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Non-traditional financing of budget deficit in Algeria during the third millennium: An analytical evaluative study

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Abstract--Between 2016 and 2017, Algeria adopted non-traditional financing methods to manage the budget deficit caused by the 2014 oil price shock, following the ineffectiveness of traditional fiscal policies in meeting the set objectives, which were met with disapproval by economic stakeholders. This approach was necessitated by the depletion of the Revenue Regulation Fund's reserves, previously allocated for public debt repayment during 2000-2005. Since 2006, its function was relegated to supporting the public treasury until 2016. In 2017, the Algerian government initiated a policy of monetary issuance, generating money ex nihilo to finance the state budget, as authorized by order 17/10.

Keywords---Budget Deficit, Structural Deficit, Non-Traditional Financing, Monetary Issuance, Monetary Mass.

Introduction

Algeria's economy is predominantly reliant on oil tax revenues, making it vulnerable to fluctuations in global oil prices. The hydrocarbons sector serves as

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the backbone of the economy, emphasizing the nation's mono-economy status. The substantial drop in oil prices during the 2014 crisis, from \$110 in June 2014 to approximately \$30 in early 2016, exacerbated Algeria's budget deficits, highlighting the urgent need for strategic financial measures.

In response to these challenges, the 2016 fiscal policy aimed to bolster fiscal discipline, streamline public expenditure, and reduce public finance burdens. This strategy encompassed a range of actions, including austerity measures, phased public investment reductions, import controls, downsizing of the public sector workforce, and incentivizing early retirements. Additionally, the fiscal plan proposed tax hikes, particularly on utilities like electricity and diesel.

Despite these efforts, the long-term sustainability of budgetary equilibrium remained elusive. The Revenue Regulation Fund's reserves dwindled rapidly, underscoring the persistent strain caused by sustained low oil prices. This compelled Algeria to adopt unconventional financing methods, such as issuing new currency as permitted by law 17/10, article 45. However, this approach faced significant criticism from economists due to its potential adverse repercussions.

This leads to the central research question:

- How effective is non-traditional financing in addressing Algeria's budget deficit?

To delve into this query, we consider the following sub-questions:

- _ What constitutes a budget deficit?
- _ What are the budget deficit financing mechanisms?
- What outcomes has non-traditional financing yielded for Algeria?

In exploring these questions, we hypothesize that:

- _ Financing the budget deficit involves augmenting the state's regular public revenues, including taxes.
- Non-traditional financing in Algeria has met its intended objectives, averting the necessity for external debt and its consequent perils.

Significance of the Study:

The topic of unconventional financing as an exceptional resource is of great importance both theoretically and practically, as it represents a temporary and circumstantial monetary solution in case of a public budget deficit. It serves as a significant stimulus for investment, especially since its procedures are implemented domestically, preserving the economic sovereignty of the Algerian state, without resorting to external borrowing.

Study Objectives:

The study aims to shed light on the monetary issuance policy as an unconventional mechanism for financing the budget deficit, introduced by Law 10/17. This mechanism reveals an important aspect of fiscal policy and its relationship with monetary policy in Algeria's exceptional situations, in addition to the depth of questions and debates that have sparked controversy among economic experts due to the use of this mechanism.

It is appropriate to outline the main working axes of this research paper as follows:

- Axis one: General concepts about the budget deficit.
- Axis two: Justifications for the budget deficit and its various effects.
- Axis three: The budget deficit in Algeria and its financing mechanisms.
- Axis four: Unconventional financing in Algeria during the third millennium.

First Axis: General Concepts about the Budget Deficit First: Concept of Budget Deficit:

- ➤ **First definition:** The budget deficit is the negative discrepancy between public revenues and expenditures, serving as a primary factor in the escalation of the external debt crisis or contributing to an increase in the money supply, thereby acting as an inflationary factor. (Al-Ashqar, 2002, p. 346)
- ➤ **Second definition:** It signifies the extent to which total expenditures surpass total revenues, necessitating multiple measures by the state to finance this deficit(Al-Hallaq & Al-Aljouani, 2010, p. 195), typically within a fiscal year. (Inaya, 2014, p. 51)
- ➤ **Third definition:** Considered an inherent challenge, the budget deficit represents the imbalance between the state's revenues and its public expenditures. This imbalance becomes inevitable with the continuous rise in public spending, making it unfeasible to offset through public revenues alone. (Ben Tefat et al., 2018, pp. 235-236)

Discuss its types, which are as follows:

- **Structural Deficit:** This is characterized by a consistent and unforeseen discrepancy, where the growth rate of public revenues fails to align with the increase in public expenditures. (Dardouri, 2013, p. 105)
- **Operational Deficit:** Emerges from the borrowing requirements of the government and public sector, discounting the interest paid on debts while accounting for prevailing inflation rates. (Halimi & Bahi, 2018, p. 40)
- **Current Deficit:** Reflects the net resource demand of the government sector, funded through borrowing, and is calculated by the difference between all forms of government spending and revenues, excluding expenditures on repaying accumulated debts from previous years. (Chayeg & Dadan, 2017, p. 204)
- **Comprehensive Deficit:** Captures the total gap between government expenditures, inclusive of interest payments but exclusive of loan principal repayments, and all public revenues, encompassing both tax and non-tax sources. (Dandan, 2023, p. 4)
- **Primary Deficit:** The primary deficit includes the current interest payments on debts. However, debts are essentially past transactions, meaning that their interest pertains to past actions and not the present. Therefore, it can be said that the primary deficit excludes debt interest to provide an overview of the current fiscal policy. (Dandan, 2023, p. 4)

• **Actual Deficit:** This refers to the shortfall of general revenues in covering general expenditures of various kinds, calculated by subtracting general revenues from general expenditures. General revenues include both regular tax and non-tax revenues, oil revenues, recovered loan installments, and grants received by the government. On the other hand, general expenditures encompass operational expenses, considered as current expenditures, and capital expenditures, which are akin to capital expenses. (Oulad Eid, 2012, pp. 216-217)

Third: Causes of Budget Deficit

1. Increase in Expenditures:

The increase can be attributed to the following reasons: (Hazrachi & Labaz, 2011, p. 7)

- Natural population growth necessitates increased state responsibilities for providing basic needs and public infrastructure, such as roads, schools, and hospitals. This growth drives a consistent rise in spending to ensure education and healthcare services.
- Escalation in civil service expenditures, particularly salaries and wages.
- Augmented defense and security expenditures due to wars and external threats, resulting in sustained cost increases.
- Growing financial burdens of public debt service used to finance the budget deficit.
- Mismanagement, as evidenced by secretive expenditures where governments divert substantial public financial resources for nonimpactful activities, such as hosting expensive festivals with no tangible outcomes. Additionally, widespread governmental corruption leads to significant public fund losses, reduced efficiency in project execution, and budget inflations that misrepresent actual expenditure accuracy. (Kaziz & Mokhtar, n.d., p. 228)
- Inflation significantly impacts by eroding the purchasing power of money, thus escalating the state's public expenditures. (El-Hadj, 2007, p. 8)

2. Decrease in Revenue Collection:

The decline in revenue can be primarily attributed to:

The absence of an effective tax system capable of accurately collecting taxes or developing new resources to meet growing needs, coupled with weak legislative and political frameworks that facilitate bribery, nepotism, tax evasion, and other forms of administrative corruption, all contributing to budgetary imbalances. (Azzam & Al-Wadi, 2007, pp. 185-186)

3. Financial Arrears Phenomenon:

This refers to the delays in collecting legally due taxes, often resulting from oversight by tax collection specialists, lack of resources, and complexities in tax legislation. It is exacerbated by global price drops for raw materials. (Halimi & Bahi, 2018, p. 41)

4. Decentralization of Foreign Trade:

Engaging in global trade necessitates lifting customs barriers and liberalizing trade, leading to minimal real border control and reduced customs mechanisms, thereby decreasing revenue to the lowest possible level.

This is particularly true under the European Union's customs dismantling system, with the primary cause of deficits being injustice and inequality by

authorities in some countries, deviation from productive work, unfair revenue distribution, and non-adherence to Sharia principles. (Darghal, n.d., p. 90-91)

A just leader should allocate public funds for public interest, prioritizing most crucial and appropriate expenditures, ensuring transparent and efficient public resource allocation. Another reason is the lack of transparency, implying the need for precise information about budget preparation and execution processes, allowing public scrutiny to combat corruption. (Mehboub, 2017, p. 42)

Fourth: Optimal Limits for Budget Deficit

Participation in global trade necessitates the removal of customs barriers and trade liberalization, leading to reduced effective border control and diminished customs revenues. This effect is pronounced under systems like the European Union's customs dismantling, where deficits often stem from governmental injustice and inequality, deviation from productive endeavors, unfair revenue distribution, and non-compliance with Sharia principles.

A just governance system should allocate public funds for the common good, prioritize essential and suitable expenditures, and ensure transparent, efficient allocation of public resources. Additionally, a lack of transparency, indicating the necessity for clear information regarding budget preparation and execution, is crucial to allow public oversight and combat corruption. (Kichiti, 2018-2019, pp. 39-40)

Second Axis: Justifications for the Budget Deficit and its Various Effects

The presence of a budget deficit in the general budget leads to various justifications, risks, and effects, which we will discuss as follows:

First: Justifications for the Budget Deficit

The general budget deficit is not always an indicator of poor public financial management but rather has justifications for public spending that necessitate it, including: (Boudlal, 2018, p. 456)

- Sometimes, the government is required to adopt an expansive spending policy to maintain peace, political stability, and social stability.
- Expansion in spending to stimulate the economy when it faces external shocks such as a decline in exports.
- Encouraging productive activity by boosting aggregate demand.
- Increasing taxes such as income tax and corporate tax to finance the deficit.
- Investment to create wealth, whether through direct investment that directly increases production such as constructing a new industrial facility or indirectly, such as providing attractive infrastructure for investment, improving local labor skills and education, or funding scientific research.

Second: Various Effects of Budget Deficit (Risks)

1. Economic Inflation:

Economic inflation occurs when the state, to cover the deficit resulting from expenditures surpassing revenues, engages in new monetary issuance and prints additional currency notes. This process boosts the circulating money supply, tipping the balance between total demand and total supply, thereby catalyzing inflation and leading to the depreciation and deterioration of the currency's value.

Inflation typically arises when community spending outstrips the availability of goods and services, implying that curbing and rationalizing public spending can mitigate inflationary pressures by diminishing the demand for existing goods and services. Nonetheless, when utilizing public spending policy to counteract inflation, it is imperative to selectively consider which public expenditures are curtailed, bearing in mind a range of domestic and international factors. (Darghal, n.d., p. 91)

2. Risk of Bankruptcy:

The risk of bankruptcy intensifies when the state resorts to borrowing to finance its deficit, resulting in future budgets incurring additional expenses for loan repayments and interest services. Consequently, the deficit exacerbates, engendering a new fiscal shortfall and compelling the state to procure further loans, escalating to a critical level.

The accumulation of financial deficits may eventually render the state unable to fulfill its financial commitments, leading to a hesitance among lenders to provide further loans, thus signifying a looming risk of bankruptcy. (Darghal, n.d, p. 91)

3. Crowding-Out Effect:

This effect materializes when financing the budget deficit through public debt constrains the borrowing capacity of the private sector. The surge in the economy's financing needs triggers an increase in interest rates, which in turn diminishes private investment and amplifies public consumption. (Kadi, 2006, p. 13)

The crowding-out effect essentially encapsulates the displacement of private sector investment by public sector borrowing. (Labaz & Hazrachi, 2011, p. 8)

Third Axis: The Budget Deficit in Algeria and its Financing Mechanisms First: Budget Deficit in Algeria

Algeria has faced numerous financial crises, leading to a structural deficit in its public budget, with a persistent deficit reaching 10.4% of the Gross Domestic Product in 1993. This situation largely stemmed from Algeria's heavy reliance on oil revenues, constituting approximately 97% of its income.

In response, the Algerian government implemented adjustments to secure new funding sources to bridge budget deficit gaps. This initiative aimed to counteract the decline in energy revenues since mid-2014, which halved petroleum and gas revenues, accounting for 60% of the state budget. Consequently, the Bank of Algeria permitted direct loans to finance the deficit and internal public debt, while also allocating resources to the National Investment Fund to enhance economic activity across all sectors. By 2016, the deficit had escalated to 15%.

Significant adjustments made by the Algerian government to reduce the budget deficit included a reduction in the import bill despite escalating restrictions since early 2014, a 14% decrease in public spending in 2017, and compensation for the decline in oil revenues without resorting to borrowing. This was achieved through a five-year plan aimed at achieving budgetary balance by 2022, while simultaneously reducing the deficit and maintaining foreign currency reserves. (Kechiouche, 2017/2018, p. 273)

Second: Financing the Budget Deficit in Algeria for the period (2000/2016)

The substantial expansion in public spending widened the gap between state expenditures and revenues, significantly impacting budget balance. Despite the

state's cautious development policy in injecting petroleum resources into the economic circuit to mitigate monetary pressure, the budget imbalance persisted despite attempts to implement reform policies. (Rkoub, 2017, p. 3) During this period, the state primarily financed its deficit through the Revenue Regulation Fund.

> Definition of the Revenue Regulation Fund in Algeria:

The Revenue Regulation Fund in Algeria is a fund within the special accounts of the treasury, particularly special allocation accounts. It is characterized by its independence from the state's general budget, making it exempt from the rules and principles governing the preparation and execution of the state's general budget, as well as from legislative control by entities like the parliament. (Ben Taher & Boughanem, 2015).

Established by Article 10 of the Supplementary Finance Law of 2000, its primary purpose is to regulate expenditures to achieve budgetary balance as defined by the annual finance law and to reduce public debt. The fund is mandated to maintain a balance not less than 740 billion DZD. (Latrech & Ketaf, 2018, pp. 28-29)

> Motivations for Creation:

- 1. **Internal Motives:** The fund's creation was driven by the Algerian economy's heavy reliance on the hydrocarbons sector, which significantly impacts economic growth and has a substantial effect on the state's general budget. This dependency posed challenges to continuous growth and stability in economic development programs due to fluctuations in hydrocarbon prices.
- 2. **External Motives:** Additionally, the establishment of the Revenue Regulation Fund was influenced by the success and prevalence of sovereign wealth funds in many oil-producing nations. These funds serve as crucial mechanisms for ensuring sustainable economic development financing and providing a sustainable financial resource to safeguard the rights of future generations.

The subsequent sections will delve into tables illustrating the development of public expenditures in Algeria from 2000 to 2016, the evolution of public revenues during the same period, and a detailed breakdown of the budget balance and its financing sources.

Table 01: Development of Public Expenditures in Algeria during the period (2000-2016)
Unit: Billion DZD

Year	Operating Expenses	Capital Expenses	Total Public
	Amount	Amount	Expenditures
2000	856.2	321.9	1178.1
2001	798.6	357.4	1156
2002	957.6	452.9	1428.5
2003	11228	567.4	1690.2
2004	1251.1	640.7	1891.8
2005	1245.1	806.9	2052
2006	1437.9	1015.1	2453

2007	1673.9	1434.6	3108.5
2008	2217.8	1973.3	4191.1
2009	2300	1946.3	4246.3
2010	2659	1807.9	4466.9
2011	3879.2	1974.4	5853.6
2012	4782.6	2275.5	7058.1
2013	4131.6	1887.8	6019.4
2014	4494.3	2501.4	6995.7
2015	4617	3039.3	7656.3
2016	4583.8	2713.6	7297.4

Source: Prepared by the researcher based on data from: Bank of Algeria, "Economic and Monetary Development of Algeria, Annual Reports (2003, 2004, 2008, 2010, 2011, 2016, 2017)" and Mohamed Bsaddiq, "Public Expenditures in Algeria in Light of Economic Reforms," a thesis for the Master's degree in Economic Analysis, University of Algiers, 2008/2009, p. 112.

We notice from the table that the total public expenditure has shown continuous growth, except for the year 2001, which witnessed a slight decrease compared to 2000, estimated at 22.1. After that, there was a noticeable increase in the total expenditure, explaining the government's adoption of an expansive fiscal policy, reflected in the expansion of investment spending to transform public investments.

This was due to the sharp rise in fuel prices, leading to a radical shift in fiscal policy and public spending policy, aiming to mitigate the negative consequences of economic reforms in the 1990s. Consequently, public expenditure increased in both its components (operating expenses and equipment expenses). However, equipment expenses stood out with a faster growth rate compared to operating expenses.

While in 2000, they were estimated at 321.9 billion DZD, they reached 640.7 billion DZD in 2004. This was attributed to the economic revitalization project in Algeria. In 2007, it reached 1015.1 billion DZD, and in 2009, it reached 1946.3 billion DZD. This acceleration in its growth is attributed to the Algerian government's focus on investing petroleum revenues primarily in public works, construction, agriculture, irrigation, and various infrastructure projects.

The period from 2010 to 2014 also witnessed an increase in equipment expenses, rising from 1807.9 billion DZD in 2010 to 2275.5 billion DZD in 2012. However, the pace of investment spending growth started declining in 2013, estimated at 1887.8 billion DZD, and although there was a slight improvement in 2014, the growth rate decreased until 2016 compared to the earlier years. This was due to the decline in fuel prices and the government's cancellation and suspension of many planned projects to address the financial crisis.

Operating expenses also saw significant increases from 2000 to 2012, but they experienced a decrease in 2013. After being valued at 4782.6 billion DZD in 2012, they decreased to 4131.6 billion DZD in 2013. However, they resumed increasing but at lower rates, reaching a growth of 4617 billion DZD in 2015. Afterward,

there was a slight decrease in 2016, estimated at 4583.8 billion DZD. Operating expenses include salaries for the public sector, including pre-employment contracts and vocational integration.

Table 02: Development of Public Revenues in Algeria during the period (2000-2016) Unit: Billion DZD

Year	Hydrocarbon Revenues	Non-Hydrocarbon Revenues	Total Public	
	Amount	Amount	Revenues	
2000	1213.2	349.5	1578.1	
2001	1001.4	483	1484.4	
2002	1007.9	580.4	1588.3	
2003	1350	720.8	8558	
2004	1570.7	580.4	2151.1	
2005	2352.7	724.2	3076.9	
2006	2799	720.8	3519.8	
2007	2796.8	883.1	3679.9	
2008	4088.6	965.2	5053.8	
2009	2412.7	1263.3	3676	
2010	2905	1298	4203	
2011	3979.7	1810.4	5790.1	
2012	4184.3	1908.6	6092.1	
2013	3678.1	2031	5709.1	
2014	3388.5	2091.4	5479.9	
2015	2373.5	2729.6	5103.1	
2016	1781.1	3329	5110.1	

Source: Prepared by the researcher based on data from: Annual Reports of the Bank of Algeria (2003, 2004, 2006, 2008, 2010, 2011, 2016, 2017) and Zouhir Ben Daas, Nariman Rakoub, "The Algerian Revenue Regulation Fund between the Fluctuations of Oil Prices and Budget Deficit," Research Files in Economics and Management, Issue 7, March 2019, p. 19.

The tables clearly demonstrate the significant role played by hydrocarbon resources, representing the predominant portion of the country's total revenues. Conversely, non-hydrocarbon revenues have exhibited a noteworthy increase in recent years, particularly in response to the oil crisis. These revenues escalated from 349.5 billion DZD in 2000 to 1263.3 billion DZD in 2009, further climbing to 1298 billion DZD in 2010, 1908.6 billion DZD in 2012, and an estimated 2091.4 billion DZD in 2014. This notable growth can be attributed to the uptick in regular tax revenues, such as the tax on overall income (IRG) and value-added tax (VAT) on imports. Non-hydrocarbon revenues continued their upward trajectory, surging to 2729.6 billion DZD in 2015 and 3329 billion DZD in 2016.

Between 2000 and 2008, revenues experienced a significant and steady ascent, soaring from an estimated 1213.2 billion DZD in 2000 to 4088.6 billion DZD in 2008, primarily driven by the surge in oil prices. In 2008, the price per barrel peaked at 99 dollars. However, 2009 witnessed a noticeable downturn in

hydrocarbon revenues, dropping to 2412.7 billion DZD due to plummeting oil prices, with an average price per barrel of 62.2 dollars for various reasons.

By 2012, hydrocarbon revenues rebounded to 4184.8 billion DZD but then began to decline again from 2013, plummeting to 3678.1 billion DZD, a trend that persisted until 2016 when it stood at 1781.1 billion DZD, owing to the steep drop in oil prices and the emergence of the oil crisis.

Table 03: Development of Budget Balance and Uses of Revenue Regulation Fund during the period (2000-2016)

Unit: Billion DZD

Year	Total	Fund	Public Debt	Treasury Deficit	Budget
	Resources	Balance	Repayment	Financing	Balance
2000	453.23	232.13	221.10	0	400
2001	356	171.54	184.46	0	328.4
2002	198.04	27.96	170.06	0	159.8
2003	476.87	320.87	156	0	6867.8
2004	944.39	721.68	222.7	0	259.3
2005	2090.52	1842.68	247.83	0	1024.9
2006	3640.68	2931.04	618.11	91.53	1066.8
2007	4669.89	3215.53	314.45	531.95	571.4
2008	5503.69	4280.07	465.43	758.18	862.7
2009	4680.74	4316.46	0	364.28	-570.3
2010	5634.77	4842.83	0	791.93	-263
2011	7143.15	5381.7	0	1761.45	-63.5
2012	7917.01	5633.75	0	2283.25	-965.2
2013	7695.98	5563.51	0	2132.47	-310.3
2014	7376.20	4410.53	0	2965.67	-1515.8
2015	4676.53	1790.03	0	2886.50	-2553.2
2016	1888.03	554.19	-	1333.84	-2187.3

Source: Prepared by the researcher, based on tables (1) and (2) and Siham Chabab, "Impact of Oil Price Fluctuations on the State's General Budget, An Empirical Study of the General Budget in Algeria for the period (1980-2016)," Ph.D. thesis in Economic Sciences, specialty in Public Finance Management, Abou Bekr Belkaid University, Tlemcen, Algeria 2018, 2019, p. 194.

Based on the previous table, since the establishment of the Revenue Regulation Fund in 2000, its balance has seen significant development, ranging from 27.96 billion DZD in 2002 to 5633.75 billion DZD in 2012. The analysis of the table is divided into two phases:

- **First Phase (2000-2005):** The Revenue Regulation Fund's role was to finance and reduce public debt, with a total amount repaid during this period of 1202.15 billion DZD.
- **Second Phase (2006-2016):** This period is characterized by the shift of the Revenue Regulation Fund from financing and repaying public debt to financing the public treasury's deficit. The debt was gradually reduced from the fund until 2008, after which the government began to address the deficit for the period 2006-2016. The fund's balance saw a sharp increase from 2006

to 2013, rising from 2931.04 billion DZD in 2006 to 5563.51 billion DZD in 2013, due to the rise in hydrocarbon tax surpluses, the main funder of the fund. However, after the oil crisis in 2014, the fund's balance decreased to 4410.53 billion DZD and continued to decline, reaching 1790.03 billion DZD in 2015 and dropping to its lowest value in 2016 of 554.19 billion DZD.

Fourth Axis: Unconventional Financing in Algeria during the Third Millennium

Law 17-10 initiated the imperative for unconventional financing to address the budget deficit triggered by the oil shock of 2014.

First: Adoption of Unconventional Financing Mechanism under Law 17-10:

In response to the oil crisis in Algeria's primary hydrocarbon sector in 2014, which historically fueled the public budget, and faced with resistance from economic stakeholders against increased taxes to compensate for oil revenue shortfalls, Algerian authorities resorted to unconventional financing as a strategic solution.

This approach aimed to navigate around the adverse reactions of economic stakeholders and involved the issuance of currency by the Bank of Algeria without tangible backing to bridge Algeria's public budget deficit for the fiscal year 2018. This initiative was formalized through monetary and credit law 17-10, dated 11/10/2017, which introduced a pivotal amendment through Article 45 bis, modifying Articles 46 and 47 of Order 03/11 dated 26/08/2003, which in turn amended Law 90/10 dated 14/04/1990 concerning currency and credit.

1. Innovations brought by Law 17/10:

- ➤ Law 90/10: Previously, under Order 90/10, the central bank was authorized to purchase only 20% of treasury bonds, and the advance provided by the Bank of Algeria to the treasury could not exceed 10% of the previous fiscal year's regular tax revenues. Additionally, the advance's duration should not surpass 240 days within the fiscal year, and the treasury was required to repay the debt before year-end. (Order 90/10, 1990)
- ➤ Order 03/11: According to Article 45 of Order 03/11, the Bank of Algeria, within the parameters established by the Monetary and Credit Council, could intervene in the money market, specifically engaging in the purchase and sale of public or private bonds. However, these operations were prohibited from benefiting the treasury or local authorities, thereby preventing the central bank from directly issuing money for the public treasury. (Order 03/11, 2003, Article 45)

Instead, it was mandated to acquire these bonds from the money market, with the second purchase being conducted from economic stakeholders such as banks and financial institutions that initially bought these bonds.

Order 17/10 dated 11/10/2017: Article 45 bis states: (Order 17/10, 2017, Article 45 bis)

"Notwithstanding any contrary provision, starting from the enactment of this provision, the Bank of Algeria will exceptionally and for a period of 5 years directly purchase financial bonds issued by the treasury, particularly to:

- Cover the treasury's financing needs.
- Finance the internal public debt.
- Finance the National Investment Fund.

Unconventional financing grants the central bank the ability to provide liquidity to the public treasury for financing expenses, addressing budget deficits, managing public debt, and supporting the National Investment Fund.

This approach will be complemented by a series of financial and economic reforms aimed at mitigating the adverse effects of this strategy. The amendment allows the public treasury to access a broader range of financial services from the central bank, beyond the traditional methods of loans and advances, and without the conventional constraints outlined in the monetary and credit law. Here are the specific changes and enhancements brought about by this amendment: (Msilti et al., 2018, pp. 3-4)

1. Overdraft Facilities:

Traditionally, as per Article 46 of the Monetary and Credit Law, the Bank of Algeria could extend loans to the public treasury through an overdraft account, limited to 10% of total regular state revenues from the previous year. However, under the new amendment, this restriction is lifted, allowing the treasury to open an overdraft account without a credit limit and under more favorable terms, providing a new and unconventional financial resource.

2. Direct Purchase of Treasury Bonds:

In the past, the central bank was restricted to purchasing public treasury bonds only in the secondary market from commercial banks and financial institutions. With the amendment, the Algerian bank gains the authority to buy public treasury bonds directly from the international market, representing a shift towards direct financing compared to previous practices.

3. Flexible Investment Criteria:

Traditionally, the central bank adhered to stringent investment criteria, typically subscribing only to high-quality financial securities and avoiding treasury bonds due to their perceived lower quality. However, under the unconventional financing model, the Bank of Algeria will purchase financial assets from the Algerian public treasury regardless of their risk level and financial quality.

This includes extending the duration of loans, providing substantial liquidity to cover debts and deficits, and supporting the National Investment Fund. Moreover, the central bank is no longer bound by strict economic calculations when printing additional currency, as it can now print more dinars to fulfill the public treasury's needs, serving as an unconventional financing source for the economy.

Second: The policy prescribed by Law 17-10

The policy outlined in Law 17-10 can be understood through the lens of quantitative easing, although it does not strictly adhere to this approach. Quantitative easing involves printing a monetary mass without a corresponding asset at the central bank, which is not precisely the policy followed by the Bank of Algeria under Law 17-10. Instead, this law mandates the Bank of Algeria to purchase public treasury bonds directly to finance the annual budget deficit, particularly in response to negative shocks in the hydrocarbons sector.

This policy challenges the independence of the Bank of Algeria by positioning it as a direct financier for the public treasury upon request, reminiscent of the banking system before the issuance of credit law Bank 86-12 dated 19/08/1986. This marks a shift away from the central bank's role as the apex of the banking hierarchy in a market economy, where the public treasury monopolized the monetary and financing circuit.

While Law 17-10 does not strictly align with quantitative easing, key figures such as deputies, the Minister of Finance, and the Prime Minister have indicated that it allows the Bank of Algeria to print money without a corresponding asset, signaling a policy of monetary issuance rather than pure quantitative easing. This policy aims to finance the annual public budget for a specified period, with the central bank and public treasury coordinating on how to introduce this newly created money into the national economy. However, the implementation of this policy is subject to various circumstances, particularly focusing on the non-exchange sector, which raises concerns about the potential impact on the real exchange rate and industrialization over time. (Hani & Ouail, 2018, p. 264)

Third: Reasons for Resorting to Unconventional Financing in Algeria and Its Implications on the National Economy

- 1. Reasons for Resorting to Unconventional Financing in Algeria: (Betaher, 2019, pp. 37-38)
- The significant decline in oil prices (the primary source of financing for the Algerian economy, despite some increases).
- The rise in inflation rates.
- The decline in investment fund revenues.
- The inability to collect what is termed in economic language as "floating money" in the black market, amounting to billions.
- The fragility of the foreign investment base and investors' preference for countries not operating under the 49-51% rule.
- The increasing devaluation of the national currency (for example, when the services sector opens in all its branches and dimensions, such as tourism, there is a demand for the Algerian dinar, leading to its appreciation).
- 2. Implications of Implementing Unconventional Financing in Algeria on the National Economy:

Implementing unconventional financing in Algeria has significant implications for the national economy, particularly considering its heavy reliance on hydrocarbon revenues and oil taxation for budgetary support. The key effects of this unconventional domestic financing policy on the national economy's indicators are as follows: (Bekhti et al., 2019, p. 11)

- Increased monetary mass and payment means in the economy without a corresponding increase in goods and services, leading to a decrease in the local currency's value and a decline in individual purchasing power. The increase in money supply and the depreciation of the local currency result in higher price levels and prices of various goods and services, creating unsatisfactory economic problems and threatening the economy.
- Increased interest rates for investment loans and decreased interest rates on savings, leading to public disincentive towards saving.

• Government debt could lead to increased taxes rather than reduced expenditures. For the new monetary issuance to effectively address the general budget deficit, the production apparatus must be flexible, with surplus in idle production elements. If the government resorts to monetary issuance, it should issue small amounts that the national economy can absorb. The increasing reliance on monetary issuance, amidst the low flexibility of the production apparatus, leads to heightened negative inflationary effects. This approach is suitable for advanced economies with a flexible production apparatus, as many studies and research indicate a circular relationship between inflationary financing, rising inflation rates, and increasing budget deficits, leading to higher public spending and further deficit increase.

Fourthly: Economic Reforms Accompanying the Implementation of Unconventional Financing Mechanism

The Algerian government adopted a set of accompanying measures within the framework of implementing unconventional financing (Executive Decree No. 18-86 dated March 5, 2018), which stipulated the necessity of defining mechanisms for monitoring measures and structural economic and financial reforms aimed at restoring the state treasury's balances and the balance of payments within a maximum period of five years starting from January 1, 2018, as follows: (Unconventional Financing in Algeria, 2018, pp. 14, 16)

1. Restoring the state treasury's balances (state finance reform):

This includes enhancing the estimation and management capacities of public expenditures and modernizing budget preparation methods as follows:

- Delegating budget management competencies at the local community level.
- Improving regular tax revenues (modernizing tax collection centers and operations, combating tax evasion, establishing an inspectorate of taxes with law enforcement authority).
- Controlling and rationalizing public expenditures (establishing a national registry of household incomes to prepare for rationalizing support policies, a new approach in the field of subsidies for 2019, aligning equipment programs with sectoral efficiency, rationalizing employment, etc.).

2. Restoring the balance of payments (economic competitiveness):

- Rationalizing imports of goods and services (increasing the domestic supply of goods and services, prioritizing local production in public procurement, controlling foreign trade, combating the inflation of import bills).
- Promoting non-hydrocarbon exports.

3. Structural economic reforms:

- Developing the digital economy (generalizing digital governance and using modern communication technologies in education and training).
- Reforming the labor market and rationalizing public spending in health (reforming pension and social security funds, issuing a new health law,

- activating the contractual system between hospitals and social security bodies).
- Modernizing the agricultural sector to achieve food security (developing irrigated areas, clearing agricultural land, implementing agricultural concession contracts).
- Improving the real estate offer and providing financing to increase investment.
- Enhancing incentive policies to direct sectoral investment.
- Improving the business environment and attracting foreign investment to Algeria (reducing deadlines and simplifying procedures, adapting legislation and economic regulations based on the recommendations of the business environment improvement committee).

Fifth: The Deficit of Unconventional Financing Policy in Algeria in Achieving its Goals

Since the Algerian government adopted unconventional financing as an urgent solution to restore the financial balance of the national economy and contain the repercussions of the 2014 oil crisis, despite accompanying economic reforms, it has not succeeded in achieving the desired objectives.

An amount of 3,114.4 billion dinars out of a total of 6556.2 billion dinars was injected into the national economy within the framework of implementing unconventional financing between mid-November 2017 and the end of January 2019. Of the total amount mobilized, 2,470 billion dinars were injected to finance the treasury deficit for the fiscal years 2017 and 2018, 1,813 billion dinars were allocated to repay public debts of national institutions and finance bond loan operations for growth, and 500 billion dinars were allocated for financing the National Retirement Fund.

Additionally, 1,773.2 billion dinars were allocated for financing the National Investment Fund (AADL housing, structural projects), meaning approximately 6000.0 billion dinars or about 60 billion dollars were printed. Despite these cash issuances, the budget balance continued to register a deficit over the last two years. Below is a table illustrating the evolution of operating and equipment expenses, ordinary and petroleum revenues, and the budget balance for the years 2017-2019 (in billion Algerian dinars):

Table 04: Evolution of Operating and Equipment Expenses, Ordinary and Petroleum Revenues, and Budget Balance for 2017-2019

Year	Operating	Equipment	Total	Petroleum	Ordinary	Total	Budget
	Expenses	Expenses	Expenses	Revenues	Revenues	Revenues	Balance
2017	4591.8	2290.3	6882.1	2200.1	2845.4	5563.5	-1318.6
2018	4584.0	4044.0	8628.0	2776.2	3033.0	6714.3	-1913.7
2019	4789.0	2772.8	7561.8	-	-	6507.9	-2049.25

Source: Compiled by the researcher, based on data from: Ali Garroud, Nesrine Kziz, "Financing The Budget Deficit in Algeria between Conventional and Unconventional Financing - The Case of Algeria 2007 - 2017," published in the Shuaa Journal of Economic Studies, Issue 4, University of Tissemsilt, Algeria, in September 2018,

page 203, along with references from the Official Gazette of the Algerian Republic, Issue 76, dated 28/12/2017, references by Nariman Rgoub, Zahir Ben Daas, and Siham Chabab's work on "Alternatives of New Monetary Issuance for Financing the Public Treasury Deficit and Developing the National Economy - Projected on the Specifics of the Algerian Economy during the period (2000 - 2019)," page 05. The website was accessed on 26/06/2023: www.yu.edu.jo.

Analyzing the table above reveals a significant increase in total public expenditures from 2017 to 2018. In 2017, these expenditures amounted to 6882.1 billion dinars, while in 2018, they rose to 8628 billion dinars. This increase was distributed across the operating budget, which was approximately 4584 billion dinars in 2018 compared to 4591.8 billion dinars in 2017, reflecting a marginal decrease of about 7 billion dinars.

Conversely, the equipment budget experienced a substantial surge, reaching about 4044 billion dinars in 2018 compared to 2290.3 billion dinars in 2017, marking an increase of nearly 50%. This escalation was primarily driven by the lifting of constraints on social and educational projects that had been paused due to financial constraints, as well as the government's efforts to settle debts owed to contracting institutions for project completions or the provision of goods and services.

In the 2017 finance law for the medium term, the government imposed a cap on public expenditures for the years 2017, 2018, and 2019, restricting them to not exceed 6800 billion dinars. However, this limit was exceeded, partly due to the slight relief in oil prices, which reached \$70 per barrel since 2017, underscoring the ongoing reliance of the state budget on oil revenues.

Despite these adjustments, the budget balance remained in deficit, with figures showing -1318.6 billion DZD in 2017, -1913.70 billion DZD in 2018, and an estimated -2049.25 billion DZD in 2019. To mitigate this deficit, a significant portion of the state's budgetary shortfall was covered by tapping into the financial reserves from oil taxation deposited in the Revenue Regulation Fund.

However, the depletion of this fund's balance by the end of the first quarter of 2017 posed challenges in finding alternative sources to cover the public treasury deficit and fulfill financial obligations, especially following unsuccessful attempts such as issuing treasury bonds and reducing the tax rate to 7%.

As a result, the unconventional financing policy did not yield the desired outcomes, leaving the budget balance in deficit until 2019. Public expenditures consistently surpassed public revenues (refer to Appendices 1, 2, 3), and the absence of decision-makers in the country post the crisis starting in February 2019 has led to a lack of a financial program for 2020.

Sixth: Stopping the Unconventional Financing Policy by the Bank of Algeria (June 2019)

After two years of implementation, the Algerian government officially abandoned unconventional financing and permanently ceased the money printing process.

This decision followed the classification by Algeria's highest monetary authority, which deemed the money printing process hazardous to the national economy. Within just 24 months, the Bank of Algeria generated an imaginary monetary mass equivalent to 65 billion dollars, with only 3114.4 billion DZD utilized out of the total funds issued.

The fate of the remaining monetary mass, undisclosed by authorities, remains unknown. The government has shifted its focus towards recalibrating the national economy's direction by discontinuing the money printing process, prompted by concerns raised by financial bodies and experts. The government spokesperson emphasized that measures have been implemented to shield the country from potential economic risks, including the depletion of foreign exchange reserves. (www.tsa-algerie.com)

Furthermore, Algeria possesses ample savings to avoid resorting to borrowing. The Bank of Algeria, in a document, clarified that between mid-November 2017 and the end of January 2019, only 3114.4 billion DZD was injected into the economy out of the 6556.2 billion DZD allocated by the treasury at the Bank of Algeria for unconventional financing. (Bank of Algeria Report, 2023)

Conclusion

Like many developing nations, Algeria faced a budget deficit despite benefiting from a financial upturn due to oil prices in the 2000s. Since the deficit's inception, its magnitude has grown, particularly following the global oil crisis in 2014. Despite Algeria's adoption of various measures, they proved inadequate to meet public spending demands amidst the deficit.

Consequently, as an extraordinary measure, Algerian authorities turned to unconventional financing policies, as outlined in decree 17/10 issued in 2017, which amended decree 03/11, itself an amendment to law 90-10. This legislation empowered the Bank of Algeria to finance the budget deficit by acquiring treasury bonds for a five-year period.

Previously, the central bank financed the treasury through short-term advances, limited to 240 days. However, this policy did not yield desired results in Algeria, owing to the weak structure of the national economy, leading to its discontinuation in 2019 due to several factors, including shifts in governmental frameworks, currency depreciation, and the resurgence of oil prices. In summary, the findings can be outlined as follows:

- To cover the budget deficit, the state resorts to various sources to obtain funds for its operations. As Algeria's economy heavily relies on oil taxation revenues, the sharp decline in oil prices led to an unfavorable shock for the hydrocarbon sector, the primary source of budget financing. After the state resorted to increasing taxes to compensate for the decline in oil revenues, it faced strong opposition from economic agents, leaving it with no choice but to turn to unconventional means to finance its budget deficit.
- Before 2017, Algeria used the Revenue Regulation Fund to pay off its debts. Starting from 2006, the Revenue Regulation Fund became an important mechanism for financing the increasing budget deficit, especially after the

- significant expansion in public spending in 2009. The fund's balance decreased and its resources significantly declined after the 2014 oil crisis, facing challenges it couldn't meet.
- The law 17/10 allowed the Bank of Algeria to finance the budget deficit by purchasing treasury bonds for a five-year period, a new practice not previously used. The central bank formerly financed the treasury by purchasing treasury bills for six months and recovering the money.
- The unconventional financing policy in Algeria failed to finance the budget deficit as the injected monetary mass was directed towards non-productive expenditures, not productive ones, drawing criticism from economic experts, media, and even the International Monetary Fund.

Based on the results obtained, some recommendations are suggested:

- It is essential to move towards governance of public spending policy and work on diversifying the Algerian economy to reduce dependency on oil, replacing oil taxation with ordinary taxation, and optimally utilizing Algeria's natural and human resources.
- Facing challenges related to achieving sustainability in financing the public budget and resource management is crucial.
- Investment should be directed towards productive sectors rather than social sectors.
- Regulating the parallel market and channeling its revenues to the state
 treasury through a comprehensive, clear strategy implemented in phases
 over a specific period, to transition activities from the informal to the formal
 economy. This can be achieved by providing incentives for legal activity,
 such as creating and equipping commercial spaces, offering advisory,
 technical, administrative, and financial support, reducing fees and taxes,
 enhancing the role of regulatory bodies, and bolstering the security forces'
 support in enforcement activities.

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