-2.861
2011	107.5	79.476	82.121	-2.645
2012	109.5	81.743	91.871	-10.129
2013	105.9	76.637	78.685	-1.61
2014	96.3	48.755	86.838	-38.08
2015	49.5	45.315	95.038	-49.723
2016	40.7	45.782	66.664	-20.882
2017	52.5	54.796	64.127	-9.331
2018	69.8	57.8	66.3	-8.5
2019	64	55.3	64.8	-9.5
2020	41.5	44.4	54.4	-10
2021	69.9	48.8	55.04	-6.24
2022	100.1	50.8	69.8	-19

Source: Arab Monetary Fund, *Unified Arab Economic Report*, various issues, 2010-2024.

Table 04 provides compelling evidence of the heavy impact of oil price fluctuations on Algeria's public finances. Public revenues demonstrate a pattern that strongly mirrors the movement of oil prices, confirming the state's dependence on hydrocarbon revenue. Revenues surged during the high-price period (2011-2014) but fell drastically following the price crash in 2014-2016. They remained suppressed even with modest price recovery, indicating a lasting structural revenue challenge or the impact of reduced export volumes. Public expenditures, while not as volatile as revenues, show less direct correlation to yearly oil prices but exhibited significant increases during the high-price era (up to 2015) before undergoing adjustment/reductions in response to lower revenues from 2016 onwards. Critically, the budget balance is *extremely* sensitive to oil prices. Small deficits occurred during higher price periods (2009-2013). The 2014 price drop initiated massive deficits that peaked in 2015 and remained substantial through the lower-price years, slightly improving with price recovery but still registering significant deficits in 2022 despite the high price (\$100.1), suggesting potential structural issues on the expenditure or production/export side. This table clearly illustrates how oil price shocks translate directly into fiscal instability for Algeria.

Fifth: Impacts of Oil Prices on the Balance of Payments

Table 05 presents data comparing Algeria's Balance of Payments (BoP) figures in billions of dollars with the average oil price per barrel over the 2009-2022 period, highlighting their interconnected dynamics.

Table 05: Comparison of Balance of Payments Values with Oil Prices During the Period 2009-2022

Year	Balance of Payments (Billion USD)	Average Price per Barrel (USD)
2009	3.8	61
2010	15.2	77.4
2011	20.19	107.5
2012	12.04	109.5
2013	79.2	105.9
2014	82.1	96.3
2015	70	49.5
2016	-26.03	40.7
2017	-21.7	52.5
2018	-15.8	69.8
2019	-16.9	64
2020	-16.3	41.5
2021	-1.66	69.9
2022	18.4	100.1

Source: Arab Monetary Fund, *Unified Arab Economic Report*, various issues, 2010-2023.

(Note: The first two rows (2009, 2010) show a different column order and potentially inaccurate Balance of Payments data according to the rest of the table. The negative values start from 2016.)

Table 05 presents the relationship between average oil prices and Algeria's balance of payments (BoP). Following the significant decline in oil prices after 2014, Algeria experienced consecutive large BoP deficits, starting with -26.03 billion USD in 2016 when the average price was lowest (\$40.7). These deficits persisted through 2021, even as oil prices recovered somewhat, fluctuating between -15.8 and -21.7 billion USD (with -16.3 billion USD in 2020 correlating with the price dip that year) before narrowing to -1.66 billion USD in 2021. With the significant price recovery to \$100.1 per barrel in 2022, the balance of payments swung back into a surplus of 18.4 billion USD. While data for the early years of the table show large positive figures (potentially reflecting reserve accumulation periods during earlier high prices rather than the yearly *balance*), the deficit period (2016-2021) clearly demonstrates the high sensitivity of Algeria's external accounts to low oil prices, depleting foreign currency inflows and causing

external imbalances. The recovery to a surplus in 2022 directly links to the rebound in oil export revenues, reinforcing the dependency.

Sixth: Impacts of Oil Prices on the Value of Foreign Reserves

Table 06 displays Algeria's foreign currency reserves in billions of dollars along with their year-on-year growth rate for the period 2009-2022. This data reflects the country's ability to build and maintain external financial buffers, which are heavily influenced by hydrocarbon revenues.

Table 06: Value of Algeria's Foreign Reserves During the Period 2009-2022

Year	Foreign Reserves (Billion USD)	Growth Rate (%)
2009	149.04	4.04
2010	162.61	9.10
2011	182.82	12.42
2012	191.29	4.63
2013	194.61	1.73
2014	179.16	(7.93)
2015	144.67	(19.25)
2016	109.31	(24.44)
2017	97.61	(10.7)
2018	78.63	(19.44)
2019	61.51	(21.78)
2020	46.87	(23.8)
2021	41.38	(11.7)
2022	56.75	37.15

Source: Arab Monetary Fund, Unified Arab Economic Report, various issues, 2010-2024.

Analysis of Table 06: Table 06 vividly demonstrates the consequence of oil price vulnerability on Algeria's financial buffers. Foreign exchange reserves steadily accumulated during the period of high oil prices, reaching a peak of 194.61 billion USD in 2013. However, following the collapse in oil prices from 2014 onwards, these reserves entered a period of sharp decline. The growth rate turned significantly negative from 2014, reaching peak declines of over 24% in 2016. This depletion continued dramatically year after year, reaching a low point of 41.38 billion USD in 2021. The high oil prices of 2022 finally reversed this trend, showing a positive growth rate of 37.15% and increasing reserves to 56.75 billion USD. This pattern directly reflects the use of reserves to finance persistent budget and balance of payments deficits during the low oil price environment. The table highlights the direct link between oil revenues, external balances, and the crucial foreign reserve buffer, underscoring the depletion of this buffer during downturns

and its partial replenishment during booms, but illustrating its structural vulnerability to prolonged periods of low oil prices.

Conclusion

In this study, we explored the impact of changes in global oil prices on the Algerian economy by analyzing prices and comparing them with Gross Domestic Product, the state budget, the balance of payments, and foreign currency reserves. It is clear from the preceding analysis that the decrease in oil prices significantly impacts these indicators, leaving the characteristic of a rentier economy associated with the Algerian economy since the nationalization of oil.

Findings and Conclusions:

1. The decline in oil prices harms the Algerian economy and increases its budget deficit, especially since the economy depends on over 90% of its revenues from oil exports.
2. The successive increase in global oil prices from the beginning of the third millennium until 2014 prompted Algeria to adopt an expansionary policy that directly led to an increase in public expenditures. This exacerbated the crisis's severity and directly impacted the state budget, as figures revealed the significant deficit recorded in this budget, which peaked at about 49.72 billion dollars in 2015.
3. Due to the chronic deficit in the state budget, Algeria's foreign exchange reserves dwindled. After more than a decade during which they peaked at an estimated 194.61 billion dollars, these reserves halved within just three years, reaching 97.3 billion dollars in 2017.
4. By tracing the general trend of public expenditures, it is clear that Algeria is attempting to reduce them as much as possible. Even though oil prices rose in 2017, the government was able to reduce its public expenditures by approximately 2.537 billion dollars despite the rise in oil prices from 40.7 to 52.5 dollars per barrel.
5. Despite the policies and plans pursued by the Algerian government to diversify its economy, until 2017, Algeria's exports remained significantly linked to global oil prices. This can be observed through the consecutive deficits in its balance of payments during the last five years of the study period.
6. Based on the preceding points, it can be concluded that global oil prices are the main determinant of all the indicators that were examined (Gross Domestic Product, the state budget, the balance of payments, and foreign reserves).

Recommendations:

The necessary solution to avoid crises resulting from sudden declines in oil prices is to diversify the Algerian economy and promote other sectors (agriculture, industry, tourism, etc.), especially since Algeria possesses natural and human capabilities and other resources that enable it to achieve comprehensive development through diversification and economic promotion.

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