L'impact des fluctuations des prix du pétrole sur le budget général algérien de 1990 à 2019

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Abstract:

This study aims at showing the relationship between the oil prices and the general budget through determining the impact of oil prices on the public expenditures and revenues during 1990 – 2019. Findings show that there is a direct relationship between the oil prices and the budget because the oil taxation revenues overwhelmed the revenues of the general budget what makes the public expenditures dependent on oil revenues.

Keywords: oil taxation; Oil prices; general revenues; general expenditure; revenues regulation fund.

Jel Classification Codes: H72 ;A10

Résumé:

Cette étude vise à montrer la relation entre les prix du pétrole et le budget général en déterminant l'impact des prix du pétrole sur les dépenses et les recettes publiques au cours de la période 1990-2019. Les résultats montrent qu'il y a un lien direct entre les prix du pétrole et le budget parce que les recettes fiscales du pétrole ont dépassé les recettes du budget général, ce qui rend les dépenses publiques dépendantes des recettes pétrolières.

Mots clés: Fiscalité pétrolière; prix du pétrole; recettes publiques; dépenses publiques ; le fonds de régulation des revenus.

Jel Classification Codes: H72;A10

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1.INTRODUCTION

Oil is one the most important natural resourse in Algeria on which it depends heavily. In the same context, oil exports are the main source to finance the general budget all along with oil taxation due to the weakness of the Algerian economy and the scarcity of monetary resources to finance it. This makes the fluctuations of oil prices important since its revenues fund different projects of growth and satisfy the needs of the national economy. Thus, oil incomes are one of the most significant economic commodities contributing to general budget revenue. However, oil prices are known to be linked to changes in the international market based on supply and demand, in addition to being subject to a set of influences such as political conditions, the dollar exchange rate, speculations and future expectations. This characterizes it with instability affecting the government's revenues and expenditures and the general budget.

In the light of the above, the problem of the study is raised through the following question:

What is the impact of oil prices fluctuations on the Algerian general budget?

From this problematic, we get a series of sub-questions that can be summarized as follows:

- -What are the fluctuations that the oil prices have witnessed during 1990-2019?
- -What is the impact of these fluctuations on the general budget in Algeria?
- What is the efficacy of revenues regulation fund in absorbing the negative impacts of oil prices decrease of the general budget?

Aims of the study: This research paper aims to achieve the following points:

- Knowing the oil prices developments and the impact of their fluctuations on the general budget in Algeria.
- Tackling the development of revenues and public expenditures in the light of the continuous change of oil prices.

- Showing the importance of revenues regulation fund in financing the general budget deficiency.

The study has been divided into three main axes. Each axis tackles the following points respectively:

- Factors affecting oil price developments
- Developments in the general budget of the Algerian state and the importance of oil taxation
- -Analysis of the impact of oil price fluctuations on the general budget (1990-2019)

2- Factors affecting oil price developments

2-1- Oil Price Concept:

The price shows the value of the good which may be less or greater than, or comparable to, the value of the commodity. By definition of price, oil price means "the value of an oil substance or commodity expressed in money".

2-2 Types of oil prices:

The most important types of traded oil prices are as follows:

- The Posted price: The posted price is used to describe the price at which buyers or sellers are willing to transact for a particular commodity. Depending on the circumstances, the posted price may differ materially from the market price of that commodity. (FERNANDO, Posted Price Definition, 2021)
- The Realized price: It is the price that was agreed upon between two parties dealing in complete independence, and was usually done between small and independent companies that lacked their own market. This type appeared in the late 50s of the twentieth century. This stage is monopolized by global companies.
- **the spot price (immediate):** It is the price of the oil unit exchanged immediately in the free oil market. It exceeds the declared price when there are major imbalances between supply and demand.

Prices paid or oil exchanged on a day-to-day basis rather than sold under a long-term contract rise quickly at an outset supply disruption (OFFICE, Oil Supply Disruptions: Their Price and Economic Effects, 1983)

2-3 Determinants of Universal oil prices:

Crude oil price is determined by the supply and demand condition in the overall global market. (Alobaid, 2020,p 164) It is also affected by a set of factors, the most important of which are:

• Global demand for oil: The global demand for oil is known to increase continuously. It is directed either to speculation or for the purpose of consumption. It has undergone a set of changes since the petroleum industry as the demand for oil for consumption is affected by the increase in global economic growth rates which contributed to the increase in the demand for oil products. Moreover, the increased consumption of China and India affected the global demand for oil.

As for the demand for oil with the aim of future oil markets or speculation, these markets have been known since the mid-80s of the last century and the entry of speculators and brokers into global markets and their dealings in selling paper barrels in order to achieve profits. Demand is mainly affected by many factors including rates of economic growth that encourage demand.

Global oil demand in the third quarter of 2019 grew by 1.1 million barrels a day, more than double the 435,000 barrels a day in the previous quarter, according to the latest from the International Energy Agency (IEA) report. (Smith, 2019)

• **Reducing supply:** Oil is the main engine in the international economy, as the demand for it increases relatively with high rates of overall growth. In the absence of adequate supply when demand rises, this will be reflected in the general price level.

According to economic theory, resources that are in scarce supply tend to have high prices. (Alobaid, 2020, p164)

The global supply of oil is also affected by the fact that oil is a nonrenewable natural resource. (King & others, 2012)

• Global economic crises: Global economic crises play an important part in world investment volume contributing to a decrease in energy demand. The biggest one being a drop in oil prices in 2009 as a result of the global financial crisis.

2-4 Historical development of oil prices:

Due to the depletion nature of the oil commodity, global oil markets have witnessed many fluctuations and changes over the various past years. Among the most important stages that oil prices have gone through are the following:

• Development of oil prices before 1970: The oil market at this stage was called an oligopoly due to the control of a small number of companies over the oil industry at that time. Prices were determined and the markets divided by the cartel, taking into account the interests of states.

Two points have been adopted for world oil pricing:

- ➤ Single base point for pricing
- ➤ The Arabian Gulf is a second base point for pricing.
- Price development during the period (1970-1999): This phase defined production cuts in order to support prices. It was actually done in 1982 in order to maintain prices at high levels. Due to the continuous instability that lasted until 1984, OPEC made another cut that did not prevent the continuation of the state of instability, which made it at the end of 1986 impose a specific production ceiling. It included individual quotas that the members committed to, which contributed to the rise in prices again in 1987.

During the 90s, oil prices decreased from 21.04 dollars a barrel in 1991 to 16.30 dollars a barrel in 1994, then saw a recovery in 1996 and maintained some stability in 1997. Prices experienced an unprecedented collapse since the seventies in 1998, and the global market was subject to another shock that caused an imbalance. Significant supply and demand led to the deterioration of oil prices to the lowest level at less than 12 dollars a barrel (boukar & Lakhdimi, 2020,p1777) of the same year. What was exacerbated by the deterioration of prices was the Asian economic crisis (Koyama, 2005)), which is considered a market for Arab oil, which forced the producing countries to search for new markets before resorting to lowering prices.

• Price development during the period (2000-2009): Due to the high taxes imposed by European governments on various types of fuels and the severe cold wave, oil prices were stable during the year 2000. However, prices declined in 2001 to 24.8 dollars per barrel and then became stagnant

after the events of September 11, 2001 in the United States of America. This is due to the close connection between the US economy and the various economies of the third world, which affected the global demand for crude oil leading to a decrease in the OPEC price rate to 23 per barrel after the year 2000 which had been estimated at 27.6 dollars, or 16%. It continued to decline until late in the same year, reaching 17.6 dollars a barrel.

• On 01/01/2002 OPEC decided to reduce production by a total of 1.5 million barrels per day. After that, the prices of the OPEC basket of raw materials knew stability and rise and remained within (22-28) dollars since May, i.e. within the specified framework of the organization; the annual rate of oil price reached 24.3 dollars per barrel. This is what nominal oil prices have not witnessed since 1984. This increase is due to the American aggression against Iraq (Seddik & Kiheli, 2019, p15)), which has the largest reserves in the world and continues to cut off supplies in Venezuela due to the general strike in the country in addition to ethnic and tribal unrest in Nigeria.

Oil prices continued to rise until 2004 reaching record numbers in 2005 as a result of the continued strong growth in global demand for oil especially from Southeast Asian countries; the most important of which are China and India (boukar & Lakhdimi, 2020, p1774). Natural disasters and political turmoil in the Middle East, Venezuela, Iran and Nigeria, raised the price of the OPEC basket to 65.85 dollars per barrel in 2006 (Afroune & Achouche, 2018, p8).

In 2008, it witnessed another high record as the price of oil exceeded 99.9 dollars a barrel. Although, financial investors often speculate crude oil in future market, their shift to the spot markets in 2008 due to their expectations mechanisms made oil prices uncontrollable. (SADALLAH, 2020, p 242) However, the financial crisis affected oil prices during the year 2009 as it fell to 62.2 dollars per barrel.

• Development of oil prices (2010-2019): Due to the recovery of the global economy after the global financial crisis, the year 2010 experienced a state of balance in the global oil market as oil prices tended again to rise

with relative stability compared to the sharp fluctuations in oil prices. Oil was about \$ 18 a barrel in 2010, when it reached \$ 80.2 a barrel In 2012, there was some kind of stability, and the annual average price of oil reached a record level of \$ 111 per barrel. In 2013, the price of oil decreased by 1.35% affected by various factors, on top of which are geopolitical factors. International oil prices witnessed a decrease in 2014 when the average price of oil reached 100.2 dollars per barrel in the first half of the year (Lafakis & others, 2015, p1) compared to 109.5 dollars per barrel in 2013. The annual average price of oil reached a record level of. Since the stability that lasted for a long time began to change in the year 2014, in the second half of this year, oil prices experienced a significant decline which had negative repercussions especially on the economies of oil-exporting countries. The decline remained until the beginning of 2015. The decline continued in 2016 reaching 45 dollars a barrel. The first half of 2016 witnessed a significant improvement in prices during which the monthly rates for the OPEC basket of crudes exceeded the barrier of 45 \$ per barrel. As for the second half of 2016, there was a divergence in the trends of the average price of OPEC's crude basket between high and low at other times to exceed the barrier of 51 \$ per barrel by the end of the year. As for 2017, there was a rise in oil prices to 60 \$ a barrel as a result of the producing countries' affirmation of their commitment to reducing production which began to be implemented in the first of January of the same year, as the oil-exporting countries within OPEC reduced 1.2 million barrels per day, while non-member countries reduced half the amount.

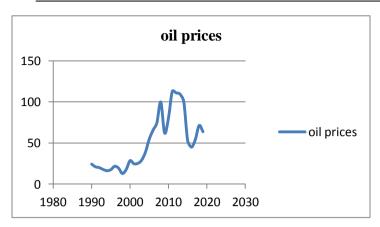
Then, oil prices continued to raise in 2018 reaching 71.3 dollars at the end of the year despite the increase in crude oil inventories especially the United States of America and the weak refining margins. International oil prices also witnessed a remarkable decline in 2019 compared to their increase in the previous year.

The following figure shows the development of oil prices in Algeria during the period 1990-2019:

Figure number (1): Evolution of oil prices in Algeria during (2000-2019):

(Dollars per barrel)

The Impact of Oil Prices Fluctuations on the General Budget in Algeria during 1990-2019



Source: Prepared by researchers, based on the Secretary-General's 2016 Annual Report, Organization of Arab Petroleum Exporting Countries from From the site: WWW.OPEC.Org, p. 53.

3-Developments in the general budget of the Algerian state and the importance of oil taxation

The Algeria general budget relies heavily on oil revenues. Below, we shall review the developments in public expenditures and revenues during the period 1990-2019

3-1 The concept of the state budget:

The modern concept defined it as "a detailed estimate of the state's expenditures and revenues for a future period of time, usually a year, approved by the competent legislative authority, which represents a financial expression of the economic and social goals that society seeks to achieve".(Meddah & sahraoui, 2020, p336)

It was defined in the Algerian legislation by Law 84/17 and Law 90_21. According to the article 06 of Law 84/17 of 07 July 1984 on Financial laws: "The state's general budget is made up of the state's final revenues and expenditures, determined annually under the Finance Law, and distributed in accordance with the legislative and regulatory provisions in force". (Chelihi, 2020, p 489)

The law on public accounting 90/21 of 15 August 1990 defines it as: "The document that estimates, for the civil year, the sum of revenues and expenditures for the management and investment, including the expenses

of general equipment and expenditures in capital, and they are authorized". (Chelihi, 2020, p. 489)

3-2- Principles of the general budget:

the principles of the general budget were laid down with the aim of organizing it and identifying the financial position of the state, in addition to simplifying the control procedures by the legislative and executive authorities, and they are as follows:

- The annual principle: It is intended that public expenditures and revenues are estimated periodically every year. This principle also means that the budget must be approved annually by the legislative authority.
- The principle of unity: This principle requires that all state revenues and expenditures be included in one budget and appear in one document.
- **Principle of inclusion:** This principle requires that all estimates of expenditures and revenues be included without any set-off in the budget document. Two basic rules are linked to this principle, namely: (Dardouri & Louglaithhi, 2019, p 566)
 - ✓ The rule of non-allocation of revenue: According to article 08 of law 17/84, « No income can be allocated to cover special expenses, and State resources are used to cover the budgetary expenses of the State without discrimination ».
 - ✓ Raw product base: This rule means that expenses and revenues are to be recorded in their raw amounts, i.e., in full amounts, which prevents the offsetting of revenues and expenditures, so that some revenues cannot be used to cover certain public expenditures.
 - The Principle of Equilibrium: It means that the state's public expenditures are equal to its public revenues.

3-3 Definition of public expenditures:

Public expenditures are defined as "an amount of money that goes out from the state treasury or one of its affiliated institutions in order to satisfy public needs."

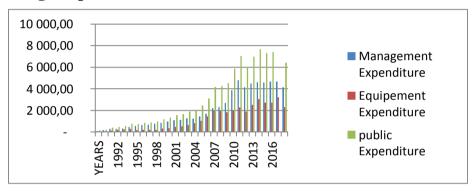
It is also defined as "the monetary amounts that the state or a legal person spend in order to achieve a public benefit." (haniche, 2017, p 468)

• Classification of public expenditure by the Algerian legislator:

Public expenditures are divided into several types according to the standard taken, and for the Algerian state, it depends in its division into two main types, namely, administrative expenses and processing expenses. (Bairech & Attia, 2020, p18)

The following figure shows the development of public expenditures in Algeria during (1990-2019)

Figure number (2): The evolution of public expenditures in Algeria during the period (1990-2019)



Source: Prepared by researchers based on: www.ONS.dz for the period (1990-2012)

www.mf.gov.dz for the period (2013-2019)

The Algerian economy has witnessed structural changes that have changed the course of the Algerian economy. Thus, economic growth has decreased, unemployment and inflation rates have risen, the budget deficit has increased, and the level of GDP has decreased. This was during the period from 1990 to 1998. This prompted comprehensive reforms in all economic sectors as public expenditures rose from 136.5 billion DZD in 1990 to 961.6 billion DZD in 1999, in which management expenditures represented the largest part, greater than 75% since 1996 as they are among the priorities of the state program as directed to finance the debt, which used to acquire 67% of the external income and was mostly funded through regular revenues. Equipping expenditures also witnessed a growth as they rose from 47.7 billion dinars in 1990 to 285.9 billion dinars in 1995, to decrease in the next year at a rate of 39.13% which led to a

decrease in public expenditures by 4.6%. The field of the state's budgetary policy is in order to control and rationalize public spending, and work to increase revenues outside the fuel sector, such as reforming the tax system and adopting a strict policy with wages. Then, during the years 1997 and 1998, it increased by 15.86% and 5.05%, respectively as a result of completing previous programs and encouraging investment.

With the beginning of the year 2000, Algeria pursued an expansionary fiscal policy through an increase in the volume of public spending through implementing a set of programs that stimulate major investments to stimulate aggregate demand, the first of which was the Economic Recovery Support Program, which has spanned three years since 2001, in which expenditures increased by 142.9 billion. For the year 2000, an amount of about 525 billion was allocated to it, and the total expenditures continued to rise, where in 2004 it reached the equivalent of 1891.8 billion dollars, meaning an increase of 43.2% compared to the year 2001, where the value of expenditures amounted to 1321 billion dollars; this is thanks to the recovery of oil prices that reached 38.7 dollars compared to 24.8 dollars in 2001.

In order to complete the previous projects, the Supplementary Growth Support Program was launched from 2005-2009, for which an amount of 8705 billion DZD was allocated, equivalent to About (114 billion dollars), while the financial envelope associated with this program when it was concluded in 2009 amounted to 968 billion DZD, or about 130 billion dollars. The public spending witnessed a significant increase since 2004 until the end of the project at a rate of 124.45%, as the value of public expenditures in the year 2009 amounted to about 4246.3 billion dinars. Despite the decrease in the revenues of the general budget in 2001 and 2009, this did not affect the expenditures as they are covered by a Revenue regulation fund.

Expenditures continued to rise as in 2010 the value of 286 dollars billion was allocated to the five-year program, while they increased dramatically in 2012, reaching 7,058.1 billion DZD. The budget also allocated a reserve of 237 billion AD to cover potential expenditures related to compensatory

systems and incomplete basic laws, in addition to a combined reserve of 220 billion AD.

Public expenditures decreased to a value of 6024.1 billion DZD in 2013 due to the end of retroactive payment of workers, the beginning of the end of allocations to the program, and the decline in revenues.

It is noticed that the proportion of equipment expenditures increased again since the beginning of the year 2000 due to the recovery of oil taxation, which moved from 27.32 % to 47.25 in 2008, compared to a decline in the proportion of operating expenses from 72.67 to 53.10 % in the same period, then it returned to decline in the proportion of its components in favor of expenditures management since 2009, which witnessed an increase from 856.2 billion in 2000 to 4782.6 billion dinars in 2012. The rates of the wage mass in relation to the management budget, which represented 57% in 2000 to 62.7% at the end of 2013 due to the payment of remnants of financial compensation resulting from the increase of wages had been paid retroactively since 2008 while the remaining percentage, estimated at 10 billion AD, is to satisfy the citizens' consumption needs, more than half of this amount falls under the heading of unnecessary consumption. At the same time, the expenditures on equipments have increased due to lack of infrastructure, health, and education services which are the basis for real economic development.

With the decline of oil prices in mid-2014, public expenditures continued to decline. They continued for each of the years 2016 and 2017 by 4.68% and 1.25%, respectively as they eroded the revenue regulation fund. Then, they increased in 2018 to the value of 7899 billion DZD, and then decreased again in 2019 by 18.6% from the previous year.

3-4 the concept of public revenues:

Public revenues are defined as "the economic resources that the state obtains in the form of cash flows in order to cover public expenditures with the aim of satisfying public needs."

The public revenues in Algeria are classified according to the desire of the person in charge of them, so they are either optional or compulsory.

Optional revenues: They represent the revenues received from individuals in exchange for a service.

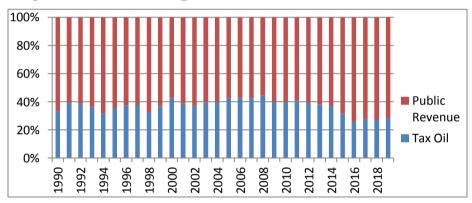
Compulsory revenue: Tax revenues: are the revenues collected compulsorily and without charge.

4- Analyzing the role of oil price fluctuations on the general budget (1990-2019):

4-1 Contribution of oil taxation to budget revenues:

The revenues of the general budget in Algeria are mainly represented in regular and petroleum taxation, and a very small percentage of non-tax revenues. This is in order to implement its work plans and ensure the good functioning of its public interests.

Figure number (3): Contribution of oil taxation to the general budget revenues for the period (1990-2019):



Source: Prepared by researchers based on: www.ONS.dz for the period (1990-2012)

www.mf.gov.dz for the period (2013-2019)

We notice that the oil tax increased in 1991 by 111.94% compared to 1990. This is due to the increase in oil prices due to the Gulf War where the demand for oil increased until 1992 despite the decline in oil prices as the exchange rates increased by a greater value than the decline in oil prices. The year 1993 witnessed a slight decrease of 7.53%, this was affected by the drop in oil prices by 2.25 dollars from the previous year, to rise again and achieve a qualitative leap until 1998 where it decreased by 32.97% due to the drop in oil prices to 12.9 dollars due to the agreement of OPEC countries in December 1997 to increase production by 10%, in

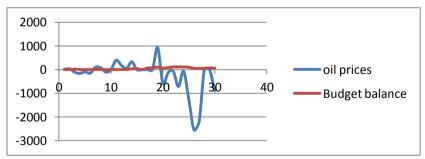
addition to the warm weather that prevailed in the northern hemisphere at that time, the increase in Iraqi oil exports, and the decline in oil demand due to the Asian Tigers crisis. However, its contribution to the international budget revenues amounted to 48.87% which highlights the importance of the oil taxation since despite its decline it remained the largest percentage. Later, it returned to improvement during the next two years as it reached in 2000 the value of 1173.2 billion AD, or 74.34% of the total revenues of the general budget. This is due to the significant increase in oil prices which reached 28.5 dollars per barrel, to see a decline during the next two years by 216.8 and 13.5 billion AD, respectively, which affected the budget revenues which were also known to decrease. However, the contribution of oil taxation remained about twothirds of the state's revenues, and then the revenues increased in the last two years due to the increase in oil taxation which was a result of the impact of the increase in the price of oil which reached 29 dollars per barrel in 2003. The period from 2003-2008 witnessed record levels of oil prices as the price of oil reached 99.9 dollars per barrel in 2008, i.e. doubled by about 3 times which positively affected the oil taxation which rose. The other is from 1284.9 in 2003 to 4088.6 billion DZD in 2008. However, with the global financial crisis, oil prices collapsed in 2009 affecting the taxation which decreased to 2,412.7 billion dinars. However, it remained in control of the general budget revenues as it represented about 65.63% of total revenues with the recovery of prices that continued to rise to reach the largest value for them in 2012, at a value of 4184.3 billion dinars. Nonetheless, in mid-2014, oil prices collapsed affecting the oil taxation which has declined dramatically in recent years and its percentage of public revenues that no longer reach 40 percent after it reached around 80 percent at peak time; it remained a significant percentage. In general, we notice that the tax revenues are what capture the revenues of the general budget until the year 2015, and this is for a set of reasons, the most important of which are:

- ✓ Granting the state a set of exemptions and reductions in order to encourage investment, export and employment, but this greatly encouraged fraud;
- ✓ The spread of tax evasion due to the weakness of the tax administration and the expansion of the parallel sector, which affected tax collection:
- ✓ The rise in oil prices and the depreciation of the Algerian dinar contributed to a positive impact on the Algerian dinar earnings.

As for the period (2015-2019), there has been a fluctuation between high and low, and this is according to oil prices, but it is noticeable during this period that the dominance of oil taxation decreases.

From the above, it is evident that the oil taxation is characterized by fluctuation and instability of its revenues due to the fluctuations in oil prices on the one hand and the exchange rate of the dinar and the dollar together on the other hand. This has great importance in the revenues of the general budget of the Algerian state as it represents more than a third of the budget revenues. The following figure represents the evolution of the state's general budget balance and its relationship to the development of oil prices.

Figure number (4): Development of oil prices and their relationship to the balance of the general budget during the period (1990-2019):



Source: Prepared by researchers based on: www.ONS.dz for the period (1990-2012)

www.mf.gov.dz for the period (2013-2017)

We notice through the figure that the balance of the state's general budget has known different stages, which are as follows:

1990-1999: We notice through the table that the balance of the general budget in Algeria, starting in 1992, recorded a deficit of 108.3 billion dinars, to continue the deficit until 1995 at a value of 147.9 billion due to the increase in public expenditures that year to 759.6 billion dinars due to the structural adjustment program, the recovery of oil prices in 1996 to 21.7 dollars, and the increase in revenues due to the increase in oil taxation to 495.9 billion AD. The general budget achieved a surplus of 100.5 billion dollars which decreased to 81.5 billion dollars in 1997. With the oil crisis, the year 1998 knew a deficit of 101.2 billion dinars due to the decline in state revenues as a result of the decrease in oil taxation by 32.79% and 13.37% of the gross domestic product and the increase in expenditures due to the deterioration of the security situation. In 1999, oil prices witnessed a slight recovery which affected positively oil revenues which contributed to the decrease in the deficit despite the increase in public expenditures due to the security conditions at the time and the rescheduling of debts of public institutions.

2000-2004: During this period, oil prices rose to reach 38.7 dollars per barrel in 2004 as a result of the decline in the dollar and the invasion of Iraq by the United States of America in addition to the growth of the economies of Asian countries such as China and India which had a clear effect on revenues that rose by 0.41%. However, the surplus in the balance of the budget fluctuated between high and low due to the increase in public expenditures for the implementation of the economic activity support program, which was greater than the increase in revenues.

2005-2008: This stage witnessed a continuous increase in oil prices as it reached 99.9 dollars per barrel in 2008 which contributed to a surplus in the budget in 2006 after it recorded a deficit in the previous year. Then, prices declined despite the increase in revenues due to the expansion of the state's spending policy which increased to double.

2009-2019: The financial crisis cast a shadow over oil prices, as they fell to 62.2 dollars a barrel in 2009. Prices recovered in 2011 and achieved record numbers. However, it is noticed that despite the financial health, the balance of the budget during this period knew high deficit ratios that

were not witnessed in previous years. The large increase in expenditures due to the increase in investment and development projects, the adoption of a broader spending policy, raising wages, retroactive payment to workers, and support in various non-productive sectors that do not generate profits for the state treasury prompted the state to try to rationalize its spending in 2013 by reducing the costs of management and equipments. It had the effect of reducing the deficit to 66.6 billion dinars.

With the sharp decline in oil prices at the end of 2014 due to the recent oil shock, the budget deficit deepened to (1261.2) billion DZD. This is due to the decline in revenues and the increase in expenditures on the other hand, most of which are directed to infrastructure and housing projects.

It is noticeable that with the decline in oil prices and their impact on the revenues of the general budget, public expenditures are on the rise, which led to an increase in the budget deficit in 2015. The deficit in the range of 58% was funded through the revenue regulation fund reaching its lowest point at the end of 2016, i.e. 740 billion dinars. With the relative improvement in oil prices in 2017, we saw a relative improvement of revenues which were further strengthened by the increase in profits paid by the Bank of Algeria to the public treasury. As the expenditures remained almost stable, the budget deficit narrowed down to what contributed to reducing the budget deficit to (1 206.5) billion DZD. That is, from 12.8% of the gross domestic product to 8.5% of the gross domestic product .In 2018, despite the increase in oil prices to 71.3 dollars and the increase in public revenues, the budget deficit increased to 1 585.1 billion DZD due to the increase in public expenditures by 6.89%. Then, the deficit decreased in October 2019 to 895.4 billion DZD. The decline in public expenditures is greater than the decline in revenues.

5. CONCLUSION

From the above, it is evident that Algeria is highly dependent from the above, it is evident that Algeria is highly dependent on its oil revenues and this is what makes it highly vulnerable to oil prices that are linked to the constant and sudden fluctuations and developments of the global oil market, which makes the country's economic growth and financial policies related to the latter through its impact on the size of public expenditures.

The decline in oil prices leads to a decline in oil revenues which affects the incoming cash flows and thus their economic activity. This is what prompted the Algerian state to reduce its expenditures and use the revenue regulation fund which contributed to reducing economic instability in the short term. The study found the following results:

- Oil prices are impacted by a set of factors related to supply and demands on oil.
- Oil revenues in Algeria have a big importance in the Algerian economy since they have the lion's share of the budget revenues.
- Oil prices increase since 2001 has helped increasing oil revenues; this contributed to the increase of the budget revenues.
- The general budget is still tightly linked to oil revenues through oil taxation.
- Oil prices decrease did not impact the general budget in the first years of its decrease in 2014 thanks to the revenues of revenues regulation fund.
- There is a direct relationship between the general budget and the development of oil taxation revenues as we notice that any shock that hits the oil market impacts the oil revenues and then the budget.
- The increase of oil incomes helped the increase of the regulation fund revenues which were meant to cover the deficiency resulting from the oil prices decrease. However, the fund depleted in October 2016 due to the big increase in the public expenditures in parallel with the decrease of oil prices.
- The instability of monetary surplus resulting from the oil revenues with the government's will to turn them into economic projects can substitute oil revenues.
- There is a lack in the alternative sources of financing the national economy as they have a very low percentage compared to the oil sector.

6.Recommendations:

From the above, the Algerian state must take a set of steps that contribute to improving its budget balance and to reducing the degree of its severe vulnerability to oil prices through:

- Working to reduce dependency on the oil sector by encouraging non-oil exports and searching for other diverse sources outside hydrocarbons in order to face the fluctuations in oil prices.
- -Rationalizing expenditures and directing support and social assistance to those who deserve it and not to all members of society without exception;
- Benefiting from periods of high oil prices by directing financial surpluses into profitable projects that achieve economic and human development;
- Working to improve the collection of tax and tax resources by undertaking a set of reforms that achieve goals.

7. Bibliography List:

- Afroune, N., & Achouche, M. (2018). Analyse de la relation entre le prix du pétrole et le taux de change réel de dinar algérien. Analysis of the relationship between the price of oil and the Algerian dinar's real exchange. *The journal of Economics and finance*, 14(2).
- Alobaid, H. (2020). Estimating the Long-Run Demand Elasticities of Crude Oil:Evidence From GCC Members . *Journal of Economic Papers*, 11(02), pp. 162-182.
- Bairech, A., & Attia, A. (2020). Program and Performance Based Budgeting As an Approach to Rationalize Public Expenditure in Algeria. *Finance & Markets Review*, 07(03), pp. 16-30.
- boukar, a., & Lakhdimi, a. (2020). Monetary Policy Response To Oil Price Shocks In Algeria: By Using An Bound Testing Approach (ARDL). *Journal of Economic Sciences Institut*,, 23(2), pp. 1773-1792.
- Chelihi, T. (2020, January). Budgetary Governance In Light Of The Open Budget Index (OBI 2017) –Case Study Of Algeria. *Dirassat Journal Economic.*, 11(1), pp. 487-506.
- Dardouri, L., & Louglaithhi, l. (2019). Contribution of the regular collection to finance the budget deficit in Algeria (2008 2016) An analytical study). *The Economic Science, Management and Business Science*, 12(01), pp. 564-574.

- FERNANDO, J. (2020). *Posted price Definition*. Récupéré sur https://www.investopedia.com/terms/p/posted_price.asp
- FERNANDO, J. (2020). *Posted price Definition*. Récupéré sur https://www.investopedia.com/terms/p/posted_price.asp
- FERNANDO, J. (2021, 06 30). *Posted Price Definition*. Récupéré sur https://www.investopedia.com/terms/p/posted_price.asp
- FERNANDO, J. (20210). *I Posted Price Definition*. Récupéré sur https://www.investopedia.com/terms/p/posted_price.asp
- haniche, A. (2017). The public budget cycle and the importance of control stage in the public expenditure rationalization. *The Economic and Human Development Magazine*, 8(1), pp. 461-474.
- King, k., & others. (2012). *An Econometric Analysis of Oil Price Movements*. Consulté le 06 30, 2021, sur https://www.bateswhite.com
- Koyama, K. (2005). *The Recent High Oil Price: Its Background and future prospects*. Consulté le 9 30, 2020, sur https://eneken.ieej.or.jp
- Lafakis, c., & others. (2015). The Economics of Lower Oil Prices. . *MOODY'S ANALYTICS*.
- Meddah, a., & sahraoui, k. (2020). The effect of modernizing the state's public budget system in reforming public administration and fighting corruption -an analytical study of the Iraqi experience. *The Economic and Human Development Magazine*, 11(1), pp. 334,349.
- OFFICE, U. S. (1983). Oil Supply Disruptions: Their Price and Economic Effects. Récupéré sur https://www.gao.gov
- OFFICE, U. S. (1983). *Oil Supply Disruptions: Their Price and Economic Effects*. Consulté le 07 5, 2021, sur https://www.gao.gov
- SADALLAH, D. (2020). REGRESSION ANALYSIS OF GLOBAL DETERMINANTS AFFECTINGCRUDE OIL PRICE

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- DYNAMICS . The Reviex of Economic Reforms and Interation into the world Economy, 14(1), pp. 114-122.
- Seddik, S., & Kiheli, A. (2019). Oil Price Shocks and Algerian Economy: Evidence from the New Economic Model. *Roa Iktissadia*, 09(01), pp. 13-26.
- Smith, E. (2019). Consulté le 05 22, 2021, sur "http://www.. com