



The Role of Monetary Policy in Promoting Economic Growth in Algeria An Analytical Study for the Period (1990-2020)

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Abstract:

Monetary policy in Algeria aims to control money supply to stimulate economic growth. This study examines the role of monetary policy tools in achieving economic growth from 1990 to 2020, focusing on the impact of Law 90-10. The findings suggest that monetary policy has had limited success in boosting growth due to the economy's heavy dependence on oil revenue for financing development projects. Despite efforts in implementing reforms and developmental schemes, desired growth rates have not been achieved.

Keywords: Monetary policy, economic growth, money supply, code of money and credit.

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Introduction:

Economic growth is considered one of the most important goals pursued by various governments, as it reflects their economic and social conditions. Therefore, it has received significant attention in order to understand its sources and determinants, aiming to achieve the desired optimal growth rate through monetary policy. Despite the different economic schools' perspectives on the role of monetary policy in achieving economic growth and its limitations, there is an agreement that monetary policy, in its core essence, involves controlling and managing the money supply to achieve an optimal real growth rate while maintaining price stability. The optimal growth rate is not always the highest, but rather the rate that does not contradict the requirements of monetary stability and allows for a slight and gradual increase in price levels.

Based on the above, the research problem we aim to address is: What role does monetary policy play in achieving economic growth in Algeria during the period (1990-2020)?

To address this research problem, the following questions were posed:

- What is the trajectory of monetary policy after the issuance of the Code of Money and Credit?
- What are the monetary policy tools used by the central bank to control the money supply and monitor economic growth during the study period?
- What is the actual development of economic growth rates in Algeria during the study period?
- To what extent have economic reform programs and developmental schemes succeeded in achieving economic growth?

Our study aims to test the following hypotheses:

- Are the economic reforms implemented in monetary policy sufficient to achieve the desired level of economic growth?

- Do monetary policy tools stimulate economic activity by increasing the money supply, which in turn promotes investment and leads to economic growth?

In order to answer this problem and the sub-questions raised, we have divided the research into three main axes:

First Axis: General Concepts of Monetary Policy.

Second Axis: The Theoretical Framework of Economic Growth.

Third Axis: The Reality of Monetary Policy and Economic Growth in Algeria.

Firstly: General Concepts of Monetary Policy

1- The concept of monetary policy and its evolution.

1-1-The concept of monetary policy can be clarified through several definitions. It has been defined as the process aimed at regulating the quantity of money available in the national economy to achieve the objectives of economic policy, which include economic development (Khababa, Abdallah, 2008, p. 199). It has also been defined as the actions used to control the money supply by the central bank to achieve economic policy goals (Jean Pierre Pattat, 1998, p. 27). Additionally, it can be defined as "the set of necessary measures and actions that allow the central bank to intervene using its monetary tools to influence the volume of credit within an expansionary or restrictive framework, in order to achieve overall monetary policy objectives" (Abdelkader Khalil, 2012, p. 150).

1-2-The stages of the evolution of monetary policy: It can be divided into four stages:

Stage One: Classical economists focused on studying and determining the impact of changes in the quantity of money on the overall price level by distinguishing between the real sector and the monetary sector. Scholars such as Fisher, Marshall, and others concluded that changes in the quantity of money would result in proportional and directional changes in the general price level. They argued that monetary policy is neutral and does not affect employment, production, real wages, or interest rates. Its role is limited to facilitating transactions by creating money. Economic growth occurs automatically without the need for state intervention in the economic process.

Prior to the occurrence of the Great Depression crisis during the period of 1929-1933, economic policy was the sole instrument used to achieve stability. However, the occurrence of this crisis demonstrated its inability to address the crisis effectively (Souheyr Mahmoud Moutawak, 1999, pp. 37-38).

Stage Two: The continuation of the crisis and the failure of classical analysis to find solutions to overcome it led to an increased interest in studying the behavior of money and its impact on overall economic activity. This gave rise to new ideas proposed by the English economist Keynes, who began advocating for monetary policy to address the crisis during the interwar period. Keynes criticized many classical ideas, especially the assumption of the stability of the velocity of money. He developed the theory of money demand by introducing the interest rate as an important variable that affects the demand for money. Keynes argued that the economy can reach equilibrium under conditions of less than full employment of productive resources and that demand creates supply. From this perspective, the concept of effective aggregate demand emerged, which could drive the business cycle and increase the rate of economic growth (Zakaria Nouri, 2006, p. 186).

Stage Three: Economic development revealed certain deficiencies in fiscal policy, leading to a decline in its significance. It was characterized by inflexibility and slowness, and its inability to effectively combat inflation became evident. As a result, some advanced countries recognized the need to implement certain monetary policy tools to achieve stability in the national economy. This was followed by the rise of the monetarists, led by Friedman and known as the Chicago School, advocating for controlling the money supply to achieve economic stability. The objective was to increase the money supply at a rate equal to the growth rate of the Gross Domestic Product (GDP), both during periods of recession and prosperity. Although inflation significantly decreased after implementing the monetary policy of controlling the money supply growth, problems such as economic downturns and unemployment began to accumulate.

Stage Four: This stage was characterized by a return to monetary thinking and a focus on fiscal policy, particularly in the United States during the presidency of Bill Clinton in the 1990s. Despite the strong adherence of each camp to their respective policies, a third group led by American economist Walter Heller emerged, arguing that bias towards a single policy is unjustifiable. They emphasized the necessity of blending and utilizing both monetary and fiscal policy tools to overcome economic crises. It was suggested that monetary policy should align with fiscal policy, complement it, support it, and not hinder its effectiveness (Salah Meftah, 2005, p. 107).

2- **The objectives of monetary policy** aim to achieve a set of ultimate objectives, and they are four objectives referred to as the "magic square" of Nicholas Kaldor. (Marie Delaplace, 2003, P118)

2-1 Achieving stability in the general price level: This is the most important objective of monetary policy. Every country seeks to combat inflation and avoid severe fluctuations in prices in order to achieve stability in their levels and, consequently, monetary and economic stability.

2-2 Achieving balance in the balance of payments: Monetary policy can contribute to reducing the deficit in the balance of payments by the central bank raising the discount rate, which in turn leads commercial banks to increase interest rates on loans. This reduces the demand for credit, goods and services, and thereby reducing the intensity of price increases within the country. Consequently, it encourages exports, reduces imports, and attracts foreign capital inflows due to higher local interest rates.

2-3 Achieving full employment: Monetary policy plays an important role in achieving employment and reducing unemployment by increasing effective demand. When monetary authorities increase the money supply during periods of unemployment, interest rates decrease. This encourages businesses to invest, leading to increased investment and employment opportunities.

2-4 Achieving high economic growth: Monetary policy aims to achieve a high rate of

economic growth by influencing the credit supply through monetary expansion. By expanding credit, investment increases, leading to higher productivity and a rise in the rate of GDP growth.

3- Monetary Policy Tools: Among these tools are:

3-1 Quantitative Tools (Indirect): These are the traditional methods used by the central bank to control money and credit, and they include:

3-1-1 Discount Rate Policy: It refers to the interest rate charged by the central bank to commercial banks in exchange for providing loans and discounting their securities and commercial papers to obtain funds to support their cash needs. By adjusting the discount rate, the central bank aims to enhance its ability to provide credit to investors, increase investment volumes, and achieve economic growth.

3-1-2 Open Market Policy: It refers to the central bank's process of buying and selling government bonds or securities in the financial market according to the prevailing economic conditions (recession or inflation). This policy aims to decrease or increase the volume of money circulating in the economy by influencing the ability of commercial banks to provide loans. When the central bank enters the open market as a buyer of securities and bonds, the money supply increases, and thereby providing the necessary funds to achieve economic growth. (Nizar Saad Eddine Al Issa, 2006, p. 289.)

3-1-3 The Required Reserve Ratio Policy: This policy is considered one of the most important tools used by central banks in developing countries, especially in the absence of a well-established and real financial market. The central bank imposes a certain percentage of the total deposits on commercial banks to hold as a legal reserve without interest, to be used as a precautionary measure to meet any unexpected increase in deposit withdrawals by customers. This policy also affects the ability of commercial banks to provide loans. When the central bank reduces the reserve requirement ratio, it increases the lending capacity of commercial banks, leading to a decrease in interest

rates. This, in turn, stimulates investments and contributes to achieving economic growth. (Bassam El-Hajjar, 2010, p. 293.)

3-2 Qualitative Tools (Direct): These are the tools used by the central bank to influence the quality of credit by directing it towards desired sectors to achieve specific economic objectives. These tools include:

3-2-1 Loan Ceiling Policy: The central bank implements this policy in cases of inflation by setting a maximum limit on the size of loans and establishing an upper credit ceiling that no bank can exceed. The purpose of this policy is to direct the granting of credit towards desired sectors and activities, control excessive lending, and maintain financial stability.

3-2-2 Selective Lending Policy: Its primary objective is to influence the direction of loans towards economic sectors that contribute to development, especially the agricultural and industrial sectors, in order to stimulate their growth. This is achieved through selective methods of lending, such as altering the maturity period, interest rates, and discounting of securities above the set ceiling. (Khababa, Abdallah, 2008, p.210).

3-3 Modern Tools: These are an extension of the quantitative and qualitative tools, where the central bank resorts to direct intervention. There are two main tools used:

3-3-1 Moral Suasion: It involves the direct guidance, statements, and advice provided by the central bank to commercial banks through meetings and discussions with their managers. The purpose is to exchange views and persuade them of the monetary policy deemed appropriate, without resorting to issuing formal orders or instructions.

3-3-2 Issuing Instructions and Orders: This involves the central bank issuing direct instructions and orders to commercial banks regarding their lending and investment activities. These instructions are binding and not optional, specifying the types of loans preferred by the central bank and establishing credit ceilings for each sector of the economy. (Hussam Ali Dawood, 2010, pp. 353-354)

Secondly: Theoretical Introduction to Economic Growth.

1- Definition of Economic Growth: Economic growth refers to an increase in the total Gross Domestic Product (GDP) or Gross National Income (GNI), resulting in an increase in the average real income per individual. This concept reveals the following:

- Economic growth does not merely entail an increase in the total GDP; it must also lead to an increase in real individual income. In other words, the growth rate must surpass the population growth rate.
- The increase in individual income should be real and not nominal, which requires the growth rate of individual income to exceed the inflation rate.
- The increase in income should be sustained over the long term and not temporary. (Abd Elaziz Mohamed Adjmia, 2002, p. 57)

2- Determinants of Economic Growth: These are the factors that play a crucial role in determining economic growth and can be summarized as follows:

2-1- Quantity and quality of human resources: Human resources contribute directly to the economy. An increase in the number of capable individuals willing to work affects labor productivity and, consequently, economic growth. The quality of human resources depends on various characteristics, including their capacity for innovation, education, training, and skills. If a shortage of skilled human resources emerges, it will hinder economic growth.

2-2- Quantity and quality of natural resources: It refers to the possession of arable land, abundance of minerals, water, forests, and others. The availability and diversity of natural resources represent an important factor in achieving economic growth, especially when utilized appropriately.

2-3- Capital accumulation: It directly relates to the level of savings, which represents sacrificing consumption in order to increase investment and, thus, raise the rate of economic growth. Capital accumulation encompasses both physical and human investment. Physical investment involves factories, machinery, transportation, and

other tangible assets. Human investment, on the other hand, includes education, skill development, training, and healthcare.

2-4- Technological progress: It refers to the advancement in technology and innovation resulting from inventions and discoveries. Technological progress leads to the development of new products and more efficient methods of production compared to traditional approaches.

2-5- Environmental factors: Economic growth in any country requires a conducive environment, whether it be political, economic, social, or cultural. It is essential to have a banking sector capable of financing growth requirements, a legal system to establish rules for commercial transactions, a tax system that does not hinder new investments, and political stability and governance that support economic growth. (Abdrahman Ismail, 2004, p. 278-280)

3- Economic Growth in Light of Economic Theories:

3-1 Economic Growth in Classical Theory:

The classical school of thought placed emphasis on the importance of capital in the process of economic growth. It focused on investigating the long-term causes of economic growth. Adam Smith attributed economic growth to the division of labor, considering the industrial sector as a key driver of growth. He believed that capital accumulation is the primary engine of growth. On the other hand, Ricardo attributed economic growth to the profits of capitalists. He saw profits as the main driver of economic activity and growth. Ricardo also considered agriculture as one of the most important economic sectors because it provides food for the population. However, he acknowledged the diminishing returns law in agriculture. Malthus, on the other hand, considered the industrial sector as the main source of wealth. He believed that economic growth results from increased output due to profitable opportunities for capital and the ease of technological progress in this sector. He also highlighted the impact of population growth on economic growth, stating that population increase

hinders capital accumulation and thus economic growth. (Falih Hassan Khalaf, 2006, p. 108-110.)

3-2 Economic Growth in Neoclassical Theory:

Neoclassical economists articulated their ideas regarding economic growth through models. The Harrod-Domar model, for instance, considered investment as the primary driver of economic growth, with no substitution between capital and labor. The model aimed to explain the rate of investment increase that would allow income to grow in line with the increase in productive capacity. According to this model, investment increases productive capacity and generates income (Falih Hassan Khalaf, 2006, p. 150).

On the other hand, the Solow model focuses on incorporating technological progress into the growth process. It is seen as an extension of the Harrod-Domar model, as both emphasize the importance of saving and investment as key determinants of capital accumulation and hence economic growth. However, Solow adds another factor to his model, which is labor, in addition to technological progress that is determined outside the model (Mashourb Ibrahim, 2006, p. 31).

As for the Ramsey model, it focuses on the trade-off between saving and consumption. The current income of economic agents is subject to individuals' preferences regarding their consumption and saving. The goal of these agents in this trade-off is to maximize their present utility while taking into account the welfare of future generations.

3-3 Economic Growth in Modern Thought:

In modern economic thought, the focus shifted towards endogenous growth models, which attributed economic growth to internal factors and made technological progress an endogenous variable. One of the prominent models in endogenous growth theory is the Lucas model. It emphasizes the unique role of human capital as a driver of growth. Lucas built his model on the assumption that human capital can be increased while maintaining constant marginal returns, allowing for sustained economic growth. The

more individuals invest time in acquiring knowledge and skills, the greater the accumulation of human capital (Baha Eddine Tawil, 2016, p. 129).

The Romer model, on the other hand, attributes economic growth to the accumulation of general knowledge. Romer argues that labor and capital alone are insufficient for generating innovations. As knowledge increases, research and development efforts driven by human capital become more productive. Therefore, the model highlights the importance of knowledge in driving economic growth.

The Barro model focuses on taxation as the sole source of government revenue. It examines the optimal taxation policy for achieving growth and investigates the impact of productive and non-productive government expenditures on the path of economic growth. According to this model, increased government intervention through higher expenditures stimulates economic growth by encouraging investment (Baha Eddine Tawil, 2016, p. 129).

Thirdly: The reality of monetary policy and economic growth in Algeria during the period (1990-2020).

1-The trajectory of monetary policy in Algeria after the issuance of the Code of Money and Credit: The Algerian economy experienced a transitional phase through the adoption of a market economy system, which had a significant impact on the development of domestic monetary conditions and indicators. The International Monetary Fund (IMF) and the World Bank imposed several strict measures through the imposition of the Monetary and Credit Law No. 90-10, issued on April 14, 1990. This law marked the beginning of radical reforms. Article 55 of the law states the following: The central bank's mission in the field of monetary and credit operations is to provide the best conditions for the steady growth of the national economy, and to ensure internal and external monetary stability. To achieve this purpose, it is tasked with regulating monetary movements and directing and monitoring the distribution of loans. (Law No. 90-10, 1990, p. 527)

1-1- The legal and regulatory framework of monetary policy: The legal framework for the operations of the Bank of Algeria was defined by Law No. 90-10, concerning monetary and credit matters. After more than a decade of implementing monetary reforms, the general powers of the Bank of Algeria were amended in 2001 by Decree No. 01-01, issued on February 27, 2001. This decree notably separated the Board of Directors of the Bank of Algeria from the Monetary and Credit Council. It also included administrative adjustments in the management of the Bank of Algeria without compromising the content of the law.

Following the bankruptcy of two private banks (Banque Khalifa and Commercial and Industrial Bank of Algeria), it became evident that the supervisory mechanisms employed by the Bank of Algeria were weak. Thus, Order 03-11 was issued on August 26, 2003, which retained a significant portion of the provisions related to monetary policy instruments in Law No. 90-10 while enhancing good governance practices in formulating and managing monetary policy.

It should be noted that this new legal framework provided greater flexibility for the Monetary and Credit Council in developing appropriate monetary instruments. According to Article 62 of this decree, the Monetary and Credit Council was granted authorities in areas such as determining monetary policy, establishing its management and monitoring, as well as evaluating it. In 2009, the regulatory framework concerning the interventions of the Bank of Algeria was revised and completed to align with global developments in monetary policy following the international financial crisis. Accordingly, the Monetary and Credit Council issued Regulation No. 09-02 on May 26, 2009, which pertained to monetary policy operations, instruments, and procedures.

With this new regulation, the operational framework of monetary policy was strengthened. Additionally, the legislative provisions of August 2010, under Decree No. 10-04, amending and supplementing Decree No. 03-11, established price stability as an explicit objective of monetary policy. This represents a significant reform in the

monetary policy framework, emphasizing the importance of inflation targeting. (Bank of Algeria, 2012, pages 172-176).

1-2 Monetary Policy Tools in Algeria during the period (1990-2020): Law No. 90-10, concerning monetary and credit, significantly contributed to changing the course of monetary policy in the 1990s. It provided the monetary authority with a clear set of tools to adjust bank liquidity and monitor economic growth. The direction of monetary policy shifted towards the use of indirect tools to control these policies, serving as the main reference for reforming monetary policy tools. These instruments can be summarized as follows:

1-2-1 Banking Loan Regulation: Granting loans underwent strict regulations to control the growth of monetary aggregates, and this regulation varied depending on the entity receiving these loans.

- ❖ **Regulation of loans granted to the state:** A ceiling has been set for loans granted to the state through the Money and Credit Code. The maximum amount of advances provided to the treasury is determined as 10% of the previous fiscal year's regular revenues achieved. The repayment period for these loans does not exceed a total of 240 days. (Law 90-10, 1990, Article 78, p. 529)
- ❖ **Regulation of loans provided to 23 non-independent institutions:** These measures were implemented during the restructuring period of these institutions to allow them to achieve independence and ensure that their operational expenses are covered by the Bank of Algeria. This was done in line with the agreed-upon programs with the International Monetary Fund (IMF). Initially, maximum limits were imposed on loans granted by each bank to these institutions. However, by the end of 1992, these maximum limits were abandoned, and full reliance was placed on economic refinancing. (Madjda Medoukh, 2011, p. 375)
- ❖ **Regulation of loans provided to the economy:** The Monetary and Credit Code established a maximum limit for the level of loan repayment directed towards the economy. The repayment period for medium-term bank loans was set at a maximum of 3 years, subject to specific guarantees and conditions, with maximum intervals of 6 months. It should be noted that these loans are related to

the development of productive means, financing exports, or residential construction. (Law 90-10, 1990, Article 71, p. 528)

1-2-2 Discount rate: The discount rate has been modified almost every year since the issuance of the Monetary and Credit Law due to the significant growth of the money supply resulting from price liberalization. The Bank of Algeria increased the discount rate to 10.5% in 1990 and then to 15% in 1995. It continued to decrease steadily until 2004, reaching 4%. It remained unchanged until September 2016 when the operations of discounting private and public bonds were reactivated, and the rate was reduced to 3.5%. In May 2017, this rate was raised to 3.75%. The following table illustrates these changes:

Table No. (01): Discount Rate at the Bank of Algeria during the period (1990-2020)

Discount rate	Calculated starting from	To
10.5 %	22/05/1990	30/09/1991
11.5%	01/10/1991	09/04/1994
15%	10/04/1994	01/08/1995
14%	02/08/1995	27/08/1996
13%	28/08/1996	20/04/1997
12.5%	21/04/1997	28/06/1997
12%	29/06/1997	17/11/1997
11%	18/11/1997	08/02/1998
9.5%	09/02/1998	08/09/1999
8.5%	09/09/1999	26/01/0002
7.5%	27/01/2000	21/10/2000
6%	22/10/2000	19/01/2002
5.5 %	20/01/2002	31/05/2003
4,5 %	01/06/2003	06/03/2004
4%	07/03/2004	30/09/2016
3.5%	01/10/2016	30/04/2017
3.75%	30/12/2020	01/05/2017

Source: Bank of Algeria, Quarterly Statistical Bulletin n°54, 60 p: 19

1-2-3 Compulsory Reserves: According to Article 93 of the Money and Credit Law, the Bank of Algeria has the right to impose compulsory reserves to be deposited by banks

in a frozen account. These reserves should not exceed 28% of the approved amounts used as a basis for calculation, with the possibility of exceeding this ratio in case of proven legal necessity. Any deficiency in the compulsory reserves subjects banks and financial institutions to a daily fine equal to 1% of the deficient amount, payable to the central bank (Law 90-10, 1990, p. 531).

Under Instruction No. 16-94 issued in April 1994, aimed at regulating liquidity in the national economy, the legal reserve rate was set at 2.5%. However, this tool remained without effective implementation until December 2001 when it came into effect due to the abundance of liquidity in banks and the general improvement of the economic situation. The system of compulsory reserves was detailed in the framework of Law 90-10, particularly in Article 30-11, Paragraph C, which states that the cash usage is determined by the Banking and Credit Council. In this context, the Council issued Regulation 04-02 dated March 4, 2004, specifying the conditions for the formation of minimum compulsory reserves. Article 18 of the same regulation indicates that, in accordance with the prescribed principles, the central bank determines the actual conditions for the formation of compulsory reserves through instructions whenever necessary (Bank of Algeria, Annual Report 2012, p. 174).

And the following table illustrates the movement of the compulsory reserve account in Algeria.

Table 02: Development of the compulsory reserve ratio at the Bank of Algeria during the period 2001-2020

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
The reserve ratio	3%	4.25%	6.25%	6.5%	6.5%	6.5%	6.5 %	8%	8%	9%
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
The reserve ratio	9%	11%	12%	12%	12%	8%	4%	10%	10%	3%

Source: Bank of Algeria, Quarterly Statistical Bulletin, n °30-46-53p17

1-2-4 Open Market: The cash market in Algeria has evolved since the issuance of the Code of Money and Credit, where it was reorganized by the Bank of Algeria within the framework of the open market. The open market involves the buying and selling of central bank securities in the cash market, including government bonds with a maturity period not exceeding six months, discountable special bonds, and bonds for granting loans. Under no circumstances shall the total amount of operations conducted by the Bank of Algeria on government bonds exceed 20% of the state's ordinary revenues (Law 90-10, Articles 76 and 77, p. 529). Despite the importance of open market operations, they have not been successful due to the limited cash market and the absence of a developed financial market in Algeria.

1-2-5 Liquidity Absorption: The Bank of Algeria was compelled to resort to new tools of monetary policy to absorb liquidity surplus starting from April 2002. These tools include a seven-day liquidity absorption tool introduced in April 2002, a three-month liquidity absorption tool implemented in August 2005, and the facilitation of excessive interest-bearing deposits starting from June 2005. Additionally, a mechanism for liquidity absorption over a period of six months was introduced in January 2013. These absorption measures aim to absorb lendable funds in the interbank cash market. As for permanent facilities (deposits with the Bank of Algeria for 24 hours), which are carried out on a blank basis and initiated by the banks, they are remunerated at a fixed rate announced by the Bank of Algeria. This rate varies according to market fluctuations, the evolution of the structure and rates of operations and interventions by the Bank of Algeria (Bank of Algeria, 2013, p. 148).

Bank liquidity amounted to 2,730.9 billion dinars at the end of 2014. With the decline in oil prices, bank liquidity decreased to 820.9 billion dinars by the end of 2016 and 482.41 billion dinars by the end of October 2017. Faced with the downward trend of liquidity, the Bank of Algeria lowered the thresholds for liquidity absorption in 2016 and resumed refinancing operations starting from March 2017. This was achieved by including open market operations to inject liquidity on different due dates, with the

main policy rate for seven-day operations serving as the main channel in monetary policy management (Bank of Algeria, 2017, p. 129).

With the implementation of non-traditional cash financing since November 2017, the level of liquidity increased to 1,380.6 billion dinars at the end of December 2017 and 1,557.6 billion dinars at the end of 2018, reaching its peak at 2,081 billion dinars in January 2019. As a result, the Bank of Algeria suspended liquidity injection, and the cancellation of non-traditional financing for the rest of 2019, along with the deficit in the current account of the balance of payments and the economic impact of the COVID-19 pandemic, led to a sharp contraction in bank liquidity from 1,100.9 billion dinars at the end of 2019 to 461.8 billion dinars at the end of September 2020. However, the emergency measures and actions taken by the Bank of Algeria to address the situation (extending the refinancing period for banks from 7 days to a month, raising the thresholds of tradable government bonds, and reducing the reserve requirement ratio from 10% to 3%) have improved the level of liquidity, reaching 632.1 billion dinars at the end of 2020 (Bank of Algeria, 2020, p. 7).

2- The economic growth rates in Algeria for the period (1990-2020): The Algerian government has sought to achieve economic growth by formulating a series of development programs and promoting investments. After two years following the completion of structural reform programs, Algeria returned to planning due to the financial breakthrough in its economy resulting from the rise in oil prices starting from 1999.

2- 1 Development Programs: These programs include:

2-1-1 Economic Recovery Support Program (2001-2004): This program includes a financial package of 52.5 billion Algerian dinars, distributed as outlined in the following table:

Table No. (03): Components of the Economic Recovery Support Program (2001-2004)

Nature of the activities	Human Resources	Major Construction Works	Local Development	Support for Reforms	Support for Agriculture and Marine Fishing	Total
Total of Licenses Programs (billion DZD)	90.2	210.4	114.0	45.0	65.4	525.0
Total Licenses Programs (as a percentage)	17.2	40.1	21.7	8.6	12.4	100

Source: National Economic and Social Council, Report on the Economic and Social Situation for the Second Semester of 2001, p. 123.

It is noted that the sector of major construction projects accounted for the largest share of projects in this program, with a percentage of 40.1%. This was followed by the local development sector with a percentage of 21.7%, then the human resources sector with a percentage of 17.2%. The sector of direct support for agriculture and marine fishing, as well as support for reforms, accounted for 12.4% and 8.6% respectively.

2-1-2 The Complementary Program for Growth Support (2005-2009): it was allocated a budget of 8,705 billion Algerian dinars. This program includes five major main axes (Bahaa El-Din Tawil ,2016, pp. 207-208). These axes are:

1. Program for improving living conditions of the population: 45.41%.
2. Program for developing infrastructure: 40.52%.
3. Program for supporting economic development: 8.02%.
4. Program for developing public services: 4.85%.
5. Program for developing modern technologies, media, and communication: 1.19%.

2-1-3 The Economic Growth Consolidation Program (2010-2014): it was allocated a financial allocation of 21,214 billion Algerian dinars. This program includes three main axes:

1. Program for improving living conditions of the population: 45.42%.
2. Program for developing infrastructure: 38.53%.
3. Program for supporting economic development: 16.05%.

2-2- Evolution of Economic Growth Rates in Algeria: Economic growth rates in Algeria have experienced fluctuations from one period to another, primarily due to global economic conditions, particularly the petroleum market. The table below presents the economic growth rates:

Table No. (04): Evolution of Economic Growth Rate for the Period (1990-2020)

Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Growth Rate(%)	-1.2	1.8	-2.1	-0.9	3.8	4.1	1.1	5.1	3.2	3.8
Years	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Growth Rate(%)	3	5.6	7.2	4.3	5.9	1.7	3.4	2.4	1.6	3.6
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Growth Rate(%)	2.9	3.4	2.8	3.8	3.7	3.2	1.3	1.2	1	-5.1

Source: World Bank Data, Annual GDP Growth % in Algeria.

Based on the data in the above table, the period from 1991 to 1994 is considered the worst period experienced by the Algerian economy. This is mainly due to the decline in oil prices during this period, slow implementation of reforms in the country, poor management, and weak economic institutions. However, starting from 1995, there was a growth recovery after several years of recession, thanks to the acceleration of reforms. The only exception was in 1997 when the growth rate was 1.1% due to adverse climatic

conditions and a decrease in agricultural and industrial production. Apart from that, this growth continued until the end of the reforms, reaching its highest rate at 5.1%. This was attributed to the growth of the industrial sector in that year, in addition to a good agricultural season at that time.

The economic growth rate in Algeria witnessed an increase with the implementation of economic recovery support programs, achieving the highest rate of 7.2% in 2003, thanks to the continuous rise in oil prices. However, starting from 2006, growth rates declined due to a relative decline in oil prices, reaching 1.6% in 2009. This was attributed to the collapse of oil prices caused by the major external shock faced by the national economy in 2009, resulting from the intensification of the global financial crisis and economic downturn (Bank of Algeria, 2012, p7). However, the growth rate increased to 3.6% in 2010 as a result of implementing programs to strengthen economic growth. The growth rate slowed down again in 2013, recording a growth rate of 2.8%, as the significant expansion in the agriculture, services, and construction sectors could not compensate for the weak performance of the hydrocarbon sector, which had been declining for the eighth consecutive year since 2006, in addition to a decrease in public investment (Bank of Algeria, 2013, p26). The growth rate relatively increased in the following three years (2014-2015-2016), reaching 3.8%, 3.7%, and 3.2% respectively, due to the recovery of the hydrocarbon sector after nine years of recession. However, it slowed down again in 2017, reaching 1.3% due to a significant decline in growth in the hydrocarbon sector (Bank of Algeria, 2017, p4). The growth rate remained stable at 1.2% in 2018, decreased to 1% in 2019, the lowest level in over 20 years. In 2020, the growth rate experienced an unprecedented decline of 5.1% due to the collapse in prices and demand for hydrocarbons amidst the health crisis and quarantine measures (Bank of Algeria, 2020, p14).

Conclusion:

Through this study, we have reached a set of results, which can be summarized as follows:

- The central bank utilizes a range of monetary policy tools to achieve economic growth by controlling the money supply. An increase in the money supply encourages investment and, consequently, leads to growth.
- The economic reforms implemented by the state in its financial and monetary system are necessary but not sufficient on their own to stimulate growth and have not yielded the expected results. The improvement in financial, monetary, and economic growth indicators is linked to the rise in oil prices in international markets.
- Development programs have helped accelerate the pace of economic growth and continue to enhance overall economic stability. The most significant achievements include an increase in the rate of economic growth to acceptable levels.
- Monetary policy tools have played a limited role in increasing economic growth as they have been unable to achieve the desired growth rates. This is due to the nature of the Algerian economy, which is heavily reliant on oil revenues to finance its development projects. It is considered a rentier economy dependent on oil price fluctuations.
- Economic growth rates are dependent on the hydrocarbon sector, and monetary policy in Algeria is linked to oil price volatility. Based on the continuous results obtained, the following recommendations can be made:
- Diversify state revenues and reduce dependence on the hydrocarbon sector by giving significant importance to agriculture, industry, and tourism sectors. Provide incentives for both local and foreign investors to encourage investment.
- Support the productive sector with production expertise and utilize advanced technologies to achieve substantial growth.

- Focus on addressing the unavailable growth determinants, such as investing in human capital by improving the quality of education and training and supporting scientific research to stimulate economic growth.
- Grant greater independence to the central bank concerning monetary policy without state intervention.

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