

Controls of the financial relationship between the public treasury and the Bank of Algeria: An analytical study for the period of 2010 - 2023**ضوابط العلاقة المالية بين الخزينة العمومية و بنك الجزائر : دراسة تحليلية للفترة 2010-2023****Ishak khadidja¹, Hani Meriem²**¹ University of Tamanghasset (Algeria), khadidja_ishak@hotmail.com² University of Tamanghasset (Algeria), m.etud.eco@gmail.com**Received:** 29/04/2025**Accepted:** 29/06/2025**Published:** 30/06/2025**Abstract:**

The aim of this study is to analyze the financial relationship between the Bank of Algeria and the public treasury from 2010 to 2023, focusing on the most important controls that affected this financial relationship, through the analysis of economic data associated with the study period.

In light of this, the study's results have also demonstrated that the financial relationship between the Bank of Algeria and the public treasury is based on the imperative of coordinating monetary and financial policies. The findings indicate that this financial relationship has been subject to several controls that have affected the strength and substance of this interaction, notably including legal frameworks, oil price fluctuations, the distribution of profits of the Bank of Algeria, public debt management, and the effects of the COVID-19 pandemic.

Keywords: Bank of Algeria; Public treasury; Monetary policy; Financial policy; Financial relationship.

JEL Classification Codes: E52, E62, E61

ملخص:

هدفت هذه الدراسة إلى تحليل العلاقة المالية بين بنك الجزائر والخزينة العمومية خلال فترة الممتدة بين 2010 إلى 2023 مُركزةً على أهم الضوابط التي أثرت في هذه العلاقة المالية، وذلك من خلال تحليل المعطيات الاقتصادية المرتبطة بفترة الدراسة. وقد تبين من خلال الدراسة أن العلاقة بين البنك الجزائر والخزينة العمومية مبنية على حتمية التنسيق بين السياستين النقدية و المالية، كما أظهرت نتائج الدراسة أن العلاقة المالية بين البنك الجزائر و الخزينة العمومية قد خضعت لعدة ضوابط أثرت في قوة هذا التفاعل المالي ومضمونه، كان من أبرزها الأطر القانونية، تقلبات أسعار النفط ، توزيع أرباح بنك الجزائر، إدارة الدين العام وجائحة كورونا .

كلمات مفتاحية : بنك الجزائر، الخزينة العمومية ، السياسة النقدية ، السياسة المالية ، العلاقة المالية.

تصنيفات JEL : E52, E62 E61

INTRODUCTION:

The financial relationship between the public treasury and the central bank is one of the fundamental axes that reflect the overlap of monetary and financial policies in any country, forming a basic basis for ensuring macroeconomic stability and achieving major balances. Furthermore, this relationship is even more important in countries with rentier economies or those relying heavily on public financing to cover budget deficits. In this context, the central bank represents a financial actor with a sovereign dimension, while the public treasury embodies the executive instrument of the State's Financial Policy. The two parties intersect in multiple areas, most notably the financing of the budget deficit, public debt management, and coordination of macroeconomic policies.

Certainly, this relationship in Algeria witnessed significant transformations from 2010 to 2023, imposed by changes in the economic and financial situation, internally due to the decline in public revenues linked to fuel prices, and externally due to global economic fluctuations.

Consequently, this study presents the following research question: "What financial controls framed the relationship between the public treasury and the Bank of Algeria during the period (2010-2023)?"

Proceeding from this problem, the following hypotheses can be formulated:

- The balance of the financial relationship between the public treasury and the Bank of Algeria depends on the extent to which this bank is legally and practically independent in exercising its monetary powers.
- The economic transformations witnessed in Algeria from 2010 to 2023 highlighted the need to restructure the institutional relationship between the treasury and the Bank of Algeria to ensure sustainable financial stability.
- The current financial relationship lacks strict regulatory mechanisms that ensure a balance between public financing requirements and maintaining monetary stability.

The study objectives: Accordingly, this study aims to:

- Analyse the development of the financial relationship between the treasury and the Bank of Algeria from 2010 through 2023.
- Evaluate the implications of this relationship on financial and monetary variables, such as the money supply, inflation, and revenues, ...etc.
- Submit proposals to regulate this relationship to enhance institutional coordination and maintain economic stability

The methodology used in the study:

In terms of methodology, we have relied on the Descriptive Approach for tracking legal and financial developments, along with the analytical approach for studying the relevant economic indicators, based on official reports issued by the Bank of Algeria, to attain objective results that reflect the reality of the controls of the financial relationship between the public treasury and the Bank of Algeria during the study period.

Previous studies:

- The study of (Mario Pessoa, Michael J. Williams, 2012), titled "Government Cash Management: Relationship between the Treasury and the Central Bank," aims to analyze the institutional relationship between the Treasury and the central bank within the context of government cash management. It adopts an institutional and technical analytical approach, emphasizing the importance of coordination between fiscal and monetary policies to ensure macroeconomic stability and effective public financial governance. The study highlights that this relationship spans various dimensions, including the management of the Treasury Single Account (TSA), auction arrangements, payment and settlement services, and the exchange of cash flow forecasts. The findings show that inadequate coordination or weak institutional frameworks can lead to policy conflicts, volatility in money markets, and increased fiscal costs. The paper recommends establishing clear Service Level Agreements (SLAs) between the treasury and the central bank to ensure transparency and well-defined responsibilities, without compromising the independence of monetary policy. These recommendations are particularly relevant for developing countries seeking to modernize their public cash management systems and enhance economic policy effectiveness.
- The study by Luis I. Jácome, Marcela Matamoros-Indorf, and others (2012), titled "Central Bank Credit to the Government: What Can We Learn from International Practices?" analyzes the institutional frameworks governing central bank lending to governments across more than 150 countries. The research reveals that advanced economies typically prohibit central bank financing of government spending, while emerging and developing economies allow short-term loans to manage tax revenue fluctuations. These loans are generally subject to specific limitations: they are capped at a small percentage of annual revenues, offered at market interest rates, and require repayment within the same fiscal year. The study emphasizes that excessive reliance on central bank financing undermines central bank independence and recommends implementing strict lending limits and enhancing transaction transparency to promote economic stability and reduce inflation risks.

1. The relationship between the Bank of Algeria and the public treasury from 2010 to 2023:

The relationship between the Bank of Algeria and the public treasury is reflected in the coordination of financial and monetary policy, which we have divided into the phases outlined below.

1-1 First Phase: Financial expansion (2010 - 2014)

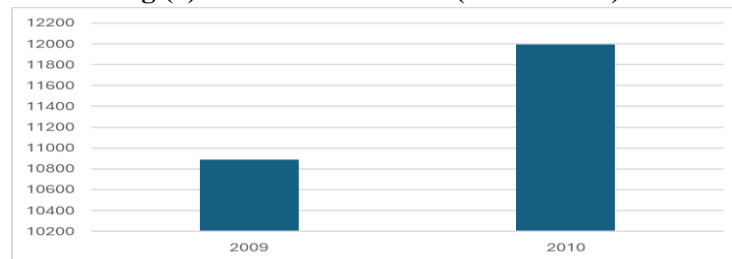
This period was characterized by high oil prices, allowing the Algerian government to implement an expansionary financial policy. Furthermore, government spending was directed toward infrastructure projects, housing subsidies, and the enhancement of social services. Likewise, social transfers also increased to achieve social and economic stability. However, excessive reliance on oil revenues resulted in weaknesses in diversifying financing sources.

Regarding financial policy, budget revenues improved in both hydrocarbon and non-hydrocarbon categories, resulting in a 19.1% increase in 2010. Budget expenditures saw a 06.3% rise in treasury withdrawals, driven by current expenses, while the trend in withdrawals

related to processing expenses remained relatively stable. Conversely, the general budget deficit, caused by the external shock of 2009, decreased significantly in 2010, confirming the feasibility of public finances. Specifically, the financial savings balance of the treasury, in terms of its deposits with the Bank of Algeria, increased in 2010 to nearly 41% of the Gross Domestic Product (GDP). Furthermore, given the importance of the revenue control fund's resources at the end of 2010, the public treasury's role as a net creditor of the banking system is quite significant, as evidenced by the analysis of the monetary situation. However, after a historically low monetary growth rate recorded in 2009 (03.1%), 2010 experienced a return to monetary expansion at a rate of 13.8% according to the monetary bloc, in the context of an increase in net foreign assets, which remained relatively stable in 2009 due to the external shock.

In 2010, the resources of the revenue control fund increased to reach the end-of-period balance of approximately 41% of GDP. In addition, the actual absorption of excess bank liquidity by the Bank of Algeria contributes to stability. At the same time, an increase in mandatory reserves leads to an increase in the monetary base in the context of stabilization of the monetary multiplier.

Fig (1): Net external assets (2009 – 2010)



Source: Prepared by the researchers based on: Bank of Algeria, Monetary and financial trends, 2010

Positively, the combined effect of stabilization by the treasury and the absorption of excess liquidity by the Bank of Algeria contributes to strengthening monetary and financial stability, even if the M2 Monetary Bloc increased by 13.8% in 2010 compared to 03.1% in 2009. Consequently, this return to monetary expansion was related to the expansion of net foreign assets, which increased from 10,886.03 billion Algerian dinars at the end of 2009 to 11,996.98 billion Algerian dinars at the end of the year, as can be seen in (Fig1) (The Bank of Algeria, 2010).

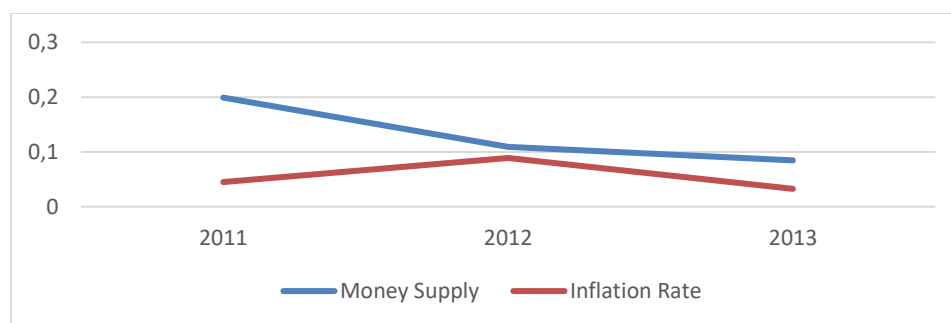
More to the point, the positive development of hydrocarbon prices in the first half of 2011 was reflected in the increase in budget revenues from hydrocarbons compared to the first half of 2010 (36.3%), amounting to 2,045.2 billion Algerian dinars. Further, these revenues amounted to 70.3% of the total budget revenues compared to 66.1% in 2010. As for non-hydrocarbon revenues advanced at a slower pace and accounted for only 28.3% of total budget revenues (33.8% in 2010). By the end of September 2011, the total budget revenues amounted to 4,441.9 billion Algerian dinars (including revenues generated by the difference between the actual and the reference price). On the other hand, oil tax revenues amount to 3,070.2 billion Algerian dinars, whilst the ordinary tax revenues amount to 1,313.8 billion Algerian dinars (compared to 1146.3 billion Algerian dinars in September 2010, with an increase of 14.6%). Consequently, the collection of ordinary revenues amounts to 78.7% of those projected in the supplementary finance law 2011 (1,669 billion Algerian dinars). Besides, after two years of budget deficit, the

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total balance of treasury operations turned positive in September 2011 against a slight deficit in June 2011, ending the year with a surplus estimated at 83 billion Algerian dinars (0.6% of GDP). This fact contributed to an increase in the balance of resources of the revenue control fund by 274 billion Algerian dinars in September 2011 compared to December 2010. After which, the balance of the revenue control fund reached 5,116.7 billion Algerian dinars and stabilized in the fourth quarter of 2011.

As for the monetary situation at the end of December 2011, it illustrates a sustained recovery in monetary expansion during the year in question, driven by strong economic credit growth in the context of a significant increase in external assets. Furthermore, these assets resumed their role in the process of creating money sustainably in 2011, after the external shock of 2009. (The Bank of Algeria, 2011)

Fig (2): Evolution of the growth of the monetary mass compared to the inflation rate between 2011 and 2013.



Source: Prepared by the researchers based on: Bank of Algeria, Monetary and financial trends, 2010, 2011, 2012 & 2013

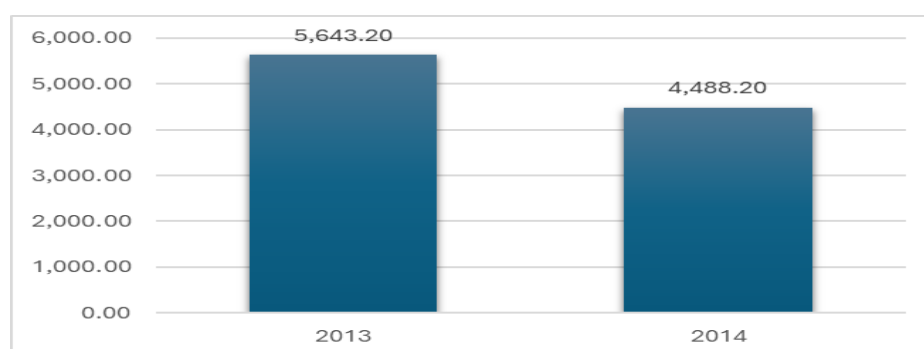
Undeniably, 2012 was marked by an acceleration of inflation despite a slowdown in the growth of the monetary mass, as this indicator increased by 11.47%, as illustrated by (Fig1), compared to 19.9% in 2011. Furthermore, the growth of paper cash also decreased to 14.81% from 22.53% in 2011, with a recorded decrease in liquidity during November and December; notwithstanding, the upward trend of the paper cash to cash mass ratio (M2) continued, reaching 26.7% by the end of the year.

The public treasury played a crucial role in influencing monetary expansion by increasing public spending, particularly in current expenditures such as wages and social transfers. Despite the ongoing fiscal deficit, the treasury's financial position remained robust, with its deposits at the Bank of Algeria totaling 5,713.5 billion Algerian dinars at the end of 2012, equivalent to 36% of GDP. Similarly, the increase in loans granted to the economy (15.3%) contributed to the expansion of the monetary mass, with loans to the private sector rising by 17%. (The Bank of Algeria, 2012)

In 2013, the slowdown in the growth of the monetary mass continued significantly, as it registered an increase of only 08.45%, compared to 10.94% in 2012 and 19.91% in 2011. Furthermore, the financial resources of the treasury also witnessed relative stability, with total

deposits in the Bank of Algeria reaching 5,646.65 billion Algerian dinars by the end of 2013, after peaking at 5,994.93 billion Algerian dinars in the middle of the same year. Additionally, 2013 saw the implementation of new monetary measures by the Bank of Algeria, wherein the mandatory reserve rate was raised to 12% in May 2013 from 11% in 2012, aiming to absorb excess liquidity. Moreover, facilities were provided for the reabsorption of bank liquidity, with the volume of withdrawn bank liquidity reaching 1,350 billion Algerian dinars by the end of the year. Simultaneously, the inflation rate recorded a significant decrease to 03.26% compared to 08.89% in 2012, reflecting the success of the monetary policy in reducing inflationary pressures. (The Bank of Algeria, 2013).

Fig (3): Treasury balance at the Bank of Algeria (2013 – 2014)



Source: Prepared by the researchers based on: Bank of Algeria, Monetary and financial trends, 2013 & 2014

Furthermore, the year 2014 also recorded a decrease in the treasury balance of the Bank of Algeria (Fig2), as it fell from 5,643.2 billion Algerian dinars at the end of 2013 to 4,488.2 billion Algerian dinars at the end of 2014, primarily due to increased public spending on processing projects, in the context of lower oil tax revenues resulting from external shock. Nevertheless, the position of the public treasury as a net creditor of the banking system remained strong. (The Bank of Algeria, 2014).

1-2 Second Phase: Financial austerity and reforms (2014 - 2019):

Oil prices, expressed in dollars, fell by about 50% in the second half of 2014, while the dollar rose significantly against the euro and other currencies. Though this decline has continued during the first nine months of 2015, the situation worsened in the third quarter. (The World Bank Group, 2015)

The national economy was exposed to the external financial shock in the second half of 2014, as the authorities realized that the situation would deteriorate in the medium term. New measures were taken starting from 2015, working to protect the national economy, without considering the overlap of powers between Algeria and the public treasury.

In preparation for the Bank of Algeria's involvement in direct financing of the public treasury, several measures have been taken since 2015, either under the direct supervision of the Bank of Algeria or by engaging it in various financial operations aimed at supporting sources of budget deficit financing. In light of the declining trend in excess bank liquidity, the Bank of Algeria issued a regulation in 2015 regarding public bond discounting and private bond

re-discounting, alongside loans and advances to banks and financial institutions. Additionally, the rules and conditions the Bank of Algeria enforced concerning public bond discounts and private bond re-discounts have been clearly defined. (The Regulation No.15-01).

In preparation for the reverse situation, which is expected to be recognized by the Monetary Market at that time, namely the deficit situation, during the month of July 2016, supplementary provisions of this system were approved. These provisions authorize the refinancing of certain parts of long-term loans and the partial refinancing of the national bond loan mass (Regulation No. 16-03). Additionally, along with its regulatory aspects, this system was created to prepare for the proper legalization of the financial procedures subsequently implemented by issuing national growth loan bonds in April 2016, and, on the other hand, bonds issued under unconventional financing in November 2017. Issuing this type of bond without a legal framework will prevent the Bank of Algeria from proceeding with its purchase.

Unquestionably, the public treasury played a significant role in financing public expenditures in 2018, as it witnessed an increase in fuel tax revenues due to high oil prices, which raised the total public revenues to 6,619.5 billion Algerian dinars. Likewise, the Treasury repaid part of its obligations to national institutions, including 452 billion Algerian dinars to the National Company for Hydrocarbons, contributing to increased bank deposits for the hydrocarbon sector. Additionally, the treasury continued to finance the general deficit, which amounted to 1,106.8 billion Algerian dinars, as the total deficit required for financing increased to 1,647.0 billion Algerian dinars when accounting for other treasury operations. On the other hand, the Bank of Algeria continued to implement monetary policies to manage liquidity and control inflation. In this context, the M2 cash mass increased by 11.18%, mainly driven by an increase in bank deposits, particularly in the fuel sector, which recorded an increase of 58.95%. More and more, the Bank of Algeria has also contributed to supporting the public treasury by transferring profits worth 1,000 billion Algerian dinars, which helped to ease the financial pressure. Into the bargain, non-traditional financing has led to an increase in bank deposits and a reduction in dependence on paper cash. Consequently, the proportion of cash in circulation has decreased to 29.5% of the total cash mass. (The Bank Algeria, 2018) .

In 2019, a slight decrease in total revenues and expenditures resulted in a near-stabilization of the budget deficit by 1,139 billion Algerian dinars. In the meantime, the increase in net treasury loans, which moved from 517.4 billion Algerian dinars in 2018 to 863.2 billion Algerian dinars in 2019 (16.8+%), led to an increase in the deficit of the total balance of the treasury, which moved from 08.2% relative to the gross domestic product in 2018 to 09.6% in 2019. This is because such a high level of deficit required resorting to (non-traditional) cash financing from the Bank of Algeria in the amount of 1000 billion Algerian dinars. (Bank of Algeria, 2020).

1-3 Third Phase: Financial rebalancing (2020 - 2023):

Since the beginning of 2020, the COVID-19 pandemic has caused one of the most severe downturns in the global economy. Besides, the economic shock affected the global economic growth, which declined by 03.3%. Most of the the world's countries entered a severe global

recession, oil prices lost their value by 65% ...), the fact of which was caused by the health crisis to the Algerian economic activity, which was still under the large-scale external shock, since mid-2014, resulting from the significant and continuous decline in oil prices.

Indeed, as the oil markets weakened, public finances were severely affected by the effects of the health crisis on the real sector. Tax revenues outside of hydrocarbons decreased by 07.7% in 2020 compared to the previous year, whilst non-tax revenues have significantly increased through profit transfer from the Bank of Algeria; however, budget expenditures decreased by 10.8% compared to 2019. In addition, this decrease in total expenditures was entirely due to capital expenditures, whilst current expenditures increased by 02.3%, resulting in a budget deficit of 11% of GDP and an overall deficit in the treasury balance of 09.5% of GDP. (The Bank of Algeria , 2021)

In reality, the monetary policy adopted in 2020 aimed to ensure the financing of the national economy, which was severely affected by the economic fallout of the health crisis. Above and beyond, bank liquidity shrank sharply, moving from 1,100.9 billion dinars in 2019 to 4,61.8 billion dinars in September 2020, with a decrease of 58.1%. In addition, the Bank of Algeria has taken emergency measures to address the situation, particularly by reducing the mandatory reserve rate from 06% to 03%, thus increasing the refinancing threshold for negotiable public bonds and extending the refinancing period of banks. Altogether, the bank's liquidity amounted to 632.1 billion Algerian dinars at the end of 2020. Notwithstanding the intense turmoil experienced by the Algerian economy in 2020, the adopted monetary, financial, and health policies have allowed reducing the impact of the health crisis on both the real sector and the financial system, in a circumstance characterized by a comfortable external financial situation. (Bank of Algeria, 2020)

At the end of March 2021, the total revenues of the public treasury decreased by 14.05% compared to the same month of the previous year, reaching 1,336.5 billion Algerian dinars compared to 1,554.9 billion Algerian dinars at the end of March 2020. As is basis in all oil-exporting countries, the health crisis caused by Covid-19 led to a decrease in revenues from hydrocarbons by 30.65% during the same period, reaching 534.6 billion Algerian dinars at the end of March 2021 compared to 770.9 billion Algerian dinars at the end of March 2020.

As for non-oil revenues, an increase of 02.28% was recorded, reaching 801.9 billion Algerian dinars at the end of March 2021, due to a noticeable rise in non-tax revenues, which grew from 62.0 billion Algerian dinars at the end of March 2020 to 87.2 billion Algerian dinars at the end of March 2021, marking an increase of 40.62%. On the other hand, tax revenues amounted to 714.7 billion Algerian dinars, reflecting a decrease of 01.01% compared to the same period of the previous year (722.0 billion Algerian dinars). Consequently, the increase in non-oil revenues by 08.2% helped mitigate the impact of a significant decrease in oil revenues on the overall revenue development.

By the end of March 2021, budget expenditures increased by 08.67%, reaching 2,738.9 billion Algerian dinars compared to 2,520.4 billion Algerian dinars in the previous year. However, this rise is attributed to a 49.56% increase in investment spending and the relative stability of current expenditures (+0.68%).

Overall, the budget deficit increased by 45.25% between March 2020 and March 2021 to reach 1,402.4 billion Algerian dinars compared to 965.5 billion Algerian dinars at the end of March 2020. Nonetheless, the decrease in net loans to the treasury and the balance of private accounts contributed to mitigating the deterioration of the total deficit, which amounted to 1,569.7 billion Algerian dinars compared to 1,343.7 billion Algerian dinars a year ago, with an increase of 16.83%, which is less than the one related to the budget deficit (The Bank of Algeria, 2022)

Actually, the Bank of Algeria has embarked on a comprehensive reform of the financial sector by issuing new directives and regulations to support the recovery of the national economy, including Regulation No. 2021-02 dated 10th June 2021, which includes the special refinancing program, to define the rules and procedures for operations that fall within the scope of the special refinancing program, which identified the bonds, that the Bank of Algeria accepts as guarantee under the special refinancing operations, as the bills issued by the public treasury in the scope of the repurchase of pooled loans. (The Regulation No.2021-02).

Indeed, through the most important indicators of public finance and monetary policy in 2021, we note that the Bank of Algeria and the public treasury have adopted an integrated role in confronting the crisis. Furthermore, the monetary policy focused on providing liquidity and supporting the stability of the financial system, while fiscal policy concentrated on managing revenues and expenditures to contain the deficit.

After the great resilience the Algerian economy shows in the face of COVID-19 waves and its repercussions, it recorded good results in 2022. In this regard, since March 2022, the Bank of Algeria has begun a gradual return to normal in relation to the implementation of monetary policy.

Fundamentally, in the face of the constant rise in inflation levels recorded worldwide after the health crisis, central banks began to tighten their monetary policy rather rapidly and tightly, to achieve the goal of price stability. Nevertheless, it is important to emphasize that the effectiveness of monetary policy depends on a clear understanding of the determinants of the transition mechanism thereof. Besides, each central bank applies a different monetary policy depending on each country's economic conditions and transition channels. After the main characteristics, the channels of transition shall be determined, with respect to such factors as the structure and level of development of the financial system, the macroeconomic environment, the legal and regulatory framework, among others. Therefore, the tightening orientation was not carried out at the same pace or at the same time in the same way.

Starting from March 2022, the Bank of Algeria began gradual measures to return its monetary policy to normal, by lifting the exceptional precautionary easing measures applied to banks and financial institutions, which were adopted on the 01st March 2020, the Instruction No.05-2020, whose main purpose was to support the banking system to protect the national economy from the impact of the pandemic shock. Conversely, during 2022, the Bank of Algeria maintained the mandatory reserve rate at 02%, and the indicative interest rate applied to primary

refinancing operations at 03% in 2022. Similarly, the refinancing program in the amount of 2,100 billion Algerian dinars was terminated in June 2022, after being launched by the Bank of Algeria in July 2021; as for the amount paid in 2022 amounted to 463.93 billion Algerian dinars, or 22% of the program.

Indubitably, 2022 was marked, in the framework of fiscal policy, by a significant increase in budget revenues, in the context of which the increase in expenditures decreased, the fact of which created an annual budget deficit of 192.7 billion Algerian dinars; however, it should be noted that the latter experienced a significant decrease. On the other hand, compared to 2021, when it reached a peak of 838.6 billion Algerian dinars, or 03.8% of GDP, compared to 0.7% in 2022. Furthermore, the 77% improvement recorded in 2022 compared to 2021 in the budget balance resulted from a significant increase in revenues compared to expenditures. In this respect, revenues increased by 43.5% as a result of the significant increase in fuel revenues by 116.8%, whilst budget expenditures increased by 30%. With regards to the net treasury loans and the balance of private accounts, they decreased by 13% and 128%, respectively, in 2022 compared to 2021, the fact of which led to a 50% improvement in the total budget deficit of 791.3 billion Algerian dinars in 2022 compared to 2021 of 1588.8 Algerian dinars. By this, the percentage of gross domestic product is 02.3% compared to 07.2% in 2021 (The Bank of Algeria, 2023).

As a matter of fact, the principal balances of the public finances witnessed a marked deterioration in 2023, as the fiscal deficit doubled to reach 1,003.48 billion Algerian dinars, compared to a deficit of 411.51 billion dinars in 2022. Consequently, the fiscal deficit ratio to gross domestic product increased from 01.28% in 2022 to 03.08% in 2023. However, this deterioration is attributed to an increase in budget expenditures of 17.97%, faster than the increase in budget revenues of 12.45%. Besides, the transfer expenses in particular contributed to the increase in total expenses, increasing by 27.90%. As for budget revenues, they were supported by non-hydrocarbon revenues, which increased by 28% between 2022 and 2023. More and more, the net treasury loans recorded an increase of 02.49% in 2023, compared to 2022, whilst the balance of private accounts turned from a surplus of 100.40 billion Algerian dinars to a deficit of 25.29 billion dinars; accordingly, these developments have resulted in an increase in the deficit of the total balance of the treasury, amounting to 1,686 billion dinars in 2023, a deterioration of 77.56% compared to 2022, which recorded a deficit of 949.56 billion dinars.

At the Bank of Algeria, the process of reforming the legal framework regulating the functions of the Bank of Algeria and the operations of various actors in the banking sector was launched with the issuance of the new monetary and banking law in June 2023, which represents an important step in the banking and financial reform carried out by the public authorities. Besides, this law is aimed, in particular, at updating the functions and governance of the central bank, together with the monetary policy framework thereof; further, it also refers to the identification of the central bank's operations with the public treasury. Additionally, in order to maintain financial stability, the new law allows the Bank of Algeria to provide emergency liquidity as a last resort to a bank that can repay its debts and is facing a temporary liquidity problem.

Faced with the nature of inflation, which was mainly imported, Algeria decided to keep the key interest rate unchanged at 03%, being one of the lowest in the MENA region. In

addition, in light of economic and financial developments and their medium-term forecasts, the decision of the Bank of Algeria in April 2023 increased the mandatory reserve by 01% up to 03%. It enhanced the bilateral recovery of liquidity introduced in September 2020 to reach 600 billion Algerian dinars. These measures initially targeted sources of excess liquidity, potentially inflationary, while keeping the banking system in a position to finance the national economy without crowding out and without incurring additional costs.

After the significant growth in bank liquidity during 2021 and 2022, the decline in exports, particularly of hydrocarbons, along with the end of the relief measures enacted following the health crisis, and monetary policy actions—especially the increase in the mandatory reserve rate—led to a 21.1% decrease in bank liquidity between 2020 and 2023. Consequently, total liquidity reached 1,551.45 billion dinars in review at the end of the year, compared to 1,966.41 billion Algerian dinars in the previous year.

With regards to the market of negotiable debt bonds, the balance of issuing State bonds by tender witnessed much less growth compared to the previous two years, reaching 4,351.31 billion Algerian dinars in 2023 compared to 3,367.94 billion Algerian dinars in 2022, an increase of 29.2% compared to 66.05% in 2022, and 40.87% in 2021.

On the other hand, the year 2023 recorded some slight changes in the yield rates of various state securities, as the rates of short-term treasury bills for 13 and 26 weeks remained constant at 02.18% and 02.99%, respectively. Furthermore, the rates for long-term treasury bills, ranging from one to five years, varied between 05.67% and 06.65%, while the rates for absorbable treasury bonds from 07 to 15 years fell between 5.67% and 6.65%.

According to the International Monetary Fund, net treasury loans amounted to an increase of 02.49% in 2023 compared to 2022, whilst the balance of private accounts turned from a surplus of 100.40 billion Algerian dinars to a deficit of 25.29 billion dinars. Besides, these developments have increased the deficit of the total balance of the treasury, which amounted to 1,686 billion dinars in 2023, a deterioration of 77.56% compared to 2022, which recorded a deficit of 949.56 billion dinars. (International Monetary Fund, 2024)

2- Controls of the financial relationship between the public treasury and the Bank of Algeria during the period (2010 – 2024)

In fact, the financial relationship between the public treasury and the central bank is an interactive relationship, manifested through the mechanisms of financing and monetary support, as this relationship is governed by a set of factors that determine the nature of this relationship.

2-1 The legal framework:

Actually, the laws regulate the financing relationship between the public treasury and the central bank, as some countries completely prohibit the financing of public expenditures in the primary market or the granting of unsecured loans, in respect such as the Euro-zone under Article 123 of the Lisbon Treaty (Dadoosh & Faris Kareem Buraihi, 2024), whilst others allow short-term financing via overdraft or advances, with a specific loan ceiling. Besides, some legislation also makes it possible to grant direct loans to the government at long-term maturity or purchase securities on the primary market. In addition, some countries allow financing of

economic activities in which the State participates or supports the Insurance Institutions for deposits to cope with financial crises (Luis I. Jácome, 2012)

In Algeria, the monetary and loan law serves as the legal framework regulating the financial relationship between the public treasury and the Bank of Algeria by defining financing mechanisms, adjusting borrowing conditions, and clarifying the roles of both the Treasury and the Central Bank in managing liquidity and financing the budget deficit. This framework ensures financial stability and responds to national economic conditions.

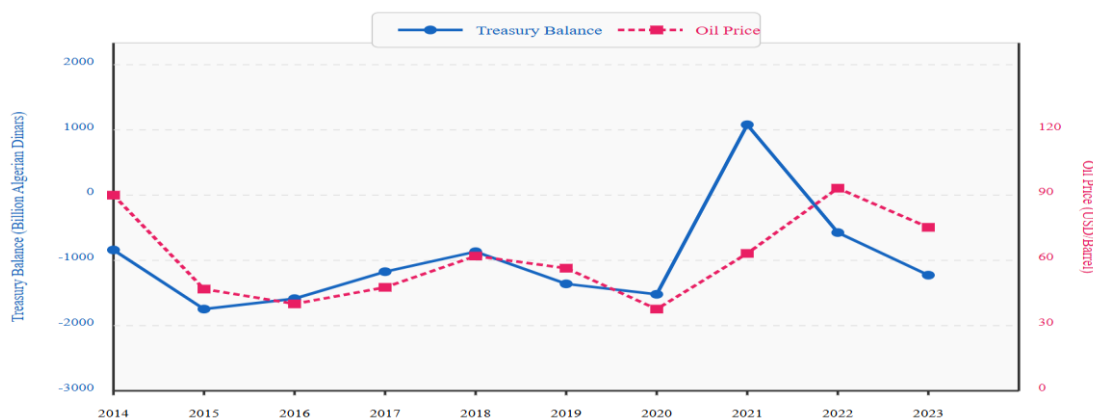
- **Borrowing limits and ceilings:** According to Article 48 of Law 23-09 dated 21st June 2023 (including the monetary and banking code), the Bank of Algeria can grant treasury current account overdrafts whose full term cannot exceed 240 consecutive or non-consecutive days within a calendar year, and up to a maximum of 10% of the State's regular revenues established during the previous budget year.
- **Exceptional advances:** According to Article 48 of the monetary and banking law, the Bank of Algeria is authorized to grant extraordinary treasury advances in the event of an unexpected and announced exceptional crisis, according to established conditions.
- **The trust system:** According to Article 49 of the monetary and banking code, the Bank of Algeria can accept guaranteed bonds under the trust system, which are written for the benefit of treasury accountants and mature within three months.
- **Maintenance of the current account:** The Bank of Algeria maintains the current account of the public treasury without expenses and performs free of charge all debit and credit operations carried out on this account in pursuance of Article 51 of Law No.23-09.
- **Consultative relationship:** The monetary and loan law also stipulates that the relationship between the central bank and the public treasury is an advisory one, as the government consults the central bank on every draft law related to monetary and financial policy.

2-2 Oil price fluctuations:

The rise of oil in world markets during the period (2001 – 2010) allowed for the accumulation of significant financial savings in the public treasury, represented by the revenue Control Fund as an account deposited with the Bank of Algeria. This totalled 4,842.8 billion Algerian dinars at the end of 2010, accounting for 40.2% of gross domestic product (The Bank of Algeria, 2011). These savings facilitated the coverage of the successive deficits recorded by the balance of the public treasury in the years following 2008.

However, the sharp decline in oil prices that began in mid-2014 and continued to drop to almost 47% in 2015 and 15.2% in 2016 (The Bank of Algeria, 2017) revealed deep imbalances in the balance of the public treasury, which recorded a deficit of -15.7% of the gross domestic product in 2015 and -16.2% in 2016. Furthermore, the financial savings accumulated in the revenue Control Fund could not withstand the ongoing deficit and were completely exhausted by deducting the last portion estimated at 784.3 billion Algerian dinars in 2017. (The Bank of Algeria, 2018).

Fig (4): Evolution of the total balance of the treasury and the price of oil for the period (2014 – 2023)



Source: Prepared by the two researchers based on the reports of the Bank of Algeria

In fact, this situation necessitated the intervention of the Bank of Algeria to finance the public treasury on an exceptional basis through the direct purchase of treasury bonds for a period of five years, as stated in Article 45bis of Law No.17-10, within the scope of the process of unconventional financing (Quantitative Easing). Furthermore, this mechanism contributed to financing 90% of the public treasury's financing needs in 2018 and 51.1% in 2019, amounting to 1000 billion Algerian dinars and 520 billion dinars in 2021 (The Bank of Algeria, 2017-2019).

2- 3Public debt management:

Sometimes, it happens that the public treasury faces significant pressures related to providing liquidity stemming from the temporal mismatch between public spending, which extends throughout the year, characterized by regularity in its disbursement, together with the revenue collection, which is abundant in some periods and a small amount in others. Besides, this time difference leads to a seasonal deficit that does not appear in the financial statements of the State (2007, معيوف), which necessitates the issuance of treasury bonds that either have a long term of more than 10 years, or an average term of not more than 10 years and not less than a year, or a short term ranging from one month to one year and provide them to the central bank in exchange for obtaining their value (400 صفحة 2022, قدي). Moreover, the management of internal government debt is carried out by the central bank by entering as a seller or buyer of government bonds or permits, depending on the monetary policy followed by the same, whether it is an expansionary monetary policy or a deflationary monetary policy. As for the management of external public debt, represented by the central bank settling the government's debts with international parties in terms of paying the agreed installments as well as the accrued interest without achieving profits for the same as a result of this work (2021, هاني).

For Algeria, the Bank of Algeria supervises the issuance process as it is responsible for

the money market and has the authority to exercise control over credit policy in the national economy (معيوف، 2007).

About the management of internal government debt, although Article 45 of Ordinance No.11.03, about cash and credit, forbade the Bank of Algeria from intervening as a buyer of treasury bonds in the primary market for issuance, i.e., directly from the public treasury or the local authorities issuing the same. Furthermore, it entailed framing the process as overdrafts on the account capped at 10% of the previous year's budget revenues, aiming to give the Bank of Algeria independence in organizing the issuance of cash away from government pressure. However, Article 45bis of Law No.17-10 allowed the Bank of Algeria, exceptionally for a period of five years, to purchase treasury bonds directly from the public treasury to:

- Covering the financing needs of the public treasury;
- Financing the internal public debt;
- Financing of the National Investment Fund.

At the end of the five years, the unconventional financing program aims to achieve balances in the State treasury and the balance of payments.

Since mid-November 2017 until the end of January 2019, the volume of unconventional financing amounted to 6556 billion Algerian dinars distributed as follows (قدي، 2022، صفحة 372):

- **2017:** The amount of 2185 billion Algerian dinars to pay off the debts owed to Suntrak company and the debts of the National Bank and the people's loan entitled repayment of the debts resulting from the targeted bond loan;
- **2018:** An amount of 3171 billion dinars to cover the annual treasury deficit and finance the housing agency (AADL) in the form of loans to complete its housing projects, finance the deficit of the pension fund, and finance the completion of the port of Cherchell and a phosphate factory;
- **2019:** 1000 billion dinars to cover the annual Treasury deficit for 2018.

Contrary to expectations, traditional financing did not accelerate inflation in 2018 and 2019, as the consumer price index experienced a significant slowdown during these two years (Bank of Algeria, 2020).

2-4 Profits of the Bank of Algeria:

Although the central bank is not a profit-making institution, it can generate profits while performing its functions, as it has various sources of income, namely (Long, 2024):

- **Seigniorage:** The minting fee is the primary source of income for most central banks, as it represents the profit derived from the difference between the costs of minting a coin and its face value. Additionally, this difference creates a source of income that is consistently positive, unless interest rates fall to zero or the value of assets decreases.
- **Mandatory non-compensated reserves:** It is a percentage of the liquidity imposed by the central bank on commercial banks, requiring them to keep it in their accounts without paying interest thereon. In return, the central bank uses these funds to purchase interest-bearing assets, such as bonds or loans, which generate a return.

- **Foreign exchange reserves:** Central banks maintain a portfolio of foreign currency reserves on their balance sheets, based on their role in monetary policy. Additionally, these foreign reserves can typically be managed to generate a positive net income by exploiting various risk premiums. However, this profit cannot be guaranteed since uncovered reserves are still subject to significant fluctuations in exchange rates.
- **Domestic market operations and net interest from other domestic liabilities and assets:** Central banks achieve returns generated by lending directly to commercial banks or by purchasing local currency-denominated assets on the market, usually through the banks themselves as intermediaries in the market. In both cases, the required amount is credited to the accounts of commercial banks with the central bank, in such a manner that it matches the value of the acquired assets. As a result of this, the central bank creates additional base money.
- **Regulatory fees:** These are the costs of supervision, which stand for the fees paid by institutions subject to the central bank's supervision.

Unquestionably, the central bank can distribute these profits after deducting operating costs as dividends to the government without necessarily upsetting monetary policy as long as it uses its tools to maintain monetary stability (Ernst Baltensperger, 1998, p. 48). As for the distribution of profits and the percentage of their retention, it can be either fixed or subject to the discretion of the central bank, or even require debate and government approval. For instance, in South Africa, the distributable amount is fixed at a fixed rate of 10% of profits, while in Lebanon, 50% of net profits are kept as reserves. In comparison, 50% is transferred to the treasury, and when the reserves reach 50% of the central bank's capital, the distribution changes to 20% retention as reserves and 80% transfer to the treasury. In the United Arab Emirates, the net profits are transferred to the government if the reserves are equivalent to four times the paid-up capital. However, if the reserves are less than four times the paid-up capital, the Council of Ministers shall issue a decision determining the percentage of profits to be retained until the reserves reach four times the paid-up capital (Long, 2024)

For Algeria, according to Article 102 of the Finance Law 2017, the annual profits of the Bank of Algeria represent the net results of depreciation, encumbrances, and provisions. Further, the balance shall be transferred to the treasury after 10% is obligatorily retained for the benefit of the legal reserve within an amount equal to the capital. The amounts that the board of Directors deems necessary to form the funds, the threshold of which has been set at three times the value of the capital, and the rest of the public and private reserves shall be allocated. Likewise, the board of directors can also decide on the total payment of the remaining balance after making mandatory deductions in favour of the treasury.

In addition, the same article mentioned above has stipulated that in the event that the results of the accounts of the Bank of Algeria closed on 31st December show losses, they are subject to the allocation of amounts of private and public reserves; if necessary, that shall be from the legal reserve. However, if the sum of these reserves is insufficient to absorb all losses, the treasury will cover the rest of the losses within three (3) months.

If truth be told, the balance of payments continued to record a surplus during the period from 2000 to June 2014, the fact of which allowed the Bank of Algeria to purchase foreign currency at an average rate of 75 Algerian dinars per dollar, together with incorporating the same into exchange reserves. However, since June 2014, the balance of payments has been suffering from a deficit, forcing the Bank of Algeria to resell foreign currencies at a daily exchange rate that exceeded the amount purchased, these differences in exchange rates enabled the Bank of Algeria, as of 2016, to distribute several exceptional profits to the treasury (Boucekkine, 2020) , and contributed to reducing the total deficit in the treasury balance in the years 2016, 2017 and 2018, which could have recorded much higher levels if not for the extraordinary profits. (Bank of Algeria, 2020)

Table (1): Evolution of the balance of the public treasury and its balance outside the profits of Algeria (2014 – 2023)

Millions of Algerian dinars	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
The total balance of the public treasury	1375.3 –	2621.8 –	2245.3 –	1590.3 –	1396.0 –	1964.6 –	2198.5 –	1588.8 –	949.6 –	1686.0 –
The total balance of the public treasury outside the profits of Algeria	1375.3 –	2621.8 –	2845.3 –	2510.1 –	2396.0 –	2,764.6 –	2,998.5 –	2,489.2 –	1,452.4 –	/
The percentage (%) of the total internal product	8.0 –	15.7 –	16.2 –	13.3 –	13.1 –	13.5 –	16.3 –	11.3 –	4.7 –	/
The profits of the Bank of Algeria	122.7	88.7	610.5	919.8	1000	800	800	900.4	502.8	/

Source: Prepared by the two researchers based on the reports of the Bank of Algeria

2-5 The pandemic of COVID-19:

The pandemic of corona and the lockdown measures that followed the same caused an unprecedented liquidity crisis, which prompted many central banks to intervene in order to mitigate the effects of the corona virus pandemic, as some of which applied measures aimed at providing cash liquidity to the economy to contain the financial repercussions and effects of the crisis, whilst some of which took measures to enable and revive the national economy and support the most affected sectors (صندوق النقد العربي، 2022)

To counter the crisis, the US Federal Reserve launched a quantitative easing program worth 700 billion dollars, including 500 billion dollars to buy US treasury bonds worth. The European Central Bank pursued a policy of quantitative easing by expanding the purchase of

government bonds and the purchase of private sector bonds worth 120 billion Euros until the end of 2020, which strengthened the level of bank liquidity at European banks (2020، طلحة). Nonetheless, the Bank of England is the latest to announce in early November 2020 an increase in the Target stock of government bonds purchased in the UK by an additional GBP 150 billion in order to achieve the inflation target in the medium term(مخلوفي)

With regards to the Bank of Algeria, in turn, took measures to contain the repercussions of the corona epidemic, transferring an amount of 900 billion Algerian dinars (equivalent to 6.47 billion US dollars) to support the State's public treasury, as well as initiating the issuance of three-year treasury bonds(صندوق النقد العربي ،، 2022)

Conclusion:

In light of the analysis of the relationship between the public treasury and the Bank of Algeria, based on the coordination of financial and monetary policy during the period (2010 – 2023), we found that this coordination is manifested in the integration of the objectives and tools used. Besides, monetary policy provides financial support and economic stability, whilst financial policy boosts revenues and manages public expenditures to balance spending needs and the level of deficits.

Many factors played an important role in influencing the nature of the financial relationship between the Bank of Algeria and the public treasury during the study period. The most prominent of these was the establishment of legal frameworks that regulated the financing relationship between the two institutions and determined each of their roles. Additionally, oil price fluctuations were another pivotal factor affecting the financial relationship. Oil shocks deepened the deficit in the treasury's total balance, prompting the Bank of Algeria to intervene by covering this deficit through the purchase of treasury bonds (non-conventional financing). Likewise, the Bank of Algeria also managed public debt, reducing the deficit in the public treasury's balance by distributing its profit shares during the coronavirus pandemic. The Bank of Algeria contributed liquidity support to mitigate the repercussions of the pandemic.

Recommendations:

- Strengthening the Bank of Algeria's independence to ensure that its monetary decisions remain uninfluenced by short-term government policies;
- The need to exploit all elements of the financing mix of the public treasury, and not limited to the savings of the revenue Control Fund;
- Adopting a method of distributing a fixed amount annually from the profits of the Bank of Algeria to the public treasury helps achieve financial stability in the long term.

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