

The impact of the collapse of oil prices in mid-2014 on Algeria's foreign trade

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Abstract:

The study aims to analyze and discuss the impact of the oil shock of mid-2014 on foreign trade in Algeria as one of oil exporters countries . and analysis the most important reasons leading to the collapse of oil prices, then discussing both sides of supply and demand in the international petroleum market , finally the study try to appear how the Algerian exports and imports structure is affected by the low oil prices.

key words: oil price, oil demand, oil supply, Algerian trade balance

JEL Classification: E3, E32, F02, F10

Introduction:

The economic environment in the Middle East, North Africa and Central Asia has undergone major changes as a result of the sharp drop in oil prices and slowing growth in the euro area, China, Japan and Russia. Where appropriate policy responses to these changes depend on whether the country is an exporter or importer of oil. Where lower oil prices have weakened the external and fiscal balances of oil-exporting countries, including Algeria. Oil-exporting countries should deal cautiously with the decline in oil prices as a very permanent reduction, and adjust their fiscal control plans over the medium term to prevent a significant reduction in their reserves and ensure intergenerational justice.

The low price of a barrel of oil in world markets by 55% in 2014 divided the world into three categories; producing and reassuring countries dealing with the emerging

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crisis calmly and confidently as Saudi Arabia and the UAE, and producer countries but worried like Iran, sees prices fall to less than half a conspiracy on Their economies, and the third group of consuming and benefit-consuming countries such as the United States and China. The reasons for the collapse were linked to the weakening of global demand for this vital commodity, as well as increased production, in conjunction with the surge of US rock oil. However, there is a consensus that there are other reasons behind the complex political economic phenomenon, and some countries believe that the decline is not due to economic considerations, but political.

1. literature review :

The shock of the collapse of oil prices in 2014-2016 is one of the most severe shocks in history, as Grigoli et al says in a study of the IMF (2017), a test of the ability of oil exporters to withstand. Where The study examined the economic factors affecting the collapse of oil prices, which explain the impact on the economic growth of the oil-exporting countries, and the choice of economic policies that mitigate the negative effects. The study found that the impact of the shock varies from state to state. Stronger Mali (high foreign exchange reserves, more diversified export base, history of price stability, more flexible exchange rate regime).

Kitous et al (2016) describes the importance of oil to its exporting countries, analyzes the potential economic effects of the collapse of oil prices, examines the most important reasons for the collapse of oil prices, and uses the analysis of statistics to show the exposure of major oil-exporting countries to the collapse of oil prices. The study concluded that GDP Government revenues are closely linked to oil prices. The study also analyzed the macroeconomic impact of the low oil price using the GEM-E3 model. Which is a presentation of changes in the oil market over the past two years, and the results showed that the decline in oil prices have different effects in the oil-exporting countries, depending on the strength of the link of exports to oil, the decline of oil prices by 60% in the economy of South Africa leads to a decline in the level Economic growth is 8.5%.

According to Gonzalo (2016), the collapse of global oil and natural gas prices has hit the Algerian economy at a time when the security situation in North Africa is deteriorating, raising concerns about OPEC's ability to cope with the resulting economic, political and security shocks. And the catastrophic events witnessed by the country during the collapse of oil prices in (1986-1988), The study shows that Algeria's future in the field of security and energy is of great importance as it is strategically located in the western Mediterranean, Africa's largest natural gas producer and the number two exporter of natural gas to Europe and a major oil supplier. The study touched on the extent to which oil prices can be reduced in creating an environment for economic and political reforms.

In a study of Hussein (2016) on the implications of the collapse of oil prices on the GCC, the causes of the collapse was linked to weak global demand for this vital commodity, as well as increased production, in conjunction with the surge of US rock oil. However, there is a consensus that there are other reasons behind the complex political economic phenomenon, and there are countries like Iran that believe that the decline is not due to economic considerations, but political.

The report by Vrontisi et al (2015) describes the importance of oil to the EU economy and analyzes the potential effects of falling prices in mid-2014, as well as the development of oil prices up to 2020 and the consequences of global oil consumption. He pointed out that the decline in oil prices from \$ 100 a barrel to \$ 50 achieved gains in GDP by about 0.7% at the level of the European Union, indicating that global gains are not distributed equally, while losing the oil-exporting countries earn the importing countries. He also pointed out that the decline in oil prices could generate up to 3 million additional jobs, in addition to the sectors that are rich in oil consumption will improve their competitiveness.

2. Reasons for the deterioration of oil prices:

Opinions on the deterioration of oil prices and the motives of OPEC's decision not to reduce its production have been divided into two parts. The first is that the reason is a Saudi-US agreement to reduce oil prices in order to pressure Russia and Iran rather than maintain markets.(Arab Center for Research and Policy Studies, 2015, p03), on the other hand, OPEC's decision is to preserve markets and prevent other sources of energy, such as oil and shale gas, whose production has grown over the past years because of high prices, which is OPEC's justification for not cutting production. In general, the main reasons for the decline in oil prices can be summarized as follows:

- Oil, like the currency, has two sides: the first is economic and the second is political. OPEC's decision not to reduce production by 2 million barrels per day to absorb the excess supply in the market has made it lose the opportunity for both Russia and Brazil to reduce their production by 500,000 to 300,000 barrels. To bring prices back to their old equilibrium levels.
- The slight decline in the growth rates of China and the EU does not lead to this significant decline in oil prices. The global economy has faced more difficult economic conditions. However, prices have not fallen so sharply; OPEC has accelerated to reduce production to achieve price equilibrium
- Recent developments in oil prices are similar only to the fall of 1986, which lasted about 15 years, due to the presence of new discoveries, especially the development of other oil sources, especially in America, whose production increased from 5 to 9 million barrels per day.
- Oil market surplus due to economic slowdown, high efficiency of oil use, resumption of production of Iraq and Libya, and increasing production of sand oil
- The doubling of US production, the rise in Canadian and Iraqi oil production, the continued production of Russians, slow growth in several regions of the world, and the upgrading of cars, which means a drop in demand for fuel, are all factors behind the fall in prices.
- Strategic oil storage, which reached its highest level in the United States and China, which announced its intention to expand storage operations to become sufficient for 90 days instead of 60.
- The continued increase in the production of shale oil, organic oil and technological development, which reduces the costs of producing other energy sources, and the continued strength of the dollar, which affects the purchasing power of developing countries.
- The production and export of oil from Iraqi Kurdistan, which does not know the size of what produces and exports accurately

- The development process stopped in a number of countries such as Iraq, Syria, Yemen and Libya, which led to weak oil consumption in these countries.

3. Oil price determinants:

The study will try to focus on the most important factors affecting oil prices, both sides of supply and demand petroleum.

3.1. Petroleum demand

The world's oil demand is based on the United States of America, which accounts for a quarter of the world demand, according to the International Energy Agency, followed by China at 9%, followed by Japan at 6% of world demand. This clearly shows the relationship between economic development and oil demand; Table 1 shows the evolution of global oil demand during the period 2011-2015 by region and the share of each region of world demand according to the statistics of 2016.

Table 1. Evolution of global oil demand during 2011-2015.

Million barrels a day

Years Countries	2011	2012	2013	2014	2015	Percentage of global demand for the year 2015 (%)
Usa	18.95	18.49	18.96	19.10	19.40	20.86
Canada	2.36	2.40	2.37	2.40	2.34	2.52
Australia	1.04	1.05	1.06	1.06	1.06	1.14
New Zealand	0.15	0.15	0.15	0.16	0.16	0.17
Japan	4.44	4.70	4.56	4.35	4.19	4.51
South Korea	2.26	2.32	2.33	2.34	2.45	2.63
France	1.78	1.74	1.71	1.65	1.65	1.77
Germany	2.39	2.39	2.44	2.40	2.39	2.57
Italy	1.49	1.37	1.26	1.22	1.30	1.40
Britain	1.58	1.53	1.50	1.52	1.54	1.66
Russia	3.28	3.32	3.38	3.46	3.43	3.69
China	9.41	9.74	10.07	10.46	10.83	11.65
other countries	39.13	46.36	40.68	41.32	42.24	45.43
Global demand	88.26	89.10	90.47	91.44	92.98	100

Source: Annual Statistical Report of OPEC, 2016, p. 42.

Factors affecting demand for petroleum include:

- The rate of economic growth and the degree of industrial progress in the world
- The price of crude oil and the prices of refined petroleum products
- The price of alternative energy materials such as gas and coal
- Political unrest in the world
- High population
- Climate change

3.2. Petroleum supply:

The oil supply is a response to what consumers demand at prevailing market prices. The most important factors affecting supply in the modern petroleum market are:

- Increasing the production of rock and sand fuels by 4 million barrels per day in world production in the United States since 2008
- The return of production in some areas of political turmoil in the Middle East, such as Iraq.
- Change in OPEC strategy towards quota retention, which made prices closer to competitive prices.

Table 2 . Evolution of the world oil supply during 2011-2015

Regions / Years	2011	2012	2013	2014	2015
total OECD	20.170	21.073	22.235	24.202	25.232
Including the United States	9.022	10.022	11.232	12.960	13.987
Outside the OECD	56.946	57.647	59.197	61.665	63.274
Including the OPEC	30.915	33.188	32.331	31.380	32.315
World supply	77.116	78.720	81.432	85.867	88.506

Source: Annual Statistical Report of OPEC, 2016, pp. 28 and 29.

The global oil supply is determined by a number of variables, the most important of which is the demand for oil and the future expectations of prices, as determined by the oil reserves and exploration operations, as well as the high profits in the petroleum industry. It is also determined by the policy of the oil producing countries and the extent of their need for oil to meet domestic consumption. To meet the needs of future generations

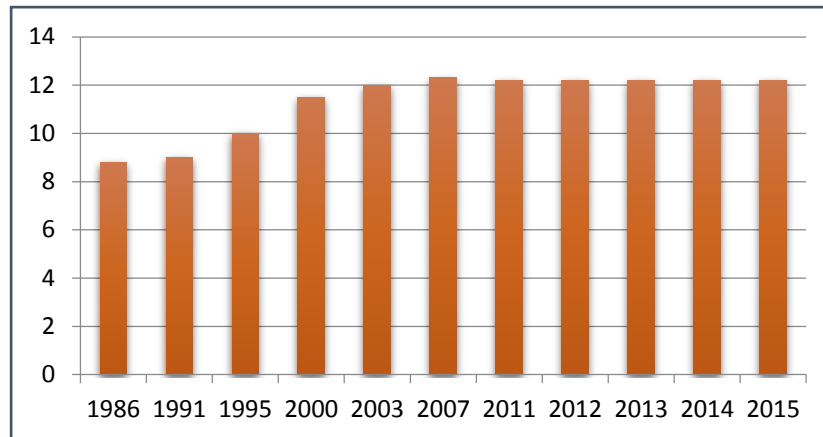
Table 3. Top 10 oil producers in the world in 2014

The country	Million barrels per day
United State	11644
Saudi	11505
Russia	10838
Canada	4292
China	4246
United Arab Emirates	3712
Iran	3614
Iraq	3285
Kuwait	3123
Mexico	2784

Source: BP Statistical Review of World Energy June 2015; Information Presented In The 2015. BP Statistical Review World Energy , Accessed on December 6, 2015

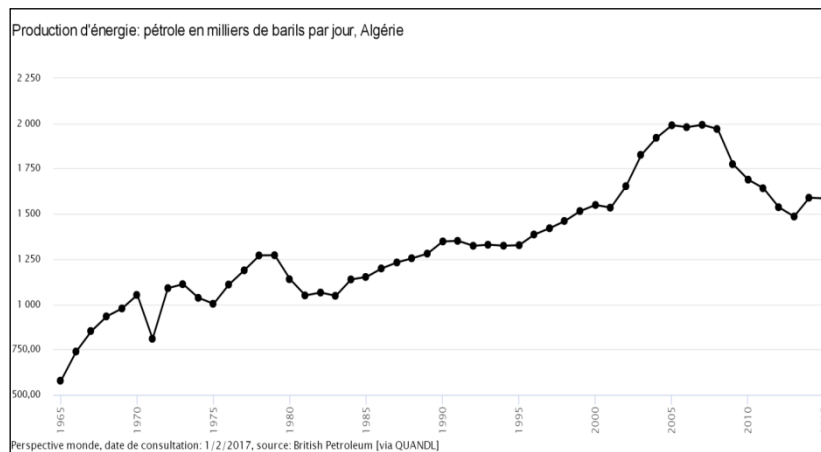
4. Algeria's oil capacities:

Algeria ranks 17th in the world according to the statistics of the British Petroleum Company in terms of oil reserves (12.2 billion barrels) at the rate of 0.7% of the world reserves and the tenth in the world in terms of natural gas reserves (4500 billion cubic meters) 2.4% of the world reserve.

Figure 1. Development of the Petroleum Reserve in ALGERIA

Source: Annual Report of OPEC, 2016.

Algeria ranks 18th in the world and third African in oil production. The total production reached about 2 million barrels per day in 2007. This production gradually fell to 1.6 million barrels per day in 2015 due to lower prices in world markets. After the agreement signed in September 2016 in Algeria between members of the OPEC and the countries outside the Organization, which provides for the reduction of production so that prices rise at the level of world production.

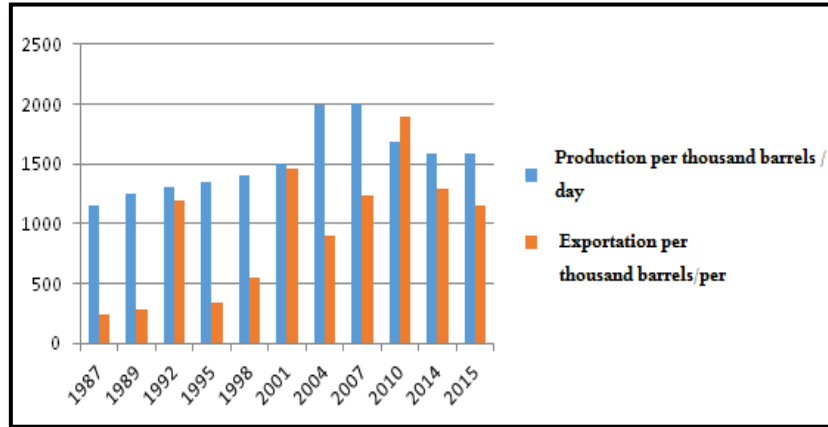
Figure 2. Evolution of daily oil production in Algeria from 1965 to 2015.

Source: British Petroleum website, accessed on 01/02/2017.

5. Algeria Export capacity:

It is clear from the figure that the production of oil and exports of Algerian oil has achieved a qualitative and increasing development due to the entry of new fields into service and the increase in global demand.

Figure 3. Development of oil production and export capacity in Algeria

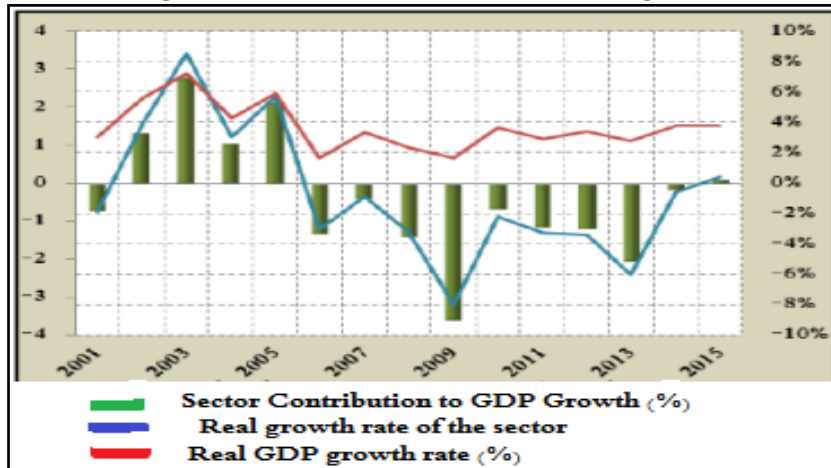


Source: Annual Report of OPEC, 2016.

6. Algerian fuel and exports sector:

Only 18.9% of the flow of wealth (GDP) is produced by hydrocarbons, compared to 27% in 2014. Among the sectors, the hydrocarbons sector contributes the lowest rate (2.9% versus 4.7% in the previous year).

Figure 4. Fuel sector contribution to GDP growth

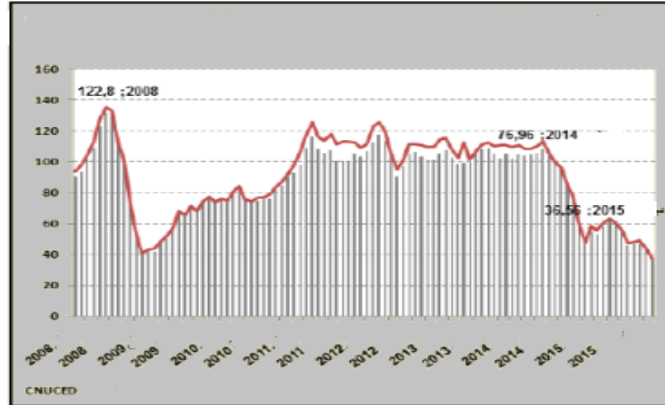


Source: Bank of Algeria Report, 2016, p36

The weak growth recovery in developed countries and the slowdown in emerging and developing countries led to a decline in the growth of global production in 2015, leaving a weakening of demand for fuel in exchange for a surplus in supply. Consequently, the oil price fell by 47.1%. The decline in the

prices and quantities of exports of liquid and gaseous fuels, Resulted in a 43.3% drop in export earnings to \$ 33.08 billion.

Figure 5. Evolution of oil prices



Source: Bank of Algeria Report, 2016, p. 37

According to World Bank data, Algeria has lost \$ 3.8 billion in 2014, rising to \$ 21.6 billion in 2015, but it is expected to achieve \$ 1.6 billion in 2016.

Table 4. Algeria's production and consumption gains and losses due to lower oil prices

ALGERIA	Relative importance		Gains (+) and losses (-) in billions of dollars								
	Production	Consumption	2014 compared to 2013			2015 compared to 2014			2016 compared to 2015		
	2014	2013	Production	Consumption	Net	Production	Consumption	Net	Production	Consumption	Net
	0.02	0.00	4.9	1.1	3.8	-27.9	6.3	-21.6	2.1	-0.5	1.6

Source: Arab Center for Research and Policy Studies, (2015), Implications of the decline in oil prices on exporting countries, p. 70

7. The trade balance situation under the oil shock:

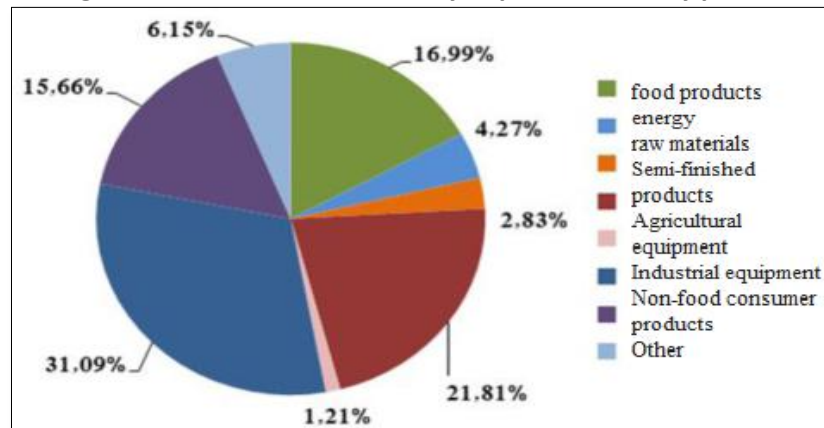
Current account record surplus for 15 consecutive years due to the rise in oil prices in the international markets .In 2014, he recorded his first deficit since 1998. These surpluses have helped a steady accumulation of exchange reserves, which reached a record high of 194.0 billion dollars at the end of 2013, such as more than 35 months of imports of goods and services. However, the low diversification of exports of non-hydrocarbon goods and the increasing pace of imports of goods and services are the most important weakness of the balance of payments in Algeria During the period (2000 - 20014), hydrocarbon exports accounted for about 98% of the total exports of goods. At the same time, the increasing pace of imports of goods and services, which began in 2004 with a sharp acceleration from 2008, led to an increase in imports to \$ 71.4 billion in 2014, more than six (06) times the level in 2000 (\$ 11.71 billion).

Throughout the year 2015, the price of oil in the international market, which began in the second half of 2014, continued to decline. The average annual price per barrel of crude oil dropped from \$ 100.23 per barrel in 2014 to \$ 53.07 per barrel in 2015, a decrease of 47.1 per cent. The six-party oil price developments highlight this continuing downward trend, with very low price levels during the second half of 2015.

For the first time in several years, the monthly average price of oil in December 2015 fell to less than \$ 40 per barrel (\$ 37.41 per barrel), which has led to a significant decline in the value of exports of fuel compared with those recorded in 2014. The report of the Bank of Algeria 2016, that the value of exports of hydrocarbons in 2015 recorded a level of 27.4% lower than that recorded in 2005, despite the convergence of oil prices during these two years, reflecting the sharp decline in the quantities of fuel exported during the last decade.

Exports of non-hydrocarbon goods remain structurally weak. After rising from 2013 to 2014, they fell by \$ 1.48 billion in 2015 from \$ 1.67 billion. After more than 18 years of uninterrupted growth, imports of goods fell sharply in 2015, to \$ 52.65 billion, down \$ 7.02 billion. This decline in imports has been attributed to all categories of products, but at different levels.

Figure 6. Structure of commodity imports in 2015 by product



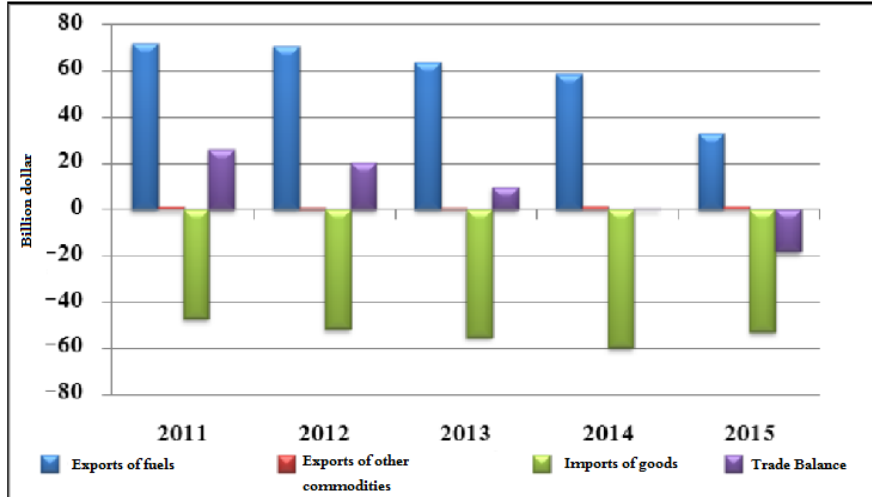
Source: Bank of Algeria Report, 2016, p62

A study of the structure of commodity imports by product category indicates that industrial processing products, semi-finished products, food products and non-food consumer products account for approximately 83% of the decline in imports. (Bank of Algeria, 2016, p. 61). The country's economic policies starting in 2015, aimed at containing the excessive rise in imports, have contributed to a decline in their level. These policies include the framing of imports, and the Bank of Algeria has also enhanced the creditworthiness requirements of the importer for the purpose of bank settlement. As well as reducing the proportion of precautionary capital of banks compared to their obligations in terms of foreign trade and intensified control of foreign trade transactions directly at the level of bank branches.

The oil price shock was so severe that the balance of trade balance hit its first deficit after more than 18 years of consecutive surpluses. The balance of trade

balance from the quasi-balance of 2014 (\$ 459 million) moved to a deficit of \$ 18.08 billion in 2015.

Figure 7. Trade Balance Developments (2011-2015)



Source: Bank of Algeria Report, 2016, p. 63

The trade balance deficit refers to:

- The continued dominance of the hydrocarbons sector over Algerian exports, despite numerous attempts to promote exports outside hydrocarbons.
- The increase in the volume of imports from year to year, especially the value of imports of foodstuffs relative to the total imports, can be attributed to two main points; the increasing population, and the weakness of the agricultural sector and its inability to meet the increasing needs
- As well as processing goods, which account for a large proportion of imports, which explains the attempts to rehabilitate the industrial sector, as well as the intensity of national investments in building the country's infrastructure under the economic recovery program.

Table 5. Development of Algerian Exports and Imports (2000 - 2016).
billion dollars

Years	Exports	Imports	Trade balance
2000	22.03	9.17	12.85
2001	19.13	9.94	9.19
2002	18.82	12.01	6.81
2003	24.61	13.53	11.08
2004	32.08	18.31	13.77
2005	46.00	20.35	25.65
2006	54.61	21.45	33.16
2007	60.16	27.63	32.53
2008	79.30	39.48	39.82
2009	45.19	39.29	5.90
2010	57.05	40.47	16.58
2011	73.39	46.45	26.93
2012	71.87	50.38	21.49
2013	64.97	55.03	9.94
2014	62.89	58.58	4.31

2015	34.67	51.70	-17.03
2016	28.88	46.72	-17.84

Source: Annual reports of the Algerian Customs issued in 2010, 2014 and 2016.

Conclusion:

Economic analysts say Algeria is a more consuming country than a producer, with an economy entirely dependent on oil and gas. The shock of falling prices requires a change in development policies and an urgent austerity program. They see the problem as a lack of a comprehensive strategy to ensure the development of new wealth production in industry, agriculture and services (Arab Center for Research and Policy Studies, 2015).

Thus, large workshops should be launched to regulate and improve the business climate, including public-private partnerships, bureaucratic restraints that have always been the focus of national and foreign investors, support and assistance to SMEs and increase their competitiveness as a substitute for domestic production. On the other hand, carry out deep economic and social reforms, which may gradually liberalize the economy from dependence on oil, and aim to rationalize expenditures while maintaining important public investments in infrastructure

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