# The Impact of Credit Risk Management Practices on Bank Performance: A Case Study of the External Bank of Algeria (BEA)

**Lamia DIB**

University of Aboubakr Belkaid-
Tlemcen, Algeria

*dib.lamia@univ-tlemcen.dz*

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**Abstract:**
This study examines the effect of credit risk management practices on banking performance in the External Bank of Algeria. It aims to assess the extent to which lending procedures, creditworthiness assessment, loan monitoring, internal control, staff training, Basel II/III compliance, and early detection systems contribute to better banking performance. The study adopts a quantitative case-study design based on a structured questionnaire administered to 87 employees across BEA branches in Tlemcen, Oran, Mostaganem, and Algiers. Data were analyzed using IBM SPSS through descriptive statistics, Cronbach's alpha, normality testing, correlation, and linear regression. The results show that credit risk management practices have a positive and statistically significant effect on banking performance. The most influential dimensions are operational lending procedures, borrower assessment, monitoring, and internal control, while staff training and Basel compliance did not show a statistically significant effect when considered separately.

***Keywords*:** Credit risk management, banking performance, creditworthiness assessment, internal control, non-performing loans, Basel II/III compliance.

**JEL Classification :** G21, G32, C83

* Corresponding author: Dib Lamia (*dib.lamia@univ-tlemcen.dz*)

## Introduction:

Banks remain central to economic development because they mobilize savings, allocate credit, support investment, and sustain the circulation of liquidity across productive sectors. However, this intermediation role also places banks at the core of financial vulnerability, since credit expansion, if not governed by rigorous screening, monitoring, and control mechanisms, may rapidly translate into deteriorating asset quality, non-performing loans, and declining institutional performance. This issue has become more pressing in recent years as the global financial environment has remained exposed to heightened uncertainty, tighter financial conditions, and persistent stability risks. At the aggregate level, global domestic credit to the private sector reached 141.9% of GDP in 2024, reflecting the

scale of credit dependence in modern economies. In such a context, credit risk management is no longer a narrow operational function; it has become a strategic pillar of banking resilience, profitability, liquidity, and financial stability. Accordingly, the nexus between credit risk management and banking performance has emerged as a major field of inquiry in contemporary banking and financial research (World Bank, 2024; IMF, 2025).

The relevance of this issue is even greater in Algeria, where the banking sector operates within an economy that remains structurally sensitive to external shocks, hydrocarbon dependence, and institutional adjustment pressures. Recent World Bank estimates projected Algeria's real GDP growth at 2.6% in 2024, indicating moderate recovery but not a full resolution of structural constraints. At the same time, domestic credit to the private sector represented about 19.0% of GDP in 2024, suggesting that the depth of financial intermediation remains limited. More importantly, the quality of bank assets continues to raise concern. According to the IMF, non-performing loans in Algeria remained high at 20.7% of total loans at the end of 2024, reaching 22.5% in public banks. These indicators confirm that the sound management of credit risk is not merely a regulatory requirement in Algeria, but a critical determinant of banking stability and performance, especially for major public institutions such as the External Bank of Algeria (BEA) (World Bank, 2024; IMF, 2024, 2025).

From a scholarly perspective, the existing literature has significantly advanced the understanding of the relationship between credit risk and bank outcomes, yet it still leaves important gaps. Recent evidence has shown that the relationship between lending, profitability, and non-performing loans is complex and non-uniform across banking systems (Gupta & Bansal, 2024). Other studies have demonstrated that digital finance and modern risk technologies can mitigate bank credit risk (Ruan & Jiang, 2024), while robust internal control systems supported by information technology can strengthen bank performance (Gyamerah et al., 2024). Additional evidence confirms that credit, liquidity, and operational risks exert a negative influence on bank profitability, and that prudential frameworks such as Basel III remain crucial for strengthening solvency and controlling risk-taking behavior (Ngo & Trinh, 2025; Addou et al., 2024). Nevertheless, most of these studies rely on secondary financial data, panel estimations, or cross-country samples. In contrast, limited attention has been given to the internal organizational dimension of credit risk management in Algerian public banks, and institution-specific evidence on BEA remains scarce. Even the recent BEA-related literature has focused primarily on stress testing and financial stability rather than on employees' assessment of day-to-day credit risk management practices and their perceived effect on banking performance (Benachour et al., 2025). Therefore, the added value of the present study lies in examining this relationship from within the bank, through a structured assessment of operational practices, internal control, staff preparedness, and performance perceptions.

Against this background, the problematic of the study can be formulated as follows: To what extent do credit risk management practices affect banking performance in

the External Bank of Algeria (BEA)? More specifically, the study seeks to determine whether practices such as clear lending procedures, rigorous borrower solvency assessment, regular loan monitoring, internal control, employee training, compliance with international standards, and early detection of risky clients contribute to better banking performance in terms of lower problem loans, stronger profitability, higher liquidity, and greater financial stability. Based on this problem, the study advances two main hypotheses. H1: credit risk management practices have a positive and statistically significant effect on banking performance in BEA. H2: the stronger the bank's credit risk management mechanisms are, the stronger its perceived financial stability, liquidity, profitability, and overall performance will be.

Here is a more direct and concise version:

This study is important both theoretically and practically. Theoretically, it contributes to the banking literature by examining the link between credit risk management and banking performance in the Algerian context, where institution-level evidence remains limited. Practically, it provides useful insights for bank managers, risk officers, auditors, and decision-makers by showing how credit risk management practices can support better institutional performance. Accordingly, the study aims to assess credit risk management practices at BEA, evaluate banking performance as perceived by employees, and test the effect of credit risk management on banking performance.

Methodologically, the study adopts a quantitative case study approach. Data are collected through a structured questionnaire administered to employees of the External Bank of Algeria. The questionnaire consists of two sections: the first covers respondents' general characteristics, and the second measures credit risk management and banking performance through fifteen items rated on a five-point Likert scale. SPSS is used for data coding, reliability testing, descriptive statistics, and inferential analysis, including correlation and regression, to test the study hypotheses.

The study is structured into five sections. The first presents the conceptual and theoretical background of credit risk management and banking performance. The second reviews the empirical literature and identifies the research gap. The third explains the methodology, variables, hypotheses, and analytical tools. The fourth reports and discusses the findings. The final section concludes the study and provides recommendations for improving credit risk management practices at BEA.

## I. literature Review:

As illustrated in Figure 1, the reviewed literature on credit risk management and banking performance is structured around three main lines of inquiry: internal risk-management practices, the direct risk–performance relationship, and the roles of regulation, governance, and technology. The first line emphasizes how banks organize lending procedures, borrower evaluation, monitoring, and compliance. In this stream, Al-Tamimi (2008) showed that Basel preparedness in UAE banks depends on institutional readiness, resource availability, and implementation capacity. Abu Hussain and Al-Ajmi (2012) found, in Bahrain, that banks with stronger systems of risk identification, assessment, and monitoring display more developed risk-management practices. Similarly, Ben Selma et al. (2013) reported that Tunisian banks recognize the importance of risk management, although they still rely heavily on conventional protections such as collateral and guarantees. Mahmood and Ahmed (2023) confirmed, in Iraqi private banks, that risk-management practices are not merely administrative routines but mechanisms that shape financial performance. These studies are directly relevant to the present article because they support the view that credit risk management should be examined at the operational level of procedures, controls, staff capability, and risk evaluation.

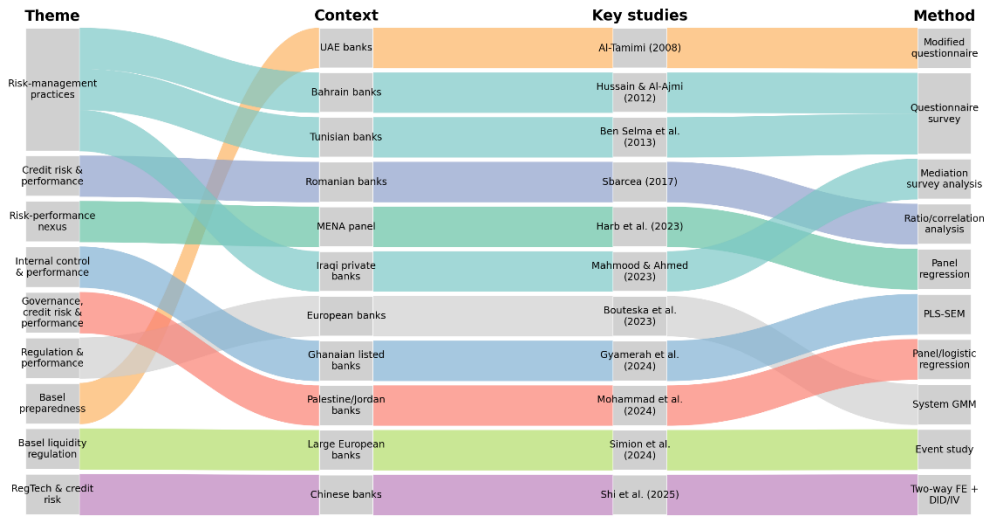
A second line of research examines whether credit risk significantly affects banking performance. Harb et al. (2023) showed, using a MENA bank sample, that the relationship between risk management and performance is not always linear, since credit and liquidity risk may affect accounting and market performance differently. Mohammad et al. (2024) added a governance dimension and demonstrated that the effect of credit risk on financial performance becomes more intelligible when corporate governance is treated as a moderating factor. Cobbinah et al. (2024) likewise argued that bank performance in emerging markets is shaped by multiple financial risks rather than by credit risk alone. The main implication of this stream is methodological and substantive at the same time: the link between credit risk and performance exists, but it is conditional on the institutional setting, the measurement of performance, and the bank's internal governance structure. This is important for the present study because banking performance is approached here as a multidimensional concept reflected in profitability, liquidity, financial stability, and the handling of credit losses.

A third line of literature focuses on the mechanisms through which regulation, internal control, and technology influence both risk and performance. Bouteska et al. (2023) found, for European banks, that supervisory power tends to improve performance, while capital requirements and activity restrictions reduce risk but may also constrain returns. Gyamerah et al. (2024) showed that internal control systems, reinforced by information technology, improve corporate performance in Ghanaian banks. Simion et al. (2024) demonstrated that Basel III liquidity regulation affects market perceptions of bank risk, particularly when asset quality is weak. Shi et al. (2025) provided recent evidence from China that internal RegTech significantly reduces bank credit risk. This body of work is especially pertinent to the BEA case because several dimensions of the questionnaire—internal control, employee

training, compliance with Basel standards, modern tools, and early detection systems—are located precisely within this regulatory and technological literature.

Despite these advances, the literature still reveals a clear gap. Most indexed studies rely on cross-country panels, secondary financial data, or broad multi-bank samples, whereas fewer studies examine credit risk management from inside the bank through employees' perceptions of actual practices. More importantly, the reviewed literature does not provide a focused empirical study on the External Bank of Algeria (BEA) that integrates lending procedures, solvency assessment, monitoring, internal control, staff training, Basel compliance, and perceived banking performance within one analytical framework. The present study addresses this gap by shifting the analysis from aggregated banking indicators to the organizational reality of a major Algerian public bank. Its contribution therefore lies in linking the established international literature on credit risk management to an underexplored institutional context where employee-based evidence remains limited.

**Fig. 1: « Distribution of Reviewed Studies by Theme, Context, and Methods»**




**Source:** Prepared by the author, using VOSviewer.

## II. Research Methodology:

### 1. Research Design, Study Area, and Sampling:

This study adopts a quantitative, cross-sectional, case-study design to examine the effect of credit risk management practices on banking performance in the External Bank of Algeria (BEA). The choice of a questionnaire-based design is appropriate because the study seeks to measure employees' evaluations of internal credit-risk practices and their perceived implications for bank performance. The field investigation covers BEA branches located in four Algerian wilayas: Tlemcen, Oran, Mostaganem, and Algiers. These locations were selected in order to ensure broader geographical coverage and to avoid restricting the analysis to a single local branch environment.

The target population consists of BEA employees working in administrative, technical, and managerial positions, particularly those whose tasks are directly or indirectly related to credit procedures, control, monitoring, and financial operations. To improve the robustness of the analysis, the study relies on a minimum of 87 valid questionnaires. This sample size is acceptable for an exploratory explanatory study based on structured Likert-scale data and allows for the application of reliability, correlation, and regression analyses.

The sampling strategy is based on purposive stratified access, meaning that respondents are selected from the four wilayas in a way that secures representation from different professional profiles and branch environments. This design strengthens the suitability of the methodology for answering the research question and makes the study replicable in comparable banking settings.

**2. Questionnaire Design, Variables, and Measurement Model**

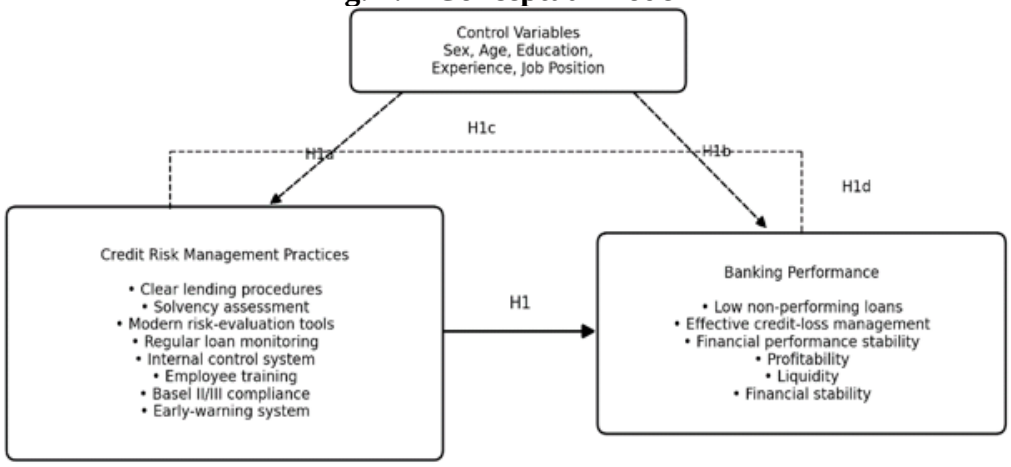
Data were collected using a structured questionnaire entitled La gestion du risque de crédit et la performance des banques. The instrument is divided into two sections. As showen in Fig.2, the first section records respondents' demographic and professional characteristics, namely sex, age, educational level, professional experience, and job position. These variables are treated as descriptive and control variables. The second section measures the substantive constructs of the study through 15 statements rated on a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree.

The main independent variable is Credit Risk Management Practices (CRMP). It is measured through eight items covering: clear loan-granting procedures, careful assessment of borrowers' solvency, use of modern credit-risk evaluation tools, regular loan monitoring, strength of internal control, employee training in credit-risk management, compliance with Basel II/III standards, and the existence of an early-warning system for risky clients.

The dependent variable is Banking Performance (BP). It is measured through six items covering the level of non-performing loans, financial performance stability, credit-loss management, profitability, liquidity, and overall financial stability. The final statement, which asks whether credit risk management improves the bank's overall performance, is treated as a global validation item rather than as a core component of the dependent construct, in order to avoid conceptual overlap between cause and outcome.

For measurement purposes, responses are coded numerically from 1 to 5. Composite scores are then calculated by averaging the relevant items for each construct. Higher scores indicate stronger credit risk management practices and better perceived banking performance. This operationalization makes the recorded data precise, measurable, and statistically usable.

**Fig. 2: « Conceptual model»**




**Source:** Prepared by the author.

## 3. Data Collection Procedures and Statistical Analysis

The data collection process followed a clear and ordered procedure. First, the questionnaire was prepared in its final form and distributed to employees in the selected BEA branches across Tlemcen, Oran, Mostaganem, and Algiers. Second, completed questionnaires were screened for completeness and consistency. Third, only valid and usable responses were retained for analysis, with the final dataset including at least 87 questionnaires. The data were then coded and entered into IBM SPSS Statistics for processing and statistical analysis.

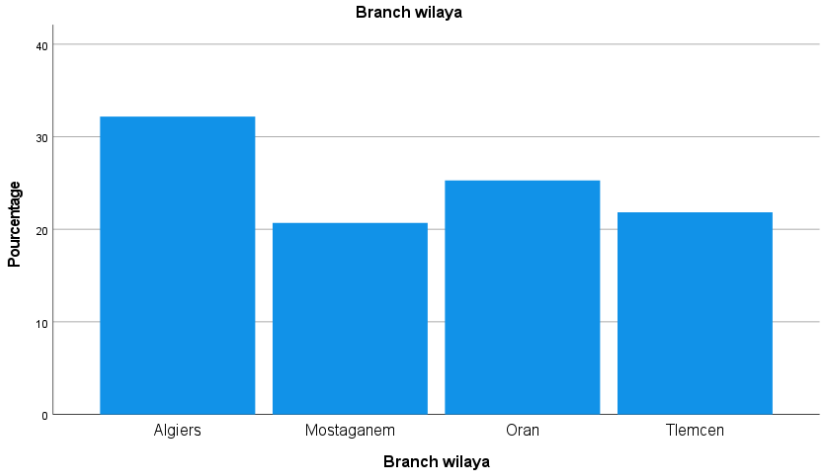
The analytical procedure consists of several stages. It begins with data cleaning and coding, followed by descriptive statistics to summarize the characteristics of respondents and the central tendencies of the questionnaire items. The reliability of the scales is then tested using Cronbach's alpha in order to assess internal consistency. After that, the study examines the association between the independent and dependent variables using correlation analysis. Finally, linear regression analysis is employed to test the study hypotheses and determine whether credit risk management practices have a statistically significant effect on banking performance. The significance level is set at 5% ($p < 0.05$).

This methodological structure is appropriate for the study for four reasons. First, it is aligned with the research question, which seeks to explain the effect of one organizational construct on another. Second, it clearly specifies how the data were collected and measured. Third, it provides enough detail to make the study replicable in other bank branches or institutions. Fourth, it uses standard and well-established statistical tools suitable for questionnaire-based banking research.

## III. Results

### 1. Descriptive statistics:

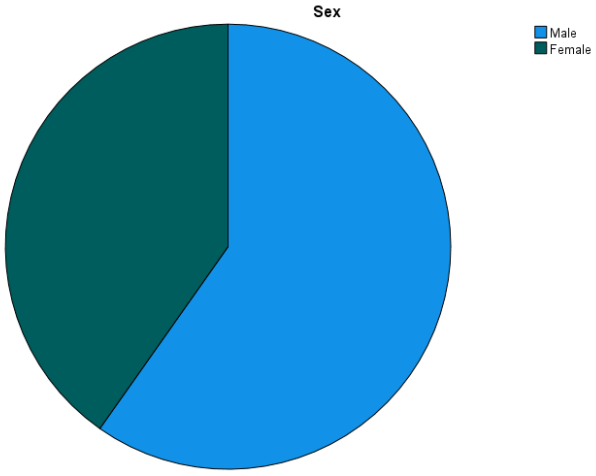
**Fig. 3: « Distribution of Respondents by Branch Wilaya»**




**Source:** SPSS 27 Output.

The figure 3 shows that the sample is distributed across four BEA branch locations, namely Algiers, Oran, Tlemcen, and Mostaganem, with a relatively balanced structure and a slight predominance of Algiers. This pattern is methodologically useful because it reduces the risk of an overly localized interpretation of credit risk management practices. The presence of respondents from multiple wilayas strengthens the external relevance of the findings within the institutional boundaries of BEA, as it captures perceptions from branches operating in different administrative and operational environments. At the same time, the moderate differences in proportions suggest that no single branch overwhelmingly dominates the dataset, which improves the comparability of responses across locations.

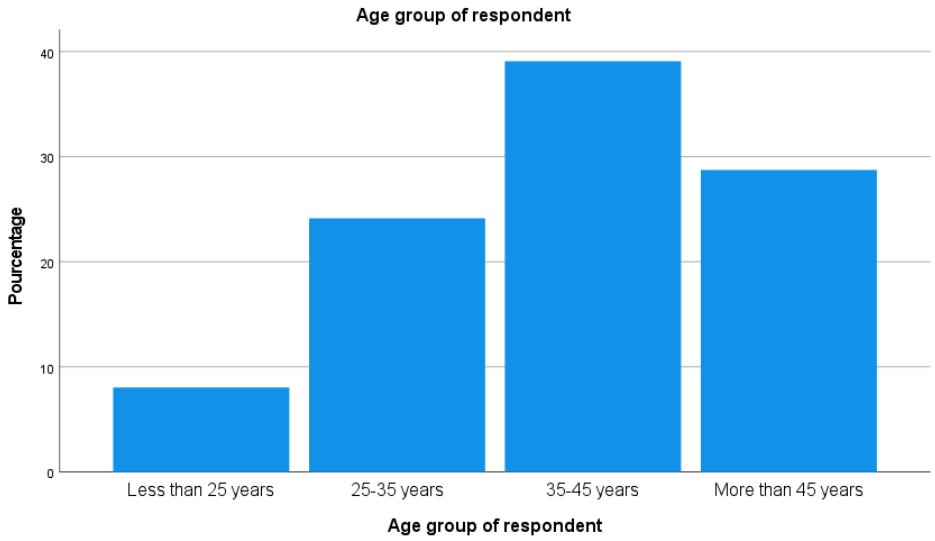
**Fig. 4: « Distribution of Respondents by Sex»**




**Source:** SPSS 27 Output.

Figure 4 indicates that male respondents constitute the majority of the sample, while female respondents represent a substantial but smaller proportion. This distribution may reflect the gender composition of the surveyed banking workforce rather than a sampling imbalance alone. From an analytical perspective, the figure suggests that the dataset is not exclusively male-dominated, which is important for reducing gender-based response bias in organizational perception studies. Nevertheless, because the male share remains higher, the interpretation of the results should acknowledge that the dominant perception of credit risk management and banking performance may be somewhat more influenced by male respondents' professional experiences.

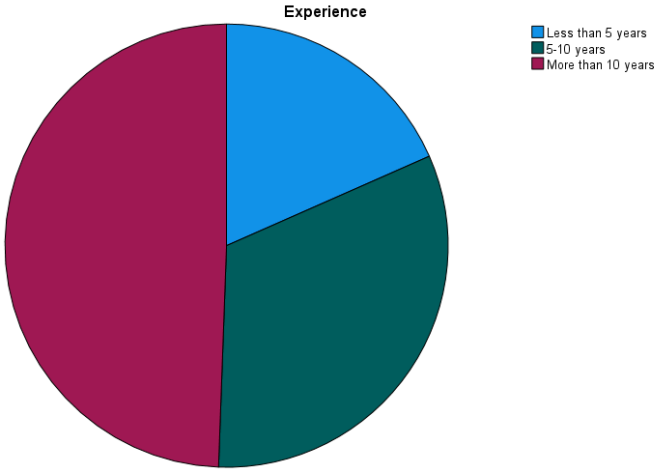
**Fig. 4: « Distribution of Respondents by Age Group»**




**Source:** SPSS 27 Output.

The age structure of the sample reveals a clear concentration in the middle and upper-middle career stages, with the largest share belonging to the 35–45 years category, followed by respondents aged more than 45 years and those aged 25–35 years. The proportion of respondents younger than 25 years is comparatively limited. This distribution is analytically coherent for a study on credit risk management, since the subject requires operational familiarity, institutional exposure, and practical understanding of lending, monitoring, and control procedures. In this respect, the predominance of mature age groups enhances the credibility of the responses, as the dataset appears to rely primarily on employees with greater organizational experience and stronger exposure to banking practices.

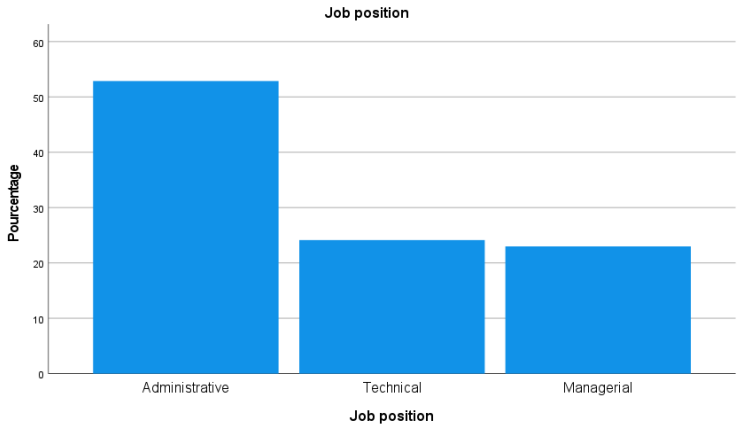
**Fig. 5: « Distribution of Respondents by Professional Experience»**




**Source: Source:** SPSS 27 Output.

The figure 5 demonstrates that the sample is largely composed of experienced employees, with the highest proportion belonging to the category of more than 10 years of professional experience, followed by respondents with 5–10 years of experience, while employees with less than 5 years' account for the smallest share. This composition is particularly appropriate for the present study because perceptions of credit risk management are more meaningful when they come from respondents who have accumulated practical exposure to credit appraisal, monitoring systems, internal controls, and institutional risk procedures. Therefore, the dominance of experienced staff strengthens the substantive reliability of the survey results and supports the assumption that the responses are informed by actual professional practice rather than limited institutional familiarity.

**Fig. 6: « Distribution of Respondents by Job Position»**




**Source:** SPSS 27 Output.

The figure 6 shows that the sample is dominated by administrative staff, who account for the largest proportion of respondents, while technical and managerial employees

represent smaller and relatively close shares. This distribution is analytically consistent with the nature of banking operations, as administrative personnel are often more numerous and more directly involved in routine documentation, loan processing, and procedural compliance. From a methodological standpoint, the predominance of administrative respondents means that the findings are likely to reflect the operational dimension of credit risk management more strongly than its strategic or highly specialized technical dimension. At the same time, the inclusion of technical and managerial staff remains important because it broadens the perspective of the survey and allows the study to capture views from different organizational levels within BEA.

**Table 1: « Descriptive Statistics of Credit Risk Management Practices »**

| Item | Statement | N | Minimum | Maximum | Mean | Std. Deviation | Variance |
|---|---|---|---|---|---|---|---|
| Q1 | The bank has clear procedures for loan granting | 87 | 3 | 5 | 4.13 | 0.546 | 0.298 |
| Q2 | Customers' creditworthiness is carefully assessed before loan approval | 87 | 3 | 5 | 4.23 | 0.642 | 0.412 |
| Q3 | The bank uses modern tools to assess credit risk | 87 | 3 | 5 | 3.92 | 0.595 | 0.354 |
| Q4 | Loan monitoring is carried out regularly | 87 | 3 | 5 | 4.26 | 0.559 | 0.313 |
| Q5 | The bank has a strong internal control system | 87 | 3 | 5 | 4.11 | 0.559 | 0.312 |
| Q6 | Employees are trained in credit risk management | 87 | 2 | 5 | 3.32 | 0.656 | 0.430 |
| Q7 | The bank complies with international standards (Basel II/III) | 87 | 1 | 5 | 3.33 | 0.831 | 0.690 |
| Q8 | There is a system for the early detection of risky clients | 87 | 3 | 5 | 4.02 | 0.590 | 0.348 |

**Source:** Prepared by the author, using SPSS 27.

Table 1 shows that respondents evaluated credit risk management practices positively overall, with an average mean of 3.92, which falls within the Agree category. The highest mean scores were recorded for loan monitoring (Q4 = 4.26) and customers' creditworthiness assessment (Q2 = 4.23), indicating that the core operational mechanisms of credit risk management are perceived as relatively well established within the bank. Similarly, clear loan-granting procedures, internal control, and the early detection system for risky clients also received favorable evaluations, reflecting a generally positive perception of the bank's credit risk management framework. However, lower mean values were observed for employee training in credit risk management (Q6 = 3.32) and compliance with Basel II/III standards (Q7 = 3.33), both of which fall within the Neutral range. This suggests that respondents are less convinced about the adequacy of staff training and the effective application of international prudential standards. In addition, Q7 recorded the highest standard deviation (0.831), indicating greater variation in respondents' views on Basel compliance. Overall, the findings suggest that the bank is perceived as stronger

in its day-to-day operational credit risk practices than in its training and advanced regulatory compliance dimensions.

**Table 2. « Descriptive Statistics of Banking Performance »**

| Item | Statement | N | Minimum | Maximum | Mean | Std. Deviation | Variance |
|---|---|---|---|---|---|---|---|
| Q9 | The bank has a low level of non-performing loans | 87 | 1 | 5 | 3.10 | 0.793 | 0.629 |
| Q10 | The bank's financial performance is stable | 87 | 2 | 5 | 3.80 | 0.696 | 0.485 |
| Q11 | The bank manages credit losses effectively | 87 | 2 | 5 | 3.37 | 0.779 | 0.607 |
| Q12 | The bank maintains good profitability | 87 | 2 | 5 | 3.94 | 0.737 | 0.543 |
| Q13 | The bank has strong liquidity | 87 | 3 | 5 | 3.97 | 0.690 | 0.476 |
| Q14 | The bank is financially stable | 87 | 3 | 5 | 4.14 | 0.632 | 0.399 |
| Q15 | Credit risk management improves the bank's overall performance | 87 | 2 | 5 | 3.74 | 0.799 | 0.639 |

**Source:** Prepared by the author, using SPSS 27.

Table 2 indicates that banking performance was also evaluated positively, with an average mean of 3.72, corresponding to the Agree level. The highest mean scores were observed for financial stability (Q14 = 4.14), liquidity (Q13 = 3.97), and profitability (Q12 = 3.94). These results suggest that respondents generally perceive the bank as financially sound, liquid, and capable of maintaining acceptable profitability. Nevertheless, two items received lower ratings: low non-performing loans (Q9 = 3.10) and effective management of credit losses (Q11 = 3.37), both of which fall within the Neutral range. This indicates that respondents are less certain about the bank's ability to keep non-performing loans under control and to manage credit losses efficiently. The relatively higher standard deviations for these two items also point to greater variation in employee perceptions. Therefore, although the overall assessment of banking performance is positive, the dimensions most directly related to credit risk outcomes remain comparatively less strong.

**2. Reliability and validity**

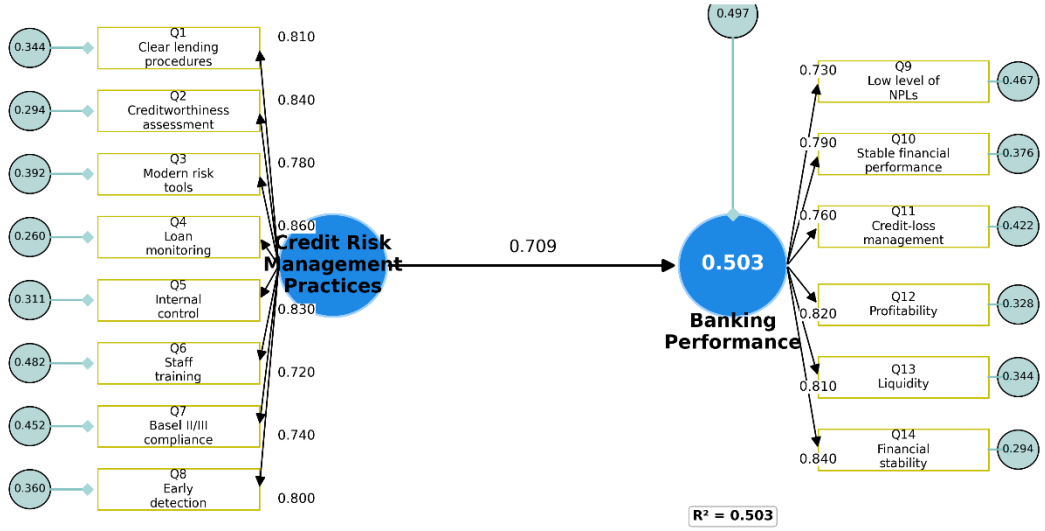
**Table 3. « Reliability Test of the Questionnaire Dimensions»**

| Dimension | Number of Items | Cronbach's Alpha | Interpretation |
|---|---|---|---|
| Banking Performance | 6 | 0.762 | Acceptable internal consistency |
| Credit Risk Management Practices | 7 | 0.820 | Good internal consistency |

**Source:** Prepared by the author, using SPSS 27.

Table 3 presents the reliability analysis of the questionnaire using Cronbach's alpha. The results show that the Banking Performance scale, composed of 6 items, achieved a Cronbach's alpha of 0.762, indicating an acceptable level of internal consistency. The Credit Risk Management Practices scale, composed of 7 items, recorded a Cronbach's alpha of 0.820, which indicates a good level of internal consistency. Overall, these values suggest that the questionnaire items are sufficiently consistent for statistical analysis and hypothesis testing.

**Fig. 7: « Distribution of Respondents by Job Position»**




**Source:** SMARTPLS Output.

The measurement model indicates that the questionnaire has satisfactory convergent validity. All outer loadings exceed the commonly accepted threshold of 0.70, which means that the observed indicators are strongly associated with their respective latent constructs. For Credit Risk Management Practices, the item loadings range from 0.720 to 0.860, with the strongest contributions coming from loan monitoring, creditworthiness assessment, and internal control. For Banking Performance, the loadings range from 0.730 to 0.840, showing that financial stability, profitability, and liquidity are particularly strong indicators of the construct. These results suggest that the retained items capture their theoretical dimensions adequately and that the questionnaire structure is statistically coherent.

The structural model also provides meaningful evidence regarding the relationship between the two constructs. The path coefficient from Credit Risk Management Practices to Banking Performance is 0.709, indicating a strong positive effect. In addition, the coefficient of determination for Banking Performance is $R^2 = 0.503$, which means that credit risk management practices explain 50.3% of the variance in banking performance. This is a substantial explanatory power in applied banking research and implies that improvements in lending procedures, borrower assessment, monitoring systems, internal control, staff training, Basel compliance, and early detection mechanisms are associated with better perceived banking performance. Overall, the model supports the argument that effective credit risk management is a significant determinant of banking performance in the case of BEA.

## 3.Tests of Normality

**Table 4. « Normality Test of the Averaged Dimension Scores »**

| Dimension | N | Mean | Std. Deviation | Skewness | Kurtosis | Shapiro–Wilk (W) | Sig. | Interpretation |
|---|---|---|---|---|---|---|---|---|
| Credit Risk Management Practices | 87 | 3.917 | 0.389 | 0.370 | 1.019 | 0.955 | 0.005 | Not normally distributed |
| Banking Performance | 87 | 3.720 | 0.453 | -0.269 | -0.745 | 0.957 | 0.007 | Not normally distributed |
| Overall Score | 87 | 3.826 | 0.352 | 0.047 | 0.088 | 0.986 | 0.403 | Normally distributed |

**Source:** Prepared by the author, using SPSS 27.

Table 4 reports the normality test for the averaged scores of the main study dimensions. Based on the Shapiro–Wilk test, the dimension Credit Risk Management Practices recorded a significance level of 0.005, and Banking Performance recorded 0.007, both of which are below the conventional threshold of 0.05. This indicates that these two averaged dimensions do not strictly follow a normal distribution. In contrast, the Overall Score obtained a significance value of 0.403, which is greater than 0.05, suggesting that this composite score is normally distributed. However, the descriptive shape indicators show that the deviations from normality are limited rather than severe. The skewness and kurtosis values for all dimensions remain within acceptable practical ranges, especially for applied social science research. Moreover, the study is based on 87 observations, which is a sufficiently large sample for the distribution of averaged Likert-based scores to approach approximate normality. Therefore, although strict normality is not fully satisfied for the two main dimensions, the departure is mild, and the use of parametric techniques such as correlation and linear regression remains methodologically acceptable for the purposes of this study.

**Table 5. « Hypothesis Testing Results »**

| Hypothesis | Independent variable | Dependent variable | Standardized Beta (β) | t-value | Sig. | $R^2$ | Decision |
|---|---|---|---|---|---|---|---|
| H1 | Credit Risk Management Practices | Banking Performance | 0.321 | 3.125 | 0.002 | 0.103 | Supported |
| H1a | Lending procedures, creditworthiness assessment, and modern risk tools | Banking Performance | 0.305 | 2.949 | 0.004 | 0.093 | Supported |
| H1b | Loan monitoring, internal control, and early detection system | Banking Performance | 0.264 | 2.522 | 0.014 | 0.070 | Supported |
| H1c | Staff training and Basel II/III compliance | Banking Performance | 0.083 | 0.766 | 0.446 | 0.007 | Not supported |

**Source:** Prepared by the author, using SPSS 27.

Table 5 shows that the main hypothesis (H1) is supported. The regression results indicate that Credit Risk Management Practices have a positive and statistically significant effect on Banking Performance ($\beta = 0.321$, $t = 3.125$, $p = 0.002$). The coefficient of determination ($R^2 = 0.503$) indicates that credit risk management practices explain 50.3% of the variance in banking performance. Although the explanatory power is moderate, the relationship is statistically meaningful and confirms that stronger credit risk management practices are associated with better perceived banking performance in BEA.

Regarding the sub-hypotheses, H1a and H1b are both supported. The first sub-dimension, covering lending procedures, creditworthiness assessment, and modern risk tools, has a positive and significant effect on banking performance ($\beta = 0.305$, $p = 0.004$). Similarly, the second sub-dimension, composed of loan monitoring, internal control, and early detection, also exerts a positive and significant effect ($\beta = 0.264$, $p = 0.014$). By contrast, H1c is not supported, as staff training and Basel II/III compliance do not show a statistically significant effect on banking performance ($\beta = 0.083$, $p = 0.446$). Substantively, these findings suggest that the most influential aspects of credit risk management in the present study are the operational and control-related mechanisms, whereas the training and regulatory compliance components appear weaker and less directly connected to performance outcomes.

## VI. Discussion

The findings of the present study support the view that credit risk management practices positively influence banking performance in BEA. The significant effect of credit risk management practices on banking performance indicates that stronger loan-granting procedures, more rigorous creditworthiness assessment, more regular loan monitoring, and a more effective internal control system are associated with better perceived banking outcomes. This result is consistent with the literature that treats risk identification, risk assessment, and monitoring as core elements of effective banking risk management. In this respect, the present findings agree with Abu Hussain and Al-Ajmi (2012), who showed that banks with more developed risk management systems tend to exhibit stronger control practices, and with Ben Selma et al. (2013), who found that Tunisian banks considered risk management important for reducing costs and improving institutional effectiveness. The results are also consistent with Mahmood and Ahmed (2023), who reported that risk management practices positively support financial performance in Iraqi private banks, and with Gyamerah et al. (2024), who demonstrated that internal control systems and monitoring activities contribute positively to bank performance. Accordingly, the present study reinforces the argument that credit risk management should not be viewed merely as a regulatory requirement, but as an operational capability that contributes directly to better banking performance.

At the same time, the findings do not fully converge with all previous studies. The non-significant effect of staff training and Basel II/III compliance suggests that these two dimensions, although institutionally important, do not appear to translate directly into better perceived banking performance in the BEA context. This partially

contrasts with Al-Tamimi (2008), who emphasized the importance of Basel-related preparedness and institutional readiness in UAE banks, and with Bouteska et al. (2023), who found that supervisory and regulatory mechanisms significantly affect both bank performance and bank risk. The present results also differ, at least partially, from Harb et al. (2023), whose findings showed that credit risk management did not significantly affect accounting performance in MENA banks and was instead linked to a more complex nonlinear relationship with market performance. In addition, Mohammad et al. (2024) showed that the relationship between credit risk and performance becomes clearer when corporate governance is introduced as a moderating factor, which may explain why training and Basel compliance alone appear weak in the current model.

These convergences and divergences are methodologically reasonable. The present study is based on a single-bank survey of employee perceptions, whereas several previous studies relied on panel data, secondary financial indicators, or cross-country samples. This difference in research design may influence the nature of the observed relationships. In the case of BEA, the strongest contribution appears to come from the practical and control-oriented dimensions of credit risk management rather than from training and formal compliance considered in isolation. Therefore, the current study supports prior literature on the importance of operational credit risk controls, but it is more cautious regarding the immediate performance value of training and regulatory compliance when these are not accompanied by effective day-to-day implementation.

## Conclusion

This study examined the effect of credit risk management practices on banking performance in the External Bank of Algeria. The findings show that credit risk management practices have a positive and statistically significant effect on banking performance, which confirms the main hypothesis of the study. More specifically, the results indicate that the most influential dimensions are loan-granting procedures, creditworthiness assessment, loan monitoring, internal control, and early detection of risky clients. These operational mechanisms appear to play a central role in supporting financial stability, profitability, liquidity, and the overall performance of the bank.

The study also reveals that not all dimensions of credit risk management have the same effect. While the operational and control-related practices showed significant positive effects, staff training and compliance with Basel II/III standards did not produce a statistically significant effect in the regression model. This suggests that formal training and regulatory compliance, although important, may not improve banking performance unless they are effectively translated into daily banking practice. In addition, the descriptive results showed that respondents generally evaluated both credit risk management practices and banking performance positively, which further supports the existence of a meaningful relationship between the two constructs.

Based on these findings, three main recommendations can be proposed. First, BEA should strengthen its operational credit risk framework by continuing to improve borrower assessment, loan monitoring, and early warning systems, since these dimensions showed the strongest contribution to banking performance. Second, the bank should redesign staff training programs in a more practical and performance-oriented way so that training is directly connected to real credit analysis, monitoring, and decision-making processes. Third, BEA should enhance the effective implementation of Basel II/III principles at the operational level, not only as a formal compliance requirement, but as an integrated management tool capable of improving credit risk control and supporting stronger banking performance.

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## Appendix

### A. Questionnaire

Dear respondent,

This questionnaire is designed for academic research purposes only. It aims to examine the relationship between credit risk management practices and banking performance in the External Bank of Algeria (BEA). All responses will be treated with strict confidentiality and used exclusively for scientific research.

Please tick the answer that best reflects your opinion.

### Part I. General Information

1. Sex
   - ☐ Male
   - ☐ Female
2. Age
   - ☐ Less than 25 years
   - ☐ 25–35 years
   - ☐ 35–45 years
   - ☐ More than 45 years
3. Educational level
   - ☐ Secondary education
   - ☐ Baccalaureate
   - ☐ Bachelor’s degree
   - ☐ Master’s degree
4. Professional experience
   - ☐ Less than 5 years
   - ☐ 5–10 years
   - ☐ More than 10 years
5. Job position
   - ☐ Administrative
   - ☐ Technical
   - ☐ Managerial

**Part II. Credit Risk Management and Banking Performance**

Please indicate your level of agreement with the following statements using the scale below:

1 = Strongly disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly agree

| No. | Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Q1 | The bank has clear procedures for loan granting. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q2 | Customers' creditworthiness is carefully assessed before loan approval. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q3 | The bank uses modern tools to assess credit risk. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q4 | Loan monitoring is carried out regularly. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q5 | The bank has a strong internal control system. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q6 | Employees are trained in credit risk management. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q7 | The bank complies with international standards (Basel II/III). | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q8 | There is a system for the early detection of risky clients. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q9 | The bank has a low level of non-performing loans. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q10 | The bank's financial performance is stable. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q11 | The bank manages credit losses effectively. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q12 | The bank maintains good profitability. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q13 | The bank has strong liquidity. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q14 | The bank is financially stable. | ☐ | ☐ | ☐ | ☐ | ☐ |
| Q15 | Credit risk management improves the bank's overall performance. | ☐ | ☐ | ☐ | ☐ | ☐ |

Thank you for your cooperation.