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Bank credit as a monetary expander in the Algerian economy - an analytical reading of the period (2000-2021)-

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#### Abstract:

This study examines the importance of bank credit as a key source for enhancing liquidity and its pivotal role in stimulating the Algerian economy. Amidst challenges stemming from various crises, including the Global Financial Crisis of 2008, the oil crisis of 2014, and the health crisis of 2019, the study investigates the impact of these events on monetary indicators and the performance of Algerian banks. Utilizing an analytical approach, the study analyzes the credit activity of banks and its implications. The findings underscore that, despite the decline in oil deposits, the effectiveness of the Algerian banking system in stimulating monetary circulation and managing crises has relied heavily on the expansion of lending activities and the increased involvement of private sector institutions as significant sources of credit. This study sheds light on the resilience and adaptability of the Algerian economy in the face of economic challenges, emphasizing the importance of bank credit as a driver of economic growth and stability.

**Keywords**: Bank credit 'monetary indicators 'Credit performance 'Algerian economy.

Jel Classification Code:E51. E59.EOO. H70

#### 1. INTRODUCTION

The function of credit holds significant importance on both monetary and economic fronts, serving as the primary activity of banks to furnish liquidity by mobilizing funds and extending loans to various sectors of the investment and economic landscape. Banks, therefore, are often described as "borrowing institutions for the sake of lending," a function that has persisted throughout history and remains pertinent in contemporary times. Modern advancements in credit have prompted monetary authorities worldwide to accord greater attention to credit expansion, recognizing it as a crucial source of money creation. This is particularly relevant for many developing nations, including Algeria, where credit activity heavily relies on oil deposits. In fact, Algerian commercial banks predominantly depend on savings from the oil sector, which constitute over 70% of their total deposits. Consequently, during periods of declining oil revenues, crisis management often necessitates the intervention of the Bank of Algeria to steer credit policy towards expansion, thereby fostering money creation within the Algerian economy.

Against this backdrop, the research poses the following problem: How effective is the Algerian banking system in expanding the credit base, and what is the impact of bank credit on credit performance indicators during the period 2000-2021?

The study explores hypotheses concerning the dynamics of banking liquidity and credit expansion within the Algerian economy. Hypothesis 1 posits that oil deposits serve as the primary source of banking liquidity for Algerian banks. Key questions include the extent of reliance on oil sector savings, the impact on banking system stability, and the exploration of alternative liquidity sources. Hypothesis 2 suggests that integrating private sector institutions into Algeria's credit framework enhances credit circulation. Pertinent inquiries revolve around the level of integration achieved, measures facilitating private sector involvement, and the impact on credit diversification. Hypothesis 3 suggests that savings deposits constitute the sole source for credit allocation in Algerian banks. Questions revolve around the proportion of savings deposits allocated for lending, the effect of fluctuations on lending capacity, and the regulatory role of the Bank of Algeria during

economic downturns. These inquiries aim to elucidate the intricate relationship between banking liquidity, credit expansion, and economic resilience in Algeria.

The study adopts a descriptive approach to elucidate the concepts of bank credit, its nature, and its significant financing and economic dimensions. Additionally, an analytical approach is employed to analyze the pivotal role of bank credit in creating and amplifying monetary circulation within the Algerian economy, thereby mitigating liquidity fluctuations and diversifying savings away from volatile oil deposits.

The article follows a structured approach, beginning with a theoretical framework of bank credit and an analysis of the Algerian banking system's reliance on oil deposits. It then explores the role of bank credit during economic crises and assesses the integration of private sector institutions into Algeria's credit framework. Through descriptive and analytical methodologies, the study aims to provide insights into banking liquidity, credit expansion, and economic resilience in Algeria.

#### 2. THEORETICAL FRAMEWORK OF BANK CREDIT

Credit is commonly understood as a contractual arrangement between two parties: the lender, who provides a sum of money to the borrower, with the agreement that the borrower will repay a larger amount in the future (Al-Afandi, Muhammad Ahmad, 2020, p. 124) This exchange involves the transfer of present value (the loan amount) for a future value that includes both the borrowed sum and any additional return. The funds lent can take the form of goods or cash, depending on the agreement between the parties involved. In the realm of banking, this process is facilitated by the banking system, which channels these funds towards various investments that serve as the foundation of the national economy (Zamouli, Hoda; Mutrif, Awatif, 2021, p. 269). Thus, bank credit can be understood as a crucial component of the financial system, enabling the flow of capital from lenders to borrowers for investment purposes.

# **2.1.From the donor:**

Bank credit encompasses the confidence bestowed by a commercial bank upon an individual, entrusting them with a sum of money or

guaranteeing it for an agreed-upon period (Sadiq Rashid Al-Shammari, 2019, p. 61). It entails the provision of diverse credit facilities by banks to individuals and businesses, catering to their financing requirements across various activities and durations, with banks expecting a corresponding return (Al-Afandi, Muhammad Ahmad, 2020, p. 124).

#### 2.2.From the granting party:

Bank credit is "the process of creating purchasing power through the sale of money for a specific period on the basis of trust, which is the exchange of a current value for a greater future value that involves confidence in the customer's ability to fulfill his obligations (Ali, Ahmed Shaaban Muhammad, 2019, p. 65).

From the above, bank credit is "a process of employing and investing the bank's resources within the framework of a clear and sound credit policy for the purpose of achieving greater returns with the least possible risks, during a specific period." Therefore, we deduce the nature of bank credit through the following elements (Al-Alfi, Ahmed Abdel Aziz, 1997, pp. 14-23):

- ✓ Granting bank credit is a decision based on trust: The relationship between the bank and its customers hinges primarily on mutual trust, with the credit decision-maker's experience playing a crucial role in assessing the customer's creditworthiness.
- ✓ Bank credit is an effective means of financing: Bank credit serves as an effective means of financing, facilitated by an efficient banking system capable of converting savings into resources for lending across various economic sectors, thereby boosting national productivity.
- ✓ Bank credit is a continuous and continuous process: It is a continuous process, with credit decisions heavily reliant on the client's past, present, and future financial capacity, ensuring that credit granted today will be repaid in the future.
- ✓ Bank credit is a risky decision: However, bank credit entails inherent risks, with the duration and value of credit directly impacting the level of risk. Banks mitigate these risks by diversifying their loan portfolios.
- ✓ Bank credit evaluation and forecasting: Despite these risks, bank credit evaluation and forecasting are essential, involving the study of

- the customer's creditworthiness and the assessment of potential risks and cash flow adequacy.
- ✓ It works in a changing and overlapping environment: Moreover, the dynamic nature of the environment in which bank credit operates, influenced by factors such as the legal system, economic trends, and government policies, underscores the changing and interconnected nature of credit decisions.

# 3. FINANCIAL AND ECONOMIC DIMENSIONS OF BANK CREDIT

### 3.1 The financing dimension:

Bank credit plays a very large role in financing economic development, as it makes it an influential and effective financing tool. The most important features of the financing dimension of bank credit are the following (Al-Alfi, Abdel Aziz Ahmed, 1997, p. 602):

- ✓ Financing investment projects in various sectors and economic activities contributes to economic development and raising the rate of economic growth.
- ✓ Financing the ongoing activities of existing projects contributes to increasing production and the flow of goods to markets.
- ✓ Financing foreign trade (imports and exports) increases the efficiency of the external sector.
- ✓ Financing export industries to increase export rates.
- ✓ Financing import substitution projects to reduce imports.
- ✓ Financing small, medium and mini-enterprises with support from the state contributes to solving economic and social problems.
- ✓ Funding expansion, modernization, and development initiatives within existing projects contributes to heightened productivity.
- ✓ Financing the agricultural and industrial sector to increase the flow of goods in the national economy.

#### 3.2 Economic dimension

The effective contribution of bank credit in financing the national economy leads to a direct impact on many economic aspects, the most important of which are, see (Al-Sayegh, Nabil dhanoun, 2018, pp. 21-22):

#### ✓ Impact on the National Product and Economic Growth Rate:

Current financial resources are mobilized and invested in projects, resulting in increased production of goods and services, thereby elevating the gross national product. Targeting bank credit towards more productive sectors further stimulates economic growth.

## **✓** Impact on the Economic Structure:

Bank credit contributes to the formation and diversification of the economic structure by directing funds towards specific sectors based on established economic policies. This intensification of credit towards certain sectors enhances their relative importance, fostering a balanced and diversified economic structure crucial for national development.

#### ✓ Effect on Economic Entry:

Bank credit indirectly provides income through loans and advances to individuals and private projects, enabling them to finance their needs and aspirations. This credit policy helps alleviate disparities and break the "vicious cycle of poverty," particularly through consumer and investment credit, which cater to different economic conditions and needs (Al-Douri & Al-Samarrai, 2020, p. 09).

# 4. DEVELOPMENTS IN THE MONETARY SITUATION IN ALGERIA DURING THE PERIOD 2000-2021

The presentation of the most important developments in the monetary situation and banking liquidity in the Algerian economy is divided into (03) three interim periods as follows:

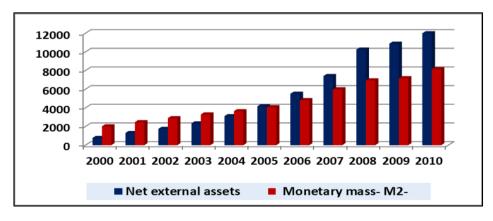
# 4.1. The first interim period during (2000-2010):

During this period, the Algerian economy experienced a significant financial boost attributable to the surge in oil prices in global markets. This surge resulted in an increase in the monetary mass "M2", reaching 8162.8 million DZD in 2010, compared to 2022.53 million DZD in 2000, marking a 4.03% growth rate over the decade (Algeria, Bank of, 2022). Despite the downturn observed in 2009 due to the 2008 global financial crisis, which

caused instability in the global financial and banking sectors, Algeria maintained financial stability, bolstered by foreign assets serving as a primary source of monetary expansion. These assets played a pivotal role in ensuring stability in the money market and banking liquidity. Additionally, there was a notable reduction in foreign debt from 22,642 billion dollars in 2002 to 5,56 billion dollars in 2010, underscoring the economic dynamics of the period.

- ✓ The continued accumulation of revenue control fund resources, as oil revenues have strengthened the solidity and solvency of Algerian banks as they are the main supplier of the Algerian economy.
- ✓ The continued development in total net external assets was considered the variable controlling the monetary expansion for the year 2010, confirming the distinctive structural trend for this decade with the exception of the year 2009, due to the upward tendency since the end of 2005, when it exceeded the cash and quasi-cash liquidity in the national economy until 2008, as shown by the following figure:

**Figure 1:** Monetary growth of net external assets and the monetary mass "M2" during the period 2000-2010



**Source:** Prepared by researchers based on data from the Bank of Algeria, statistical bulletins for the years mentioned, date of access: 04/28/2023, available on the website:

https://www.bank-of-algeria.dz/indicateurs-monetaires

In conclusion, the trend of the M2 monetary mass over the period from 2000 to 2010 reflects significant growth, largely driven by the surge in oil prices in global markets. Despite the destabilization caused by the 2008 global financial crisis, Algeria maintained financial stability, supported by foreign

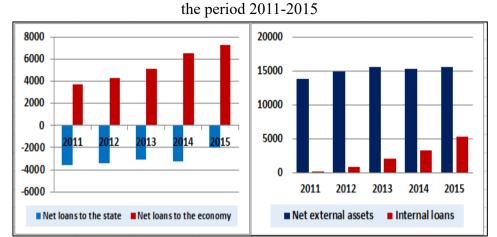
assets contributing to monetary expansion. The notable reduction in foreign debt further underscores the resilience of the Algerian economy during this period. Overall, the trajectory of the M2 monetary mass highlights the interplay between global economic factors and Algeria's economic landscape, emphasizing the importance of prudent financial management in navigating periods of volatility.

#### 4.2. The second interim period during (2011-2015):

During this period, the growth of the monetary mass "M2" was minimal, estimated at 0.13%, highlighting significant disparities in the development of its components (Bank, The World, 2022). Conversely, the monetary aggregate "M1" exhibited continuous growth from 2011 to 2014, increasing by 16.4%. However, it experienced a decline of 3.6% in 2015 due to a decrease in demand deposits at the bank level. Quasi-cash liquidity, represented by Q1, saw an 8.8% increase, attributed to a rise in term deposits in non-hydrocarbon sectors by 10.3%. In contrast, banking liquidity expanded with a 12.3% increase in term deposits for the private sector. The significant decline in global oil prices in 2015 marked a turning point in the development of monetary aggregates, with net foreign assets no longer serving as the primary source of monetary expansion. This shift negatively impacted the balance of payments, resulting in a deficit of \$27,54 billion in 2015, compared to a surplus of \$15,58 billion in 2010, revealing the vulnerability of the algerian economy to energy price shocks.

The decline in oil revenues led to a decrease in the revenue control fund, accompanied by a sharp decline of 41.1% in demand deposits from the fuel sector. Conversely, net loans to the state increased, along with banks' dues towards it. With shrinking exchange reserves and the state transitioning from a net creditor to a net debtor to the banking system, loans directed to the economy maintained their vitality. In 2015, these loans reached 7277.2 billion DZD, the highest level since 2000, emerging as a significant source of monetary expansion. Short-term loans increased from 1363 billion DZD in 2011 to 1710.6 DZD in 2015, alongside an increase in medium and long-term loans from 2363.5 to 5566.6 billion DZD during the same period. This trend is depicted in the following figure.

Figure 2: Development and growth of internal loans granted during



**Source:** Prepared by researchers based on data from The World Bank, for the years mentioned, date of access 2023/08/19, available on the website:

https://data.albankaldawli.org/indicator/FS.AST.PRVT.GD.ZS?locations=DZ

Figure 2 shows the development and growth of internal loans granted by banks in Algeria from 2011 to 2015. The data, sourced from the Bank of Algeria, indicates that short-term loans increased moderately from 1363 billion DZD in 2011 to 1710.6 billion DZD in 2015. However, medium and long-term loans expanded rapidly over the same period, rising from 2363.5 billion DZD to 5566.6 billion DZD. As a result, total internal lending grew substantially from around 3700 billion DZD in 2011 to over 7200 billion DZD by 2015. A key trend is the growing prominence of medium and long-term lending, which accounted for nearly 65% of the loan total in 2011 but made up over 75% by 2015. The data highlights the vital role played by bank credit expansion, particularly in longer-term loans, in driving monetary expansion and economic growth during this period in Algeria.

# 4.3. The third interim period during (2016-2021):

Many economic conditions were reflected in the monetary and financial position of the algerian banking system during this period, including the repercussions of the 2014 oil crisis, the 2017 monetary issuance, and the 2019 Corona pandemic, the monetary policy of the Bank of algeria gradually moved toward pumping liquidity since July 2016. The most important thing that distinguished this stage, and in the context of declining financial

resources, was the banks' resort to requesting refinancing from. The Bank of algeria has been working since July 2016 to strengthen banking liquidity and the work of banks to expand their lending activity, as shown in the following table regarding monetary indicators and the development of monetary growth:

**Table 1:** Evolution of liquidity and credit activity during the period 2016-2021 (in billions of dinars)

	The monetary -M2 -mass		-M2 - corresponding to the monetary mass					
The year	The monetar y massM2	grow thM2	Net external assets	% grow th	Loans to the economy	% grow th	Loans to the state	% grow th
2016	13816.3	0.81	12596	-29.26	7909.9	6.32	2682.2	46.74
2017	14974.6	8.40	11227.4	-13.68	8880	9.70	4691.9	20.09
2018	16636.7	11.10	9485.6	-17.41	9976.3	10.96	6325.7	16.33
2019	16506.6	-0.78	7598.7	-18.86	10857.8	8.81	7019.9	6.94
2020	17659.6	6.98	6518.2	-10.80	11182.3	3.24	9353.5	23.33
2021	20053.5	13.55	6596.5	0.78	9794.7	-13.87	12908.7	35.55

**Source**: prepared by researchers based on data from the National Office of Statistics "ONS" · National accounting ·date of access08/05/2023 ·available on the website:

https://www.ons.dz/spip.php?rubrique327

Based on the above table, it can be noted that:

- ✓ The Severe Decline in Net Foreign Assets: Net foreign assets have experienced a significant and continuous decline since 2016, plummeting by approximately 42% from 15522.6 billion DZD in 2015 to 6596.5 billion DZD in 2021. This downward trend is primarily attributed to the persistent decrease in oil prices since 2014, significantly impacting the cash position of the bank of algeria, exacerbated further by the global health crisis induced by COVID-19.
- ✓ **Decrease in M2 Monetary Mass:** The M2 monetary mass witnessed a decline of 0.8% in 2019 following two years of growth, with rates of 8.4% in 2017 and 11.1% in 2018. This decrease can be attributed to the injection of liquidity into the economy through the direct purchase of treasury bonds as part of monetary financing initiated since March 2017, in

- response to the deficit registered in the amount of 1000 billion dinars (algeria, bank of, 2017)under "Article 45" bis of Order No. 03-11.
- ✓ Decline in Demand Deposits of the National Fuel Company: Demand deposits of the National Fuel Company witnessed a sharp decline of (71.3)% in the face of economic policies aimed at stimulating and directing credit towards long-term investments to diversify income sources amid dwindling oil revenues. This decline contrasts with increases of 5.7% in time deposits and 10.4% in cash circulation recorded in 2020.
- ✓ Increase in Net Loans Directed to the State and Economy: Net loans directed to the state experienced a continuous increase, rising from 3857.8 billion dinars at the end of 2018 to 4782.4 billion dinars at the end of 2019, driven by the bank of algeria's increased dues to the public treasury. Concurrently, loans directed to the economy continued to grow since 2016, achieving a growth rate of 12.3% in 2018. Despite a decline in loan demand in 2019 due to the global COVID-19 crisis, growth rates of 8.8% in 2020 and 3% in 2021 were recorded before experiencing a negative decline estimated at 12.40% in 2021.

# 5. EVOLUTION OF THE VOLUME OF BANK CREDIT AND CREDIT POLICY

The direct credit facilities extended by algerian banks encompass a range of loans and advances disbursed to both the private and public sectors, including state-owned and private institutions. The Bank of Algeria, utilizing its supervisory mechanisms, establishes macro and partial credit policies aligned with the overarching objectives of the state and the interests of the banking system. These policies are also tailored to support broader developmental goals. The table below illustrates the volume of loans and advances extended by the algerian banking system throughout the period spanning from 2000 to 2021.

**Table 2:** Bank credit granted by the banking system during the period 2000-2021((in billions of dinars)

central bank	Commercial banks	
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The years	Billion dzd	percentage %	Billiondzd	Percentage %	Total credit facilities
2000	/	/	993.05	/	/
2001	0.7	0.06	1077.7	99.93	1078.4
2002	0.8	0.06	1266.0	99.93	1266.8
2003	0.7	0.05	1379.5	99.94	1380.2
2004	0.6	0.03	1534.4	99.96	1535
2005	0.8	0.04	1778.9	99.95	1779.7
2006	1.3	0.06	1904.1	99.93	1905.4
2007	1.5	0.06	2203.8	99.93	2205.3
2008	1.4	0.05	2414.4	99.94	2415.8
2009	1.4	0.04	3085.2	99.95	3086.6
2010	1.4	0.04	3266.7	99.95	3268.1
2011	1.8	0.04	3724.7	99.95	3726.5
2012	2.0	0.04	4285.6	99.95	4287.6
2013	1.8	0.03	5154.5	99.96	5156.3
2014	1.7	0.02	6502.9	99.97	6504.6
2015	1.7	0.02	7275.6	99.97	7277.3
2016	2.1	0.02	7907.8	99.97	7909.9
2017	2.2	0.02	8877.9	99.97	8880.1
2018	2.3	0.02	9974.0	99.97	9976.3
2019	2.2	0.02	10855.6	99.97	10857.8
2020	2.1	0.01	11180.2	99.98	11182.3
2021	2.6	0.02	9792.1	99.97	9794.7

**Source:** Prepared by researchers based on data from The World Bank, for the years mentioned, date of access2023/08/27, available on the website: https://data.albankaldawli.org/indicator/FS.AST.PRVT.GD.ZS?locations=DZ

From the above table it can be observed that:

**5.1.At the level of the overall credit policy:** The Bank of Algeria worked to provide credit facilities and loans to the public treasury in order to enhance financial and economic stability, as the Bank of Algeria's loans increased since 2006 to 1,3 billion DZD, after their volume did not exceed 0,8 billion DZD since 2001, because the economy enjoyed sufficient liquidity, and because of The decline in oil revenues since 2003 resulting

from the stagnation and fluctuation of the oil market due to the war on Iraq. The Bank of Algeria increased the percentage of loans granted to the treasury, reaching 1,4 billion dinars in 2010, and this increase continued after that due to the impact of bank liquidity by the global financial crisis of 2008 and the oil crisis of 2014, where it continued to rise. Loans reached 2.3 billion DZD in 2018, as the Bank of Algeria's loans played a "monetary expansion to stimulate the vitality of the economy" through its intervention in bank refinancing programs, as they continued to rise from 2,1 billion DZD in 2020 to 2,6 billion DZD in 2021 thanks to the facilitative measures supporting the economy since 2020. The minimum mandatory reserve rate was also reduced from 3% to 2% (Algeria, Bank of, 2021)in 2021, with the aim of "stimulating and increasing the loan supply" as an accompanying measure to revive the national economy.

**5.2** At the level of partial credit policy: The credit activity of commercial banks has exhibited a consistent and notable increase since the year 2000, when it stood at 993.05 billion DZD, escalating to 2615.5 billion DZD by 2008, reflecting a growth rate of approximately 18.60% during this period. This surge aimed to bolster liquidity and invigorate economic vitality. Despite stagnation in the oil market from 2004 to 2006 due to geopolitical factors such as the Iraq war, and the global financial crisis of 2008, the credit activity of commercial banks persisted in its upward trajectory. Following the 2014 oil crisis, which significantly impacted Algeria's monetary and economic landscape, lending activity surged, reaching a peak growth rate of 26.14% in 2014 – the highest observed in the past two decades (study period). Subsequently, lending trends continued to ascend until 2020, when total loans granted amounted to 11180.2 billion dinars, aligning with the state's policy of financing and bolstering investment projects across economic sectors through credit guarantee institutions. The average total loans surged to 99.97%, particularly following the decline in fuel deposits, further fostering the process of money creation and fortifying financial resilience in the face of diverse crises.

# 6. THE IMPACT OF CREDIT EXPANSION ON THE PERFORMANCE OF MONETARY INDICATORS IN THE ECONOMY

The high rate of deposit growth contributes to increasing and expanding the credit base of the banking system. The more the credit network expands, the greater the ability of commercial banks to mobilize savings, reduce consumption among the public and encourage demand for savings bank deposits, which allows the economy to be more stimulated and growth to be achieved. This development is considered Lending rates relative to deposits are an important indicator of the activity and performance of banks, and the extent of their ability to influence economic performance through the index of credit granted to the private sector in relation to gross domestic product (GDP). The following table presents the most important indicators of credit performance in the Algerian economy as follows:

**Table 3:** Rates (%) of credit performance for the most important indicators during the period 2000-2021

year	/Assets Advers aries	Deposits to liabilities ratio	Loans to assets ratio	Loan to deposit ratio	Ratio of loans to the private sector to GDP
2000	/	/	/	/	/
2001	2793.1	62.48	38.60	61.78	7.99
2002	3323.7	62.08	38.11	61.39	12.18
2003	3534.4	67.16	39.05	58.14	11.20
2004	3893	67.75	39.42	58.19	10.98
2005	4209.8	68.55	42.27	61.66	11.86
2006	5228.9	66.58	36.43	54.72	12.43
2007	6510.8	67.31	33.86	50.31	13.00
2008	7287.2	67.76	35.89	52.96	12.79
2009	7327.3	64.57	42.12	65.22	16.05
2010	7988.7	67.30	40.90	60.78	15.06
2011	9002.4	69.79	41.39	59.31	13.59
2012	9654.4	69.29	44.41	64.08	13.86
2013	10320	70.05	49.96	71.32	13.49

2014	11976.4	71.12	54.31	76.35	15.80
2015	12508.7	66.63	58.17	87.30	18.67
2016	12881	63.20	61.40	97.15	22.59
2017	14098.4	65.30	62.98	96.44	24.20
2018	15514.3	65.18	64.30	98.64	24.67
2019	16586.9	59.35	65.46	110.29	25.46
2020	16979.7	58.13	65.85	113.28	29.15
2021	20460.9	57.08	47.87	83.86	25.58

**Source:** Prepared by researchers based on data bulletin knoema, date of access 13/09/2023, available on the website:

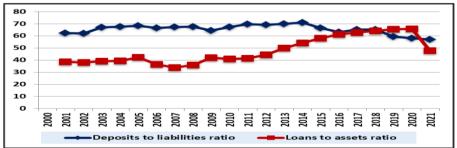
https://ar.knoema.com/atlas//topics

Credit performance rates can be analyzed through the most important monetary indicators shown in the table above as follows:

# 6.1. Loans to deposits ratio index:

In 2008, the loan-to-deposit ratio stood at 52.96%, reflecting a surplus of liquidity in the banking system due to the hydrocarbon sector, rather than a focus on lending. However, since the 2014 oil crisis, the deposit-to-liability ratio declined to 65.18% in 2018, despite efforts to encourage savings mobilization. Meanwhile, loans to assets have steadily increased since 2001, with notable vitality even after the decline in oil deposits, reaching 98.64% in 2018. By 2019 and 2020, loans exceeded deposits in commercial banks, driven by interventions from the Bank of Algeria to support the economy during the health crisis, reducing reserve requirements to finance investment projects.

**Figure 3:** Evolution of loan and deposit rates as a percentage (%) of assets/liabilities during the period 2000-2021



**Source:** Prepared by researchers based on data from The World Bank, for the years mentioned, date of access 2023/08/31, available on the website:

https://data.albankaldawli.org/indicator/FS.AST.PRVT.GD.ZS?locations=DZ

Figure3 shows that private sector loans as a percentage of GDP in Algeria witnessed steady growth from 2000 to 2021. In 2000, private sector loans were around 5% of GDP. This ratio remained low, under 10%, from 2000 to 2008 due to limited private sector participation in the economy, with most development programs and funding provided by the public sector. However, after the recession in oil markets in 2006 and subsequent fluctuations in revenues, private sector loans began rising as a share of GDP. This was supported by new investment laws and incentives for the private sector. The expansion accelerated from around 2008 to 2021 as loan guarantee institutions helped expand access to lending for small, medium and micro enterprises. By 2021, private sector lending had grown to over 25% of GDP, five times the 2000 level. The graph illustrates the growing role of bank credit in financing the private sector as algeria sought to diversify its economy beyond hydrocarbons. Expanding private loans also became an important avenue for banks to channel liquidity as public sector lending declined.

#### 6.2. Private sector loans to GDP ratio index:

From 2000 to 2008, despite significant bank liquidity, the private sector's access to credit was limited, with more funds allocated to state-led development programs. However, starting from 2006, there was a gradual increase in credit to the private sector, particularly after governmental efforts to improve the business environment and provide incentives. This expansion was facilitated by loan guarantee mechanisms, especially benefiting small and medium enterprises. While the percentage of loans to the private sector relative to GDP was 16.05% in 2009, it fluctuated due to the 2014 financial crisis, yet rose to 29.15% in 2020, aided by increased credit availability and additional liquidity support measures (chahra, Ouarti; Haj Ahmad, Fawzi, 2023, p. 427)

35 6000 30 5000 25 4000 20 3000 15 2000 10 1000 5 Loans granted to the private sector Ratio of private sector loans to GDP ■ Loans granted to the public sector

**Figure 4:** Percentage (%) of loans granted to the private sector/GDP during the period 2000-2021

**Source:** Prepared by researchers based on data from trading conomics, Economic indicators, date of access 10/09/2023, available on the website:

https://ar.tradingeconomics.com/algeria/gdp-growth-annual

**Figure 4** depicts the ratio of private sector loans to GDP in Algeria from 2000 to 2021. It shows that this ratio grew steadily over the period, apart from a slight dip around 2014. In 2000, private sector loans were about 5% of GDP. The ratio rose gradually in the 2000s, reaching around 16% by 2009 as the economy was liberalized. However, in 2014, amidst falling oil prices and revenues, the ratio dropped back to under 15%. This highlighted the dependence on hydrocarbons. But from 2014 onwards, as part of diversification efforts, the government incentivized lending to the private sector. As a result, the ratio steadily increased again, exceeding 25% by 2019 and reaching nearly 30% by 2021. The graph illustrates how private credit has become an important avenue for channeling liquidity, especially after 2014 when oil income declined. Expanded lending also reflects monetization and development of the private sector in Algeria's push to reduce dependence on hydrocarbons. The rising ratio shows the growing role of bank credit, versus oil rents, in financing economic activity.

#### 7. CONCLUSION

The effectiveness of the Algerian banking system manifests in the capability of commercial banks to execute their credit functions, primarily providing liquidity and enhancing monetary circulation for sustaining financial and economic stability. This study aims to underscore the pivotal role of bank credit in infusing liquidity and cash into the Algerian economy, particularly during crises. Consequently, the following conclusions emerge:

- Over a decade, notably from 2000 to 2008, oil deposits served as the primary source of bank liquidity and financial depth, significantly impacting monetary and economic indicators in Algeria. This period marked a dependency on oil revenues, **confirming the validity of hypothesis (1).**
- A more targeted approach to the credit base components, particularly towards private sector institutions, substantially influenced the development and growth of loans in this sector, especially during crises (e.g., the 2008 financial crisis, the 2014 oil crisis, and the 2019 Corona crisis). This substantiates the validity of hypothesis (2).
- Deposits in Algerian banks did not constitute the primary source of lending in 2019 and 2020. Instead, bank liquidity and lending rates increased due to an additional margin released from the mandatory reserve to refinance banks by the Central Bank. This contradicts the validity of hypothesis (3).

Consequently, the study proposes the following recommendations:

- Ensure the collection of financial surpluses from diverse sources, reducing reliance on fuel deposits and focusing on private sector surpluses, which contribute over 99% to the Algerian economy.
- Expand the financial inclusion network in algeria and broaden the banking base, aligning it with sectors and regions benefiting from the new investment law (22-18). Emphasize value-added economic activities operating outside the formal system.
- Reduce precautionary measures by allocating a percentage of idle financial margins from the compulsory reserve to inject into the Algerian economy, particularly after demonstrating their effectiveness in maintaining project stability during the 2019 and 2020 Corona crisis.
- We recommend prioritizing policies aimed at easing access to finance for

small and medium enterprises (PMEs), facilitating their integration into the economy. This includes establishing dedicated credit facilities, fostering partnerships with financial institutions, and implementing streamlined loan application processes tailored to the needs of PMEs. Such measures can significantly enhance their ability to invest, innovate, and contribute to economic growth.

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