

Hacini, Ishaq; Dahou, Khadra

## Article

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## Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/>

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## The Evolution of the Algerian Banking System

**Ishaq HACINI**

University of Mascara  
Sidi Said, CP 29000, Mascara, AL  
ishaq\_zida@yahoo.fr

**Khadra DAHOU**

University of Mascara  
Sidi Said, CP 29000, Mascara, AL  
dahou.khadra@yahoo.fr

**Abstract.** *The study aims to shed light on Algerian Banking system through investigating its evolution's stages starting from the independence (1962), wherein Algeria inherited the colonial banking system. For examining the evolution, the study focused on the critical phases in the evolution of the Algerian banking system (Colonial Phase, Sovereignty Phase, Nationalization and Socialization Phase, Restricting Phase and Liberalization Phase). In Addition, the study analyzed several indicators of the banking sectors in Algeria such as (interest rate spread, banks' ownership, banks' activity and banks' profitability). Furthermore, it made a comparison between the Algerian banking sector and the banking sectors of two North African neighbors, Morocco and Tunisia. The study revealed that the Algerian banking system has witnessed several mutations. Therefore, the Algerian authorities had constructed an Algerian Banking system (Stated-owned banks) to substitute the colonial banking system. After that, many reforms had been adopted by the Algerian government based on economic and social requirements. In the early nineties, especially with the Law on Money and Credit (1990), the Algerian authorities endeavored to liberalize the banks' activities to improve the banks' performance. As consequences, the Algerian banking system changed radically, wherein, in 2016, it is composed of twenty commercial banks and eight financial companies and a group of liaison offices of foreign banks. The total assets have grown significantly from 2000-2015, in which the total assets increased by 412%, and the total assets which represent 75.5% of the GDP in 2015. In addition, they granted more loans to the economy, wherein the credit for the economy as a percentage of GDP passed from 2.4% in 2000 to 4.4% in 2015. Therefore, the progression of the Banks activities had a positive effect on the banks' profitability, in which ROA was 0.46% in 2005 and reached 1.9% in 2015. The liberalization policy encouraged The entry of thirteen foreign banks, which improved the services' quality. On the other hand, the banking sector in Algeria still needs more development to reach the level of banks in the region (Morocco and Tunisia), especially in the market concentration and credit risk management.*

**Keywords:** *banking system; liberalization policy; Algeria.*

## **Introduction**

The Algerian banking system has passed through many stages. Thus, Algeria has inherited a well-developed banking system from the French colonial, but this system had hampered the achievement of the development programs planned by the Algerian state. After that, the banking system has been dominated by the state to ensure the required financing of the investment programs to develop an industrial sector that characterized by an intensive capital production technology.

The economic crisis of 1986 has pushed the Algerian government to adopt important economic reforms in which the banking system development was the pillar of these reforms. The transition from the centrally-planned economy to the market economy involves structural reforms focusing on the correction of the macro-economic imbalances, stimulate the foreign direct investment, and open the Algerian economy to the international competition (Ruppert, 1999).

Hence, the banking reforms of 1990 had a significant impact on the Algerian banking system, where these reforms have allowed liberalizing the banking sector from the state intervention. Furthermore, the reforms have encouraged opening the banking sector to private investment to increase the competition level in the banking sector and improving the banks' performance. It is worth noting that banking competition is the cornerstone of the financial system and economic stability, authorities either in developed or developing countries give utmost importance to make the banking market competitive (Hartmann, Straetmans, & De Vries, 2005). In other words, the authorities should remove the financial restrictions and initiate a real financial development to promote and sustain the economic growth (Creane, Goya, Mobarak, & Sab, 2003).

Based on the aforementioned, the study seeks to shed light on the evolution of the Algerian banking sector. For this purpose, the study firstly focuses on the historical background of the evolution of the Algerian banking system. The Algerian banking sector has passed through five phases; colonial phase, sovereignty phase, nationalization and socialization phase, restricting phase and Liberalization Phase.

Secondly, the study discusses the main indicators of the Algerian banking system through; banks' ownership, bank activity (assets, credit granted to the economy), and bank's soundness (liquidity, profitability and credit risk).

## **Historical background**

The banking system in Algeria has witnessed several changes; this section highlights the historical stages of the banking system development through summarizing these stages in five phases.

### ***Colonial phase***

In Algeria, the banking existence traced its roots back to the French colonial period, where the Algerian banking system was among the developed banking systems in the north of Africa and French colonies. During this period, the Algerian banking system was composed of; the Bank of Algeria (1851) (la Banque de l'Algerie) that was an annex of bank of French (Banque de la France), in which its role was the issuance of money, providing loans for financing the colonial economic activities and assuring the services of currency exchange (Latrach, 2001).

Furthermore, there was a vast network of commercial banks, financial institutions operated in Algeria. In fact, the majority of banks operated in Algeria were branches and subsidiaries of French banks such as (la société générale, Le Credit Lyonnais... etc.). In order to organize and control the banking activities, French authorities established the Algerian Council of Credit that had a mission of setting regulations and legal framework and providing propositions and consultations concerning the development of the banking system.

In general, Algerian banks were just an extension of the French banking system; they were created to guarantee the financial needs of the colonial economy. Hence, the banks were installed in the large cities where the colonist widely exists. In addition, they specialized financing the colonist agriculture activities, foreign trade, petrol and mining exploitation. On the other hand, they neglected to finance the activities related to the Algerian interests.

### ***Sovereignty phase***

After the independence in 1962, the Algerian government undertook to build an economy independent from the colonial economy in order to accomplish the independence of the country. Following the political ideology, the Algerian authorities have adopted a socialist economy oriented by the state; this choice has been justified by the objective of improving the living conditions of the Algerian people.

On the other hand, the period of independence has witnessed a contraction of the financial institutions' activities, as a result of the departure of the businessmen of the colonists and the transferring of their capital and investments outside Algeria. Thus, many banks stopped their activities by closing their branches which led to a shortage of financing the economic activities. Moreover, the remaining foreign banks, which followed the liberal economic doctrine have refused to finance the investment programs of the Algerian government; they also refused to deal with the state-owned-companies for the reason that these programs and companies are programs with social objectives and unprofitable programs which contradicts with their commercial objectives.

In these circumstances, it was necessary for the Algerian authorities to establish an Algerian banking system that supports and finance the ambitious programs for the economic development. Thus, to reach this objective and monitor the credit policies,

the Algerian authorities have outlined the process of "Algerianisation". In this context, the treasury was created in August 1962. The principal role of the treasury is ensuring the financial resources for executing the budget of the state. The Treasury has been charged also monitoring the financial and accounting's organization of the state-owned enterprises.

Central Bank of Algeria (CBA) was set up in December 1962, in which its principal role was orienting and protecting the Algerian economy in a manner that ensures the general interest of the country. For this purpose, CBA was charged for creating and maintaining money (Algerian Dinar) as Algeria moved out of the Franc, making and controlling currency exchange, and assuring the financing of the economy directly and indirectly through the commercial banks and the financial institutions. CBA was charged with providing loans and advances for financing the state-owned enterprises and the agriculture sector. In summary, CBA plays different roles; Bank of Banks, Bank of State and Bank of Exchange (Naas, 2003).

In the context of the process of Algerianization, the government has endeavored to construct a core of Algerian commercial banks. Thus, a set of public banks was created as, the "Caisse Algerienne de Développement" (CAD) was created in May 1963, as the first investment bank created by CBA. CAD had a role in financing the development's programs planned by the state through providing the medium and long term loans. Furthermore, CAD had contributed to creating the state-owned-enterprises in different sectors and finance their activities (El-hassar, 2000).

In order to collect savings, the "Caisse National d'Epargne et de Prévoyance" (CNEP) was created in August 1964. CNEP has been considered as a bank of housing in which it was responsible for financing the housing programs through promoting and encouraging the households' savings. In fact, CNEP has ensured the financing of the operations of construction, operations of local communities, and operations of private that have the general interest (Latrach, 2001).

However, Naas (2003) revealed that the Algerian authorities during this period have planned set of development programs that had economic-social objectives but these programs have needed the financing. For this purpose, the Algerian government has searched for creating its own banking sector, while the existed foreign banks have refused to finance these programs.

### ***Nationalization and socialization phase***

In 1966, the Algerian banking network has expanded by creating three commercial banks as a result of the nationalization process of the foreign banks that had operated in Algeria since the colonial period. Thus, "Banque Nationale d'Algérie" (BNA) was created in 1966 as a national corporation. BNA was created to succeed the operations of foreign banks that stopped their activities among these banks, Le Credit Foncier D'Algerie et de Tunisie, La Banque National pour le Commerce et l'Industrie, La Banque du Paris et des Pays-Bas. BNA has provided all the services of a bank, in which it collects saving from the public as a form of deposits, provides all types of loans to the privates and enterprises, and ensures the exchange operations. Moreover, the

enterprises of the public sector have been obliged by the government to deal only with BNA.

The "Crédit Populaire d'Algérie" (CPA) was created in 1966, as a national corporation. It was established to succeed the operations of; Caisse Centrale Algerienne de Credit Populaire, Societe Marseillaise de Credit, Companies Francaise de Credit et de Banque. However, CPA was provided all the services of a bank, where, its activities covered the operations of hotelier, tourism, fishing and craft activities.

The "Banque Extérieure d'Algérie" (BAE) was created in 1967. It succeeded the activities of Credit Lyonnais, Credit du Nord, Societe Generale, Banque Industrielle de l'Algerie et de la Mediterranee. BEA is a bank that provides all services of a bank. Its functions focus mainly on facilitating and developing all transactions between Algeria and foreign countries (BenHalima, 1996).

However, the main characteristic of this period is the domination of the state on the economic activities and the orientation of the banking sector to finance these activities. Thus, the government has relied principally on the treasury to allocate the financial resources to the investment programs which implies that the role of the banking sector was passive.

Moreover, banks' credit policies were determined completely by the state that did not take into account the banks' profitability. Rather, the programs of development were financed by the public treasury and the banks were just an intermediate that transfers the funds to state-owned-enterprises. This means that the objective of the banks was purely accounting rather than financial, in which providing loans to enterprises regardless of their financial health and performance.

In the context of the central planning, the banking sector in Algeria was subjected to a set of restrictions that had a negative impact on its profitability. The Algerian authorities have obliged the state-owned enterprises to localize their financial operations in one bank. This was introduced in the context of realizing the mono-bank principle which allows monitoring and controlling the enterprises' activities and ensuring that these enterprises operate to realize the government's plans. For example, BNA has specialized in financing the enterprises of the agriculture sector, BEA has specialized in dealing with enterprises of industry sector and CPA has specialized in services and construction sectors (Latrach, 2001). Therefore, these principles have prevented the development of the banking sector in which killed the competition among banks in collecting savings and allocating loans efficiently.

During this period, banks have been prohibited from managing their profits and revenues autonomously in which banks need the approval of the central authorities for all decisions even the decisions concerning the investment of their financial resources. This restriction was imposed to prevent banks working for their private interest which might harm the state's investment programs. Thus, any investment plan or financial decision should subject to the approval of the central authorities which might prevent the banks to set their strategies based on the business logic (Naas, 2003).

However, the Algerian authorities have emphasized on the principle of the centralization of the resource allocation to ensure orienting resources according to the state objectives without taking into consideration the banks' objectives. BenBitour (1998) revealed that in this period the principal institution in the Algerian financial system is the treasury in which it managed the state financial resources, while the banking sector is just a channel that distributes capital according to the state plans.

### ***Restricting phase***

In this phase, the Algerian banking sector was enhanced by creating two commercial banks: La Banque de L'Agriculture et du Developpement Rural (BADR) was created in 1982 to replace BNA in the role of financing the agriculture sector. Thus, BADR was charged to finance the programs of agriculture development and agro-industrial industries in order to realize the objective of increasing the agricultural production and realizing self-sufficiency of food products.

La Banque de Development Local (BDL) was created in 1985. It replaced the CPA in its activities of financing the state-owned-enterprises with the economic nature and financing the investment plans of the local authorities. In fact, BDL was created in the context of realizing the local development by ensuring the necessary financing to the local enterprises and the local investment projects (BenHalima, 1996). The creation of these specialized banks is included in the context of the organizational restructuring of public enterprises. It was also for the purpose of the expansion of the banking sector to cover all sectors across the country. In 1985 the number of the commercial banks reached six banks all of them are owned by the state.

However, the main characteristic of this period is restructuring the state-owned enterprises in order to improve their profitability. Thus, at the beginning of the years of the eighties, the enterprises have got their autonomy in determining their policies and objectives in the context of the process of management decentralization. They have been benefited from relaxing the bureaucratic control procedures.

In addition, enterprises have been benefited from the financial restructuring by effacing their debts, where, treasury intervened to clean the long-term debts of enterprises to improve their financial situation. On the other hand, enterprises were required to assume their responsibilities and financial engagements toward banks in the future.

### ***Liberalization phase***

In years of the 1970s, Algerian people lived in what was called "The Golden Age", wherein the socioeconomic indicators were good. After that, the beginning of the 1980s, Algeria faced serious economic difficulties (Meliani, Aghrout, & Ammari, 2004).

In 1986, the Algerian economy has witnessed a severe crisis caused by a drastic fall in oil prices, which led to the contraction of the exportation revenue and economic

growth rate which registered negative values. This, in turn, led to the collapse of the currency reserve and increasing the level of external debt and the debt service.

In light of these realities, it was necessary, making a set of reforms touching the majority of economic sectors among them the banking sector. The Algerian banks have suffered from the insolvency problem that was aggravated by the critical situation of the state-owned-enterprises that failed to attain their objectives and hence impeded the banks' performance. Therefore, the law of bank and credit of 1986 was issued in order to include radical changes in the banking sector. Algerian authorities also sought to determine the legal framework that defines the activities of the different financial institutions.

The management autonomy has been given to the banks to determine their credit policies in the context of the national plan of credit. Hence, banks were able to collect deposits whatever their forms and duration and provide loans in short and long term, also they enjoy the entire responsibilities to evaluate and manage the credit risk. However, the objective of the flexibility in determining the bank credit policies was increasing the banks' role in collecting all financial resources to finance the investment programs and reduce the role of treasury in financing these programs.

The reforms have enabled the Central Bank to retrieve its traditional role as the bank of banks, control the loan distribution and determining the monetary policy. The law also organized the different relationships between the bank and its customers, and it established a new control and advisory entities. The authorities in Algeria have endeavored through the law of 1986 to correct the mission of the banks, in which the bank credit policy should be determined based on economic objectives rather than social objectives. However, this autonomy didn't have a great impact on bank sectors because the enterprises owned by the state were not autonomy and they still managed by a centralized system (Hadj-Nacer, 1990). In addition, some points of this law were not applied and they have remained just an ink on paper.

In order to eliminate the shortcoming that appeared in previous reforms, the law of banks autonomy came in 1988 to complete and modify the law of 1986. The Law of 1988 was established for the purpose of achieving the process of providing the autonomy to the economic public enterprises including the financial institutions. Thus, the economic public enterprises were required to subject only to the logic of the performance and profitability. Hence, this orientation has confirmed the principle of management's independence of the banks as an economic enterprise.

At the end of the eighties, Algeria has witnessed a multidimensional crisis (political, social, and economic) which was characterized by a poor production system, high level of external debt, decline of exports, and contraction of currency reserve that has led to reducing the importation. These situations have influenced negatively the Algerian living standards. The Algerian people were unsatisfied with this situation and they have called the authorities to make reforms, including political reform, which caused the explosion of the events of October 1988.

These situations have forced the Algerian authorities introducing a set of political and economic reforms. In the economic aspect, the essence of the reforms was switching



the national economy from system highly dominated by state (socialist) to the market-oriented system. Following to International Monetary Fund (IMF) recommendations, Algeria has worked to reconstruct the economy to sustain long-term growth by creating a favorable macroeconomic environment (Oufriha, 2008). Thus, programs of macroeconomic stabilization and structural reform have been launched as began as early as 1988. The objectives of these programs were correcting macroeconomic imbalances, attracting foreign direct investment, and promoting the private sector by encouraging privatization (Saad, Meliani, & Benosman, 2005).

It's worthy to clarify that the economic reforms and the macroeconomic stability require a developed financial system and a competitive banking sector to implement an effective monetary policy. However, Mishra, Montiel, Pedroni, and Spilimbergo (2014) proved that in low-income countries, which characterized by poor institutional environment and concentrated banking sector, the monetary policy is an ineffective instrument for the macroeconomic stabilization. Furthermore, they suggested that the implementation of an aggressive monetary policy in these environments may aggravate rather than reduce macroeconomic instability.

In order to realize the objectives of the economic reforms, it was necessary to make fundamental financial reforms. To this end, the Law on Money and Credit (LMC) was issued in 1990, in which it aimed to construct a modern banking system that it is able to meet the requirements of the market economy system. The main objectives of this law were moving from the directed credit banks to market-determined credit banks and enhancing the modernization and competitions in the banking sector. Thus, the authorities have proceeded to a gradual withdrawal of the role of treasury in financing the state-owned enterprises and transferred this role to banks. Moreover, the role of the central bank in financing the deficit of the treasury has been reduced by determining a specific ceiling in financing the deficit.

The LMC was focused on the liberalization of banks' activities from the centralized management through breaking down of state interferences in the banks' decisions; such as the administrative determination of interest rates and the orientation of loans allocation. For the first time, CBA was charged for the monetary policy and interest rate determination (Benachenhou, 1993). LMC has neutralized the role of treasury in setting preferable interest rates for the public sector, where the lending interest rates have been unified for the private and public sectors.

On the other hand, the law has allowed deregulating the interest rates on deposits by removing the interest rates ceiling. Hence, ceilings on lending interest rates were substituted by limits on banking spreads, and in 1995, these limits were removed. Furthermore, the law had unified the interest rates for the public and private banks (Jbili, Enders, & Treichel, 1997).

Table 1 reports the interest rate indicators. It is clear that the banking reforms have allowed the interest on deposits and lending varying, where, deposits interest rate has taken an increased trend from 8% to reach the maximum value of 16.6 %. After that, it has reversed its direction and has decreased to reach 1.8 %. Concerning the lending interest rate, it started from 16% to reach the maximum value of 19%, after that, it followed a decreasing trend to reach 8%. From another side, the decline of the

lending and deposit interest rates may be explained by the decline of the inflation rate and the stabilization of the exchange rate which are the consequences of the economic reforms (Benamraoui, 2008). It is clear that spread interest rate (yield) has registered a significant increase from 4% to 6%. This demonstrates that the liberalization policy had a positive impact on the bank profitability in which it enabled banks increased their interest yield by reducing the deposit interest rate and increasing the lending interest rate.

**Table 1. Interest Rate Indicators (1990-2016) (IMF, 2017)**

	<b>Deposit Interest Rate (%)</b>	<b>Lending Interest Rate (%)</b>	<b>Spread (%)</b>
1990	8.0	N.A	N.A
1991	8.0	N.A	N.A
1992	8.0	N.A	N.A
1993	8.0	N.A	N.A
1994	12.0	16.0	4.0
1995	16.6	18.4	1.8
1996	14.5	19.0	4.5
1997	12.6	15.7	3.1
1998	9.1	11.5	2.4
1999	8.3	10.8	2.5
2000	7.5	10.0	2.5
2001	6.3	9.5	3.2
2002	5.3	8.6	3.3
2003	5.3	8.1	2.8
2004	3.6	8.0	4.4
2005	1.9	8.0	6.1
2006	1.8	8.0	6.2
2007	1.8	8.0	6.2
2008	1.8	8.0	6.2
2009	1.8	8.0	6.2
2010	1.8	8.0	6.2
2011	1.8	8.0	6.2
2012	1.8	8.0	6.2
2013	1.8	8.0	6.2
2014	1.8	8.0	6.2
2015	1.8	8.0	6.2
2016	1.8	8.0	6.2

Deposit interest rate is the rate paid by commercial or similar banks for demand, time, or savings deposits. Lending Interest Rate is the bank rate that usually meets the short- and medium-term financing needs of the private sector. This rate is normally differentiated according to the creditworthiness of borrowers and objectives of financing. Interest rate spread is the interest rate charged by banks on loans minus the interest rate paid by commercial or similar banks for savings deposits.

LMC has abandoned the principles of mono-bank and bank specialization, where banks are not obliged to deal with specific sectors, but they are autonomous to determine their target, consequently, all sectors were opened to all banks including the specialized banks. Thus, banks have obtained great autonomy in financing the state-owned enterprises and holding Treasury Bills. Moreover, the banks have disposed of the nonperforming loans of the state-owned enterprises through the operation of bank recapitalization (Iradian, Bazzoni, & Joly, 2000).

For the first time, the law allowed opening the banking sector to the private investment to increase the competition level in the banking sector and improving the banks' performance. For this purpose, the authorities have removed the entry constraints in order to encourage the foreign banks to operate in the Algerian markets. On the other hand, authorities have offered the privatization of some state-owned banks by negotiating the sale of these banks to the foreign investors. As a result, the establishment of the private banks has started in the early year of 1990 by establishing Baraka Bank, which is a joint venture between banks from Algeria and Saudi Arabia, and Banque du Maghreb Arab (BAMIC), which is Joint Offshore between Libya and Algeria. After that, the entry of new foreign and private banks has intensified since 1997. Thus, several international banks have started to operate in Algeria such as; B.N.P Paribas Bank, Société Générale, Natixis Bank, Arab Banking Corporation...etc. The process of opening the banking sector to the private and foreign investment has continued with increased pace, in 2001, the Algerian banking system is composed of more than twenty banks and financial institutions vary between public, private, and foreign.

Concerning the privatization state-owned banks by transferring their ownership to private investors no transfer had been made to date regarding several obstacles. Among the obstacles that have prevented the process of privatization is the high level of non-performing loans that characterized the state-owned banks and backed to the period of the centralized economy. Therefore, the authorities have conducted the process of banks recapitalization during the period of 1992-1993 and after in 1997, where, the treasury bought these debts by substituting them with Treasury Bonds.

The haste in liberalizing the banking sector and the insufficiency of laws devoted to controlling the banks' activities have exposed the Algerian banking system to a violent shake represented in the failure of three national private banks; Banque Commercial et Industrielle (BCIA), EL-Khalifa Bank and Union Bank (Tlemçani, 2008). In fact, these failures have caused a confidence crisis toward the private banks which braked their development. Therefore, the Algerian authorities have accelerated to reinforce the legislative environment and regulations of banks' activities via issuing the banking ordinance in 2003.

However, the ordinance of 2003 has revolved around the following axes; tightening the procedures of providing the accreditation for banks, augmenting the minimum capital of the banks and financial institutions, modernization the methods of the bank's management and improving the operations of supervision and control of banks' activities. At the same time, the government has continued its policy of privation of the public banks through its attempt to privatize Crédit Populaire d'Algérie (CPA) described as the least bad state-owned bank. Thus, Société Générale has negotiated to buy CPA bank. Unfortunately, any public bank has been privatized because of the lack of profitable offers and the effects of the international financial crisis, on the other hand, the heavy bureaucratic system of the evaluation procedures

in Algeria. In addition, the insistence of the Algerian government for maintaining 51 percent of bank's capital as public ownership hindered the process of the banks' privatization (Aghrout, Bouhezza, & Sadaoui, 2004).

However, foreign banks such as Société Générale, B.N.P Paribas, and H.S.B.C banks have chosen to enter the Algerian market by establishing new banks instead to buy the Algerian banks. Moreover, Iradian et al. (2000) have argued that in Algeria the number of operating banks is not sufficient to satisfy the financial services' demand in the short-term. Therefore, there is still an opportunity to capture a part of the market by opening new banks. Therefore, the foreign banks have preferred offering new banks instead to buy the state-owned banks.

### **Research design**

The study seeks to analyze the evolution of the banking sector in Algeria. For this objective, a comprehensive analysis was conducted, starting from the colonial phase until the recent period. In addition, the study has shed light on the important reforms adopted for the banks in Algeria.

In order to evaluate the performance of the banks in Algeria, the study used several indicators on the banks as a whole such as (bank ownership, Assets, resources, credit for economic, non-performing loans and profitability). Furthermore, the study made a comparison based on these indicators between banks in Algeria and Morocco and Tunisia.

The study used annual data by focusing on the recent periods because the principal banking reforms were adopted in the period of the nineties. Data were collected from different sources such as Official Journal, Annual reports of central banks of Algeria, Morocco and Tunisia and annual reports of Professional Association of Banks.

### **Algerian banking sector' indicators**

This section analyses the banking sector in Algeria by focusing on the following indicators; bank ownership, bank activity, and bank soundness.

#### ***Banks' ownership***

After the process of the reforms, it could be said that the banking system in Algeria today changed radically, where it moved from closed-central system to independent open system. In 2015, the banking system is composed of twenty commercial banks and eight financial companies and a group of liaison offices of foreign banks, as the table 2 shows.

Concerning the commercial banks, six of the commercial banks are public; while thirteen are privates all of them are foreign banks except "Al Barka bank" which has mixed capital (public + private). Despite, the superiority of the private banks in term of the number the public banks capture the majority of the banking activities,

regarding the vastness of their branch network. The public banks cover all the national territory while the existence of the private banks is limited in the large cities and in the north of the country. At the end of 2015, the branches' number of public banks was 1123 branches and just 346 branches of the private banks (CBA, 2016). This allows the public banks hold 87.2% of the total assets of the banking sector in Algeria. By comparing the situation in 2014, 1113 branches of the public banks and 325 branches of private banks. It is clear that the private banks try to improve their spread by increasing the pace of creating new branches in comparison with the public banks. Nevertheless, bancarization rate remains weak with one counter for 25 600 people (including the financial companies), while the international standards determine one counter for 8000 people (CBA, 2016).

Concerning the financial companies, there are eight companies that operate in Algeria, all of them are privates except three companies. The number of their branches remained without changes 88 in 2015 versus 88 branches in 2014. According to LMC of 1990, the financial companies are entities that perform all the activities of commercial banks excluding the reception of funds from the public as deposits.

**Table 2. List of Banks and Financial Companies in Algeria (CBA, 2016)**

<b>I: Commercial Banks</b>			
<b>No</b>	<b>Name</b>	<b>Ownership</b>	<b>Approval Date</b>
01	Banque Nationale d'Algérie	Public	25/09/1995
02	Caisse Nationale d'Epargne et de prévoyance	Public	25/05/1997
03	Crédit Populaire d'Algérie	Public	25/05/1997
04	Banque de Développement Local	Public	23/09/2002
05	Banque Extérieur d'Algérie	Public	23/09/2002
06	Banque de l'Agriculture et du Développement Rural	Public	23/09/2002
07	Banque Al Baraka Algérie	Private (Mixed)	20/05/1991
08	Arab Banking Corporation Algeria	Private (Foreign)	24/09/1998
09	Natixis Banque	Private (Foreign)	27/10/1999
10	Société Générale Algérie	Private (Foreign)	04/11/1999
11	City Bank Algeria	Private (Foreign)	18/05/1998
12	Arab Bank	Private (Foreign)	15/10/2001
13	B.N.P Paribas El Djazair	Private (Foreign)	31/01/2001
14	Trust Bank Algeria	Private (Foreign)	30/12/2002
15	Gulf Bank Algeria	Private (Foreign)	15/12/2003

16	The Housing Bank For Trade And Finance-Algeria	Private (Foreign)	08/10/2003
17	Fransabank El Djazaïr	Private (Foreign)	07/09/2006
18	Credit Agricole Corporate Et Investissement Bank-Algerie	Private (Foreign)	09/05/2007
19	Al Salam Bank-Algeria	Private (Foreign)	10/09/2008
20	H.S.B.C Algeria	Private (Foreign)	17/06/2008
<b>II: Financial Companies</b>			
<b>No</b>	<b>Name</b>	<b>Ownership</b>	<b>Approval Date</b>
01	Sofinance	Public	09/01/2001
02	Société de Refinancement Hypothécaire (SRH)	Public	06/04/1998
03	Arab Leasing Corporation	Mixed	20/02/2002
04	Cetelem Algerie	Private (Foreign)	22/02/2006
05	Maghreb Leasing Algerie	Private (Foreign)	11/03/2006
06	Société Nationale de Leasing	Public	23/02/2011
07	IJAR Leasing Algerie	Mixed	31/05/2012
08	El Djazair Ijar	Mixed	02/08/2012

The financial companies provide all types of investment's loans with more orientation toward leasing in which five companies from eight are leasing companies. As commercial banks, all the private and mixed companies have foreign capital without any national private investment. This might be explained by the hesitation of the Algerian investors after the failure of the Algerian private banks such as BCIA, EL-Khalifa, and Union Banks.

Lee (2002) in his study on the bank's ownership in the Arab countries, has confirmed that the domestic equity (private and public) dominates the total equity of banking sector in these countries, while the foreign equity represents the smallest part. He also revealed that the Algerian banking sector is dominated by the state-owned banks in which the state equity represents 95% of the total equity of the banking sector. This share remains very high compared to the equity average of Arab countries which the foreign equity represents 16 %. Claessens (2009) suggested that, in order to stimulate the foreign investment in the banking sector, the authorities should revise the banking regulations by making it more open, reduce the entry barriers, remove intra-sectoral restrictions, and reinforce the supervision's institutions.

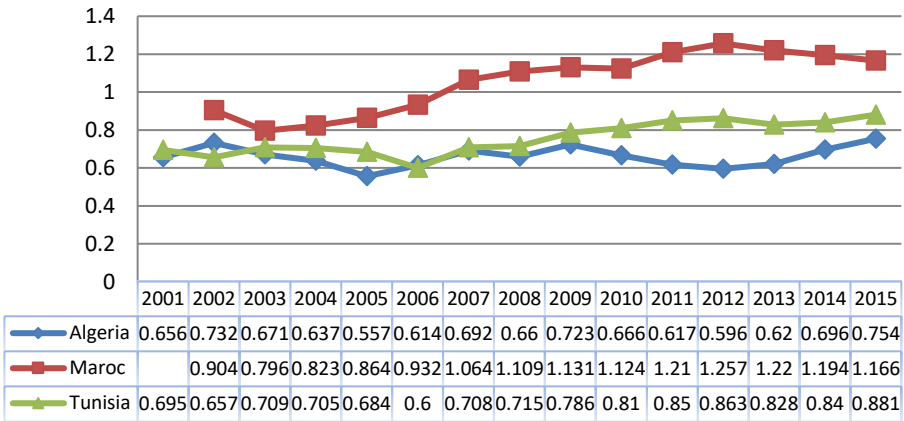
### *Banks' activity*

Table 3 reports the aggregate balance Sheet of banks during (2000-2015).

**Table 3. Aggregate Balance Sheet of Banks in Algeria (2000-2015) (CBA, 2015)  
(DZD Million)**

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2012	2013	2014	2015
Reserves	63016	198937	203874	373754	198104	273613	444631	370284	340185	464710	538625	717800	899800	1091200
Foreign Assets	28315	32354	49666	55509	76611	91406	83950	107727	142300	57729	28280	76142	79400	44700
Claims on State	771241	766478	843906	808517	803400	876384	1014523	941239	678301	841131	1150065	1462327	1403900	1472000
Loans to Economy	993053	1077698	1266043	1379473	1534389	1778916	1904102	2203756	2614050	3085168	3266712	3724746	4285500	6502900
Loans to Public Sector	664349	740086	715835	791693	857983	882479	848408	989774	1202201	1485944	1742337	2040600	2434400	3225200
Loans to Private Sector	328504	337219	550208	587780	674731	895871	1055694	1212953	1411041	1597976	1804707	1981452	2244700	2719900
Loans to Financial Institution	201	393	0	0	1 675	566	0	1 529	808	1 248	633	957	200	300
Other Assets	585983	7117652	960213	917193	1198001	1264998	1952714	2813413	3482260	3002833	3078942	3200568	3167600	2883400
Total Assets	2441607	2793121	3323702	3 534446	4 209808	5 228902	6 510766	7 287195	7 327045	7 988709	9 002408	9 654400	10320000	11976400
Liabilities														
Current Deposits	467502	554927	642168	718 905	1127916	122444	1750432	2560801	2946919	2502926	2870718	3495792	3357100	4434700
Public S	-	240463	322068	387 331	697 423	773903	1163928	1831698	2056423	1426827	1680711	2005287	1667700	1585700
Private S	-	260282	244450	232 346	273 903	321 294	442 418	563301	720765	903596	910679	1039688	1224300	1403800
Other	74106	54182	75649	99 228	156 590	129 207	144087	165801	169731	172503	279328	450817	465100	547900
Deposits Term	974350	1235006	1485191	1724043	1577456	173614	1766105	1956555	2214968	2228894	2524281	2787488	3333600	3691700
Public S	-	253475	382 902	513 972	254 102	365818	364453	394011	499167	579536	625678	862900	1022500	1189100
Private S	-	901634	1001637	1102217	1189187	123285	1271360	1395884	1572921	1722577	1935527	2152283	2420400	2597400
Other	66454	79896	100 653	107 853	134 167	137551	130 291	209998	248036	7 150	9 218	9527	50300	71800
Foreign Commitment	54274	59676	73 320	80 680	116 143	83829	114 671	89755	134310	46 137	43308	39554	75 900	93 802
Deposits of State	33507	26896	69 929	51 140	66 513	99 122	143 675	218189	399710	444 699	302987	346369	473 000	401 171
Other Liabilities	80810	776795	902208	799855	838844	894757	1269194	1486927	1238728	1632400	1708224	1723258	1748500	1871727
Capital Accounts	10384	139820	150 886	159 823	166 112	171 531	184 824	198538	352560	471 989	538991	609947	667000	724200
Total Liabilities	2441607	2793121	3 323702	3 534446	4 209808	5 228902	6 510766	7 287195	7 327045	7 988709	9002408	9654400	10320000	11976400

The table clarifies that banks in Algeria have grown significantly from 2000-2015, in which the total assets increased by 412%, and the total assets which represent 75.5% of the GDP in 2015. This expansion is due to the establishment of new banks in the context of the entry of foreign banks, and the increasing of the branches of the existing banks. Concerning the banking intermediation, banks have known large activities in collecting funds (deposits) and granting loans. Figure 1 presents the evolution of the total assets as a percentage of GDP. Therefore, there is an upward trend in the long-run of the total assets of the Algerian banks, but this progress is inferior to the progress in Morocco and Tunisia.



**Figure 1. Banks total Assets as a percentage of GDP in Algeria, Morocco, and Tunisia (Bank Al-Maghrib, 2016; CBA, 2016; CBT, 2016)**

The deposits (current and long term) have expanded by 365% from 2001 to 2015, in which the collected deposits have represented 8.7% of GDP in 2015. This clarifies the role of banks in mobilizing savings. However; the largest part of the deposits is collected by the public banks, in 2012 the public banks collected 88.3% of the total deposits while the private banks collected 11.7%. These percentages demonstrate the extent of the dominance of the public banks over the private banks.

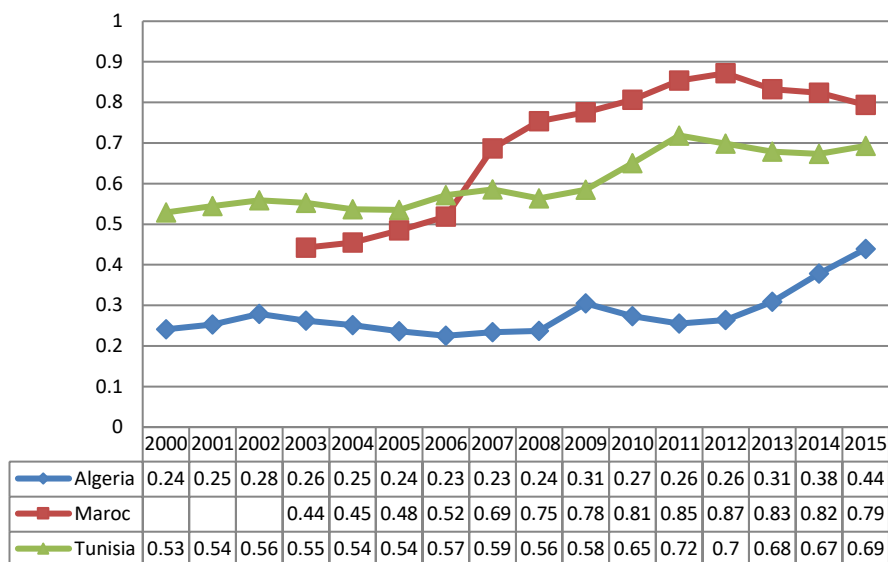
The private banks collect funds principally from the private companies and householders while the public banks collect funds from private companies, householders, and public companies. The public companies prefer to deal only with the public banks. Furthermore, it appears that the private sector (householders and private enterprises) is the primary source of the banks' deposits which represent 59% of the total deposits in 2015.

The loans granted to the economy have recorded sustained growth from 2000 to 2015 with 600% growth rate; this might be explained by the economic reforms that oriented banks toward financing the economy. Before 2005, the largest part of the loans was granted to the public sector and this was included in the context of the operation of repurchase the bank overdrafts of the state-owned enterprises by the



public treasury. In addition, loans have been granted to state-owned enterprises to finance the operations of equipment and the importation of the raw materials.

After 2005, it clears that banks have oriented to finance the private sector, in which the loans granted to the private sector reached 53% of the total loans granted to the economy. The increase of the loans to the private sector is the consequence of the government policy for encouraging the investment through encouraging the creation of small-medium enterprises. Therefore, several procedures have been launched by the government to involve banks in financing the investment projects of the private investors in the context of ANGEM, ANSEJ and CNAC programs. On the other hand, the increase of loans granted to the private sector is due to the increase of loans provided to householders in the form of mortgage loans and loans to finance other durable goods.



**Figure 2. Credit for the Economy as a percentage of GDP in Algeria, Morocco, and Tunisia (Bank Al-Maghrib, 2016; CBA, 2016; CBT, 2016)**

The figure 2 indicates that the credit granted to the economy as a percentage of GDP passed from 20% to 45%, but the banks' credit to the economy as a percentage of Non-hydrocarbons GDP did not exceed the level of 50%. Hence, it is clear that banking sector does not play its role as the principal source in financing the economic sector despite the high level of liquidity that it holds. The ratio of credit to NHGDP in Algeria is below than the ratios recorded in non-hydrocarbons countries, while in the developed countries the percentage of the credit to GDP exceeds 100%. On the other hand, the banks in Morocco and Tunisia plays important role in financing the economy, wherein the amount of credit as a percentage of GDP reached 87% in Morocco and 72%.

The weakness of the banking sector in granting more credit to the economy might be explained by the unwillingness of the Algerian householders to borrow to finance their activities, considering that householders are among the main borrowers in the developed countries. However, the refraining of borrowing of the householders and Algerian peoples, in general, is due to religious considerations. On another hand, this

shortcoming might be explained by the failure of the banking sector in Algeria to transform efficiently the short-term savings into long-term assets to finance the investment projects regarding the limited information they hold about enterprises and projects that might push the banks to invest their savings in long-term investments. Indeed, banks sector in Algeria is the only financial source that serves the economic units, considering that the financial market and the financial institution are inactive and the commercial banks dominate the financial system as is the case in the MENA countries (Olson & Zoubi, 2011).

It is important to note that the public banks dominate the credit market in Algeria. In 2015, 87.5% of loans granted to the economy are provided by the public banks and this is due to the dominance of the state-owned banks on the exclusivity of financing the public sector, while the private banks were content with 12.5%. However, Delis (2012) suggested that the banking sectors in former centrally-planned economies, such as the Algerian case, are characterized by high market power. The market share of private banks remains important regarding the little experience of these banks in the Algerian market, moreover, this share increases from year to year in a steady manner. Therefore, the existence of the private banks will contribute to improving the services of public banks in Algeria through increasing the level of competition between the private and public banks.

There are several approaches those explained the dominance of the public banks. Among these explanations, the public banks are strengthened by the governments to accompany the economic and financial development when the quality of institutions is low. This means, that in the weak institutions (economic, political, legal, etc.) environment, the private banks can't perform well. Andrianova, Panicos, and Anja (2012) clarified that the quality of institutions increases the confidence in private banks, preventing any opportunistic tendencies that appear in less developed banking systems.

### ***Banks' soundness***

For the financial strength of the banking sector in Algeria, the banks have responded to the instructions of central bank concerning the prudential regulation by increasing their capital. Hence, the banks' capital has increased by 60% from 2000 to 2013. The default risk of banks in Algeria is low, in 2012 the solvency ratio of banks reached 15,4 %, which is superior to the percentage 7% recommended by the standards of Basel III for covering the risks (CBA, 2013).

Banks in Algeria also characterize by the excess liquidity because the banks' deposits are much higher than the granted loans, where the ratio of loans/ deposits reached 72% in 2013. The excess liquidity, which represents idle capital, is due to the central bank policy, where for the purpose of inflation's control the central bank has prevented some types of loans such as the loans of consummation.

In addition, the conservative policy of banks in providing loans is another reason for the banks' liquidity excess. The banks follow this policy as a procedure to control well the credit risk regarding the worrying level of non-performing loans, especially for the public banks. The figure 3 shows that the volume of the non-performing loans at the public banks is very high, especially in 2007, which reached the maximum with 680 billion DA. The non-performing loans represented 23.6% of total loans granted

by public banks in 2009, after that, it decreased to reach 16% in 2011. However, these loans back principally to the loans granted to state-owned enterprises during the period of the central economy. In addition, the non-performing loans toward the private enterprises and householders were important, where; it represented 13.4% and 12% of all the public banks' non-performing loans in 2010 and 2011 respectively.

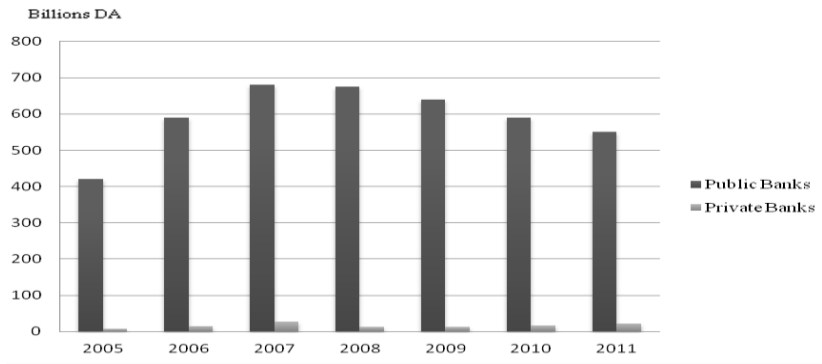


Figure 3. Non-Performing Loans (CBA, 2013)

In contrary, the non-performing loans of private banks remain low, where, it didn't exceed 30 billion DA. It reached 3.8% and 4.2% of all loans in 2009 and 2011 respectively. This demonstrates that the private banks manage well their credit risk compared to the public banks which positively influence their performance. In the literature, there is an evidence of a positive relationship between state ownership and risk-taking and negative relationship for the foreign banks (Lassoued, Houda, & Mouna, 2016). This may explain the higher level of the nonperforming loans of public banks compared to the private banks.

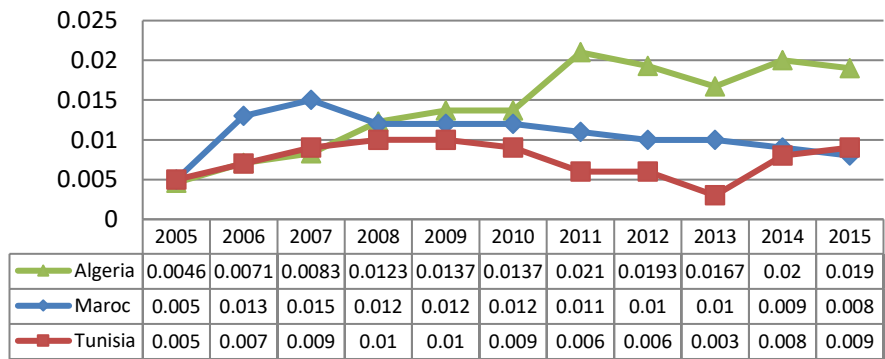


Figure 4. Banks' Profitability  
(Bank Al-Maghrib, 2016; CBA, 2016; CBT, 2016)

Concerning the banks' profitability, figure 4 reports ROA as an indicator of the profitability in Algeria, Morocco and, Tunisia. It is clear that the profitability of banks in Algeria has progressed gradually reaching the level of 2 %. However, the

profitability of Algerian banks has stagnated in 2008 and 2009, and this may be attributed to the effect of the decision of the authorities increasing of the minimum required capital in 2008 and the effect of the financial crisis in 2007. Therefore, banks in Algeria have outperformed the banks in Tunisia and Morocco in term of profitability. This level of profitability clarifies that the Algerian market didn't reach the maturity stage and there are more opportunities to realize high profit contrary to the Tunisian and Moroccan markets where the competition reached high levels.

Indeed, there is no decisive evidence on the relationship between the market concentration and the bank profitability. In the literature, there are two approaches to this issue: The Structure-Conduct-Performance approach and Efficient-Structure approach. The Structure-Conduct-Performance suggests that the market power means the monopoly powers, which generates high profitability (Molyneux, Thornton, & Llyod-Williams, 1996; Rose & Fraser, 1976; Samad, 2005). On the other hand, the Efficient-Structure approach states that the market concentration isn't a guarantee of high profitability, but the bank's profitability is a result of bank's efficiency, which enables efficient banks to hold a large market share and consequently yield high profits (Demsetz, 1973; Evanoff & Fortier, 1988; Gilligan, Smirlock, & Marshall, 1984).

## **Conclusion**

The study shows that the banking sector in Algeria has progressed significantly in many areas. In the side of regulation and laws, the Algerian banks have witnessed several reforms and laws in order to liberalize their activities and determine their policy independently, in addition, the Algerian market has been opened to the private and foreign investment. Therefore, these reforms had a positive impact on the banks' performance, wherein, the banks' assets have increased to accompany the economic development, they increased their capacity to collect the deposits, and they granted more credit to finance the economy. As results, these activities increased the banks' profitability, on the other hand, the banks in Algeria have reduced the credit risk by reducing the level of the non-performing loans.

Despite, the progression of banks in Algeria in many areas, they are still behind the level of banks in the region (Morocco and Tunisia), wherein, Banks in Algeria still suffer from many shortcomings that slows their development (Abed & Davoodi, 2003). Among these shortcomings; the dominance of six public banks on 87% of the credit market, which makes the banking sector in Algeria a concentrated market and this leads to reducing the quality of services. The weaknesses in the credit risk management that leads to increasing the volume of the non-performing loans for the public banks. In addition, lack of the formation and training of the banks' staffs which reflects on the quality of the banks' decisions and consequently the banks' performance.

The study recommends that the Algerian government should continue in the process of banking reforms with caution and gradual implementation. It is necessary to the success of the banking reforms, adopt an institutional reform by improving the

transparency (Corruption, bureaucracy). Delis (2012) suggested that the banking reforms fail in the underdeveloped banking systems due to the institutions' fragility. He advocated for the development of the institutions as the single most important prerequisites for the success of the financial reforms.

In addition, the government should enhance the competition in the banking market by providing more facilities to the private investment, opening of the capital of the public banks and accelerating the banks' privatization process. The government must enhance the regulations and strengthen the institutions to promote the private banks because the majority of studies concluded that bank privatization improves the banks' performance when it is adopted correctly (Clarke, Cull, & Shirley, 2005). On the other hand, the public banks can benefit from the foreign banks in term of management styles, new technologies and risk-taking. Furthermore, banks in Algeria must adopt effective risk management tools and financial rules according to the international standards.

## References

- Abed, G.T., and Davoodi, H.R. (2003). *Challenges of growth and globalization in the Middle East and North Africa*. Washington, DC: International Monetary Fund.
- Aghrout, A., Bouhezza, M., and Sadaoui, K. (2004). Restructuring and privatization in Algeria. In Aghrout, A. (Ed.), *Algeria in transition: Reforms and development prospects* (pp.120-135). London: RoutledgeCurzon.
- Andrianova, S., Demetriades, P., and Shortland, A. (2012). Government ownership of banks, institutions and economic growth. *Economica*, 79(315), 449-469.
- Bank Al-Maghrib (2016). Annual report on banking supervision – 2015. Retrieved from <http://www.bkam.ma/en/content/view/full/14456>.
- Benachenhou, M. (1993). *Réformes économiques : dette et démocratie*. Algiers: Echrifa.
- Benamraoui, A. (2008). Islamic banking: the case of Algeria. *International Journal of Islamic and Middle Eastern Finance and Management*, 1(2), 113-131.
- BenBitour, A. (1998). *L'Algerie au Troisième Millenaire: Défis et Potentialités*. Algiers: Edition Marinoor.
- BenHalima, A. (1996). *Le Système Bancaire Algérien: Textes et Réalités*. Algiers: Dahlab.
- CBA (2013). *Banques et établissement financiers*. Retrieved on March 2, 2014, from <http://www.bank-of-algeria.dz/html/banque.htm>.
- CBA (2015). *Bulletin Statistique de la Banque d'Agerie*. Algeria: Central Bank of Algeria.
- CBA (2016). *Annual Report of Central Bank of Algeria 2015*. Algeria: Central Bank of Algeria.
- CBT (2016). Annual Report of Central Bank of Tunisia 2016. Retrieved from [https://www.bct.gov.tn/bct/siteprod/documents/RA\\_2016\\_en.pdf](https://www.bct.gov.tn/bct/siteprod/documents/RA_2016_en.pdf).
- Claessens, S. (2009). Competition in the financial sector: overview of competition policies. *The World Bank Research Observer*, 24(1), 83-118.
- Clarke, G.R., Cull, R., and Shirley, M.M. (2005). Bank privatization in developing countries: A summary of lessons and findings. *Journal of Banking & Finance*, 29(8/9), 1905-1930.

- Creane, S., Goya, L.R., Mobarak, M., and Sab, R. (2003). Financial development and economic growth in the Middle East and North Africa Finance and Development. Retrieved from <https://www.imf.org/external/pubs/ft/med/2003/eng/creane/index.htm>.
- Delis, M.D. (2012). Bank competition, financial reform, and institutions: The importance of being developed. *Journal of Development Economics*, 97(2), 450-465.
- Demsetz, H. (1973). Industry structure, market rivalry, and public policy. *The Journal of Law and Economics*, 16(1), 1-9.
- El-hassar, C. (2000). Réformes et opportunités d'investissements dans le secteur bancaire Algérien. *Média Bank*, 48, 4-8.
- Evanoff, D.D., and Fortier, D.L. (1988). Reevaluation of the structure-conduct-performance paradigm in banking. *Journal of Financial Services Research*, 1(3), 277-294.
- Gilligan, T., Smirlock, M., and Marshall, W. (1984). Scale and scope economies in the multi-product banking firm. *Journal of Monetary Economics*, 13(3), 393-405.
- Hadj-Nacer, A.R. (1990). *Les Cies de la réforme*. Algiers: E.N.A.G.
- Hartmann, P., Straetmans, S., and De Vries, C.G. (2005). Banking system stability: A cross-Atlantic perspective. Retrieved from <https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp527.pdf>.
- IMF (2017). IMF Data. Retrieved from <http://www.imf.org/en/Data>.
- Iradian, G., Bazzoni, S., and Joly, H. (2000). *Algeria: Recent Economic Developments*. Washington: International Monetary Fund.
- Jbili, A., Enders, K., and Treichel, V. (1997). Financial sector reforms in Algeria, Morocco, and Tunisia: A preliminary assessment. Retrieved from <https://www.imf.org/external/pubs/ft/fandd/1997/09/pdf/jbili.pdf>.
- Lassoued, N., Sassi, H., and Attia, M.B.R. (2016). The impact of state and foreign ownership on banking risk: Evidence from the MENA countries. *Research in International Business and Finance*, 36, 167-178.
- Latrach, T.Z. (2001). *Banking techniques*. Algeria: University Publications Offices.
- Lee, J.-K. (2002). Financial Liberalization and Foreign Bank Entry in MENA. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.200.6230&rep=rep1&type=pdf>.
- Meliani, H., Aghrout, A., and Ammari, A. (2004). Economic reforms and foreign direct investment in Algeria. In Aghrout, A., and Bougherira, R.M. (Eds.), *Algeria in transition: Reforms and development prospects* (pp.87-101). London: Routledge.
- Mishra, P., Montiel, P., Pedroni, P., and Spilimbergo, A. (2014). Monetary policy and bank lending rates in low-income countries: Heterogeneous panel estimates. *Journal of Development Economics*, 111(C), 117-131.
- Molyneux, P., Thornton, J., and Llyod-Williams, D.M. (1996). Competition and market contestability in Japanese commercial banking. *Journal of Economics and Business*, 48(1), 33-45.
- Naas, A. (2003). *Le Système Bancaire Algérien: de la décolonisation l'économie de marché*. Paris: Maisonneuve et Larose.
- Olson, D., and Zoubi, T.A. (2011). Efficiency and bank profitability in MENA countries. *Emerging markets review*, 12(2), 94-110.

- Oufriha, F.Z. (2008). La difficile transformation du système bancaire en Algérie. In Chenntouf, T. (Ed.), *L'Algérie face à la mondialisation* (pp.115-163). Dakar: CODESRIA.
- Rose, P.S., and Fraser, D.R. (1976). The relationships between stability and change in market structure: an analysis of bank prices. *The Journal of industrial economics*, 24(4), 251-266.
- Ruppert, E. (1999). The Algerian Retrenchment System: a financial and economic evaluation. *The World Bank Economic Review*, 13(1), 155-183.
- Saad, M., Meliani, H., and Benosman, M. (2005). The Tortuous and Uncompleted Privatisation Process in Algeria. In Majumdar, A.M., and Saad, M. (Eds.), *Transition and development in Algeria: economic, social and cultural challenges* (pp.17-27). London, UK: Intellect Ltd.
- Samad, A. (2005). Banking structure and performance: evidence from Utah. *Review of Business Research*, 2, 151-156.
- Tlemçani, R. (2008). Infitah, globalisation et corruption. In Chenntouf, T. (Ed.), *L'Algérie face à la mondialisation* (pp.28-47). Dakar: CODESRIA.

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