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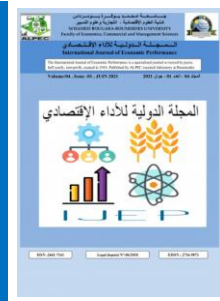
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The effect of government subsidies on Algeria's general budget deficit during (2000-2020) -analytical measurement study-

 Fettouche Fatma

f.fettouche@centre-univ-mila.dz

University Center Abdelhafid Boussouf (Algeria)

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Abstract:

This study examines government subsidy and the Algerian budget deficit from 2000 to 2020. Descriptive analysis visualized the general budget deficit and government subsidy. as well as using standard quantitative analysis to explain government subsidy and budget deficit. Ministry of Finance and General Authority for Treasury publications provided data. The study found that social transfers increase the budget deficit and recommended digitizing the floor for vulnerable groups with low incomes to rationalize government subsidy.

Key words: Budget Deficit, Government Subsidy, Social Transfers, Joint Integration.

JEL Classification Codes: H60, H70.

Introduction :

The governments of the world strive for balance, to meet the general needs of society, and to achieve development in various fields. To achieve these objectives, it relies on a variety of fiscal tools, including social support policy as a tool for improving living conditions.

This policy, however, has had a number of negative effects on various macroeconomic variables, including the general budget. The increase in government spending on subsidies has been observed as a result of price fluctuations in global markets on the one hand and fuel prices on the other, which is one of the pillars used to absorb these fluctuations on a social level. Algeria recorded an increase in government transfer rates due to its social, economic, and political importance, despite the challenges facing the budget, costing it huge non-refundable amounts, which contributed to deepening the budget deficit in dependence on the hydrocarbon sector, especially after the decline in revenues due to the drop in fuel prices in 2015, 2019 and 2020 as a result of the Corona pandemic.

Study problem:

The problem of this study can be formulated in the following main question:

What is the impact of government subsidy on the Algerian general budget from 2000 to 2020?

Study Hypothesis:

This study proceeds from the following main hypotheses:

One of the main factors contributing to Algeria's growing budget deficit is the continuous expansion of government subsidy expenditures

Study objectives:

This study aims to test the main hypothesis by:

- Presenting concepts related to government subsidy and budget deficit.
- Shedding light on the evolution of the reality of government subsidy and the budget deficit in Algeria.

- Clarify and highlight the relationship between government subsidy and the public budget deficit.

Study importance:

The study's significance lies in determining the extent of the impact of Algeria's government subsidy policy on the accumulation of deficits in the public budget.

Study Approach:

To test the research hypothesis, we used both the descriptive analytical method and the measurement method using the EVIEWS-10 program in this study.

1. Budget deficit and government subsidy conceptual framework

1.1. Budget deficit:

a. Definition of budget deficit:

The budget deficit is defined as "the negative balance of the state's general budget caused by the fact that expenditures exceed revenues, and in this case, the government is forced to finance this deficit through borrowing, resulting in an increase in the public debt" (Bahaa Suphi & Jafar , 2021, p. 13).

The budget deficit is also defined as the excess of expenditures over revenues when all state expenditures and financial revenues are included in the budget. It is the sum of the negative consequences of fiscal policy and the approach used in budget preparation and implementation (Shardud & Jalid , 2022, p. 54). Because the large budget deficit and the method of financing it affect a variety of macroeconomic variables, particularly when the government finances the deficit through domestic borrowing (Eldepcy, 2022, p. 85). As a result, the burden of the annual budget deficit accumulates, resulting in the weakening of public finances and the depletion of economic resources. When confronted with this situation, governments must consider restructuring their spending programs (Fund, 1996).

b. Types of budget deficit:

It is well known that there are two types of budget deficits (Bin Tafat , Sahel , & Elifi , 2018, p. 236):

- ❖ **Account deficit:** It results from the difference between public expenditures and revenues, but the general budget must include all expenditures and state revenues.
- ❖ **Economic deficit:** It denotes the gap between the economic and social goals that should be included in the general budget and the actual goals that can be achieved through budget allocations. It is normal to have a continuous economic deficit because the economic and social goals are always greater than the ability of local financial resources to achieve them (public revenues), as a result, deficit financing is used. The economic deficit is not necessarily a negative situation for the economy; rather, it is required to achieve a set of economic goals.

c. Reasons for budget deficit:

There are several main reasons that contribute to deepening the deficit, which we summarize as follows (kasmori , Hadia, & Alawi , 2020, p. 160):

- Increasing the burden of domestic and foreign public debts.
- Military spending and the expansion of government employment growth.
- Increasing commodity and production support and increasing public spending on consumption.
- Poor tax collection and rigidity of the tax system.
- Business cycles Government revenues can fall during an economic downturn, as seen during the 2008 global financial crisis. This is due to an increase in the costs of unemployment benefits and income support, which reduces income while increasing spending (Boyce, 2022).
- Interest payments as a result of the state's continuous deficit and debt accumulation, which leads to an increase in the amounts owed to it in interest, which contributes to the budget deficit deepening. For example, in 2019, the United States of America paid \$389 billion in interest alone, accounting for 33% of its total budget deficit. This vicious circle will continue to result in future budget deficits (Boyce, 2022).

1.2. Government subsidy:

a. Definition of government subsidy:

The World Trade Organization's (WTO) Agreement on subsidy and Compensatory Measures defines subsidy as "government financial contributions that provide an advantage, either directly or through an intermediary party." This definition may include government practices such as the provision of goods and services, as well as the waiver or exemption from the collection of goods, services, and revenue accrued, or the government subsidizing price and income (Alwan, Al-Aqabi, & Fadel , 2020, pp. 687-688).

Government subsidy is defined as "all financial support directed to the implementation of public-private partnership projects, including all tax incentives, government grants, state-backed loans, guarantees, or trust funds" (Insider, 2008). It also includes tax benefits and social assistance; these government incentives would be critical in promoting economic growth and reducing the budget deficit.

b. Types of government subsidy:

Government subsidy is divided into several types, including (Hassan & Qaddal , 2022, pp. 356-357):

- ❖ **In-kind subsidies:** the government lowering the prices of basic commodities needed by citizens, resulting in an increase in real income, or providing inputs to the production process at the lowest possible cost, such as diesel.
- ❖ **Cash subsidies:** granting liquid funds to a specific group that meets the criteria to purchase their needs, or granting it to stimulate investment through so-called incentives.
- ❖ **Tax subsidies:** in order to reduce the tax burden on employers and emerging and strategic industries.
- ❖ **Government purchasing policy:** it is more commonly used in the agricultural sector to set prices and supplies through the government's purchase of this product in order to encourage its production process and obtain a strategic stock of it.
- ❖ **Purchasing stock exchange shares:** The government purchases stock exchange shares, particularly during times of crisis, in order to maintain a specific price level and avoid the risk of bankruptcy.

❖ **Assumption of risk:** In the case of international transactions, this assistance takes the form of commercial and political risks, guaranteeing loans or granting preferential loans to the beneficiary.

c. Types of subsidy:

Subsidy can be (Zerrouqi , 2022, pp. 218-219):

❖ **Subsidy by demand or subsidy consumption:** It is the subsidy that the government provides to the consumer, directly and indirectly:

- Direct government subsidy in cash: It is public spending that is clearly and explicitly recorded, such as the amounts of money allocated each year in the state's general budget to provide goods at a lower cost than the costs of production and import.
- Indirect government subsidy is implicit: It includes total revenues that are not recorded in the general budget, i.e. the difference between the prices of public-sector products and the cost of production, or the difference between their selling prices locally and their global selling prices.

❖ **Offer subsidy:** includes production subsidy , export subsidy, and employment subsidy.

d. Implications of the government subsidy policy:

The government subsidy policy has many effects, the most important of which are (Bohush & Sayd , 2022, p. 285):

- The general budget includes very large sums of money directed primarily to government subsidy rather than directing it to various sectors, including housing, education and infrastructure.
- The budget deficit rises due to the expansion of public expenditures directed at government subsidy.
- An increase in the general level of prices and exchange rates as a result of the deficit in the public budget.

- Poor economic rationality in light of the spread of unethical behavior, including excessive consumption of subsidized products due to their low prices.
- Violation of the principle of achieving social justice, but the prices of goods and services are directed to the poor and the rich alike, and this contradicts this principle.

2. The reality of government subsidy and the budget deficit in Algeria

Government subsidy dates back to the post-independence period. Algeria faced several challenges, including unemployment, poverty, and social inequality, and sought to implement a number of social measures, particularly in the health and education sectors, as well as supporting basic products needed by citizens; however, this support eventually contributed to an increase in the burden. The general budget is being balanced against a lack of financial resources in terms of revenue.

2.1. The structure of subsidy policy in Algeria:

Algerian government subsidy takes several forms, as shown in the table below:

Table 1. Some forms of government subsidy in Algeria

Subsidy	Paid goods and services	Subsidy type
Energy products subsidy	Diesel	Implicit subsidy by lowering diesel prices
	Benzene	Implicit subsidy by lowering gasoline prices
	Electricity	Subsidy directed to consumers of cooking gas and electricity in 13 states in the form of preferential prices, where families and those working in agriculture in 10 states of the south benefit from a 50% discount on energy consumption with a maximum of 10,500 kilowatts / year
	Cooking gas	Implicit subsidy through price cuts.
Basic food commodities subsidy	Wheat and its derivatives	Cash subsidy for soft wheat and its derivatives.
	Sugar	Sugar imports subsidy by eliminating customs duties and value-added taxes.
	Milk	Subsidies are directed to bags of milk produced by the national milk office through importing milk powder and selling it to transformers at regulated prices.
	Edible oil	Subsidy through the abolition of customs duties and value-added taxes and setting the market price.
	Housing	Providing subsidy in the form of grants directly to the beneficiaries of the national housing fund.

Social services subsidy	Drinking water	Cash subsidy for water desalination units.	
	Transport	Cash subsidy through the state budget.	
	Education and higher education	Represented by some aid and grants:	
		Financial aid granted to students during the three phases is estimated at 3000 da.	
		Subsidy directed to social services (accommodation, restaurants...).	
		Scholarships and training grants	
		Free textbooks for needy pupils.	
	Health other than health care	Cash subsidy through the state budget.	
Human medicine	Subsidy through tax cuts		

Source: Prepared by the researcher based on (Bohush & Sayd , 2022, p. 287)

2.2.The evolution of social transfers in Algeria:

Algerian government subsidy spans several sectors, including housing, health, the family, and some disadvantaged groups, as shown in the table below:

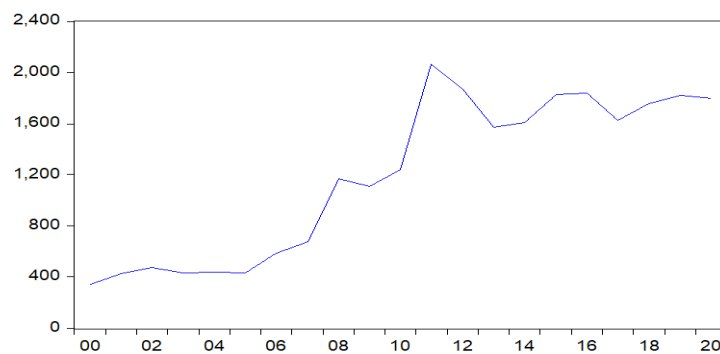
Table 2. The evolution of government subsidy in Algeria (2000-2020) Unit: billion DA

Years	Total Government Subsidy	Years	Total Government Subsidy
2000	344.48	2011	2065.074
2001	426.795	2012	1868.5
2002	474.563	2013	1574.361
2003	433.065	2014	1609.123
2004	437.429	2015	1830.314
2005	435.498	2016	1841.57
2006	584.8	2017	1624.923
2007	676.805	2018	1760.018
2008	1164.067	2019	1820.767
2009	1107.855	2020	1797.578
2010	1239.26		

Source: Prepared by the researcher based on (Ministry of Finance, 2020)

We can see from the table above that social transfers increased over the period (2000-2020), rising from 344.4 billion dinars in 2000 to 1624.9 billion dinars in 2020. The value of social transfers increased the most in 2011, rising from 1239.2 billion dinars in 2010 to 2065.07 billion dinars in 2011, owing to the global food crisis and high import prices for basic food. Despite the global economic setback caused by the Corona pandemic and expectations of a decrease in oil tax revenues, government subsidy amounts are expected to increase in 2023. As illustrated in the diagram below:

Fig.1. The evolution of government subsidy in Algeria during the period (2000-2020)



Source: Prepared by the researcher based on the outputs of Eviews 10

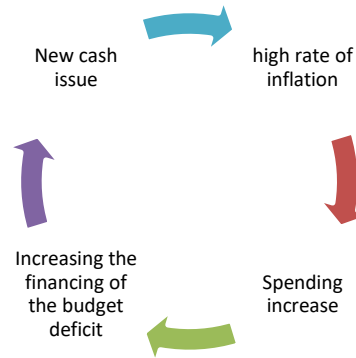
2.3. The relationship of government subsidy to the budget deficit in Algeria |:

Before discussing the evolution of government subsidy and the budget deficit in Algeria, it is necessary to first discuss the relationship between government subsidy and the overall budget deficit. As a result, the public finances are made up of public expenditures and revenues. A budget deficit occurs when the volume of public expenditures increases in exchange for a decrease in public revenues, while a budget surplus occurs when the volume of public revenues increases in comparison to public expenditures. As a result, government subsidy as a financial policy tool does not result in a state of equilibrium, as classical theory suggests, but rather as a result of a country's economy's good fortune.

When the economy is in a slump, the government must increase spending in exchange for tax cuts, which causes the budget deficit to grow. However, by using this metric, countries can push the economy from stagnation to boom without considering the costs and magnitude of the deficit. According to the periodic budgeting principle that the United States and European countries implemented after the 1929 Great Depression, the government may use that surplus when it experiences a recession.

In the case of an economic boom, the government reduces public spending in exchange for raising taxes in order to reduce inflationary effects in the economy and achieve a surplus (Kanaan , 2009, p. 314).

Fig.2. The circular relationship between inflationary financing, high inflation, and an increase in the budget deficit



Source: Prepared by the researcher

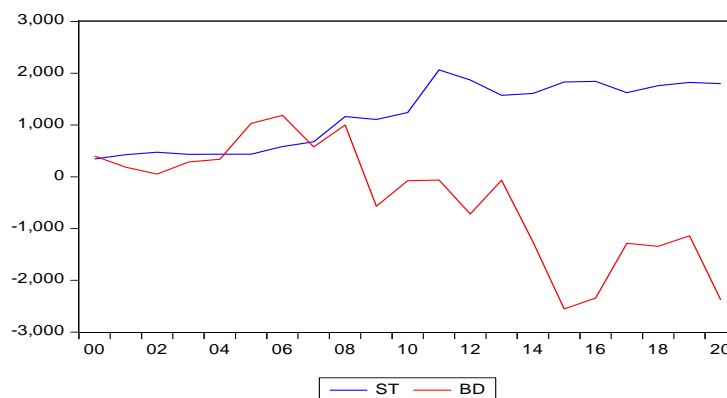
To better understand the relationship between government subsidy and the general budget deficit in Algeria during the study period (2000-2020), we present the budget balance and government subsidy in Algeria as follows:

Table 3. The budget and subsidy balance over period (2000-2020)

Years	Budget Balance	Social Transfers	Years	Budget Balance	Social Transfers
2000	400	344.48	2011	-63.5	2065.074
2001	184.5	426.795	2012	-718.7	1868.5
2002	52.6	474.563	2013	-66.6	1574.361
2003	284.2	433.065	2014	-1257.4	1609.123
2004	337.9	437.429	2015	-2553.2	1830.314
2005	1030.6	435.498	2016	-2341.4	1841.57
2006	1186.8	584.8	2017	-1284.9	1624.923
2007	579.3	676.805	2018	-1342.6	1760.018
2008	999.5	1164.067	2019	-1139	1820.767
2009	-570.3	1107.855	2020	-2380	1797.578
2010	-74	1239.26			

Source: Prepared by the researcher based on (Ministry of Finance, 2020)

Fig.2. The budget and subsidy balance over period (2000-2020)



Source: Prepared by the researcher based on the outputs of Eviews 10

We can see from Table No. (03) and Figure No. (01) that the general budget achieved a positive balance from 2000 to 2008. The reason is that revenues have increased, particularly in the hydrocarbon sector, as a result of the oil market recovery, which has benefited the budget balance. During the same period, public expenditures increased due to the Algerian government's adoption of development programs, including the economic recovery programs 2001-2004 and 2009-2005, in exchange for increased subsidy for social transfers.

The budget recorded a negative balance between 2010 and 2020, as shown in the table. Because of the decline in oil revenues that occurred in the middle of 2014, the year 2015 was more affected than the other years. Due to the procedures for raising the value of ordinary taxation, which replaced petroleum taxation, as well as the bond loan in 2016 and unconventional financing in 2017, the budget balance continued to record a deficit beginning in 2016. Furthermore, the effects of the Corona pandemic in late 2019 and early 2020 contributed to the decline in oil revenues, so these deficits must be rationalized. It is worth noting that Algeria's government subsidy policy has had several ramifications that have resulted in imbalances and deviations in various aspects, including economic, financial, social, and political ones, as listed below (Hami Hasaan, 2022):

- ❖ The accumulated burden on the public budget in order to meet societal needs in light of fluctuations in the prices of basic materials in global markets with widespread consumption, which contributed to the widening of the balance of payments deficit, as recently as the rise in food commodity prices and the emergence of the scarcity crisis as a result of speculative and monopolistic market operations.
- ❖ The expansion of government subsidies for social transfers to support families and mass-consuming goods resulted in price differences between these products and those imported.

2.4.Steps toward the success of Algeria's subsidy reform policy:

The following steps can be taken to ensure the success of the support reform policy (Zaghouani & karim, 2021, p. 387):

- Using the press and advertising, create a comprehensive and detailed reform plan in terms of objectives and compensatory measures.
- Energy-related companies receive transfers from the state to compensate for inefficiencies in production and revenue collection, which reduces production subsidies. Companies must improve their efficiency in order to reduce these transfers.
- Implementing necessary counter-measures to the effects of subsidy reform in order to protect disadvantaged groups and people with limited income, as represented by allocating cash transfers to the poor to supplement their income.
- Addressing the public through advertising means informing the public about price changes in order to convey the correct idea of why these procedures are being performed.
- Prices will rise gradually and in an appropriate manner. To avoid a record rise in the general level of prices and other negative consequences, the government must choose the right time to increase subsidies.

3. Analysis of the results of the relationship between the budget deficit and government subsidy in Algeria for the period 2000-2020

To investigate the relationship between the general budget deficit and government subsidy in Algeria from 2000 to 2020, a model was developed in which the budget balance represents the dependent variable and government subsidy is represented by social transfers as the explanatory variable, using the Eviews10 program, which includes 21 views from 2000 to 2020. As a result, the model variables are:

Dependent variable: Budget Deficit (BD), Independent Variable: Social Transfers (ST)

3.1.The static test:

In order to detect the unit root test we will use the extended Dickey-Fuller test, and the following results are in the table:

Table 4. Extended Dickey Fuller Test Results

V	Corresponding probability of the test at level I (0)			Corresponding probability of the test at I (1)			Integration degree
	GD and FL	FL	Without GD and FL	GD and FL	FL	Without GD and FL	
BD	0,3019	0,7285	0,3953	0,0072*	0,0014*	0,0001*	I(1)
ST	0,6238	0,6773	0,8456	0,0174	0,0039*	0,0002*	I(1)

* Indicates that the null hypothesis is rejected at the 5% level of significance.

V= Variables, GD = General Direction, FL = Fixed Limit

Source: Prepared by the researcher based on the outputs of Eviews 10

The time series for each of the budget deficit and social transfers are at the level of I(0) with a significant level of 5%, but when the first difference for these variables is taken into account, the hypothesis is confirmed where $Pr < 0.05$. As a result, we reject the null hypothesis and accept the alternative hypothesis, and it can be stated that the two variables are complementary of the first degree I(1), indicating the possibility of a joint integration of the public budget deficit and government spending, and from which the error-correcting ray model (VECM) can be applied.

3.2. Determine the optimal deceleration period:

We use a set of criteria to determine the optimal deceleration period, which are (AIC), (SC), (FPE), and (HQ), and the period with the lowest values for these criteria is considered the optimal deceleration period. Based on the results shown in Table No.5, three optimal deceleration periods were chosen.

Table 5. optimal deceleration period Test

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-284.6162	NA	2.32e+11	31.84624	31.94517	31.85988
1	-265.0246	32.65258	4.13e+10	30.11385	30.41064*	30.15477
2	-264.9409	0.120904	6.54e+10	30.54899	31.04364	30.61720
3	-256.0919	10.81546*	4.04e+10*	30.01021*	30.70273	30.10570*

Source: Prepared by the researcher based on the outputs of Eviews 10

3.3. Johansen's co-integration test:

After making sure of the stability of the time series of the study variables, we found that they are integrated of the first degree, as we can test the existence of a equilibrium relationship between the time series over the long-runs through the Johansen1988 co-integration test, which is a test of the matrix soil.

Table 6. Johansen's Co-Integration Test Results

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.612750	17.92168	15.49471	0.0211
At most 1	0.100154	1.794039	3.841466	0.1804

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
 * denotes rejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.612750	16.12764	14.26460	0.0251
At most 1	0.100154	1.794039	3.841466	0.1804

Source: Prepared by the researcher based on the outputs of Eviews 10

The Trace test and the Maximum Eigenvalue test are included in the results table. We reject the null hypothesis, which includes the absence of co-integration between the variables, if the calculated value of the two tests is greater than the tabulated value at the 5% level of significance. The table shows that there is a co-integration between the general budget deficit variable and social transfers during these two tests (Maximum Eigenvalue, Trace), where there is only one co-integration relationship in the long-term.

3.4. Granger's causality test:

Because there is a co-integration relationship between long-term variables, we test for causation to determine the direction of the relationship, as shown in the table below:

Table 7. Granger's causality test results

Null Hypothesis:	Obs	F-Statistic	Prob.
ST does not Granger Cause BD	18	5.15546	0.0182
BD does not Granger Cause ST		0.82926	0.5050

Source: Prepared by the researcher based on the outputs of Eviews 10

Through the above table we find:

- ❖ **The first test:** It tests the causality of the ST on the BD insignificant, where the F-Statistic value indicates that it is less than 0.005, so social transfers cause the budget deficit.
- ❖ **The second test:** tests the causality of BD on the ST, where the probabilistic value of F-Statistic is greater than 0.005, so the budget deficit variable does not cause changes in social transfers.

Conclusion:

This study examined the impact of government subsidy policy on the general budget in Algeria using a measurement study based on the joint integration test, Granger causality, and annual data from 2000 to 2020, which included the budget deficit and social transfers. Through our examination of theoretical aspects of the public budget deficit and government subsidy, as well as clarification of its implications for the Algerian public budget deficit during the study period. Due to the large number of public expenditures (ten types), the share of social transfers was estimated to be between 22% and 26% of total public expenditures. Competing with government subsidy for expenditures and various economic programs, but despite recent declines in state revenues, it has maintained the state's general budget share of government subsidy.

Results :

- Algeria has pursued an expansionary fiscal policy since 2000, in response to an increase in government spending that has resulted in a persistent budget deficit.
- In Algeria, government subsidy is directed to six groups regardless of their standard of living, which is incompatible with social justice.
- Government subsidy represents a massive budget, a burden borne by the government, as large sums are allocated, contributing to an increase in the budget deficit.

Recommendations:

- Seeking to diversify sources of income and rationalization in government spending to reduce the budget deficit.
 - Diversify sources of income by distributing government subsidy allocations for productive projects.

Referrals and references:

- Eldepcy, M. (2022). The Budget Deficit Financing Impact on the Real Exchange Rate in. *International Journal of Economics and Finance*, 14(03), p. 85.
- Alwan, M., Al-Aqabi, R., & Fadel, J. (2020). The reality of government support for the agricultural sector in Iraq for the period (2004-2012). *Al Waseet Journal of Social Sciences*, 15.
- Bahaa Suphi, A., & Jafar, S. (2021). The Role of the Clearance Crisis on Public Expenditure and Budget. *International Journal of Business Ethics*, 04(01), p. 13.
- Bin Tafat, A., Sahel, M., & Elifi, M. (2018, 12 20). The impact of the budget deficit on economic growth in Algeria during the period (2009-2016). *Annals of the University of Algiers*, 32(04), pp. 233-251.
- Bohush, A., & Sayd, F. (2022). The effect of government support on the state budget deficit in Algeria, a standard study for the period 2000-2020. *Journal of Economic Integration*, 10(02).
- Boyce, P. (2022, 4 26). *Budget Deficit Definition*. Consulté le 09 2022, 16, sur boycewire: <https://boycewire.com/budget-deficit-definition/#Politics>
- Fund, I. M. (1996, 09). *Confronting Budget Deficits*. Retrieved from <https://www.imf.org/external/pubs/ft/issues3/>.
- Hami Hasaan. (2022, 02 24). *The jewel of Arab reform*. Retrieved from The policy of social support in Algeria Al-Talfa, the economic and the inevitability of reform: <https://www.arab-reform.net/ar/publication>
- Hassan, D., & Qaddal, Z. (2022). Government support and its implications for the state's general budget - a case study of Algeria during the period 2010-2020. *Afaq Journal for Research and Studies*, 05(01).
- Insider, L. (2008, 09 19). *government support definition*. Consulté le 13 2022, 10, sur lawinsider: <https://www.lawinsider.com/dictionary/government-support>
- Kanaan, A. (2009). *financial economics*. Damascus: Damascus University Publications.
- kasmori, k., Hadia, B., & Alawi, S. (2020). The reality of the relationship between inflation and the general budget deficit in Algeria, a standard analytical study during the period 2000-2016. *Journal of Banking Financial Economics and Business Administration*, 09(02).
- Ministry of Finance. (2020). Retrieved from <https://www.mf.gov.dz/index.php/ar/services-ar/prevision-et-politiques-ar/531-retrospective>
- Shardud, K., & Jalid, N. (2022, 04 17). Financing the public budget deficit between the functional economy and the Islamic economy. *Journal of Economic Problem and Development*, 01(01), pp. 52-71.
- Zaghrouani, L., & karim, b. (2021). Reform of government subsidies as a measure of fiscal consolidation. *Contemporary Economic Research Journal*, 04(02), p. 387.
- Zerrouqi, F.-Z. (2022). An analytical study of the development of government support in Algeria during the period 2010-2020. *Shuaa Journal of Economic Studies*, 06(01).