

Risk control in the Algerian banking system according to Basel standards

رقابة المخاطر في المنظومة المصرفية الجزائرية وفق معايير بازل

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Abstract:

Banking supervision operations are important because they aim to ensure sufficient financial capital to cover the overall risks they face when carrying out their activities, and they also aim to encourage the use of methods in relation to prudential supervision and risks. This article is about comparing banking risk control with international Basel standards, and the study reached a set of results, which is the work to develop and coordinate between the requirements of Basel on the one hand, and what is imposed by the regulatory rules and standards

Keywords: Risk control, Algerian banking, Basel committee, Regulatory standards.

JEL Classification Codes : E42, F33

ملخص:

تعتبر عمليات الرقابة المصرفية مهمة لأنها تهدف لضمان رأس مال مالي كاف لتغطية المخاطر الإجمالية التي تواجهها عند القيام بأنشطتها، وتهدف أيضاً لتشجيع استخدام الأساليب فيما يتعلق بالإشراف الاحترازي والمخاطر تطوير ووضع أنظمة خاصة بعمليات الرقابة الداخلية والخارجية للمخاطر في البنوك والمؤسسات المالية ولهذا قام هذا المقال على مقارنة رقابة المخاطر البنكية بمعايير بازل الدولية وتوصلت الدراسة الى مجموعة من النتائج وهي العمل على التطوير والتنسيق بين متطلبات بازل من ناحية، وما تفرضه كذلك القواعد و المعايير الرقابية

كلمات مفتاحية: رقابة البنوك، البنوك الجزائرية، معايير بازل، المعايير الرقابية.

تصنيفات JEL: F33، E42

1. Introduction :

With the regulatory changes that the banking sector witnessed during the eighties, the banks took in the activities of financial liberalization and the creation of new financial tools and the intensification of financial globalization, technological development and competition between banks, which led to the emergence of risks in the absence of a culture of risk management and information inconsistency and under supervision From the Bank for International Settlements, and after meetings held on capital adequacy, the Basel Committee for Banking Supervision and Supervision presented the first global agreement in Basel I in 1988 and gradually began to be implemented until 1992, as it included in terms of how to include risk-weighted assets for loans and the market. Giving each type of assets its own risk weight in order to calculate the capital adequacy ratio to cover potential banking risks, and the ratio was set at 8% with a division of capital into 3 levels, then thinking about another second agreement contracted at the end of the 1990s and Basel II standards were issued in the year 2001 was based on three main pillars, the first and most important of which are new standard methods and methods to measure the adequacy of the bank's weighted capital to meet credit and market risks in addition to operational risks. The second and third step in the process of supervising and supervising banks in the process of controlling the market, respectively.

The problematic:

How is risk control in the Algerian banking system according to Basel standards?

To answer them, we divided this research into the following axes:

1- Literature Review.

2- Banking risk control and international Basel standards.

3- Basel standards for banking supervision in Algeria.

2.LITERATURE REVIEW

The existing literature on the effect of the Basel committee on banks There have been many previous studies that have been interested in this topic and different methods of analysis, among these studies we find:

2.1 (Bendehina & Zirar, 2019)

This study was based on the identification of the most important standards of the Basel Convention of new capital adequacy standards, especially the regulatory capital segment and the criterion of long and short-term liquidity as well as the criterion of leverage, was based on the annual reports of the Central Bank and various banks under study for the purpose of evaluation. The capital adequacy ratio for the period 2006-2013, the basic capital till 2016, and then the rate of capital adequacy development rate for a group of public and private banks, where the solvency ratio witnessed a remarkable development in all the banks under study. Second and the third, which concerns the banking and market controls only study and relying on the Bank for International Settlements BIS, the Algerian banking sector has not yet applied these two pillars.

2.2 (BCBS, 2019)

This study is a report that determines the status of adopting Basel 3 standards for each Basel Committee for Banking Operations as of the end of March 2019, which has been in operation since October 2011, where the committee has periodically monitored the implementation of Basel 3 standards as it focused on monitoring the risk-based capital requirements and the leverage ratio. The overall level of risk and the adjustment of credit risk assessment, and the countries on which the report is based in the extent of Basel 3 implementation are: Argentina, Australia, Brazil, Canada, China, Hong Kong, India, Japan, Indonesia, Korea, Mexico, Russia, Saudi Arabia, Singapore, South Africa, Switzerland, the Netherlands, the United Kingdom, Luxembourg, Germany, Italy, Spain, Sweden, the United States, the European Union, Belgium, France, and Turkey, which focused on a set of post-crisis reforms in Basel 3 published by the committee. In December 2017, which will take effect from January 2022 and the end of 2026, to become fully effective in January 2027, and will be phased in more than five years.

2.3 (Bendehina* & Hamoudi, 2018)

This study aims to know the reality of the Algerian banking system and the extent of its supervision on the control of Algerian public banks

to apply the Basel methods to know the evolution of bank capital adequacy to face bank risks, and therefore analyzed the solvency ratio of a group of Algerian public banks, the study also calculated the private funds and weighted assets As per the bank's budgets and the steps of calculating the private funds as per the instructions of the Bank of Algeria as well as the capital adequacy ratios in the public banks, we have shown through The Algerian banking system is suffering from underdevelopment as a result of its impact on the former central management waste, especially in public banks, while many reforms that sought to develop and rehabilitate it failed to answer the question posed by reducing banking risks. Basel III standards, where there is a lack of a skilled and specialized team, banks are now working to develop and develop human competencies to keep pace with recent developments in terms of risk management.

2.4 (Bouabdali & said, 2015)

This study was conducted on how to manage operational risk according to Basel II standards with reference to good practices of its principles in identifying and evaluating risks. These principles were applied to a sample of banks: BEA, BDL, BADR, BNA, CPA, SGA, and presented statistical results Through the statistical program SPSS and the questionnaire section in question to 4 axes and included 29 questions and the results of the field reported that banks are interested in forming a framework to identify operational risks and are developing strategies to address this type of risk while not forming any contingency 2.2 (plans In order to face any losses caused by operational risks as stated in the SPSS analysis, due to the failure to follow the rules of sound management of operational risks as stated in Basel II, banks are therefore concerned with the same operational risks on the theoretical side rather than practical.

2.5 (Lokman,2008)

This study aimed to find out how to manage risks at the level of Algerian banks and focus on private banks and to what extent they are in line with one of the most important methods for calculating risk in Algerian banks, which is the method of modifying the risk of return on capital, since the emphasis on bank capital is very important and Any return corresponds to a risk, and after studying the theoretical knowledge

of this method RACOC (Risk Adjusted Return on Capital).

The researcher applied it to the total loans granted by the bank and relied on the central database of the bank group and extracted the data needed for the study from May 31, 2007 to May 31, 2008 in one of the private banks in Algeria Bnp Paribas as this method is an effective solution in managing loan risks and Manage it in banks.

2.6 (Souar, 2008)

The study aimed to assess and assess the risk of non-repayment of loans by one of the methods of managing loan risks, which is the pointing loan method and the method of modern artificial neurotechnology, by applying it to one of the Algerian public banks, the Bank for Rural Development and Agriculture, BADR, this method was able to control risk management Loans using the method of discriminatory analysis of the statistical program SPSS V and the technique of neural networks according to the classification of global institutions $C \pm C$, and the theoretical side came to mention several methods, including the classic method, the credit-men method, and the scoring method based on external classification institutions

And the results of the study that was conducted on a sample of 52 institutions, including 42 healthy institutions and 10 incapable ones, which benefited from the loan in a period of 10 years by relying on accounting documents that help in making the decision in granting loans and the possibility of working in these two ways in order to proceed. Hassan for loan risks and thus exclusion of risks.

2.7 (Al-Qatnani, 2007)

This study aimed to identify some characteristics of the technical environment and information technology (administrative characteristics, suitability characteristics, safety and security characteristics) and measure their availability in Jordanian banks, in addition to determining the extent of the impact of these characteristics on operational control risks in Jordanian banks from the point of view of all those working in The oversight and internal auditing departments in Jordanian banks and the external auditors of these banks, and the extent of consensus of the study

sample in answering the study's questions. The researcher developed the study tool (the questionnaire) based on the theoretical framework and previous studies. (64) questionnaires were distributed to a sample of the study population, which consists of workers in the internal control departments in Jordanian banks and the external auditors of these banks. By using the appropriate statistical analysis tools for the study data (arithmetic averages, standard deviations, and the T-test paired sample), the researcher concluded that there are statistically significant differences between the opinions of workers in the internal control departments in Jordanian banks and the external auditors of these banks regarding the availability of the technical and technological environment characteristics of the systems. Information (administrative characteristics, convenience, security and safety) in Jordanian banks. There are no statistically significant differences between the opinions of the two study samples of these banks regarding the extent of the impact of the technical and technological environment characteristics of information systems on the operational control risks in Jordanian banks. In light of the results of the analysis, the researcher presented a set of recommendations that he deems necessary to improve the technical environment and information technology characteristics in Jordanian banks to reduce their regulatory risks.

3. Banking risk control and international Basel standards:

3.1 Definition of risk:

It is the probability of losses as a result of events such as changes in market prices and events that are less likely to occur and result in financial loss (Souar, 2008, p. 06)

3.2 Types of risks according to the first pillar of the Basel Convention:

3.2.1 Credit risk

In pillar one (BAHAMAS, C. B, 2013, page 03) Basel provides details of how banks must calculate their minimum capital requirements. It suggests various approaches for calculating capital for credit, market, and operational risk. The Central Bank has determined that the Standardized Approach for Credit Risk capital measurement will be more appropriate for banks within

this jurisdiction, notwithstanding that some banks may be subsidiaries of large international banks that are subject to the more advanced approaches in their home countries

3.2.2 Market risk

The Central Bank has completed its implementation of the 1996 Market Risk Amendment to Basel I, with the release of the Guidelines for the Management of Market Risk in December 2012. It is not envisaged that any changes will be made to the framework for Basel II, given the limited trading book activity and number of banks that are subject to a market risk capital charge.

3.2.3 Operational risk:

Operational risks are risks resulting from the weakness of supervision and the internal control system of the bank, weakness in the personality or capabilities of working individuals, weak surrounding systems, or the occurrence of external conditions. (Ali, 2010, p. 178)

3.3 The second pillar: audit and oversight processes

This pillar is related to the prudential supervision processes with a set of recommendations for risk management and transparency in the methods used, as banking supervision operations are very important, as it does not only aim to ensure that banks have the financial capital sufficient to cover the total risks they face when carrying out their activities, but also aims to Urging the use of the best methods with regard to prudential control and risk management (Ali Sh., 2007, p. 23)

3.4 The third pillar: market discipline

This pillar aims to develop a set of disclosure requirements that allow the evaluation of information about capital and risk exposure and their assessment processes. It also allows banks to evaluate other parties, including investors, analysts, clients, other banks and rating agencies, which leads to good corporate governance through Provide disclosures that provide a summary of the objectives and general policies for risk management, which can be conducted annually. Institutions must also develop a formal policy regarding what will be disclosed and the controls surrounding them. (IBM, 2019, p. 01).

4. Basel standards for banking supervision in Algeria:

4.1 Table 1: Banking risks in Algerian banks according to the Basel Convention

Risks	Definition of risks
Credit risks	Is defined in Article 2 as the risk arising from a situation where one or more parties default.
The interest rate risks	Is the risk arising from changes in interest rates for off-budget operations.
Market risks	This risk is caused by changing market prices and includes: exchange risks and risks related to interest rate related instruments.
Operational risks	That arising from inadequate internal systems or internal and external fraud.
The legal risks	This risk arising from disputes with one of the parties or in the event of a shortage, whatever its nature, and which the bank bears.

Source: Regulation 11-08 Of November 28th, 2011 Relating to Internal Audit of Banks and Financial Institutions

4.2 A comparative study between banking supervision in Algeria and the principles of the Basel Committee:

- Supervision has a major role in applying standards in managing banking risks that are in line with the standards of the Basel Accords, and the Basel Committee issued 25 principles in their regard that fall into seven groups, and any banker must respect and adhere to them as a basic reference and regarding the application of these principles even before their issuance in 1997 AD. What is shown in the following table:

Table 2: Comparison of the Algerian banking sector supervision standards with the Basel Committee audit standards

Standards of banking supervision in Algeria	Basel Committee Standards
1- This principle is illustrated by: - A- Article 44 of Law 10-90 - b- Article 143 of Law 10-90	-1- Conditions for establishing an effective banking system - A - The first principle of effective banking supervision shall be adopted in providing the necessary conditions for implementing an effective, authorized supervisory system holdings and forms.

2- These principles are clear through:

- A- Article 126 of Law 90-10

Defined by the following articles:

-B- The organizational basis for granting accreditation in Articles 45, 127 and 131 of Law 10-90

- In addition to Instruction No. 2000-04 specifying the components of the accreditation file, Articles 135 and 136 of Law 10-90

-C- Article 139 of Law 90-10

-D- Article 94 of Law 90-10

-3- These principles are illustrated by:

- A- Article 92 of Law 10-90 and this principle was defined more precisely through Regulation 91-01, Regulation No. 95-04 and Instruction 74-94

-B- Instruction 91-34 and Instruction No. 94-74

-C- Article 02 of Regulation No. 91-04 of Regulation No. 92-02

-D- Instruction 99-02, which is subject to the conditions stipulated in Article 168 of Law 10-90

-E- System No. 03-02

-And- Systems No. 92-01 No. 92-02

-2- Granting licenses and required structures to banks:

A- According to the second principle, the word “bank” should not be used for the institution unless it is actually practicing banking.

-B- The third principle relates to the conditions for practicing the banking profession.

-C- The fourth principle is related to reviewing the control and supervision authorities of the bank’s

3- Precautionary arrangements and rules:

- A - The sixth principle relates to the adoption of the solvency ratio

- B- The eighth principle is related to the need for supervisory authorities to ensure that the bank adopts adequate allocations to monitor doubtful debts, as well as the availability of appropriate precautions

-C- Principle Seven: The supervisory authorities must be convinced that banks have information systems that enable management to determine concentrations in credit portfolios and set this authority to set reasonable limits to limit the banks ’exposure to credit risk to individual borrowers or a group of related borrowers.

-D- The tenth principle related to announcing the amounts of loans granted to managers and shareholders of a bank or financial institution

E - The fourteenth principle that includes the internal control of banks and financial institutions, and includes the various systems and arrangements for the internal control system for banks.

-F- The fifteenth principle related to the conduct of risk centralization regulation that imposes on banks and financial institutions to send information about the clients benefiting from loans, the nature and the loans granted, the amounts withdrawn and

	the guarantees given for each loan to centralize risks
4- These principles are clear through: - A - Article 147 of Law 10-90 - b - Article 94 of Law 90-10 C - Article 150 of Law 90-10 - d - Article 148 of Law 10-90	-4- Continuous control methods: - A - The sixteenth principle relates to the necessity of internal and external oversight - b - Principle sixteen: related to the necessity and existence of an orderly communication between the bank's management and the supervisory and supervisory authorities - C - The eighteenth principle: The Banking Committee grants the powers to determine the list of documents and information, their success and the period of delivery for banks and financial institutions, on a single and combined basis. - D - The Nineteenth Principle: The Central Bank is empowered to independently obtain control information through internal examination or by organizing a special administrative unit for control that assigns any person it chooses to do any work.
5- This principle is illustrated by: - A - Articles: 166-167 of Law 10-90 through Regulations 92-08, 94-18, 92-09, 97-01	5- Availability of information: A- Principle Twenty-One: The supervisory authority must ensure that every bank maintains and integrated accounting practices that enable it to form a true opinion, and that it ensures that the bank thankfully submits its financial statements that correctly reflect its financial position
-6- This principle is illustrated by: Article 140 of Law 90-10	6- Official authorities of observers: Principle Twenty-Two: Relating to the ability of the Banking Committee to take punitive measures against the bank and financial institution in the event of a violation of regulatory laws or precautionary rules.

7- These two principles become clear:

- A - Article 151 of Law 90-10 with respect to the twenty-three principle, while the twenty-fifth principle is respected by the provisions of Articles 12, 131,130 from 90-10, in addition to Instruction 2000.02 aimed at reducing the fairness of banking performance.

-7- Cross-border banking:

- A - The third and twenty-fifth principles related respectively to monitoring bank branches and financial institutions abroad and the fairness of the latter's work at the same levels of performance demanded by local banks, obligating them to provide the information required to circulate standardized supervision.

Source: Bendehina and others, 2018, pp. 61-64, The reality of the Algerian banking system being in line with the standards of the BALE Agreement, a standard study of the Algerian banking system, North Africa Journal of Financial and Economic Studies, Issue 1, June, University of Tlemcen - Algeria -.

4.3 For the second pillar:

It was mentioned in **Regulation No. 03-02 of November 4, 2002 issued in the Official journal of the Algerian Republic, No. 84, of December 18, 2002, corresponding to Shawwal 14, 1423:**

- Internal control systems for bank operations.
- Accounting systems, information processing, and risk and outcome measurement systems.
- Banking risk control systems, documentation and information systems.

Then he issued **Regulation No. 08-11 of November 28, 2011 and issued in the Official journal of the Algerian Republic, Issue 44, on Shawwal 11, 1433, corresponding to August 29, 2012, which canceled the articles of regulation 03-02** and indicated the volume of interest of the Bank of Algeria With the content of strict supervision and review, as he gave orders requiring banks and financial institutions to form internal control systems to address deviations in a timely manner.

4.4 For the third pillar:

Order 02-03 of November 14, 2002 related to disclosure processes in the required manner, with the aim of improving security conditions, credibility and comprehensiveness, was issued to monitor the conformity of the internal operations of banks and financial institutions, with the legislative and regulatory provisions and standards, and the quality of information and

communication systems to improve the banks 'process of disclosing their financial statements and their financial position With all transparency

Then, **Ordinance 09-02 of December 16, 2002**, which stipulates instructions and regulations requiring banks and financial institutions to undertake the disclosure of various data related to their activities. Especially since the Basel Accord focused on the necessity for banks to disclose accurately and in a timely manner about the capital requirements, they maintain to face the risks they are exposed to. In return, the Banking Committee in Algeria obliges banks and financial institutions

4.5 The extent to which banks and financial institutions adhere to the prudential standards:

In the lowest table, cases of non-compliance with the new prudential and regulatory standards such as the solvency and liquidity factor alone, we note that the year 2017 was characterized by a decrease in the number of deficiencies recorded by banks and financial institutions, and it reached 48 institutions compared to the years 2015 and 2016, which amounted to 73, 75 banks and non-institutions Compliant with the prudential standards, it is also noticeable that one bank recorded a lack of a cushion or safety margin, and 4 cases were recorded with regard to liquidity.

Table 3: Cases of non-compliance with banking regulations by the end of 2017

Total violations		Number of banks and financial institutions	Authorization frequency
Solvency factor	Triple	00	00
Basic private funds coefficient	Triple	00	00
25% of the legal private funds	Triple	02 banks	08
8 times the legal private money	Triple	00	00
Loans granted to institutions in which the bank has contributions	Every two months	00	00
external commitments by signing	Monthly	One bank	10
10 of your own money in hard currency.	Monthly	00	00

30 of Special Funds / Total Hard Currency.	Monthly	00	00
Private funds and permanent resources coefficient	Annual	Three banks	3
Liquidity factor	Triple	Three banks	13
Net assets	monthly	one financial institution	12
TOTAL	/	six institutions	48

Source : Banque d'Algérie, (2017), p 82, CONTROLE ET SUPERVISION BANCAIRE.

5.Conclusion:

Despite the structural changes and amendments that have passed to the Algerian banking sector, however, everything that came and stipulated in the Basel Accords has not been implemented, despite the need for both banks and supervisory and supervisory authorities for these standards, and therefore it requires great efforts to develop this banking sector The needs of each of the banks and the supervisory and supervisory authorities for these competencies increase, and thus it requires a distinct quality of technological and human competencies.

6. Results:

- Developing and setting up systems for internal and external control processes for risks in banks and financial institutions.
- Work on developing and coordinating between the requirements of Basel on the one hand, and what is imposed by international and local rules and standards for regulatory systems.

7. Recommendations:

Imposing central banks through their supervisory methods on public banks and their regulations on Algerian banks to implement Basel standards by developing precautionary policies against various types of risks.

8. References:

1. Ahmed Shaban Muhammad Ali. (2010). Crises, economic changes and the role of the banking sector. Alexandria: Dar Al-Wafa Printing and Publishing, first edition.
2. Banque d'Algérie, (2017), p 82, CONTROLE ET SUPERVISION BANCAIRE.
3. BAHAMAS, C. B. (2013). BASEL II & III IMPLEMENTATION ROAD MAP. Bahamas.
4. BCBS. (2019). Sixteenth progress report on adoption of the Basel regulatory framework. Bank for international Settlements.
5. Bendehina**, M., Tlemcani, h., & Zeddoun, D. (2018). The reality of correspondence of the Algerian banking system to the standards of the basel conventions- a stastical study of the Algerian banking system-. *north African review of applied finance and economic NARAFE, university of tlemcen.*

Bendehina*, M., & Hamoudi, I. (2018, 10 24.25). The reality of the application of the Basel 3 in the Algerian banking system” A analytique study of a sample of public bank. *Research paper presented to the events of the international forum on the implication of financial institutions adaptations with indicators of financial stability in Algeria university of Medea. algeria.*

Bendehina, M., & Zirar, S. (2019). Basel III and Algerian Banks _Field study a sample of Algerian Banks. *Finance and Business Economics Review JFBE Volume (03) Number01.*

Bouabdali, A., & said, t. (2015). Managing operational risks in commercial banks - a case study of a sample of commercial banks in Algeria. *Algerian Journal of Economic Development, No. 3, University of Ghardaia.*

Souar, Y. (2008). Trying to estimate the risk of non-payment of loans using the point loan method and the artificial nerve technique of the Algerian Banks. *Thesis for a PhD. University of Saïda, Algeria.*