Financial Sector in Algeria: Analysing Some Facts and Challenges

Larabi Aicha [(1)], Nassour Abdelkader [(2)]

[1] Ph.D. Condidate, faculty of Economics, University of Djillali Liabes, Algeria, laboratory of Entreprises Management aicha.larabi@univ-sba.dz

[2]Lecturer, faculty of Economics, University of Djillali Liabe, Algeria, laboratory of Entreprises Management nassour_abdel@yahoo.fr,

ARTICLE INFORMATION

Original Research Paper
Received:16 /04/2021
Accepted:22/06/2021
Published:15/09/2021

Keywords:
financial sector development:
economic growth:
monetary stability:
response to shocks:
Algeria:
JEL Clkassification Codes:
F65,F43.

Abstract

This study aims to shed light on the apparent and hidden side of the development of the Algerian financial sector, along with the actions taken to improve its performance and correct its path back to its traditional functions. The sustainability of the financial sector enables the development and implementation of economic policies, including monetary policy to finance economic activity from savings and investment operations.

The results of the study concluded that the reforms that affected financial sector in Algeria since independence until today have failed to restore the financial sector to its traditional functions and to activate it as a decisive factor in economic growth. But more than that, it has become almost completely linked like other sectors in Algeria to oil revenues. Hence, stimulating the Algerian financial sector requires urgent reforms rebuilding and using it to stimulate growth, address issues of monetary stability, and respond to shocks.

Mots clés:
développement du secteur financier:
croissance économique:
stabilité monétaire:
réponse aux chocs:
Algérie:
Codes Classification JEL:
F65,F43.

Résumé:

Cette étude But à éclairer les différents aspects du développement du secteur financier ainsi que les mesures prises pour l'améliorer et le mettre sur les rails de ses fonctions traditionnelles. La durabilité du secteur financier permet le développement et la mise en œuvre des politiques économiques, y compris la politique monétaire, afin de financer l'activité économique à partir des opérations d'épargne et d'investissement.

Les résultats de cette étude ont conclu que, depuis l'indépendance, les réformes qui ont touché le secteur n'ont pas réussi à redonner au secteur financier ses fonctions traditionnelles ni de l'activer en tant que facteur décisif dans la croissance économique. Mais plus que cela, et comme d'autres secteurs il est devenu presque complètement lié aux revenus du secteur d'hydrocarbures. Ce qui nécessite des réformes urgentes ainsi que le reconstruire et l'exploiter pour stimuler la croissane, résoudre les problèmes de stabilité monétaire et répondre aux chocs. Mots clés : développement du secteur financier, croissance économique, stabilité monétaire, réponse aux chocs.

Corresponding Author:Larabi Aicha: aicha_larabi17@yahoo.com

1- Introduction

After its independence, Algeria, like other countries, hastened to keep pace with global changes by undertaking several reforms of its own free will or with the intervention of international bodies, affecting the financial sector at the level of all its structures, with the establishment of the Algerian Central Bank in 1962, the Algerian dinar in 1964, the nationalization of banks in 1966, and in accordance with the 1986 loan law and the Bank law in 1988, central bank was separated from public treasury and commercial banks restored their main role as financial intermediaries. However, financial sector remained unstable at this stage and all relevant decisions were taken centrally. At the end of the 80s, Algeria suffered from an economic crisis due to the collapse of oil prices which prompted it to restructure its economic institutions and switch from a centrally planned economy to a market economy.

1990, was not only a turning point for the financial sector, but for the economy as a whole. where Algeria was forced to implement a contractionary fiscal policy for 10 years as a mandatory measure as a result of resorting to international financial institutions which resulted in liberalizing interest rates, devaluing the currency, opening up to the outside world, and most importantly assuming responsibility for the banking system and organizing it according to the ACT of Money and Loan 90/10 and give the Central Bank its full role in managing the financial sector. Despite these reforms, which were mostly ink on paper financial sector remained heavily dependent on oil prices which were demonstrated by the 2014 crisis after the drop in oil prices and the adoption of an unconventional monetary policy as a solution to get out of the crisis.

- **Study Problem**

Based on the above, the study problem can be formulated as follows: How can Algeria develop the financial sector to be an alternative and a decisive factor in sustainable economic development outside the hydrocarbons sector?

- **Importance of the Study**

The importance of this study lies in the topic itself, as it searches for the importance of a strong and developed financial sector that guarantees its stability and continuity, through its vital role in providing permanent sources of financing for the operations of economic activity, the sustainability of competition, and containing the impact of economic shocks.

- **Methodology**

Since our study is analytical, and it relies on data from various scientific sources to link the variables of the study, the appropriate approach for it is the descriptive approach. by analyzing and commenting on the data of the development of the financial sector and its role in sustainable economic growth.

- **Previous Studies**

There are many theoretical and experimental studies that have dealt with the relationship of the financial sector to economic growth, although this relationship differs in terms of Relationship direction, relationship strength, positive or negative relationship, and also whether the relationship is direct or indirect, so we set bellow some studies that were in touch with our topic in this paper.

In a study by Abdel-Rahim & Ben said (2015) they aim to measure the relationship between financial system, foreign direct investment and economic growth using the regular least squares MCO method for the case of Algeria during the period (1990-2014). The study found that the importance of the financial system as a major determinant of attracting foreign direct investment, and activating the latter to influence economic growth requires the capacity of the host country including a minimum of financial development which was estimated at 37.15%.

Medjahed (2016) has shed light on the role of the financial sector in economic activity through indicators of the development of banks and financial market where each of them was represented by three variables, loans directed to the private sector as a percentage of GDP, money mass M2 as a percentage of GDP, total commercial bank assets to total commercial bank assets and central bank assets, stock exchange capitalization (GDP%), Stock trading volume index (GDP%), turnover rate, and economic growth was represented by the rate of real GDP growth using Panel data analysis method for 24 developed countries and 37 developing countries. The study found that there is a reciprocal effect between financial development and economic growth. Moreover, the effect of the financial sector on growth is negative due to the volatile nature of the financial system which is considered the most vulnerable to financial crises in developed countries, and banking liberalization crises in developing countries. It has been observed that for this effect to be positive it requires a certain level of financial development.

Recently, Mir (2020) in his study tried to gain familiarity with the concepts of financial development and its relationship to economic growth through theoretical literature, by addressing the indicators of measuring financial development and its influence channels on economic growth. The study reached a set of recommendations to enhance the role of financial sector in the economy and to maintain its integrity, including; Carrying out reforms that serve the financial sector in the field of creativity and innovation, giving the central bank greater independence as a monetary authority, adherence to prudential rules, openness to the global financial system.

2-The Relationship between Financial Development and Economic Growth:

The topic of financial development has gained the interest of economic decision-makers and attracted researchers to bridge the scientific gap in economic theories and confirm or deny the views that support the need for an advanced financial sector, and this interest began since the evolution of money and the emergence of the banking system as an indicator of financial development, where some researchers focused on the one-way relationship from financial development to economic growth as Bagehot (1873), Schumpete (1911), Goldsmith (1969), Shaw (1973), McKinnon (1973) where they unanimously agree on the importance of financial intermediation (the banking sector) in investment and production processes through the exploitation of savings, hedging of risks, creativity and innovation in financial services in terms of quality and quantity of these services and their access to new markets as a channel of influence between the development of financial sector and economic growth. But in order to benefit from the positive effects of the financial sector on economic activity, the negative effects should be avoided by removing restrictions by not excessive interference by governments, especially in developing countries. From the viewpoint of Levine (1997), the relationship from financial sector to economic growth is positive through financial markets, which are an indicator of financial development and a major component in terms of their ability to diversify, manage risks, and providing information at a lower cost which helps attract investment, especially for large companies, and secure financing for megaprojects, and thus drives growth. While others tend to deny the relationship between financial development and economic growth like Robinson (1952), Lucas (1988), and this is due to the fact that interest in the financial sector and its development will costs governments huge money and creates more crises that affect the economy as a whole, adding to that there are more sustainable and stable alternatives to achieving growth. While recent studies like Varga (2018) and ICAEW& ISCA (2014) found that the world's entry into the fourth wave of technology led to a change in the financial sector structures, in particular, the banking sector by adopting this technology by digitizing financial services. The development of technology is working on the efficiency and acceleration of financial services (payments, lending, insurance and capital and their coverage), this increases the opportunities for the added value of financial technology to grow in terms of time, cost, comprehensiveness, ease, and most importantly, absorbing the excess cash flow and eliminating the liquidity problem by compensating it through electronic transactions.

3- Financial system in Algeria:

Financial system plays a decisive role in maintaining financial stability through developing the financial sector. There is no stability without an effective and developed financial system. And what is meant by the financial system is "the organization that allows some agents during a certain period to obtain resources for financing and others to use and employ their savings." (Abdel-rrahim & Ben said, 2015) As for the development of the financial system, we mean by it “the factors and policies that lead to an increase in the effectiveness and efficiency of financial intermediation, markets and services provided” (Mohemad & jawaher, 2014). The financial system differs from the financial sector, The financial sector refers to any intermediary between those who have a financial surplus and those who suffer from a financial deficit, whether that intermediary is a banking or non-banking institution The financial system calls the financial sector in addition to the bodies, mechanisms and laws that govern and regulate the work of the financial sector and facilitate the transfer of money from savers to Investors ”(oussaghir, 2019) Thus, the financial system can be defined as the regulatory framework that facilitates the work of financial intermediation according to legal controls and frameworks on a permanent basis under the supervision of the Monetary Authority, in order to improve financial services and finance economic activities.
Algerian economy is classified within the economies of indebtedness because it mainly relies on indirect loans to finance the economy. Mostly in Algeria, banking sector is considering an important part of the financial sector because the financial market is not developed, so the economic agents resort to banks and financial institutions to ask for financing help.

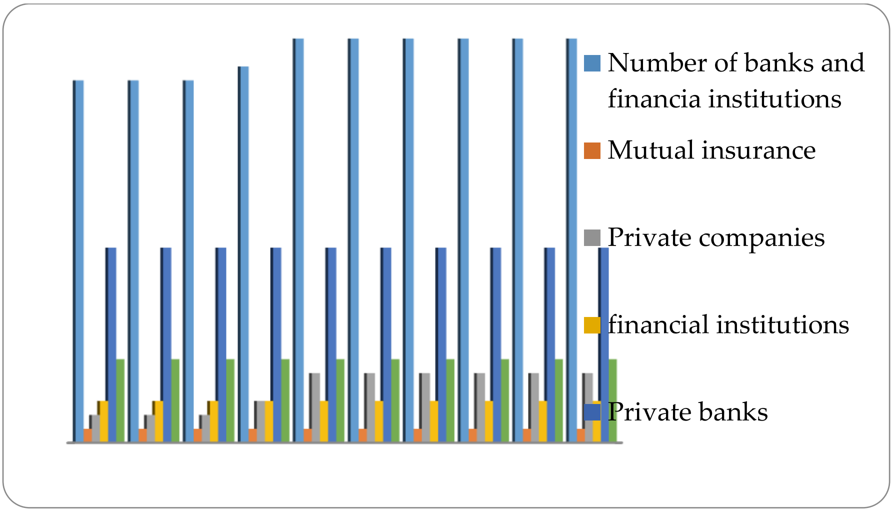
3-1The banking sector in Algeria

In order to complete its political independence through its economic independence, Algeria quickly established its banking system, starting with the Bank of Algeria in late 1962, the national currency (the Algerian dinar) 1964, the nationalization of foreign banks in 1966 and the establishment of alternative national banks to them within the Finance Act of 1966. The banking sector passed Since its establishment to the present day with important developments through the economic reforms undertaken by Algeria and changed the structure and ownership of the banking sector, the most important reform is the financial reform in 1990 which was the basic building block in developing banking activity and its openness to national and foreign dealers after it was completely controlled by the state. This law also allowed the influx of foreign capital, especially direct ones, and the involvement of the private sector in providing financial services by establishing banks and institutions through partnership, which were: (Tatar, 2002)

- Al Baraka Bank in 1990;
- Union bank, 1990;
- The Arab Foundation ABC Algeria in 1998;
- Citibank in Algeria Citybank N.A. Algeria in 1998;
- Al Khalifa Bank in 1998;
- The Libyan-Algerian Mixed Bank (BAMIC)

in 1986, that is before the issuance of the Money and Loan Act, this partnership contributed to the development of financial intermediation, by expanding the range of financial services provided by banks and financial institutions with an increase in their number over the years, as shown in Figure (1). The number of banks and financial institutions reached 26 banks and financial institutions in 2008, including 6 public banks (Bank of Algeria, the National Bank of Algeria, the National People's Loan, the Local Development Bank, the Agriculture and Rural Development Bank, the National Fund for Savings and Reserve - the Real Estate Bank). (Ben mouiza, 2019) and the private banks registered 14 banks, while the number of financial institutions reached 6 financial institutions, including one mutual insurance company, and two private companies for rental credit. The number of public and private banks remained stable over the nine years from 2008 to 2017, with an increase in private companies of three companies, bringing the number of banks and financial institutions to 29 banks and financial institutions in 2017.

Figure **1**. The development of the banking sector in Algeria from 2008-2017



Source: Prepared by researchers based on the reports of (Bank of Algeria, 2008-2017)

3-2-Banking sector performance and soundness:

Money and Loan Act has included precautionary rules to maintain the stability of the financial system since its promulgation in 1990, as Article 90/01 of the 1990 Act obliges banks and financial institutions to do the following: That the minimum capital is 500 million dinars for banks and 10 million dinars for financial institutions, provided that It was later amended in the 2004 system through Article 04/01, which stipulates 2.5 billion dinars as the minimum capital for banks and 500 million dinars as the minimum capital for financial institutions. After the 2008 crisis, Algeria raised this percentage to 10 billion dinars for banks and 2.5 billion for financial institutions in 2008, Article 08/01 (Haffai, 2018). In order to ensure the security and stability of the banking sector, Decree 10/04 issued on 13/08/2010 has to boost the role of the Bank of Algeria in supervision, especially internal control to set up a rating system for banks to test their financial soundness and to regulate the conditions for entering this banking profession in accordance with international standards and the precautionary rules of Basel (Bank of Algeria, 2010).

Table (1) represents the solvency ratio of the banking sector from 2005-2008, as private banks recorded the highest solvency ratio of 35,26% in 2009 and the lowest rate of 68,18% in 2017, despite The fluctuations recorded in the rest of the years, but they remain greater than those percentages recorded in the public sector, which also witnessed fluctuations between rising and fall, registering the highest percentage of 68,21% in 2010 and the lowest rate in 2005. The reason for this difference is due to the amendments made to the 2004 system, the 2008 system, and the 2010 system that obligate banks to a certain minimum capital on the one hand, and on the other hand the difference is due to the foreign ownership of the capital of private banks, as well as the difference in the type and degree of risks that private and public banks are exposed to. The latter being more vulnerable to risks. At the end of 2017, the banking sector had a solvency ratio of 19,56%, which is higher than what is recommended in Basel III.

Table 1. Solvency ratio in banks from 2005-2017

Solvency ratio	2005	2008	2009	2010	2015	2016	2017
The banking sector	%12,0	%16,5	%21,78	%23,31	%19,3	%18,86	%19,56
Public banks	%11,69	%15,97	%19,10	%21,78	%17,7	%18,48	%19,76
Private banks	%21,59	%21,24	%35,26	%29,19	%21,9	%20,44	%18,68

Source: Prepared by researchers based on the reports of the Bank of Algeria, 2005,2008,2010,2017.

3-2-1- Profitability of the banking sector

Profit margin measures the bank margin computed by banks after taking into account the costs and expenses of operations (particularly overheads and credit risk provisions (Habbar, 2013). Through Table No. (2), the profit margin of public banks increased between 2015 and 2017, moving from 32,3% in 2015 to 33,7% in 2016 and 45,2% in 2017, then, it stabilized to some extent at the level of private banks between 2015 and 2016 in the range of 36%, and decreased to 31,4% in 2017. The increase in the profit margin of public banks, especially in 2017, resulted from the credit risk provisions and the increase in the money supply of the public banks through resorting to the Central Bank in the context of unconventional financing.

Table 2. Profit margin for public banks and private banks 2015-2017.

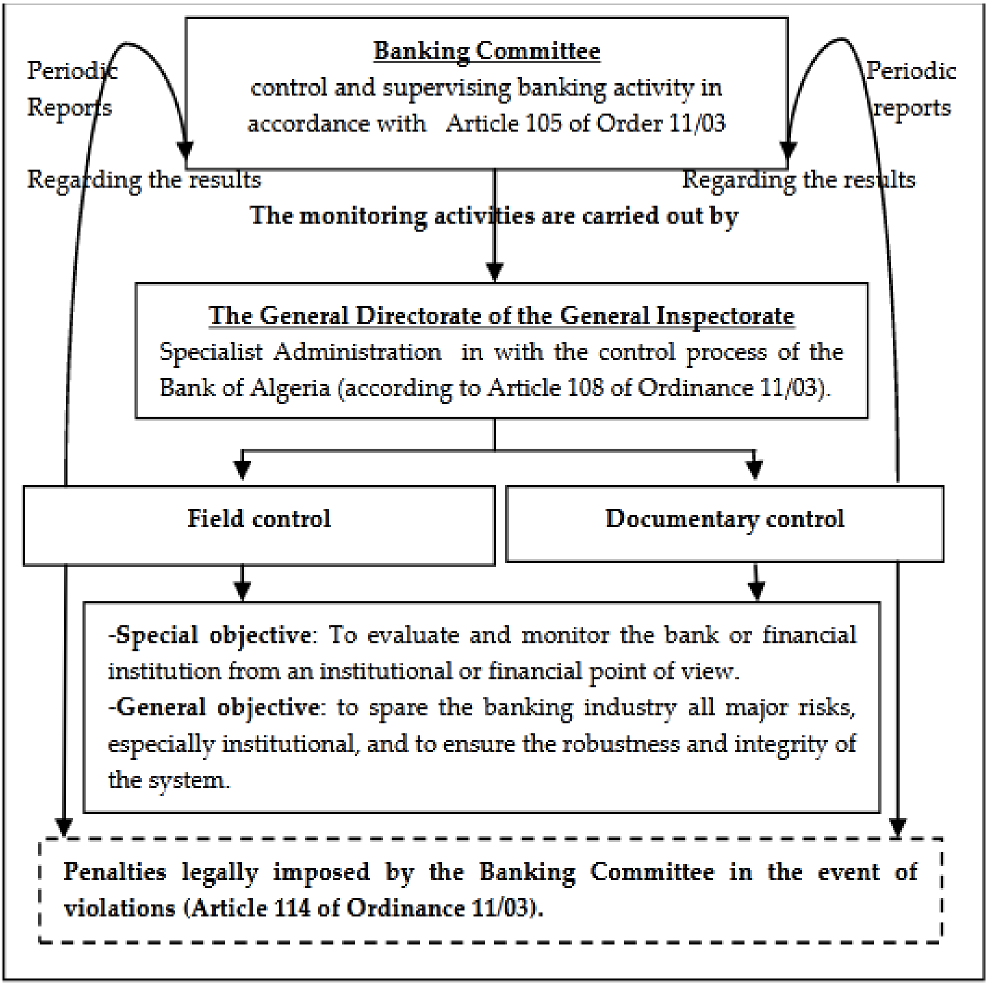
Profit margin	2015	2016	2017
Public banks	%32,3	%33,7	%45,2
Private banks	%36	%36	%31,4

Source: Prepared by researchers based on the reports of the Bank of Algeria, 2017.

3-2-2-Control and supervision of the banking sector

The supervision of banks in Algeria is carried out by the Banking Committee, which depends on the resources of the General Directorate of the Inspectorate General of the Bank of Algeria. The control process can be summarized as given in figure (2):

Figure 2. An illustrative diagram of the Banking Commission's supervision of banks and financial institutions in Algeria.



Source: Ben mouiza, The Banking Committee Control on Banks and Financial Institutions in Algeria Between Documentary &Field Control for the Period 2008-2016, 2019,p258.

Through profit margin and bank solvency index, the banking sector remained stable and witnessed a significant improvement at the end of 2017, after the refinancing operations carried out by the Bank of Algeria as part of the unconventional financing process. While the banks remain subject to monitoring through documentary and field supervision.

3-3- Modernizing Banking Sector in Algeria:

Due to the failure of reforms targeting economic sectors especially the financial sector, and the deviation of goals from their development paths, Algeria lagged behind global developments including information and communication technology, and in order to address this delay Algeria began to modernize its banking sector by introducing electronic banking and creating the legislative environment and infrastructure for a gradual shift from traditional banking services to electronic banking services through:

3-3-1-The legislative framework

The provisions of Article 03 of Regulation 03/97 relating to the clearinghouse, Order No. 05/02 relating to means of payment, and Executive Decree No. 07/162 relating to electronic signatures and Law No 18/05 of 10/05/2018 on electronic commerce have stipulated the importance of adopting technology in financial services and the need to enhance electronic means of payment and equate them with written payment methods, and start using electronic cards in withdrawing, transferring money, settling financial and commercial transactions (Kraa, 2019).

3-3-2-The Institutional Framework

In order to adopt technology and implement the electronic banking project, companies and institutions were established to develop the services provided, manage and develop means of payment and provide them in the best conditions, and among these companies and institutions we find: (Ayyash & Boukhail, 2017).

3-3-2-1- The Automated Cash and Automatic Relationships between Banks (SATIM) Company: Established in 1995, it is a public-private partnership, whose tasks are to modernize banking technologies, manage interbank cash flow, and modernize payment methods.

3-3-2-2- Interbank Cash Processing Center: It is a center supervised by SATIM, one of its tasks is to connect the automatic dispatcher to the service provider, and monitor operations on the lost and forged cards.

3-3-2-3Algeria Company for Electronic Banking Services AEBS:
It was created in 2004 under a partnership agreement between the French group (DIAGRAMEDI) and three Algerian institutions

(SORTANGINERING) and (AGACTMULTIMEDIA) and the Center for Scientific and Technical Research for Media (CERIST) its main task is to propose and provide software in field of electronic banking services.

3-3-3-Payment Systems

Algeria continued its efforts to adopt electronic banking and implement a payment system modernization project with financial assistance from the World Bank estimated at $ 16 million. The project was launched in 2006 with the Algerian Instant Settlement System (ARTES), which is an interbank payment system for large and urgent amounts of more than 10 million dinars. It is 13% owned by the Bank of Algeria. This system organizes and uses it to achieve a set of objectives including keeping pace with international norms and standards, reducing payment risks, ensuring security and speed of trade, and encouraging the establishment of foreign banks (Zaghdar & Hamidi, 2015). During the year 2017, the (ARTES) system handled the equivalent of 339227 operations, with a total amount of 99896,3 billion dinars, compared to 328440 operations amounting to 201692 billion dinars in 2016, meaning a decrease in the volume of operations and a sharp decline in their value by almost 50%. This decline is explained by the contraction of monetary policy operations in 2017 with the doubling of the volume and value of the ARTES settlement operations since the project was launched in 2006 by settling 142373 operations with a total amount of 750,6 billion dinars from year to year, as shown in Table (3).

Electronic Clearing House System for Public Payments (ATCI), which went into production in 2006 exchanges all means of payment associated with public payments (bonds, commercial papers, transfers, automatic discounts, and card transactions) (Bank of Algeria, 2016). Owned for the tribal clearing center a branch of the Bank of Algeria (Bank of Algeria, 2008). This system used 251 exchange days, equivalent to 22.9 million deals worth 118.753.8 billion dinars in 2017, compared to 21.0 million deals worth 17639.5 billion dinars in 2016, this increase is due to the number of transactions that were cleared electronically due to the increase in the volume of payments through transfers (Bank of Algeria, 2017).

Despite the efforts made in developing payment systems and tools, and despite the evolution of this system in Algeria, its use is still relatively limited compared to similar systems in developed countries and even in some Arab countries. According to a report by the National Bank of Algeria, the majority of transactions were carried out in cash, and checks came in second as a tool of payment.

Table3. The activity of the ARTS system for the period 2008-2017

Year	Circulation Ratio of the ARTS System %	Number of operations	The value of completed operations (billion dinars)
2006	-	142373	750,6
2007	-	176900	313373
2008	99,34	195175	607138
2009	99,56	205736	649740
2010	99,93	211561	587475
2011	99,97	237311	680123
2012	99,77	269557	535234
2013	99,99	290418	358026
2014	99,99	314357	372394
2015	100	334749	264140,6
2016	-	328404	201692,3
2017	-	339227	99896,3

Source: Zeghdar & Hamidi(2015) Evaluating the performance of Algeria for the Immediate Settlement System (ARTS) in the Algerian banking system during the period 2006-2014, Journal of Scientific Research, , Medea University,No. 2, p.16.; reports the Bank Algeria , 2017,p91; reports The Bank Algeria, 2016,p103.

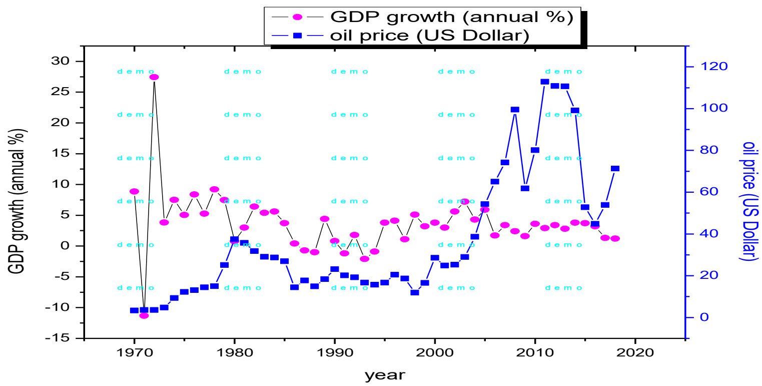
3-3-4- Networks and means of communication

Technological advancements have pushed financial service providers, especially banks to use more sophisticated networks to connect banks with each other, as well as connect them to automatic teller machines using one system, one language, and electronic encrypted payment systems and methods for security and privacy, such as Communication Network (DZPAC) 1993, SWIFT banking network, and the Réseau Monétaire Interbancaire (RMI) 1996.

4-Financial Intermediation and Economic Growth in Algeria

As the Algerian economy mainly depends on the revenues of the hydrocarbon sector to implement development plans and finance economic activity, and since these revenues fluctuate due to oil shocks which impede growth as a result of central planning and public ownership with weak economic sectors outside the hydrocarbon sector, oil sector has witnessed a severe collapse in the 80s that led the economy to an economic recession, pushing Algeria to abandon its socialist system by resorting to external borrowing and searching for alternatives in order to achieve sustainable growth. As a result of Algeria's resorting to international bodies through the First and Second Stand Bay Agreement and the structural amendment for the years 1994 and 1995, which included: Financial liberalization, devaluation, and limiting monetary expansion, the effects of these measures were disastrous on the Algerian economy, as the inflation rate in the early 1990s reached 31,6% (see Figure 4) due to the devaluation of the currency, unemployment rate which has risen from 21,5% in 1991 to 29,5% in 2000 as a reflection of the restructuring of economic institutions (see Figure 5).

Fugure3. The evolution of oil prices and gross domestic product (GDP) in Algeria from1970-2019



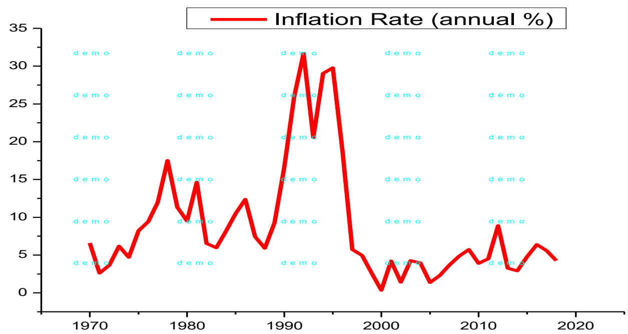
Source: Prepared by Researchers Based on the data of world bank database; Organization of the Petroleum Exporting Countries.

Through Figure 3 above, it becomes clear to us that the relationship between fluctuations in oil prices and changes in the rate of economic growth has a direct relationship, and this is what we observe by tracing the stages of development of each of them. In the sharp and sudden collapse in 1986, the price of a barrel reached 14,44 dollars, compared to 37.42 dollars a barrel in 1980, followed by a 0,4% economic recession (see Figure 3). To appear signs of economic recovery after the oil boom that began in 2000, when the growth rate reached 3,8%.

In 2008, as a result of the global crisis and the drop in oil prices from 99,4 dollars a barrel in 2008 to 61,8 dollars a barrel in 2009, the growth rate decreased from 2,4% in 2008 to 1,6% in 2009.

After the 2014 oil crisis, the government increased oil production by 3,2% in 2016 compared to 0,8% in 2015 to cover price differences and maintain economic growth rates at relatively good levels of 3,9% in 2015 and 8,3% in 2016 (Youcefi & Mekhaldi, 2019).

Fugure 4. The development of the inflation rate in Algeria from 1970-2019



Source: Prepared by Researchers Based on the data of world bank database (2021).

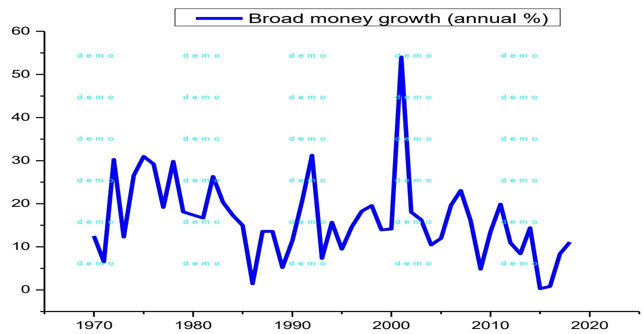
Fugure 5. The development of the unemployment rate in Algeria from 1970-2019

Source: Prepared by Researchers Based on the data of National Office of Statistics (Algeria)

Financial sector was not exempt from these measures either, but they were in its favor as they represented the starting point for the financial sector in Algeria. According to the Bank of Algeria report, and within the framework of the purification process of public banks, the public treasury paid the

amount of 1240,6 billion dinars as debt on banks, and the method of payment was either in cash or as a shareholder for the banks during the period 1991-2008, in order to preserve the banks 'capital and face the competition of the private sector, and the amount of restructuring public banks was estimated at 169,5 billion dinars.
Although this measure apparently aims to liquidate debts and help institutions maintain their survival, it conceals dangerous effects that spoil the lending policy on which the national economy depends, thus deviating from the desired policies and goals (Kharoubi & snoussi, 2019).

Fugure 6. Annual growth of the broad money from 1970-2019



Source: Prepared by Researchers Based On: the world bank database

From Figure 6, we notice the growth of cash in a broad sense, reaching its highest level of 54% in 2001, and in order to preserve monetary stability, central Bank raised the compulsory reserve ratio from 6,5% to 8% in 2008, in order to absorb the surplus liquidity resulting from the increase in oil prices and government spending at the beginning of the year 2000 (Bou-Ghazaleh, 2015).

Bank of Algeria has also recovered excess liquidity from the money market through calls for offers or what is called sterilization and absorption of the excess liquidity of banking system starting from 2002 in the form of deposits placed with the central bank at a rate ranging between 75,0% and 75,2% for a period of 7 days or three months. In 2005, Bank of Algeria created a new indirect mechanism known as the interest-bearing deposit facility, in the form of a loan granted to the Central Bank by commercial banks at a rate ranging between 0,3% and 0.75%. and the discount rate remained constant at 4% in the period from 2004 to 2015, as a result of banks 'reluctance to refinance from the central bank due to excess cash flow (Faraj & Brouki, 2017).

After the decline in fuel prices due to the global economic conditions resulting from the Covid-19 epidemic and weak demand, the Algerian economy entered a recession that caused the deterioration of social conditions, which prompted government to take quarantine and closure measures in addition to other measures that would save the economy from collapse, as a guaranteeing the purchasing power of families and preventing financial insolvency for companies, as it was decided to cancel the income tax equal to or more than 30 thousand dinars and increase the guaranteed basic salary to 20 thousand Algerian dinars, with an increase in pensions and compensation Some owners Free professions.

Searching for new financing alternatives for national economy that would reduce the impact of the "twin deficit" and lay down systems to enhance financial inclusion and provide services to customers and dealers. In this context, the Bank of Algeria issued in 2020 a regulation that promotes Islamic banking transactions to cover a large segment of society, and to provide free digital services, such as a bank card, annual account statement, use of an automated teller machine, providing merchants with electronic payment devices.

Using foreign exchange reserves to finance investments and attract foreign investment by enacting laws that encourage investors in all sectors, especially inland and air transport, the central bank intervened to reduce the compulsory reserve to 6% after it reached 10% and 8% at the beginning of 2020, to address the problem of liquidity drought, and pushing banks to pump more of their reserves of hard currencies and dinars into the banking market, while overall liquidity continued to decline for banks in 2020, as it moved from 1.557 billion dinars at the end of 2018 to 1100,8 billion dinars at the end of 2019, to reach 916,7 billion dinars by the end of 2020. Government has to cancel some projects and freezing others as part of the spending rationalization policy (reports of the Bank of Algeria, 2020).

Since the issuance of the Money and Loan Act 90/10, the financial sector has benefited from the legislative regulation of the role it plays in economic activity and growth, through its traditional functions, and this can be tracked through:

4-1- Banking Density

With the increase in population density accompanying the increasing need for continuously provided financial services, the development of the number of banks and financial institutions, and the expansion of banking activity. The network of bank branches has grown across the entire national territory.

Table 4. The evolution of banks Network 2008 -2017

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total networks	1301	1324	1367	1441	1478	1494	1526	1557	1577	1604
Public Banking Network	1057	1072	1077	1086	1091	1094	1113	1123	1134	1145
Network of banks and private financial institutions	244	252	290	343	387	400	413	434	443	459

Source: Prepared by researchers based on the reports of the Bank of Algeria 2008-2017 .

We note from Table (4) the continuous increase in the number of networks from 1301 networks in 2008 to 13 networks in 2017, with the predominance of public banks in the size of their networks and branches distributed throughout the national territory with 1145 networks compared to 459 networks in 2017 for the private sector located in the North. On the other hand, the active labor force/banking networks in 2008 reached 8300 persons of working age (Bank of Algeria, 2008) and 7667 persons of working age per banking network in 2017. The networks of postal bonds were characterized by a greater density than the network of banking agencies. It includes 3826 electronically connected agencies, which represents one agency for every 3214 persons of working age. (Bank of Algeria, 2017).

4-2- Bundled Savings

The performance and efficiency of banks are evaluated through their ability to mobilize savings by attracting deposits, especially time and savings deposits, and according to Table (5), we see an increase in time deposits from 1632,9 billion dinars in 2005 to 4708,5 billion dinars in 2017, that is, a three-fold increase in 12 years. This is not a good percentage compared to the total volume of deposits, which amounted to 2960,0 billion dinars in 2005 and 10232,2 billion dinars in 2017, which affects the ability of banks to grant loans and dispose of current deposits.

We also note from the table the dominance of public banks over the deposit structure through their share that exceeded 90% of total deposits and during the period 2005-2009 and fluctuated in the area of 80% of total deposits for the period 2010-2017. While the share of private banks did not exceed 10% of total deposits for the period 2005-2009 and did not reach 13% of total deposits for the period 2010-2017. The volume of deposits is directly related to income, which is also related to income from the hydrocarbon sector, which explains the continuous increase in the volume of deposits and the share of public banks in total deposits, Unconventional financing in 2017 also had a positive impact on the development of cash deposits.

Table 5. The evolution of the volume of deposits (billion dinars) 2005-2017

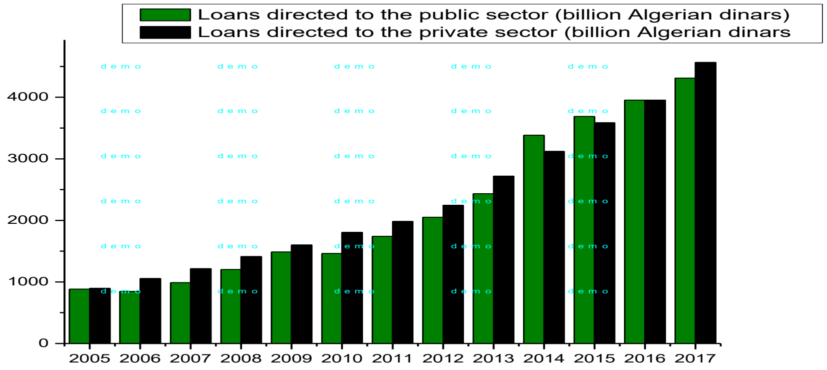
Deposits / Year	Total deposits	A time deposits or (term deposits)	Share of public banks	the share of private banks
2005	2960,0	1632,9	%93,3	%6,7
2006	3516,5	1649,8	%92,9	%7,1
2007	4517,3	1761,0	% 93,1	%6,9
2008	5161,8	1991,0	%92,2	%7,8
2009	5146,4	2228,9	%90,0	%10,0
2010	5712,1	2524,3	%89,6	% 10,4
2011	6733,0	2787,5	%89,1	%10,9
2012	7238,0	3333,6	%87,1	%12,9
2013	3787,4	3691,7	% 86,6	%13,4
2014	9117,5	4083,7	%87,7	%12,3
2015	9200,7	4443,3	%88,3	%11,7
2016	9079,9	4409,3	% 87,1	%12,9
2017	10232,2	4708,5	%85,8	%14,2

Source: Prepared by researchers based on information Grouped from the Bank of Algeria on economic and monetary developments in Algeria for the years 2012, 2015 and 2017.

4-3- Loans directed to the economy

The improvement in financial conditions resulting from fuel income led to the banking sector directing more loans to the public and private sectors as a channel to stimulate economic activities and support economic growth. Figure No. (7) illustrates this uneven increase between the public sector and the private sector in favor of the private sector from 2005 to 2017, where loan amounts more than tripled in 2017, amounting to 2720,2 billion dinars, compared to 896,4 in 2005, as a result of the continuous increase in aggregate savings. On the part of private institutions and families, and because of the government's creation of youth support institutions. This increase will continue, but slowly, from 2014 to 2015, for the benefit of the public sector, at an amount of 3689 billion dinars, and for the benefit of the private sector in 2017, at an amount of 4566,1 billion dinars, affected by the decrease in oil prices in 2014, the decline in deposits collected from the hydrocarbons sector, and the increase in the monetary mass in the economy in 2017 as a result of the unconventional monetary policy applied by the government as a solution to get out of the crisis.

Fugure 7. Loans directed for the economy (billion dinars) 2005-2017



Source: Prepared by researchers based on information Grouped from the Bank of Algeria, 2005-2017

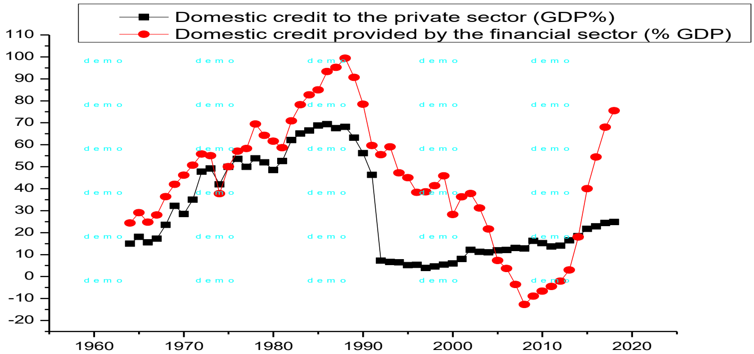
5-Challenges facing the financial sector in Algeria

Despite the reforms undertaken by the monetary authorities to restore the financial sector to its traditional functions and its important role in economic activity, it still faces major challenges posed by globalization and the resulting free movement of capital and increased competition and technology adoption in the banking sector. The stability and continuity of the financial sector in Algeria, like other countries, is related to its ability to keep pace with the new changes in the global environment, these changes that limit the competitiveness of banks, in particular:

5-1- Financial depth and concentration in the share and ownership of banks

Advanced financial sector provides a favorable market environment to encourage investment and economic growth, as well as reduce poverty at the lower levels of society. The World Bank estimates that the development of the financial sector can be calculated through: (1) Domestic credit provided by the financial sector, expressed as a percentage of the gross domestic product of the financial sector, which measures the depth and development of the banking sector. (2) Domestic private sector credit, as a percentage of GDP, measures the private sector's access to credit. From Figure (8), we note the increase in credit granted to the private sector as a percentage of GDP during the period 1964 to 2018 from 14,94% to 24,82%. These rates fluctuated in times of crisis, with the decline in credit granted to the private sector. Algeria reduced this percentage from 19,63% in 1989 to 90,3% in 1997 and 79,12% in 2008, and an upward trend after these periods.

Fugure8. Banking sector development index and private sector access to credit in Algeria.



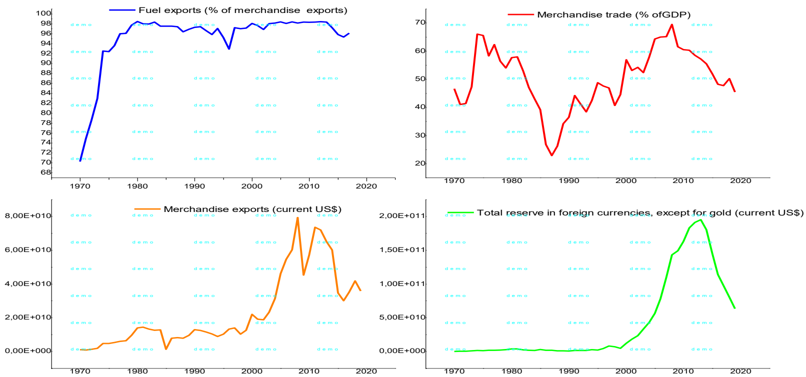
Source: Prepared by Researchers Based On: the world bank database

5-2-Looking Beyond the hydrocarbon: A Journey in Search of Alternatives

Over the past two years, 2019 and 2020, Algeria has suffered from the consequences of the "twin deficit". With the entry of the year 2021, Algeria is looking forward to an economic recovery after the difficult circumstances it has experienced, which contributed to the deterioration of economic conditions with the decline in reserves of hard currency from 195 billion dollars in 2013 to 63 billion dollars in 2019, see Figure 9.

In this context, Algeria must quickly and seriously consider rehabilitating its economy away from the resource curse, and focus on economic diversification, with priority given to long-term reforms that will allow the financial sector to develop in the future and build a competitive industry, as a sustainable alternative to the hydrocarbon sector. Which represents 36% of GDP, 66% of budget revenues, 98% of exports, 94% of merchandise exports in 2017, see Figure 9.

Fugure 9. Total exports of fuel, merchandise and reserves in foreign currencies except for gold, from 1970-2019.



Source: by Researchers Based On; world bank database

5-3-The planed role for monetary policy and other policies

In economics, monetary policy always aims to restrict inflation rates within certain limits that oscillate between the events of inflation and its treatment, and the goal of integration with the rest of the policies is to achieve balance (Lachachi& al, 2019). This is how it should be, but in the reality of the Algerian economy, we find limited effectiveness of monetary policy and other policies for several considerations, in particular, the political and economic independence of the Bank of Algeria in taking decisions away from the interference of the executive authority (Mammeri & Yahiaoui, 2020). and its ability to implement the inflation targeting strategy in a timely manner through monetary policy tools, which depend on fuel revenues in order to improve the growth rate (Benatia & Benabiza, 2019).

Conclusion

Reforms of the financial sector in Algeria were not sufficient to restore it to its traditional jobs and to rely on it as an alternative sector to achieve growth in light of the economic diversification that Algeria seeks outside the hydrocarbon sector. Algeria's dependence on the revenues of the hydrocarbon sector and its inability to develop other economic sectors contributed to the dominance of the public sector and the fear of complete and unconditional openness to the outside world, paving the way for the spread of corruption and imbalance in the traditional functions of the financial sector while linking its stability and continuity with the hydrocarbon incomes, this negatively affected the size of banks and competition, and the financial sector became more sensitive to external shocks, which prevented the development of financial sector and its shortcomings in terms of financing and its impact on economic activity.

The government has largely failed to introduce technology to financial services, despite its attempt to pave the way for this industry, due to the lack of a strong technological infrastructure and the presence of a low educational level that reflects the weakness of research and development and the tendency to adopt modern technology to keep pace with the changes taking place globally. Therefore, Algeria must change its economic plans and search for alternatives outside the hydrocarbon sector and pay attention to the financial sector, because it is the pillar of stability and it is necessary to finance development and achieve growth, especially after the stage of popular movement and self-determination (12/12/2019), in which Algeria wants to change by following economic policies based on investment in the real sector and paying attention to the economic and social aspect of development.

References

Abdel-rrahim, A. & Ben said, M., 2015. The importance of the financial system and foreign direct investment in the new economic orientation-ALGIERS case An Eeconometric Study (1990-2014). *Jornal of Quantitative Economics Studies (JQES),University of Ouargla,* Issue N°3, p. p90.

Ayyash, Z. & Boukhail, N., 2017. The development and modernization of the banking services in thelight of the trend towards the economy knowledge, "the case ofAlgeria. *Milev journal of research & studies, N0 5, University of Mila, Algeria,* pp. 587,588.

Bagehot, W., 1873. *Lombard Street: A Description of the Money Market.* s.l.:s.n.

Bank of Algeria, 2008. *Economic and monetary evolution in Algeria,* s.l.: s.n.

Bank of Algeria, 2005-2017. *Economic and monetary evolution in Algeria,* s.l.: s.n.

Bank of Algeria, 2008-2017. *Economic and monetary evolution in Algeria,* s.l.: s.n.

Bank of Algeria, 2008-2017. Economic and monetary evolution in Algeria.

Bank of Algeria, 2010. *Economic and monetary evolution in Algeria,* s.l.: s.n.

Bank of Algeria, 2016. *Economic and monetary evolution in Algeria,* s.l.: s.n.

Bank of Algeria, 2017. *Economic and monetary evolution in Algeria,* s.l.: s.n.

Ben mouiza, m., 2019. The Banking Committee Control on Banks and Financial Institutions in Algeria Between Documentary &Field Control for the Period 2008-2016. *Al Bashaer Economic Journal , University of Béchar,* Vol 5(N°3), p. 149.

Ben mouiza, m., 2019. The Banking Committee Control on Banks and Financial Institutions in Algeria Between Documentary &Field Control for the Period 2008-2016. *Al Bashaer Economic Journal , University of Béchar,* Vol 5(N°3), p. 258.

Benatia, m. & Benabiza, d., 2019. cbounoua Shoaib, Inflation targeting strategy by economic level Descriptive study for the period 1990-2016. *Finance & Markets Review,University of Mostaganem,* Vol 6(N°1), p. 204.

Bou-Ghazaleh, M. A., 2015. Financial development in Maghreb Countries in the light of openness and financial liberalization during the period 1990- 2013. *The Algerian Business Performance Review,University of Ouargla, Algeria,* Issue N°8, p. 131.

Faraj, T. & Brouki, A., 2017. an empirical study on the impact of high oil prices on the monetary bloc as a variable indicating the monetary policy in Algeria for the period 2000-2015. *Al Bashaer Economic Journal, University of Béchar,* Vol 3(N°3), pp. 25,26.

Goldsmith, W., 1969. *Financial Structure and Development.* s.l.:New Haven: Yale University Press.

habbar, a., 2013. Development ofPerformance Indicators and thePath of Reforms in the Algerian Banking Sector. *The Academia Journal of Social and Human Studies,* Issue N°9, p. 59.

Haffai, A., 2018. The Algerian banking system and the challenges of financial globalization. *Dirassat Journal Economic Issue, Universety of Laghouat,* Vol 15(N°2), p. 285.

ICAEW and ISCA, 2014. *Fintech innovation: perspectives from Singapore and London. institute of Singapore Chartered Accountants,* s.l.: s.n.

Kharoubi, M. & snoussi, b. o., 2019. Analysis of The impact of LoansOrientedto The Economy on The Financing of EconomicDevelopment in Algeria, During The Period (2001-2016). *Finance & Markets Review, University of Mostaganem,* Vol 5(N°10), p. 261.

Kraa, H., 2019. *Modernization of the banking system to keep pace with developments in information and communication technology - A study in Algerian law.* s.l., s.n., p. 7.

Lachachi, M., ben Kaddour, A. & Ibrirm, M., 2019. Behavior of some monetary policy variables on inflation inalgeria for the period (1990 -2017). *Finance & Markets Review, University of Mostaganem,* Vol 5(N°10), pp. 24,25.

Levine, R., 1997. Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature.*

Lucas, R., 1988. On the Mechanics of Economic Development. *Journal of Monetary Economics.*

Mammeri, L. & Yahiaoui, S., 2020. The impact of the Central Bank independence on the economic balance in Algeria. *Finance & Markets Review, University of Mostaganem,* Vol 7(N°2), p. 152.

McKinnon, R. I., 1973. *Money and Capital in Economic Development. Washington.* D.C.: Brookings Institution: s.n.

Medjahed, K., 2016. *The Impact of Financial Sector Development on Economic Growth: A Case Study of Developing and Developed Countries.* University of Tlemcen: s.n.

Mir, A., 2020. Evolution of the financial system as an important and effective instrument in financing and increasing economic growth. *Algerian Journal of Legal and Political Sciences , University of Algeria,* Vol 57(N°2).

Mohemad, M. & jawaher, A.-Q., 2014. The impact of financial development on the growth of manufacturing industries in Saudi Arabia. *King Saud University,* p. 4.

oussaghir, l., 2019. *The effectiveness of the mechanisms of money flow within the financial system, "With reference to the case of Algeria".* s.l., s.n., p. 3.

reports of the Bank of Algeria, 2020.

reports the Bank Algeria , 2017. p. 91.

reports the Bank Algeria, 2016. p. 103.

Robinson, J., 1952. *The Generalization of the General Theory.* London: MacMillan Press.

Schumpete, J., 1911. *The Theory of Economic Development.* s.l.:Cambridge, MA: Harvard University Press.

Shaw, E., 1973. *Financial Deepening in Economic Development.* s.l.:Oxford: Oxford University Press.

Tatar, M. M., 2002. The Algerian banking system and electronic banking. *Journal of the Human Sciences, University of Biskra,* Issue N°2, p. 185.

Bank of Algeria, 2005,2008,2010,2017. *Economic and monetary evolution in Algeria,* s.l.: s.n.

varga, D., 2018. *evolution FINTECH, THE NEW ERA OF FINANCIAL SERVICES.* University Corvinus,Budapest,Hungarian.: s.n.

world bank database, s.d. s.l.:s.n.

Youcefi, R. & Mekhaldi, Y., 2019. owards building an effective strategy that reform the exports' structural imbalance in Algeria and to realize a sustainable economic growth. *Finance & Markets Review, University of Mostaganem,* Vol 5(N°10), p. 96.

Zeghdar, A. & Hamidi, K., 2015. Evaluating the performance of Algeria for the Immediate Settlement System (ARTS) in the Algerian banking system during the period 2006-2014. *The journal of research and scientific, Medea University,* Issue N°2, p. 16.