

The impact of the changing relationship between the budget and the balance of payments on the national economy**أثر تطور العلاقة بين الميزانية وميزان المدفوعات على الاقتصاد الوطني****Dr. Mohamed Belaidi**

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Received: 20/07/2023**Accepted:** 23/09/2023**Published:** 30/09/2023**Abstract:**

This study aims to determine the extent of the impact resulting from the evolution of the relationship between the public budget deficit (internal equilibrium) and the balance of payments deficit (external equilibrium) on the general equilibrium of the Algerian economy. during the period 2014-2020. While the value of exports and imports continued to decline, alongside the fall in the price of a barrel of oil, which was offset by the export of goods outside the hydrocarbon sector in small quantities, resulting in to record a negative balance of trade, in addition to a drop in foreign direct investment flows. On the other hand, the public budget experienced strong fluctuations due to the downward trend in public savings, which did not contribute to financing the required volume of public investment.

Keywords: public budget; balance of payments; internal equilibrium; external equilibrium; Economy equilibrium.

JEL Classification Codes: H61, B27, D5, F3

ملخص:

تهدف هذه الدراسة إلى تحديد مدى التأثير الناتج عن تطور العلاقة، بين عجز الميزانية العامة (التوازن الداخلي) وعجز ميزان المدفوعات (التوازن الخارجي) على التوازن العام للاقتصاد الجزائري خلال الفترة 2014-2020. حيث واصلت قيمة الصادرات والواردات في التراجع، بالموازاة مع انخفاض سعر برميل النفط، والذي تم تعويضه بتصدير سلع خارج قطاع المحروقات بكميات قليلة، مما نشأ عنه تسجيل رصيد سالب للميزان التجاري، بالإضافة إلى تدني تدفق الاستثمار الأجنبي المباشر. ومن جانب آخر، شهدت الميزانية العامة تقلبات حادة بسبب الاتجاه التنافسي للدخار العمومي، الأمر الذي لم يساهم في تمويل الحجم المطلوب من الاستثمار العام.

كلمات مفتاحية: الميزانية العامة، ميزان المدفوعات، التوازن الداخلي، التوازن الخارجي، التوازن الاقتصادي.

تصنيفات JEL: H61 , B27 , D5, F3

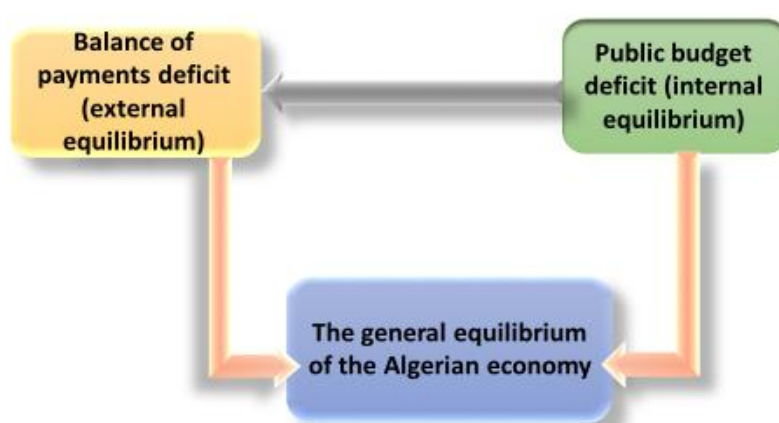
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INTRODUCTION:

The relationship between public savings and the financing needs of the national economy has changed. During the period 2014-2020. Public savings are always lower than the amounts allocated to public investment, which explains the State's constant recourse to borrowing from the local banking sector, which is accompanied by a very low inflow of direct investment strangers. Covering both the general budget deficit and the balance of payments deficit has become a complex problem for the government. The decline in public savings results from fluctuations in public revenues affected by the negative balances of the trade balance account, the current account and the capital account, which led to the erosion of the total foreign exchange reserve, and its ability to finance imports.

Thus, in the end, the magnitude of the "real correlation" between the general budget deficit and the balance of payments deficit becomes clear, but the repercussions of this relationship on certain monetary and real variables of the national economy are become clear, especially when this coincided with the emergence of the phenomenon of "double decline" in the value of exports and imports. Based on what has been said, the following main question can be asked: *Has the evolution of the relationship between the public budget and the balance of payments played a role in the promotion of national exports outside the oil sector towards international markets?*

To answer the problem posed, we can make the following hypothesis: The general budget deficit is the main cause of the balance of payments deficit and the resulting negative effects on the most important indicators of the internal and external balance. From the above, the following study model can be developed to clarify the impact of the changing relationship between public budget and balance of payments on the national economy:



This research aims to reveal the reality of the effect of the relationship between the general budget deficit and the balance of payments deficit on the following indicators of the national economy:

- ✓ Consumer price index or inflation rate.

- ✓ The money supply, made up of money and quasi-money, M2.
- ✓ Total foreign exchange reserves.
- ✓ The exchange rate of the Algerian dinar

The analytical descriptive approach was used to find out the impact of the emerging relationship between the budget deficit and the external deficit of the balance of payments on the most important indicators of the balance of the national economy. compiled and analyzed a set of statistics and historical data, which are organized in tables with a 7-year time series representing an cycle, drawn from the reports of the most important national and international and monetary bodies that serve the problem of the study.

1- The theoretical framework of the study:

The budget is a central policy document of government, showing how it will prioritise and achieve its annual and multi-annual objectives. Apart from financing new and existing programmes, the budget is the primary instrument for implementing fiscal policy, and thereby influencing the economy as a whole. Alongside other instruments of government policy – such as laws, regulation and joint action with other actors in society – the budget aims to turn plans and aspirations into reality. More than this, the budget is a contract between citizens and state, showing how resources are raised and allocated for the delivery of public services. Such a document must be clear, transparent and credible if it is to command trust, and to serve as a basis of accountability. (Organisation for Economic Co-operation and Development (OECD), 2014). Government revenues are government income. The main sources of revenue in OECD countries are typically taxes and social contributions, with some income from charges for services provided by the state. In some countries, revenues may include a significant portion from non-tax sources, such as income from state-owned or royalties on natural resources. Revenue policy is typically designed to serve multiple purposes. The most fundamental is to collect funds to pay for the provision of goods and services for the population, such as health care and defense. Policies will often also be designed not to worsen inequality, such as by levying higher income taxes on those with higher incomes. Policies can be used to encourage socially beneficial activities (such as tax breaks on research and development) and discourage harmful ones (such as taxes on carbon emissions or tobacco). In some cases, these different purposes may conflict with each other. (Els, 2021)

Government balance sheet is a comprehensive statement of the assets, liabilities, and net worth (assets less liabilities) of government at a point in time—usually year-end. In practice, very few governments prepare statements of their financial position that could be described as balance sheet. Adoption of actual Accounting reports and generally Accepted methods of assets evaluation are prerequisites for a reliable balance sheet presentation. (INTERNATIONAL MONETARY FUND, 2007)

analysis of the aggregate effects of fiscal policy dates back at least to the work of David Ricardo. Modern academic interest was reinvigorated by the work of Robert Barro and others and by the emergence of large U.S. federal budget deficits in the 1980s and early 1990s.¹ The result was a substantial amount of research, which is summarized in several excellent surveys.² The rapid but short-lived transition to budget surpluses in the late 1990s, followed by the sharp reversal in budget outflows since 2000, has raised interest in this topic again. Economists tend to view the aggregate effects of fiscal policy from one of three perspectives. To sharpen the distinctions among them, it is helpful to consider a deficit induced by a lump-

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sum tax cut today followed by a lump-sum tax increase in the future, holding the path of government purchases and marginal tax rates constant. Under the Ricardian equivalence hypothesis proposed by Barro, such a deficit will be fully offset by an increase in private saving, as taxpayers recognize that the tax is merely postponed, not cancelled. The offsetting increase in private saving means that the deficit will have no effect on national saving, interest rates, exchange rates, future domestic production, or future national income. A second model, the small open economy view, suggests that budget deficits do reduce national saving but, at the same time, induce increased capital inflows from abroad that finance the entire reduction. As a result, domestic production does not decline and interest rates do not rise, but future national income falls because of the added burdens of servicing the increased foreign debt. A third model, which we call the conventional view, likewise holds that deficits reduce national saving but that this reduction is at least partly reflected in lower domestic investment. In this model, budget deficits partly crowd out private investment and partly increase borrowing from abroad; the combined effect reduces future national income and future domestic production. The reduction in domestic investment in this model is brought about by an increase in interest rates, thus establishing a connection between deficits and interest rates. (GALE & ORSZAG, 2004)

Given a definition of government, the net issue is defining debt and deficit. There are a myriad of ways of doing so. Practice varies from country to country and, within a given country, central and local governments may follow different rules. To make analytical progress, it is necessary to abstract from much of this variation. We can start with the deficit. It is natural to think of it as the difference between spending and revenue, without reference to the government's balance sheet. Yet it can also be defined in terms of changes in the balance sheet, and it often is because spending and revenue are themselves defined in this way. A simple measure of the deficit is the decline in the value of the government's net assets. Such a deficit is said to be clean, while one that excludes certain changes is said to be dirty. Although dirty deficits can be used to exclude losses for pure cosmetic reasons, certain dirty deficits are important. In particular, excluding capital gains and losses caused by changes in market prices generates a deficit that is more stable and more easily controlled by the government than the clean deficit. In government-finance statistics, the clean deficit is usefully split into a part arising from transactions and a part related to "other flows," and it is the deficit on transactions that gets most attention. Different measures of the clean deficit arise from differences in the assets and liabilities that are recognized in each of which generates its own measure of net assets and hence its own clean deficit. Each set also tends to be associated with certain dirty deficits, as well as certain measures of the debt. The smallest set, contains cash and nothing else. The clean cash deficit is just the change in the government's cash balance, which is crucial when the government's liquidity is in doubt, but not very informative otherwise. When cash accounting is used, attention is paid to a dirty deficit that is derived by classifying transactions into groups. Often, financing cash flows are distinguished from operating and investing cash flows, and the deficit is taken to be the sum of operating and investing cash flows. The next set, F, contains cash and other financial assets, like loans, shares, and accounts receivable, as well as the liabilities that correspond to these

assets. This set generates what could be called financial accounting and a clean deficit equal to the decline in the government's net financial worth. The part of this decline that arises from transactions is the deficit subject to the European Unions fiscal rule. The Third set, R, also includes real assets, like land and buildings, and generates the kind of accounting that is used by businesses and required by IPSASB (2014). For convenience, R-based accounts can be called full-actual (recognition that financial accounting as defined above is also a form of actual accounting). The clean deficit of full-actual accounting is the decline in the government's net worth, and the change in net worth arising from transactions is the net operating balance government's accounting. The Universal set, M, in Figure 2 includes assets and liabilities in respect of all the government's projected spending and revenue under current policy. (Irwin, 2015)

Federal fiscal policy affects the amount of federal government saving and this in turn directly affects national saving. From the 1970s through the mid 1990s, federal deficits absorbed a large share of private saving and reduce the amount of national saving available for investment. Borrowing to finance these deficits added to the federal debt held by the public. In recent years, federal surpluses added to national saving and increased funds available for investment. So far, the federal government has used surplus funds to reduce its debt held by the public. Accumulation of federal financial assets, such as stocks, could be another way that government saving could translate into resources available for investment, but this idea is controversial. An additional dollar of government saving and debt reduction does not automatically increase national saving and investment by a dollar because changes in saving by households and businesses will tend to offset some of the change in government saving. (United States General Accounting Office, 2001)

The effects of government debt on the real interest rate, or the degree to which government deficits crowd out private-sector activity, depend to a large extent on whether consumers view debt as net wealth. If consumers are connected to all future generations and can borrow and lend against their future income streams, changes in debt will not crowd out private consumption and investment because consumers effectively internalize the government's intertemporal budget constraint and regard a debt-financed reduction in taxes today as implying an equivalent increase in future tax burdens. This extreme polar case is generally referred to as the Ricardian equivalence hypothesis. (Faruquee, Laxton, & Symansky, 2006, p. 2006)

Net saving refers to the difference between current revenues and current expenditures or the fiscal balance without taking into account capital expenditures. Net saving does not consider investment expenditures or capital transfers, instance e.g. to publicly owned or financial institutions. Net saving is typically associated with the "golden rule" of public finance, which advocates that, in the course of a cycle, the current revenues should cover current expenditures. This also implies that debt issuance should only be for growth-promoting investment leading to a sustainable fiscal stance. In 2017, the average net saving in OECD countries was -1.8% of GDP, with slightly more than 50% of the countries reporting positive net saving levels. The United States had the largest negative net saving in 2017, amounting to 4.9% of GDP, partially explained by a change in trend in 2016 as the federal government increased expenditure after several years of consolidation. This trend is expected to continue as fiscal policy relaxed substantially in early 2018 resulting from a tax reform combined with

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congress raising spending ceilings in 2018 and 19 all of which led to further spending (OECD 2018a). Conversely, Norway had the highest positive net saving in 2017 (6.9%), as under the fiscal framework, withdrawals from the Norwegian Wealth Fund (e.g. revenues from off-shore petroleum production) cover the non-oil budget deficits to a ceiling set by the fiscal rule, while still protecting the interests of future generations. In consequence, it is unlikely that while this arrangement is in place net savings will be ever negative. In 2007, only 8 OECD countries reported negative net savings compared to 17 in 2017. Still, all countries that had positive net savings in 2007 reported lower levels in 2017, except Austria (0.1 p.p.), the Czech Republic (0.4 p.p.), the Netherlands (0.8 p.p.) and Germany (1.2 p.p.) who reported higher net saving levels. These countries have been at the forefront of advocating and implementing austerity policies (OECD, 2019)

Balance of payments deficits of a more persistent character will arise if there is a falling trend in a country's export receipts over a long period due to circumstances beyond the exporting country's control. Unfortunately for the developing countries, there are many of this kind ; mineral resources may become exhausted, for instance, or there may be a fall in international demand for one of a country's leading products. When such mis fortunes occlure, it is necessary to appli corrective measures ; if the deficit were permitted to go on, réserves and other sources of compensa tory financing would be depleted. A logiciel measure would be a dépréciation of the currency to permit the balance of payments to become Balanced without excessive application of restrictions or deflationary policies. An alternative would be an increase in import duties. This measure, in contrast to depreciation of its domestic currency, does not encourage à diversification of exports. In Common with other measures affection trade, increased import duties call for close examinassions and, where applicable, measures of renégociation, under the General Agreement on Tarifs and Trade. These are among the obvions rational policies. But this is clear a situation in which the application of rational policies may rencontre résistance. In the short rune it may be necessary to ajust the economy to a lower level of real income, Something which may created Political difficult in many countries. Any measures to deal with the immediate balance of payments problems must, therefore, be supplémente with seps to improves the balance of payments over the long run. (Madsen, 2010)

The balance of payments problem of developing countries has in many instances been aggravâtes by inflationary price rises due to an excessive monetary expansion, the primary source more often than not being a government deficit. Such deficits are bound to arise whenever a government is endeavoring to push expenditures for development beyond what can be financed from domestic noninflationary sources and foreign aid and capital (although it can also arise because a government's current expenditures are unduly high). In the short run domestic savings may perhaps sometimes be increased by resort to inflationary financing ; but in the long run the effect of inflation on saving is bound to be harmful. In addition, inflation and the disturbances to international payments that it brings about tends to discourage an inflow of foreign capital, while stimulating an outflow of capital. Inflation, therefore, will in the end reduce the resources available to finance development expenditure. The use of inflationary financing is usually soon reflected in the balance of payments. Insar a inflation

results in expenditures for domestic capital formation in excess of domestic saving and the net inflow of financial resources from abroad, an overall deficit in the balance of payments is bound to arise, quite aside from any rise in prices. In addition, the rise in domestic prices, costs, and incomes with which inflationary financing is associated, discourage exports and stimulate imports. These developments are also likely to worsen the capital account of the balance of payment. (Madsen, 2010)

Order to appreciate the practice applicability of this macro concept, a theoretical Under standing is necessary. By definition, the twin deficits hypothesis purposes that there is a causal relationship between the fiscal deficit and the current account deficit. It derived its basis from the national income identity (NII), which is obtained from the Keynesian spending equation, and penne on the Mundell-Fleming model :

$$CA = (Sp - IP) + (SG - IGG)$$

Where CA is the current account, Sp and IP are private savings and investment, respectively ; and SG and IGG are government savings and investment. SG – IGG is equivalent to the fiscal balance. (Thompson, Sonnylal, & Nelson, 2021)

2- The repercussions of weak tax revenue growth on the public budget balance:

The repercussions of the weak growth in tax revenue have affected the balance of the public budget and the extent of the public treasury's needs in sources of financing in Algeria during the period 2014-2020. The process of collecting non-hydrocarbon revenue continued at a rate that did not allow the tax administration to collect the sums programmed in the finance laws, represented in taxes on income and profits, taxes on goods and services, which raise public savings to sufficient levels required to finance current expenditure and public investment. The weak growth of tax revenues in the national economy during the period 2014-2020 played a leading role in the decline in the level of government revenues, which over time became able only to finance current expenditures, and the remaining amounts did not cover all the investment expenditure of the State, and this explains The budget public budget falls into a deficit. It reflects the inability of fiscal policy to collect taxes and fees to a sufficient extent to fill the public expenditure gap on the one hand, and the impact on the economic and social situation on the other hand, noting that the policy fiscal expresses a set of fiscal and fiscal measures and procedures related to the collection of public revenue expected or estimated in each country. A finance law implemented by the tax administration. In this context, it should be noted that among the most important reasons attributed to the inability of tax policy to accelerate the growth rate of tax and fee collection, and the increase in tax revenue, are :

- Tax pressure, which reflects knowledge of the impact of large tax deductions on tax collection.
- The tax effort which reflects the ability of taxpayers to submit their due to the tax administration.
- Tax efficiency, ie the possibility for the actual product of tax deductions to be equivalent to the expected or estimated product.
- Measure the level of tax evasion.

It is clear that the low growth of tax revenues has repercussions and repercussions on the balance of the public budget, but as we mentioned before, these repercussions resulting from the inability of tax policy and the administration tax to double the collection of taxes and fees,

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lead to a complex and social situation, which can spread. Its impact has led to the appearance of imbalances in some important real and monetary variables which directly contribute to maintaining the internal and external balance of the national economy. The most important reasons that have strongly contributed to the failure of tax policy and tax administration to raise tax revenue to the required level are :

- High rate of tax pressure and tax effort
- Low tax efficiency
- Increase in tax evasion.

Therefore, a study of the reality of the repercussions of the weak growth of tax revenues on the national economy requires to well on the reasons which contributed to the achievement of this slow growth by calculaient the values of the following indicators :

- **Tax pressure rate** : Tax pressure is the ratio of total taxes to gross domestic product (GDP). The purpose of the tax burdens calculassions is to déterminer the changes resulting from tax deductions, and its formula is as follows :

$$\text{Tax pressure rate} = \text{Total taxes} / \text{Gross domestic product (GDP)}$$

Table (1): Tax pressure rate Evolution (Total taxes / Gross domestic product)- billion Algerian dinars

Year	2014	2015	2016	2017	2018	2019	2020
Total taxes	2091.4	2354.7	2482.2	2630	2711.8	2843.5	2625.17
GDP	17242.5	16591.9	17514.6	18876.2	20452.3	20428.3	18723.5
Tax pressure rate	0,12	0,14	0,14	0,14	0,13	0,14	0,14

Source: (Bank of Algeria(2016), 2016) (the Bank of Algeria, 2016, p. (2020)

The high rate of fiscal pressure in the national economy has created many problems. As a result, the State has not been able, through the withholding tax that was collected during the period 2014-2020, to collect the public revenue necessary to cover all public expenditure, and at the same time it has not kept the volume of consumption and investment at levels which do not increase costs and do not affect prices and the market. Therefore, the high tax pressure will have disastrous consequences on the rate of growth, and therefore will decrease the profitability of collection in the future. It should be noted that the rate of tax pressure during the period 2009-2013 did not exceed 0.11.

- **Tax effort rate** : The tax effort is the ability of taxpayers, dépendant on their activities, to meet their requirements for the payment of taxes of any kind. The value of tax effort is determined by calculaient the ratio of tax product to tax energy as follows :

$$\text{Tax effort} = \text{tax revenue} / \text{tax capacity}$$

In which :

$$\text{Tax capacity} = \text{gross domestic product (GDP)} - \text{gross national consumption}$$

Table (2): Tax effort rate Evolution (tax revenue / tax capacity)- billion Algerian dinars

Year	2014	2015	2016	2017	2018	2019	2020
tax revenue	2091.4	2354.7	2482.2	2630	2711.8	2843.5	2625.17

GDP - gross national consumption	7612.9	6291.1	6408.9	7264.9	8375.9	8080.2	6166.8
effort tax rate	0,27	0,37	0,39	0,36	0,32	0,35	0,42

Source: (Bank of Algeria(2016), 2016) (the Bank of Algeria, 2016, p. (2020))

It is clear that the tax effort ratio during the period 2014-2020 increased from 0.27 en 2014 to 0.42 en 2014. This means that it increased by 0.15, which reduce the ability of taxpayers to fully pay their tax payments. For taxpayers, tax energy represents gross domestic savings, which is equal to the difference between gross domestic product (GDP) and gross national consumption. In short, we conclue that there is an inverse relationship between the tax effort ratio and total domestic savings. The higher the size of gross domestic savings, the lower the proportion of tax effort associated with it. vice versa.

- **Tax efficiency** : Tax efficiency is the development of the ability of the Tax Département to meet the financial needs of the national economy. Tax efficiency is measure by calculaient the ratio of the actual procédés of tax deductions to the estimated procédés, which are :

Tax efficiency = Tax efficiency = actual tax product / estimated tax product

Table (3): Tax efficiency Evolution (actual tax product / estimated tax product)- billion Algerian dinars

Year	2014	2015	2016	2017	2018	2019	2020
actual tax product	2091.4	2354.7	2482.2	2630	2711.8	2843.5	2625.17
estimated tax product	2267.45	2465.71	2722.68	2845.37	3033.02	3041.42	3046.86
Tax efficiency	0,92	0,95	0,91	0,92	0,89	0,93	0,86

Source: (Bank of Algeria(2016), 2016) (the Bank of Algeria, 2016, p. (2022))

By examinant the tax efficiency ratio calculâtes during the period 2014-2020, we fund that the Tax Département was not able to collect the estimated tax revenues required in the finance laws. When mesurant tax efficiency, we fund that it always remanie below 100%. This indicates that actual tax revenue has always been lower than estimated tax revenue.

- **Tax evasion Level** : The calculassions of tax evasion is donne by mesurant the tax performance capacity of the Tax Département, which relies on a hypothesis based on the validité and crédibilité of the BIP. Tax evasion is calculâtes by the following relationship :

Tax evasion Level = Potential Statu tory Tax (PST) - Revalidez Tax (RT)

Table (4): Level tax evasion Evolution (PST - RT) Evolution-billion Algerian dinars

Year	2014	2015	2016	2017	2018	2019	2020
Potential Statu tory Tax (PST)	2267.45	2465.71	2722.68	2845.37	3033.02	3041.42	3046.86
Potential Statu tory Tax (PST)	2091.4	2354.7	2482.2	2630	2711.8	2843.5	2625.17
Tax evasion	176,05	111,01	240,48	215,37	321,22	197,92	421,69

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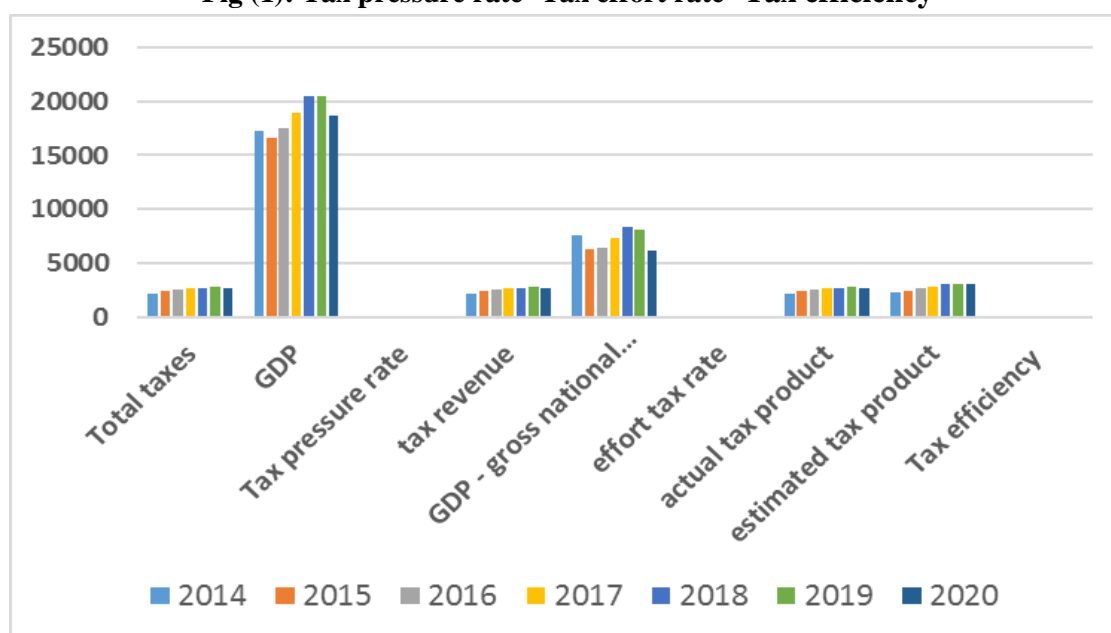
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Source: (Bank of Algeria(2016), 2016) (the Bank of Algeria, 2016, p. (2020)

Tax evasion in the national economy still represents significant paid bills at the Tax Département. A percentage of taxpayers continue to avoid paying the required taxes. The volume of paid taxes during the period 2014-2020 amounts to approximately 1683.7 billion Algerian dinars. This is an amount that covers the budget deficit for the year 2020.

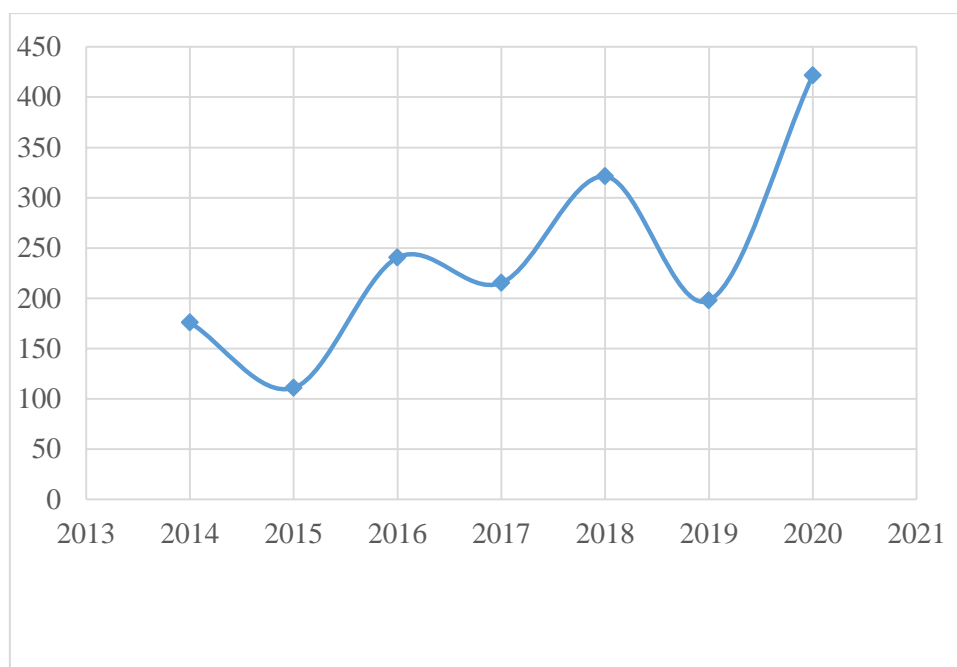
And on the basis of the values of tax pressure, tax effort, tax efficiency and tax evasion, which are included in the four tables, we put graphs n°1 and 2 :

Fig (1): Tax pressure rate- Tax effort rate- Tax efficiency



Source: Prepared by the researcher

Fig (2): level tax evasion



Source: Prepared by the researcher

3- The evolution of the relationship between the budget deficit and the external deficit:

3-1 Analysis of the relationship between the budget deficit and the balance of payments deficit (double deficit)

World Bank experts believe that the budget deficit is the main cause of the public debt crisis, and this has been justified by means of a mathematical relationship, which generally translates and reflects the relationship between the budget deficit and the deficit external balance of payments, which is as follows:

We have the gross domestic product from an expenditure perspective:

$$(1) \text{ GDP} = C + I + G + X - M$$

We also have the gross domestic product from a usage perspective:

$$(2) \text{ GDP} = C + S + T + R$$

in which:

C: private consumption.

I: private investment.

S: private savings.

T: government revenue (taxes).

A: net transfers abroad.

G: public expenditure.

X: exports.

M: imports.

From equation (1), (2) we find:

$$C + I + G + X - M = C + S + T + R$$

Then put together the elements of the general budget and the elements of the balance of payments, and we find:

The balance of payments and budget components are broken down as follows:

$$(I - S) + (G - T) = (M - X + R)$$

We deduce that the “current account balance” of the balance of payments ($M - X + R$) is equal to

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the sum of the “investment and savings balance” of the productive sector (I-S) and the “general budget deficit (G-T). This mathematical equation presents at least one presence - effect A reciprocal between the deficit of the balance sheet and the deficit of the current account of the balance of payments - and that the budgetary deficit, in general, is the main reason for the recourse of the State to the external loan.

Table (5): The evolution of the relationship between the current account balance and the budget deficit-billion Algerian dinars

Year	2014	2015	2016	2017	2018	2019	2020
(M-x+R)	-766.067	-2741.76	-2862.62	-2444.92	-1953.49	2021.95-	-2873.23
(I-S)	491.133	-148.46	-823.68	-1216.22	-978.89	-358.05	-1611.3
(G-T)	-1257.2	-2593.3	-2187.4	-1234.7	-974.6	-1663.9	-1261.9

Source: (Bank of Algeria(2016), 2016) (the Bank of Algeria, 2016, p. (2020)

on the level of external equilibrium. The double deficit showed a relationship between domestic national saving and the national economy's need for external sources of financing, mainly represented in foreign loans and foreign investment. It is noticeable that the level of domestic saving in the national economy has become less than the level required to finance public investments. This made the national economy's need for external financing increase, especially foreign direct investment.

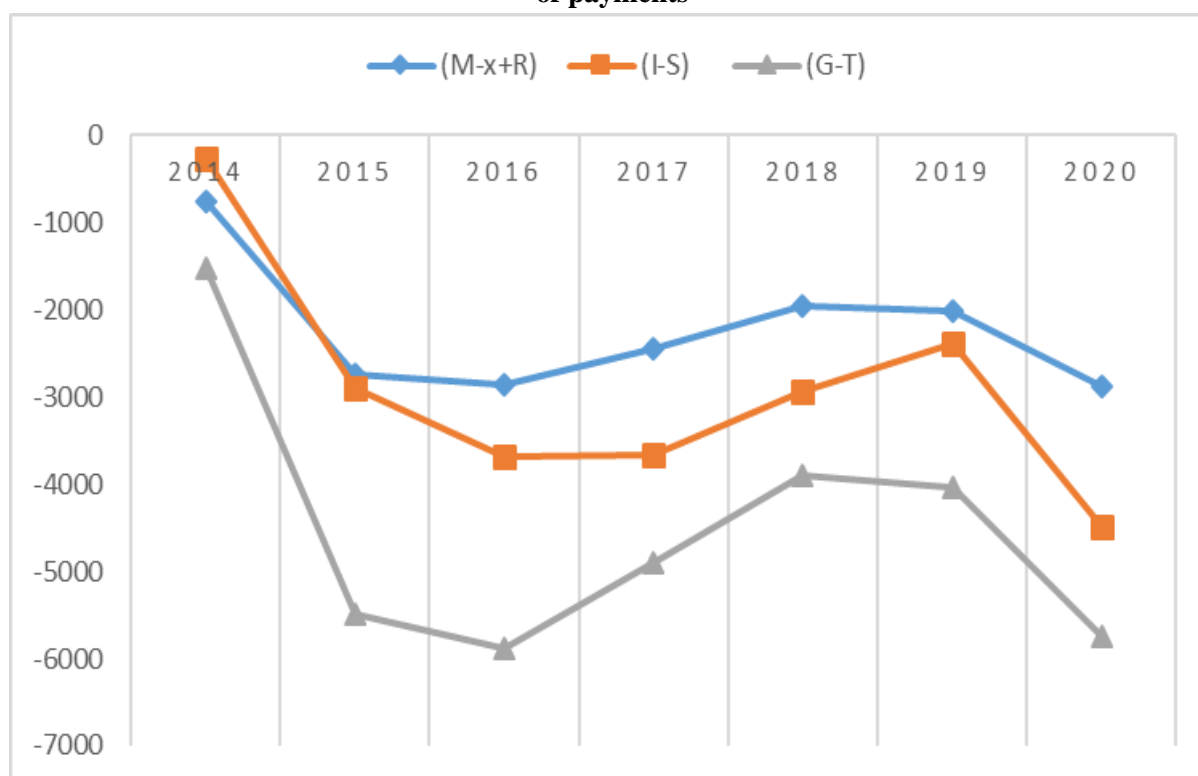
The existence of the double deficit also proved that the continued decline in domestic financial resources was always matched by an increase in the trade balance deficit. With it, the ability of the reserve to finance the difference between the value of imports during a certain period and the proceeds of exports decreased. The persistent existence of the external trade deficit in the national economy confirms the following :

- An increase in the index of imports in relation to GDP, because this ratio expresses the extent to which imports contribute to satisfying overall demand, that is to say it reflects the degree of dependence of the national economy with respect to abroad to meet domestic demand, which means that this ratio reflects the impact of international economic activity on the national market.
- An increase in the exports to GDP index, because this ratio expresses the contribution of exports of goods and services to the volume of national economic activity, which highlights the importance of the role of exported goods and services in the stimulation of local economic activity, as the ratio of exports to GDP remains high, which proves that the degree of dependence of national economic activity on foreign countries is high. (Khirdja , 2023)

In light of the aforementioned. Over the period 2014-2020, we find that the Bank of Algeria, which is the monetary authority, did not control the change in the M2 monetary complex, despite setting target limits for this change within the framework of financial programming. It appears that the direct issuance of the Algerian dinar by the Bank of Algeria was not accompanied by a parallel development of the GDP (PIB). In fact, the indicator that shows this situation is the M2/PIB liquidity ratio. This explains the failure to ensure the stability of the value of the Algerian dinar against other foreign currencies, especially the US dollar, as well as the failure to guarantee reasonable prices in the market for goods and services.

On the basis of the figures in table n°5, which include a relationship between the current account balance and the budget deficit, it is possible to establishing graph n°3 :

Fig (3): Shows the relationship between the budget deficit and the external deficit of the balance of payments



Source: Prepared by the researcher

3-2 The effect of the double deficit on the inflation rate and the money supply:

Table (6): The evolution of the effective inflation rate and the monetary liquidity ratio

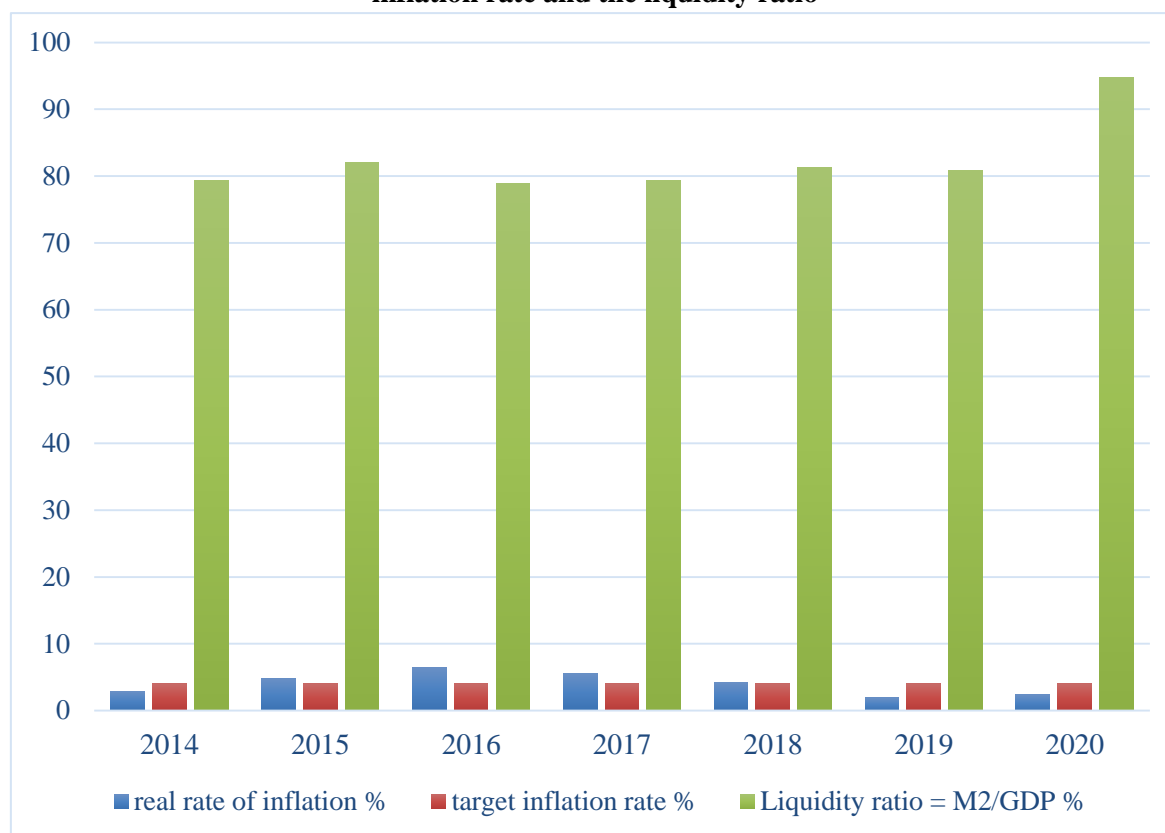
Year	2014	2015	2016	2017	2018	2019	2020
real rate of inflation %	2,92	4,78	6,4	5,59	4,27	1,95	2,42
target inflation rate %	4	4	4	4	4	4	4
Liquidity ratio = M2/GDP %	79,4	82	78,9	79,3	81, 3	80,8	94,7

Source: (Bank of Algeria(2016), 2016) (the Bank of Algeria, 2016, p. (2020))

While at the level of internal balance. The double deficit illustrates the challenges faced by the national economy in achieving a targeted inflation rate of 4%. and proper management of foreign exchange reserves. As the exchange reserve continued to decrease during the period 2014-2020, and as it is known, the exchange reserve of foreign exchange also represents the main cover for the exported money, and a source of stability for the national currency, the Algerian dinar.

Based on the figures in Table 6, which include the evolution of the effective inflation rate and the cash ratio, it is possible to draw Graph 4:

Fig (4): The effect of changes in the budget deficit and the balance of payments on the effective inflation rate and the liquidity ratio



Source: Prepared by the researcher

3-3 The impact of the double deficit on foreign exchange reserves and the stability of the Algerian dinar exchange rate:

Table (7): Evolution of foreign exchange reserves, and the exchange rate of the Algerian dinar

Year	2014	2015	2016	2017	2018	2019	2020
(billion exchange reserve USD)	178.93	144.13	114.13	97.332	79.882	62.756	48.167
exchange rate against the US dollar (Algerian dinars)	87.90	107.14	110.52	114.94	118.29	119.16	126.82

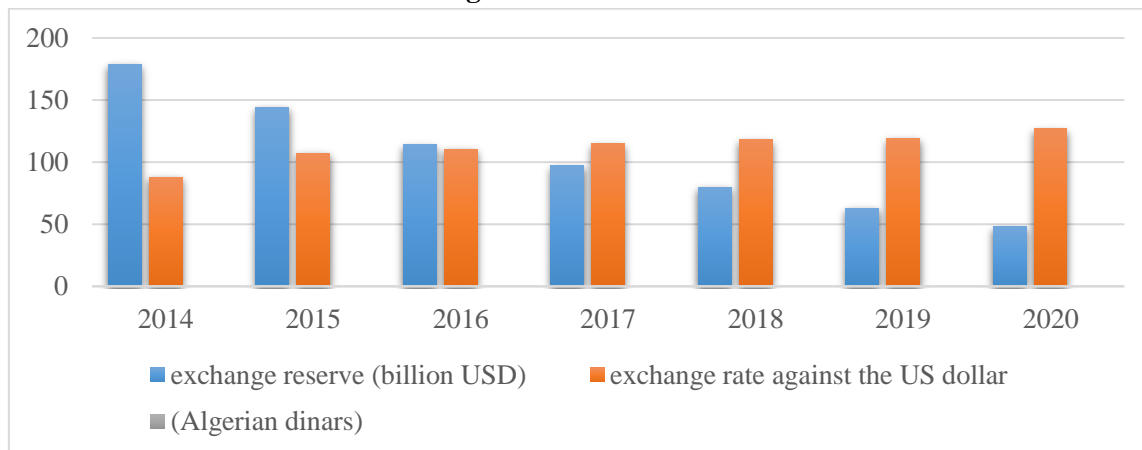
Source: (Bank of Algeria(2016), 2016) (the Bank of Algeria, 2016, p. (2020)

The failure to limit the price level within its target range, especially during the period 2015-2019, is considered an and social problem at the same time. It contributed to the failure to achieve a rapid growth rate, one of the most important negative results of which was the impact on the purchasing power of the daily per capita income, which required the government to take repeated decisions to raise wages. The change in the M2 monetary complex often affected the activity of dealers in the national economy, and therefore it affected the gross domestic product (PIB). Also, therefore, the issuance of more money was not in accordance with the needs of the national economy, and this resulted in the instability of the value of the exported Algerian dinar, as well as the failure to maintain acceptable price levels by both consumers and producers in the national market. We know that the foreign

exchange réserve, represented by net foreign assets in Algerian dinars, is closely linked to the evolution of the volume of Algerian public expenditure for the purpose of financing public expenditure. This prompted the Bank of Algeria, in 2017 and 2018, to buy bonds directly from the public treasury. In this context, we found that foreign exchange reserves continued to gradually decrease until they became not the main Hergé in the issuance of Algerian debt. Dinar intense for the financing of public expenditure and the remboursement of the internal debt.

On the basis of the figures in table n°7, which include the evolution of foreign exchange reserves and the exchange rate of the Algerian dinar, it is possible to draw graph n°5):

Fig (5): Displays the foreign exchange reserves and the exchange rate of the Algerian dinar against the US dollar



Source: Prepared by the researcher

Conclusion:

The impact of the evolution of the relationship between the budget deficit and the balance of payments deficit was studied on the most important equilibrium variables of the national economy. This is based on the assumption that the general budget deficit is the main cause of the balance of payments deficit, which will result in negative effects on certain internal and external balance indicators. This research revealed the reality of the impact of the relationship between the general budget deficit and the balance of payments deficit in the national economy through the study and analysis of the evolution:

- ✓ Inflation rate.
- ✓ Currency and cash equivalents M2.
- ✓ Total foreign exchange reserves.
- ✓ The exchange rate of the Algerian dinar.

The study concluded that the general budget deficit is the main cause of the balance of payments deficit. However, it was clearly confirmed that this budget deficit resulted from the following factors:

- ✓ The high rate of tax pressure in the national economy, which resulted in a drop in the level of collection of tax revenue, necessary to cover all public expenditure.
- ✓ The increase in the rate of tax effort, which has led to a decline in the ability of taxpayers to fully pay taxes.
- ✓ Low rate of tax efficiency, which means the inefficiency of the ability of the Tax Department to achieve the estimated tax revenues.

*The impact of the changing relationship between the budget and the balance
of payments on the national economy*

- ✓ The rate of tax evasion continues to increase in the national economy.

The study also showed that:

- ✓ Continue to register a double deficit of the national economy, which leads to a growing need for external sources of financing represented by external loans and foreign investments. Especially since domestic savings have fallen below the level required to finance public investments.

The possibility of a return to the direct issuance of cash by the Bank of Algeria, which is a factor that would destabilize the value of the Algerian dinar against foreign currencies, as well as the lack of control over the prices of goods and services in the national market.

The continued recovery of public spending in the national economy is linked to an increase in the level of foreign exchange reserves from one source, which is the hydrocarbons sector.

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