
THE ALGERIAN ECONOMY BETWEEN CRISES AND REFORMS: EXPLORING SOME INDICATORS.

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Abstract:

The main objective of this paper is to describe and analyze some aspects of the Algerian economy from 2014 to 2020. We take on consideration the sharp decreasing of oil prices since the second half of 2014, the deep political change since 2019, and COVID 19 pandemic. To achieve this objective, we use mainly IMF country reports. Based on these reports, we found that the Algerian monetary and economic situation is strongly linked to oil and gas prices. This “Dutch disease” phenomenon seems affecting the Algerian economy profoundly. We recommend some important reforms that help to overtake these negative effects, and solve that perpetual cyclic problem that characterizes the Algerian economy.

Keywords: Algerian Economy; Reforms; IMF Reports; Dutch Disease; COVID 19.

JEL Classification Codes : E5, E6.

L'objectif de cet article est de décrire et d'analyser certains aspects de l'économie algérienne entre 2014 et 2020. Nous prenons en considération la baisse importante des prix du pétrole depuis le second semestre de 2014, le profond changement politique depuis 2019 et la pandémie de COVID 19. Pour atteindre cet objectif, nous utilisons principalement les rapports pays du FMI. Par conséquent, nous avons constaté que la situation monétaire et économique algérienne est fortement liée aux prix des hydrocarbures. Ce phénomène de «syndrome hollandais» semble affecter profondément l'économie algérienne.

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Nous recommandons quelques réformes qui peuvent atténuer ces effets négatifs et à résoudre ce problème cyclique perpétuel qui caractérise l'économie algérienne.

Mots clés : Économie algérienne ; réformes ; rapports du FMI ; syndrome hollandais ; COVID 19.

Code de classification Jel: E5, E6.

1- Introduction

With a Brent barrel around 55 USD since the last quarter of 2014, political deep change since February 2019 “Harak”, followed by corruption crackdown, which is finished by jailing some powerful men from the former president ABDELAZIZ BOUTEFLIKA era, which last around 20 years and consume about trillion USD. COVID 19 lockdown impact since Mars 2020 will not be the final episode of all these crises. The very simple structure of the Algerian economy is the most complicated problem since the 70's of the last millennium. It was always exporting oil and gas and importing almost everything. After more than 30 years of the famous reforms of 1988, which was the second major reforms in the same decade (the restructurings of 1982 were the first), absolutely, nothing is changed! Algeria today is in the same departing point! And this time the population is doubled, the society is profoundly mutated, but the problem still always the same!

Algeria, as many other oil-exporting countries, has suffered for decades from the Dutch disease (دقيش & دربال, 2015), the syndrome, which affects the economies that have only one exporting sector. This phenomenon is always linked to the fluctuations of oil and gas prices, the main exports of Algeria.

Since 2014, a huge decline of oil prices has stroked the Algerian economy that is overly dominated by oil and gas exports. Algeria's growth model, based on the reallocation of oil and gas revenues by a large public sector, has always needed a fundamental transformation before the second sharp decline of oil prices in 2015 (the first was in 1986). Furthermore, proven hydrocarbons reserves (except shale gas) are expected to last about 62 years (calculation based on BP Statistical Review, 2019). These facts require urgent measures to diversify economy and exports with the minimum costs.

Facing the crisis of oil lower prices, and until 2016, the major response of the financial decision makers in Algeria was the depreciation of DA exchange rate, and withdrawing on RRF to sustain spending. In addition, they have initiated a long-term scheme to reform the growth model (The New Growth Model), taking some measures to improve the business environment, restructuring energy subventions, and introducing new tools of monetary policy. Moreover, adopting an expansionary budget for 2018 was another solution aimed to support public investment without resorting to foreign debt or depreciating the exchange rate at a faster pace; the government continues using non-conventional monetary policy (money printing) and imposes imports new barriers.

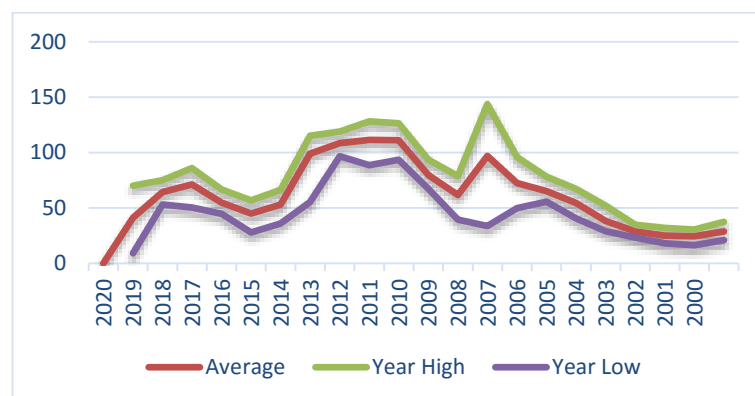
In this paper, we try to deal with the issue that links the sharp decline of oil prices to the Algerian growth model with regard to his implications at the macroeconomic, financial, and monetary levels since 2014. In addition, we try to analyze the impact of COVID 19 on the same levels that we have just mentioned.

To well examine the issue and provide a reliable answer to the previous question, this paper is outlined into six sections; it deals first with some economic and macroeconomic indicators, it then presents some fiscal and financial indicators, monetary indicators are the objective of the next section of this study. Finally, the last section emphasizes on some reforms that are needed to stabilize the economy, and to promote a more diversified economy.

2- The Algerian Economy: Some Indicators

In this section, and in order to summarize the situation of the Algerian economy since the last World Financial Crisis, we try to use some indicators as competitiveness, corruption, doing business...etc. This period was characterized by three major shocks. The first hit was in 2008 when the average Brent prices dropped to 61.74 US dollars, this fall was due to the World Financial Crisis and its impact on the real economic sphere. The second critical point was in 2015, when the price of Brent touched 27.88 US dollars, which is the lowest price since December 2003. The year 2019 has witnessed a Brent price less than 10 US dollars, a price never seen since 1999. The chart below shows the variation of the Brent prices from January 2000 to September 2020.

Figure N°1: Brent Crude - Historical Annual Data (USD per Barrel).

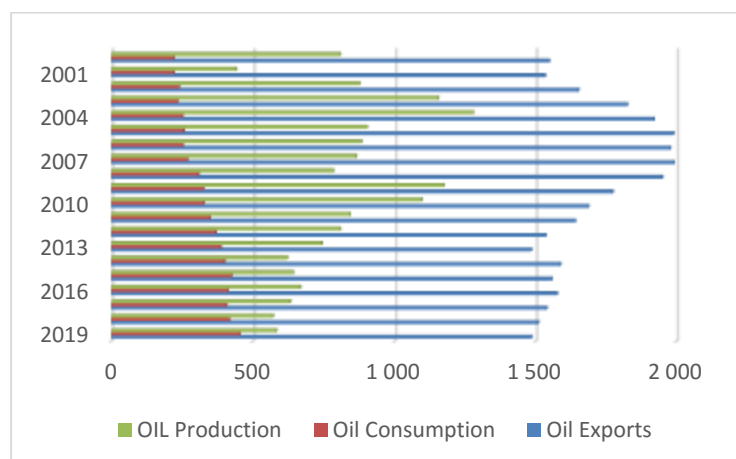


Source : <https://www.macrotrends.net/2480/brent-crude-oil-prices-10-year-daily-chart>.

BP Statistical Review of World Energy, 67th edition, June 2018.

Figure two below displays that oil exports decreased due to a drop-in production since 2007. It illustrates also the Algerian Oil Production, Consumption, and Exports (barrels per day) between 2000 and 2019.

Figure N°2: Oil Production, Consumption and Exports in Algeria from 2000 to 2019 (Barrels per Day)



Source : <https://www.ceicdata.com>

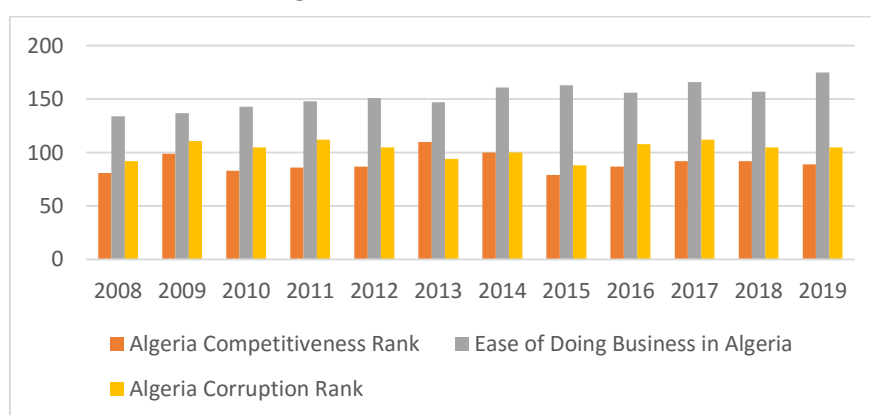
https://www.theglobaleconomy.com/Algeria/oil_consumption/

<https://www.statista.com/search/?q=algeria+oil+production>

Algeria is ranked 157 among 190 economies in the ease of doing business, according to the World Bank annual ratings. The rank of Algeria remained unchanged at 157 in 2019 from 157 in 2018.

Algeria is also ranked 89 among 140 countries ranked in the 2018 version of the Global Competitiveness Report published by the World Economic Forum, and the 106 least corrupt nation out of 180 countries, according to the 2019 Corruption Perceptions Index of Transparency International. Figure N° 3 below gives more details from 2008 to 2019.

Figure N°3: The Ranking of Algeria in Competitiveness, Corruption and Doing Business from 2008 to 2019.



Source: <https://tradingeconomics.com/algeria>, WEF, WB, TI.

3- Macroeconomic Indicators

This section will survey the deep inclusive impact of hydrocarbons sector on the macroeconomic level of the Algerian economy, so we will inspect some selective macroeconomic indicators.

According to World Bank statistics, the Algerian GDP growth reached 1.5% in 2018, compared to 1.4% in 2017, and was sustained around the same level (1.5%) in Q1-2019. Due to the global economy stagnation, growth in the hydrocarbon sector was sluggish, with shrinking economic activity by 6.5% and 7.7% in 2018 and Q1-2019, respectively. Non-hydrocarbon growth was increased by 3.4% and 3.9% in 2018 and Q1-2019. On the other hand, other sectors as commercial services, industrial, construction and public works, and agriculture continue to drive non-hydrocarbon growth, reaching 5.6%, 4.6%, 3% and 2.7% in Q1-2019, respectively.

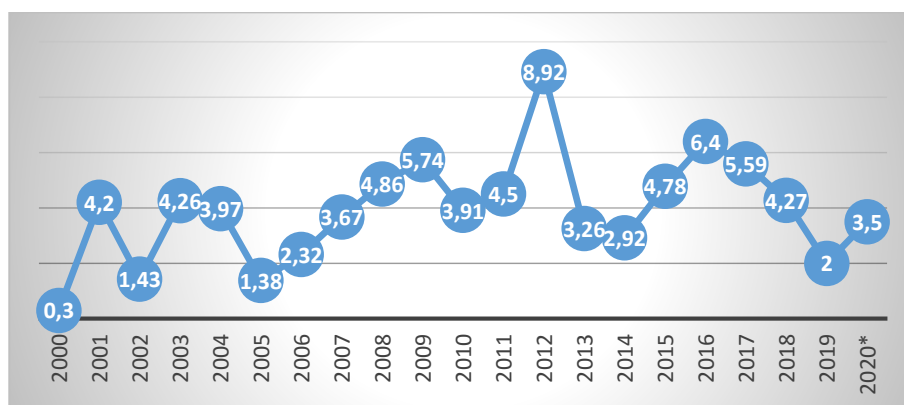
Table N° 1: GDP, Oil Real GDP, Non-Oil Real GDP Growth in Constant Prices and Breakeven Fiscal Oil Price for Algeria

Year	GDP	Non-Oil Real GDP Growth in Constant Prices for Algeria	Oil Real GDP Growth in Constant Prices for Algeria	Breakeven Fiscal Oil Price for Algeria
2007	134.98	6.96	-0.90	75.78
2008	171	6.68	-3.20	80.08
2009	137.21	9.59	-8.00	83.77
2010	161.21	6.25	-2.20	108.41
2011	200	6.1	-3.30	122.85
2012	209.1	7.2	-3.40	108.14
2013	209.8	7.3	-6.00	135.33
2014	213.8	5.6	-0.60	106.83
2015	166	5	0.20	102.51
2016	160	2.2	7.70	91.39
2017	167.39	2.1	-2.40	101.37
2018	173.76	3.3	-6.40	104.64
2019	169.99	2.5	-5.51	157.23

Source: <https://alfred.stlouisfed.org>

The Table above shows that total Non-Oil Real GDP growth rate has reduced since 2014 due to a significant contraction in hydrocarbon sector revenues (production and prices); which affected the public spending, the most important source of GDP growth. However, hydrocarbon GDP has fluctuated due to different reasons. Furthermore, Oil Real GDP Growth was negative in almost all the period except 2016. The Breakeven Fiscal Oil Price shows that Algerian economy structure needs always a barrel above 100 US Dollar, which confirms the importance of deep economic and fiscal reforms.

A closer view to the structure of the Non-hydrocarbon growth, in some selected years, demonstrates that non-government services has represented always an important share, and construction and agriculture have played also a significant role in Non-Hydrocarbon growth. Non-hydrocarbon growth was strengthened in the last two quarters of 2017 by construction and manufacturing. (DERBAL, SEDDI, & AMER SAID, 2019).

Figure N° 4: Inflation Rate from 2000 to 2020.

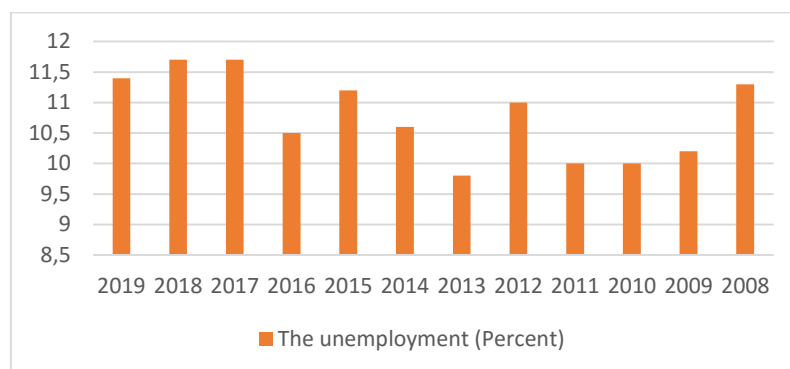
Source: <https://www.statista.com/statistics/439788/inflation-rate-in-algeria/>

The inflation rate in Algeria moved over the past 20 years between 0.3% in 2000 and 8.92 % in 2012. For 2019, an inflation rate about 2.0% was observed. During the period from 2000 to 2019, the average inflation rate was 3.92% per year. Overall, the price increase was 78.33 %. An item that cost 100 Dinar in 2000 was so charged to 178.33 DA in the beginning of 2020.

According to the World Bank, the average inflation rate was more severe in the last 40 years, making Algeria one of the very few countries, the price increase is that high. The year 1992 was the worst year of the observed period with a rate of 31.7%. That rate means that prices have been increased by an average of 31.7% compared to the previous year. Comparing to other countries, the extreme price increases are no longer on average, which could be considered as a sign of political and economic turmoil. It is important to note that non-food items inflation receded in 2017, but food prices remained very unstable. In addition, fresh food inflation dropped from about 9 % in 2012 to about 5 % in 2017.

The other macroeconomic variable, which is unemployment still one of the main problems that slows down the performance of the Algerian economy and causes many other complications. According to the IMF reports, unemployment rate increased sharply between 2016 and 2017, especially among young people (IMF, 2018), as figure n°5 below confirms.

Figure N°5: Unemployment (Percent) in Algeria from 2008 to 2019.



Source : <https://knoema.com/atlas/Algeria/Unemployment-rate>

According to ONS, Algeria's Unemployment Rate was 11.4% in 2019, and remained the same at 11.70 % in 2018, from the previously reported number of 11.70 % in 2017. The highest level in the last two decades was 28.80 % in 2000. In the latest reports, Algeria's population reached 43.42 million people in 2019. The country's Labour Force Participation Rate fell to 41.70 % in 2018.

4- Fiscal and Financial Indicators

Algeria, as many other oil-exporting countries, depends strongly on oil and gas taxation, this situation makes the national economy exposed directly to the fluctuation of the international markets, which are related to other geopolitical factors. In the following section, we try to read and analyse some fiscal and financial indicators based on some statistics published by Federal Reserve Bank. Table n ° 2 below shows some of the most important fiscal financial indicators.

Table N° 2: Some Fiscal and Financial Indicators, Percent of GDP, Annual, Not Seasonally Adjusted

Year	Total Expenditure and Net Lending Percent of GDP	Overall Non-Oil Fiscal Balance Percent of GDP	Current Account Balance Percent of GDP	Overall Fiscal Balance Percent of GDP	Non-oil Revenue Percent of GDP	Total Revenue, Excluding Grants, Percent of GDP
2007	34.95	-45.17	22.67	4.89	16.92	39.83

2008	39.35	-53.65	20.15	8.21	18.23	47.57
2009	43.95	-45.45	0.30	-7.15	18.42	36.79
2010	38.70	-40.36	7.54	-1.49	19.05	37.21
2011	41.17	-44.90	9.89	-1.16	19.37	40.02
2012	43.49	-45.86	5.88	-4.39	20.19	39.11
2013	36.65	-32.72	0.40	-0.86	19.52	35.79
2014	41.29	-37.90	-4.41	-7.98	18.69	33.30
2015	46.22	-36.79	-16.44	-15.68	20.10	30.54
2016	42.00	-27.79	-16.54	-13.38	22.98	28.61
2017	41.12	-25.32	-13.18	-8.56	26.02	32.56
2018	40.80	-28.02	-9.61	-6.89	24.60	33.33
2019	43.87	-31.29	-12.56	-9.32	23.14	30.65

Source : <https://alfred.stlouisfed.org>

Both current and capital spending have compacted since 2015 due to the severe crisis of oil prices, which have diminished significantly (about 50 us Dollars). The budget deficit was mainly compensated by non-oil revenue. We can see also that the overall fiscal balance is clearly dependent on oil and gas revenue with a sharp decrease in 2015 reflecting the fall of oil prices in the same period. The table above shows that Total Expenditure and Net Lending (Percent of GDP) has witnessed a decline from about 46 % in 2015 to nearly 40% in 2018. The non-oil revenue, which represented about 17 % in 2007, has increased to represent about 26 % in 2017. The deficit of non-oil fiscal balance, as a percentage of NOGDP, has reduced significantly from -45% in 2011 to about -31% in 2019. Because of oil prices decrease, current spending and mostly all of its components, as percent of non-oil GDP, continued to decline since 2015

5- Monetary Indicators

Because of the fast shrinking of the Revenue Regulation Fund assets since 2014, the government started using new financial and monetary tools, including borrowing domestically and even using non-conventional funding with printing money.

Table N° 3: Some Monetary Indicators, Percent of GDP, Annual, Not Seasonally Adjustedⁱⁱ

Year	Financial System Deposits to GDP	Private Credit by Deposit Money Banks and Other Financial Institutions to GDP	Bank Credit to Bank Deposits for Algeria	Liquid Assets to Deposits and Short Term Funding
2007	41.53	12.24	28.69	57.78
2008	41.78	12.18	28.27	68.17
2009	49.23	15.58	30.89	58.47
2010	42.65	14.68	33.58	60.45
2011	40.14	13.43	32.73	54.94
2012	40.87	13.63	32.86	55.51
2013	41.98	15.33	36.02	48.82
2014	45.71	17.35	37.49	43.90
2015	50.53	20.57	40.17	39.40
2016	47.47	22.26	46.19	26.76
2017	46.85	23.58	49.60	30.79

Source :<https://alfred.stlouisfed.org>

Table n° 3 above illustrates that the financial system deposits to GDP have represented between 40 and 50% due to the expansionary policy of the government, a policy adopted since 2001 through three massive plans. A strategy that has been implemented about two decades, and costed Algeria about 1000 Billion US Dollar without any real significant results (Algeria still in the same rank in almost all international famous reports issued by specialized organizations).

The same remarks could be said about the other two indicators illustrated in the table 3 above (Deposit Money Banks and Other Financial Institutions to GDP and Bank Credit to Bank Deposits for Algeria). The last indicator could be seen as the opposite result of the large spending policy and the drop of oil and gas revenues. The same policy had led to a severe shortage of Liquid Assets despite the money printing policy.

Along the same line of thoughts, the IMF Country Report No.18/168, published in June 2018, indicated that broad money growth has accelerated. 8.3% growth rate reflected a fast growth in net credit to

central government, which exceeds the persistent drop in net foreign assets. An expansion in credit has marked the whole economy since 2017. The private sector particularly had an important share with about 13%, due to the huge liquidity injections in the banking system originated by government's drawing on the RRF and other financial expansion tools used by Bank of Algeria. In the second quarter of 2017, broad money growth accelerated rapidly, this huge escalation was driven, mainly, by a higher growth in transferable deposits. The growth of the credit to the government has represented an important positive share (about 10%) of M2's global growth since the third quarter of 2014, this share has grown to about 25% in the first and second quarter of 2016, and continued to represent about 15% in the last quarter of 2017. On the other hand, net foreign assets declined with a mean of – 20% between the third quarter of 2016 and the second quarter of 2017, the trend in the last two quarters of 2017 was slower (about -10%).

The same report specified that until 2014, the growth rate of credit to the public sector was greater than private sector, the situation was changed radically and growth rate of credit to the private sector has taken the lead since 2015. It was easy to notice that since October 2017, the liquidity has grown enormously due to the money printing policy. This new situation triggered a sharp decrease of the interest rate in November 2017.

The trend of the exchange rate can be one of the most important indicators that illustrates the real tendency of the Algerian economy. Through the development of the exchange rate of the national currency, we can understand easily the diminution of the DZD compared to the EUR; the fall was more dramatic compared to the USD. This situation has reflected on both the NEER and REER, which continued to fall since the second half of 2014. This exchange rate depreciation was taken as a monetary response to adjust the oil prices falling.

The debt policy adopted by the government increased the government bond yields sharply between January 2016 and June 2016. The second half of 2017 knew a second sharp rise of government bond yields.

6- COVID-19, another Problem!

Algerian economy was facing a shock from a sharp drop of oil prices, caused by the world trade war between USA and China. From the

end of 2019, a huge health crisis hit China first, and then spread around the globe. The consequences of this global economic trouble, following the COVID-19 outbreak, touched all the countries around the world without any single exception. The thing that multiplies the pain upon the oil exporting countries. Unfortunately, Algeria is not apart, an oil price around 40 US Dollar /barrel in 2020 would cut Algeria's total fiscal revenues by 15 %. Although the measures that have been taken by government (public investment (-9.7%) and public consumption (-1.6%)) predicted by the 2020 Finance Law, the fiscal deficit would surge to about 13% of GDP. Meanwhile, the severe drop in oil exports revenues (-40%) will expand the trade deficit to around 15 % of GDP.ⁱⁱⁱ(World Bank, 2020)

Again, COVID 19 obliged the Algerian government, as all other governments across the world, to take some resting measures. Among these actions those mentioned by KPMG: (<https://home.kpmg>, 2020)

- *Freezing of the payment of financial charges and fiscal and Para fiscal obligations owed by economic operators for the period corresponding to the containment period. Thus, no sanctions or payment of penalties will be required from these operators during this period.*
- *The Ministers concerned are therefore responsible for informing the banks, the tax administration and the administration under the Ministry of Labour of this decision. -*
- *Rigorous evaluation of the damage suffered and loss of earnings recorded by economic operators, particularly in the case of small and medium-sized enterprises and small trades. –*
- *Allocation of financial aid for small trades (taxis, hairdressers, etc.) to the value of 30,000 Dinars, for a period of 3 months, based on a rigorous evaluation of the situation of each corporation during the last 4 months. This measure should be ratified by an executive decree to be issued before the end of the month. -*
- *The Minister of Finance has been instructed to take a note to the banking sector to ensure the implementation of the preventive measures to facilitate financing already taken at the level of the Central Bank*
- *With regard to the industrial sector, the decrees laying down specifications for the assembly of household appliances, the*

assembly of vehicles, the import of new vehicles and the acquisition of renovated lines and equipment have been adopted.(<https://home.kpmg>, 2020).

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It is obvious that COVID-19 magnifies the consequences of the severe international economic crisis. The same disease that is affecting the biggest oil importing countries and freezing oil prices around 40 USD. At the national level, the lockdown is making things worst especially for vulnerable people (small business owners, daily workers, and jobless people) that are expecting government help. The government which cannot spend more money on social assistance because the whole economy is in critical situation since 2014. This vicious circle should describe the Algerian situation with COVID-19.

7- The Algerian Economy: Serious Reforms to Take

Non-hydrocarbons exports are equal to around 2% of imports, making Algeria one of the most hydrocarbon-dependent states in the world (www.lloydsbanktrade.com, 2020). Based on all the indicators that have been presented in this study, and considering the strong link between the oil prices and the national economic situation (Dutch disease), measures should be taken in the short and the long terms, so the IMF staff propose some recommendations, which we try to summarize.

The whole economic and institutional environment seems to be requiring some main fundamental reforms, which have to be smoothly arranged and appropriately realized. The objective is to restructure the country's growth model, and to achieve this aim, decision makers have to start deep reforms on several fronts. These adjustments must be implemented gradually taking into consideration time and interactions between different reforms fundamental elements that help to succeed. The main reforms include:

- Establishment of governance and transparency, reducing bureaucracy, and fighting corruption effectively.
- Efforts should be done to improve access to finance and to expand the sources of financing by creating and developing financial tools that meet the needs of SMEs and mobilizing private saving.
- Opening the economy to more foreign investment and trade: it is vital to improve the competitiveness of enterprises in order to promote exports

and develop domestic production. This process requires simplifying product market regulations and reinforcing the competition laws.

- Improving the labour market mechanisms and promoting skills training match.
- Stimulating better inclusion of women in the labour market is another objective to achieve. (Rapport du FMI No. 18/168, French version. , 2018)

In addition to these reforms, other requirements are needed to increase policy effectiveness; some priorities need to be taken on consideration:

- Strengthening the public finance management system.
- Improving the efficiency of public spending by reducing the cost of public wage management and enhancing investment efficiency in term of coverage and quality of public service. Finally, revising some other elements related to public investment as the return, the relation between remuneration and productivity, budgeting, and implementation costs.
- Enhancing liquidity management through BA's toolbox, which includes reserve requirements, open market operations and other mechanisms.
- Facing one of the biggest challenges which is stopping the growth and reducing the parallel foreign exchange market (the parallel market premium is around 50 % of the official exchange rate) because the existence of this market complicates macroeconomic management by powering inflationary anticipations, distorts price formation, and weakens monetary policy implementation.
- Enduring efforts to reinforce the prudential framework. The implementation of the Basel II basis, risk-based management and stronger public bank governance rules could improve the banking sector's resilience. In this context, developing a systemic risk analysis and containment framework would be necessary.
- The policy makers have to develop a crisis vigilance system, through a crisis management process, which defines the roles and responsibilities of the different players involved. (IMF Country Report No.18/169, 2018)

8- Conclusion

Algeria is a young country, with less than 60 years of political independence, a new republic who still struggling for a complete

economic independence, an objective that still far to achieve because of the wrong economic policies that have been adopted from 1962. Politically, the Algerian state is relatively new (the first republic), governed almost by one political party from the independence, namely the FLN (National Liberation Front). The political and economic reforms, implemented since 1988, were not enough to change the growth model, which has been adopted since the 70's of the last millennium. A huge public sector financed mainly by oil and gas exports revenues, which his principal objective is to reallocate the national wealth, this was the growth model before 1986 economic crisis, after it; before 2014 crisis, and after it! Unfortunately, it seems to stand a very long time in the future, because of the slow, insignificant and empty reforms.

The IMF report as many other reports suggests some serious reforms and measures that should be taken as soon as possible, among these reforms, extra efforts needed in some domains. Since Algerian economy has been always based on public investment, policy makers have to concentrate their actions on realizing sophisticated infrastructure and delivering appropriate and better public services. Enhancing private sector activity and satisfying the basic needs of the population. Improve institutional quality and capacity, data collection and analysis. Strengthening the capacity to monitor budget execution in real time and control spending commitments. These reforms are critical to enhancing public spending efficiency. Developing the information system to improve transparent information access, good control of expenditures, and cost benefit-oriented budgeting. COVID-19 crisis could be a very important opportunity to think seriously about a real diversified exports and more effective collaboration with trade partners.

Finally, it will be very important to start implementing reforms as soon as possible, within a clearly established timetable because it will take some time to give results.

Bibliography

- 1-(2018, 6). *BP Statistical Review of World Energy, 67th edition, June 2018*. BP. Récupéré sur BP Statistical Review: BP Statistical Review of World Energy, 67th edition, June 2018

- 2-DERBAL, A., SEDDI, A., & AMER SAID, C. (2019). "The Algerian Economy: Some Financial and Monetary Indicators. An Analytical Review of 2018 IMF Report ». *الملتقى العلمي الوطني حول التوجهات النقدية 1*, pp. 2-20. جامعة الجلفة-كلية العلوم الاقتصادية والتجارية وعلوم التسيير: الجلفة.
- 3-<https://home.kpmg>. (2020, 8 14). Récupéré sur kpmg: <https://home.kpmg/xx/en/home/insights/2020/04/algeria-government-and-institution-measures-in-response-to-covid.html>
- 4-IMF Country Report, English version. Washington, D.C. IMF.No.18/168, June 2018,
- 5-IMF Country Report. Washington, D.C.: International Monetary Fund. No.18/169,2018.
- 6-Rapport du FMI, French version. . Washington, D.C. : International Monetary Fund,No. 18/168, 2018.
- 7-World Bank, (2020, 4). Récupéré sur <https://www.worldbank.org>: <https://www.worldbank.org/en/country/algeria/publication/economic-update-april-2020>
- 8-www.lloydsbanktrade.com. (2020, September). Récupéré sur Lloyds Bank Trade: <https://www.lloydsbanktrade.com/en/market-potential/algeria/economical-context>

9-دربال ع, & دقيش م, (2015). (15) العلة الهولندية: نظرية وفحص تجريبي في الجزائر الفترة 1986-2006. ج. سطيف. (Ed.) *مجلة العلوم الاقتصادية وعلوم التسيير*. 11(11), 111-124.

ⁱ - In [economics](#), the **Dutch disease** is the apparent causal relationship between the increase in the economic development of a specific sector (for example [natural resources](#)) and a decline in other sectors (like the [manufacturing sector](#) or [agriculture](#)), *Ebrahim-zadeh, Christine* (March 2003). "[Back to Basics – Dutch Disease: Too much wealth managed unwisely](#)". *Finance and Development, A quarterly magazine of the IMF. IMF*.

ⁱⁱ - Liquid Assets to Deposits and Short-Term Funding for Algeria Vintage: 2018-07-30, Percent, Annual, Not Seasonally Adjusted: The ratio of the value of liquid assets (easily converted to cash) to short-term funding plus total deposits. Liquid assets include cash and due from banks, trading securities and at fair value through income, loans and advances to banks, reverse repos and cash collaterals. Deposits and short-term funding

include total customer deposits (current, savings and term) and short-term borrowing (money market instruments, CDs and other deposits).

-Bank Credit to Bank Deposits for Algeria Vintage, Percent, Annual, Not Seasonally Adjusted: The financial resources provided to the private sector by domestic money banks as a share of total deposits. Domestic money banks comprise commercial banks and other financial institutions that accept transferable deposits, such as demand deposits. Total deposits include demand, time and saving deposits in deposit money banks.

-Private Credit by Deposit Money Banks and Other Financial Institutions to GDP for Algeria: Private credit by deposit money banks and other financial institutions to GDP, calculated using the following deflation method: $\{(0.5) * [F_t/P_{et} + F_{t-1}/P_{et-1}]\} / [GDP_t/P_{at}]$ where F is credit to the private sector, P_e is end-of period CPI, and P_a is average annual CPI.

-Financial System Deposits to GDP for Algeria: Demand, time and saving deposits in deposit money banks and other financial institutions as a share of GDP, calculated using the following deflation method: $\{(0.5) * [F_t/P_{et} + F_{t-1}/P_{et-1}]\} / [GDP_t/P_{at}]$ where F is demand and time and saving deposits, P_e is end-of period CPI, and P_a is average annual CPI.

ⁱⁱⁱ - numbers have been adapted to the prices of oil.