Journal of Business and Trade Economics | **Volume: 11 / N°: 01 (2026), p 381-400**

The role of audited financial statements analysis in credit Granting Decisions in Algerian Commercial Banks (A Case Study of a Group of Algerian banks)

Soumia Ahmed Mili[1*]

[1] Mohamed Boudiaf University of M'sila (Algeria)

soumia.ahmedmili@univ-msila.dz

Received: 28-01-2026 Accepted: 27-03-2026 Published: 31-03-2026

Abstract:

This study investigate the role analyzing audited financial statements in making credit granting decisions in Algerian commercial banks. To achieve this goal, a questionnaire was designed and distributed to six banks, The data collected included all the necessary information to assess the impact of financial statements analysis on Credit decision-making. The statistical analysis software SPSS (version 22) was used to to process the data and test hypotheses.

The study reached a number of key findings, including:

- *Algerian commercial banks rely on financial statement analysis to make credit decisions;*
- *Internal bank policies encourage reliance on financial statements analysis as a fundamental basis for credit decisions- making;*
- *The credit decisions process is based on several key financial ratios such liquidity ratios, financial structure ratios, and comparison of financial indicators related to the customer's activity. In-kind guarantees also play a crucial role in the decision- making process.*

We also presented a set of recommendations, the key Recommendations of which are:

- *Increase the focus on financial analysis by training credit officers, and appointing qualified, experienced staff in this domain;*
- *Encourage credit analysts to pay greater attention to relevant financial ratios to guide rational credit decisions.*

Key words: *credit decision, financial statements, financial analysis, auditing, commercial banks.*

Jel Classification Codes: *G210, G320, M420.*

[*] ***Corresponding author***

1. Introduction:

Financial analysis is based on the use of financial statements, which are considered among the most significant sources of information for credit applicants. These statements present the financial position of a company at a specific point in time, as well as the results of its operations over a previous period. They enable users to forecast the company's future regarding return on investment, profit distributions, and the risks related to expected cash flows.

Accordingly, banks place great emphasis on analyzing historical financial statements, as well as preparing and analyzing projected financial statements and cash budgets. These are predictive tools used in business planning through the application of various managerial instruments, such as budget forecasts, financing plans, and others.

1.1 Research Problem: The analysis of financial statements is highly significant for various economic institutions, especially banks when granting credit. These statements assist in evaluating the client's current and future financial position. Based on this, the primary research question can be formulated as follows:

Do audited financial statements play a role in the credit decision-making process in Algerian commercial banks?

This main question is divided into the following sub-questions:

- Do the Algerian commercial banks under study utilize financial statements in the process of making credit decisions?
- What are the key indicators extracted from financial statements that are relied upon when making credit decisions?
- Does the application of auditing methods influence credit decision-making in the Algerian commercial banks under study?

1.2 Hypotheses: This study aims to test the following hypotheses, which align with the proposed research questions:

- H01: The Algerian commercial banks under study rely heavily on financial statements when making credit decisions.
- H02: The most important indicators extracted from financial statements are liquidity ratios and activity ratios.
- H03: The auditing method has a positive impact on credit decision- making in the Algerian commercial bank.

1.3 Significance of the Study: Audited financial statements, presented in accordance with accounting standards, are valuable for evaluating a client's current and future financial position, profitability, and ability to generate the necessary cash flows to repay credit. They also help in identifying potential losses in the event of client default. Therefore, this study aims to investigate the role of audited financial statement analysis in the credit decision-making process of Algerian commercial banks.

1.4 Objectives of the Study: This study seeks to achieve the following objectives:To identify the most important financial analysis tools, particularly financial ratios, used by commercial banks in Algeria;To determine the importance of financial statement analysis in credit decision-making by Algerian commercial banks;To assess the extent to which

Algerian commercial banks rely on the analysis of audited financial statements when making credit decisions.

1.5 Research Methodology: This study employs the descriptive and analytical method to address the research problem, present relevant information, and analyze it to understand the role of audited financial statement analysis and the extent to which it is relied upon by Algerian commercial banks in credit decision-making. The analysis is conducted using the SPSS statistical software, version 22. Additionally, the inductive method is used through the analysis of questionnaires with statistical tools in order to derive accurate results.

1.6 Previous Studies: Despite the considerable value of the information provided by financial statements in guiding credit decision-making in banks, previous studies have generally overlooked an essential aspect—namely, the role of financial statement analysis in the credit-granting process. One of the relevant studies includes:

- Raed Nafez Khudair's study titled "The Extent of the Use of Audited Financial Statements by Jordanian Banks in the Decision to Grant Commercial Credit Facilities", Master'sthesis, Faculty of Graduate Studies in Administrative and Financial Sciences, Amman Arab University for Graduate Studies, Amman, Jordan, 2004.

The objective of this study was to determine the extent to which commercial borrowers' financial statements are used when Jordanian banks make decisions to grant credit facilities. It also examined the factors affecting the degree of reliance on these statements, as well as the reasons that limit their use in the credit decision-making process. The researcher conducted a field study involving 13 banks and distributed questionnaires to credit officers and central bank inspectors.

The findings indicated that financial statements play an important role in credit decisions from the perspective of credit officers, although other considerations are also taken into account. Central bank inspectors, however, viewed this role as insufficient. The researcher concluded that the cash flow statement holds the highest importance in credit decisions, followed by the income statement and the balance sheet, respectively. Moreover, the study revealed that client characteristics and the availability of adequate collateral negatively affect the reliance on financial statements, whereas the amount of credit granted has a positive effect on their use.

The researcher also recommended increasing reliance on financial statements when making credit decisions in order to reduce associated risks. Furthermore, he emphasized the need for an agreement among banks not to consider applications for commercial credit facilities unless clients provide audited and credible financial statements. He also suggested reducing dependence on collateral guarantees in the credit decision-making process.

- Study by Rami Hashem Al-Shanbari, titled "Financial Analysis and Its Role in Credit Decision-Making in Commercial Banks Operating in Palestine," Master's Thesis, Graduate School, American World University, Department of Financial Planning, Palestine, 2006.

This study aimed to assess the extent to which banks rely on financial analysis as a tool to guide banking credit decisions. To achieve this objective, the researcher conducted a field study covering banks operating in the Gaza Strip, including 15 Palestinian and Arab

banks—8 Palestinian and 7 Arab institutions. A questionnaire was distributed to 76 employees, and 70 responses were recovered, representing a return rate of 92%.

The researcher concluded that neither the nature of the bank's operations nor the department in which the employee works had a significant impact on the degree of reliance on financial analysis. Furthermore, the study found that 37.1% of credit facility officers did not request financial information from clients. When financial statements were required, the most frequently requested documents were: the income statement, the balance sheet, and the cash flow statement, respectively.

The researcher made several recommendations, most notably: the necessity of enhancing focus on financial analysis by improving the capabilities of credit officers to perform such analyses, and the importance of hiring competent and experienced personnel in credit facilities departments.

- Study by Ammar Akram Omar Al-Tawil, titled "The Extent of Banks' Reliance on Financial Analysis to Predict Default: An Applied Study on National Commercial Banks in the Gaza Strip," Master's Thesis, Faculty of Commerce, Islamic University, Department of Accounting, Gaza, Palestine, 2008.

This study aimed to explore the extent to which national commercial banks rely on financial analysis to predict default. To achieve this aim, the researcher conducted a comprehensive survey involving 65 employees working in national commercial banks in Gaza. A comprehensive questionnaire was utilized to gather all relevant data regarding the use of financial analysis and the identification of key causes of financial default. The data was analyzed using statistical techniques.

The study yielded several key findings. Primarily, banks significantly relied on financial analysis in performance evaluation and decision-making processes. However, the reliance was comparatively limited in the context of forecasting financial failure or default. Furthermore, banks did not sufficiently focus on training their employees in predictive financial analysis.

Among the study's key recommendations were: the necessity for banks to conduct continuous training programs in financial analysis, especially in default prediction; encouraging employees to participate in such training through performance-based incentives; and the development of a predictive default model tailored to the conditions and variables of the Palestinian banking sector, to enable early detection of potential default risks.

- Daniela Feschijan, "Analysis of the Credit Worthiness of Bank Loan Applicants," Economics and Organization, Vol. 05, No. 3, 2008.

This study explored the importance of creditworthiness analysis in making lending decisions. The researcher presented a theoretical model for analyzing borrowers' creditworthiness, identifying the fundamental elements of such analysis. These include the factors and conditions that may impact timely repayment of credit and the stages of credit analysis. A crucial component of the analysis is the assessment of credit risk, which requires thecollection of reliable and credible information about the borrower's financial position and surrounding conditions.

The study emphasized that accounting information can be used to assess creditworthiness. Among the most relevant accounting reports for credit evaluation are: the

balance sheet, profit and loss statement, statement of changes in equity, cash flow statement, and audit reports on the company's financial status.

Ultimately, the researcher concluded that the core objective of credit analysis is to provide sufficient information regarding the credit commitment, assess the level of associated risks, and determine whether adequate protective measures are in place to mitigate potential credit risks. Preventive action must be taken based on credit analysis findings that highlight specific risk factors in the borrower's operations.

- Study by Yasser Abdul-Hamid Hussein Al-Zahhar, titled "The Role of Financial Analysis in Credit Decision-Making and Default Prediction: An Applied Study on Yemeni Commercial Banks," Master's Thesis, College of Financial and Banking Sciences, Arab Academy, Sana'a, Iraq, 2009.

One study aimed to assess the extent to which Yemeni commercial banks rely on financial analysis in making credit decisions and predicting default. A field study was conducted involving 34 employees from Yemeni commercial banks using a comprehensive survey approach. The study utilized a questionnaire covering all relevant data to evaluate the extent of reliance on financial analysis for credit decision-making and default prediction. The descriptive and analytical methodology was adopted to present information and analyze data using statistical software and appropriate analytical techniques.

The study reached several conclusions, most notably: Yemeni commercial banks do rely on financial analysis for credit decision-making, but to a lesser extent for default prediction. Additionally, the study identified key obstacles hindering effective financial analysis, primarily a lack of trust in financial statements and the failure of clients to maintain organized financial records.

Accordingly, the researcher made several recommendations, the most important of which include: the need to enhance focus on financial analysis by training credit officers in its application; the necessity for banks to offer specialized training courses, particularly in default prediction; and the importance of appointing competent and experienced personnel in credit departments, especially those handling financial analysis.

- Another relevant study is that of Tania Kader Abdulrahman, titled: "The Role of Financial Analysis in Diagnosing Strengths and Weaknesses in the Financial Statements of Borrowing Firms for Credit Decision-Making: An Applied Study on Selected Banks in Kirkuk," published in Tikrit Journal of Administrative and Economic Sciences, Vol. 8, No. 26, 2012.

This study aimed to highlight the role of financial statement analysis in credit decision-making at the banking level, and to identify the most influential factors in assessing strengths and weaknesses in financial statements. The research sample consisted of nine banks in Kirkuk—five government-owned and four private commercial banks. The study targeted credit officers and individuals authorized to grant credit facilities.

The main findings indicated a growing importance of financial analysis in identifying key factors that directly impact the evaluation of financial statement strength and weakness. A positive correlation was found between reliance on financial analysis and the accuracy of credit decisions for borrowing firms.

The study recommended the application of financial analysis in reviewing financial statements prior to credit approval. It also emphasized the need for banks, especially those in

Kirkuk, to increase their focus on financial analysis and to regularly train their staff to stay current with evolving practices in the field.

- Additionally, a study by Y. A. Babalola and F. R. Abiola, titled "Financial Ratio Analysis of Firms: A Tool for Decision Making," published in the International Journal of Management Sciences, Vol. 1, No. 4, 2013.

explored the use of financial ratios in accounting and financial management, and how they assist decision-makers in understanding profitability, financial position, and operational efficiency.

The authors emphasized the link between financial analysis and accounting, highlighting the foundational role accounting plays in generating the data used in analysis. Financial analysis, as a subset of accounting, collects, processes, and interprets financial data to assess and forecast the financial performance and position of a firm. Key tools include comparative financial statement analysis, ratio analysis, and cash flow analysis, culminating in comprehensive performance evaluation.

The study concluded that there is a historical and functional relationship between accounting and financial analysis. Accounting provides the necessary data, while financial analysis exploits that information for decision-making purposes. The researchers noted that many financial databases are built from statistical data embedded in accounting systems, and that refining this data enhances portfolio management strategies. As such, financial analysis continues to be an indispensable function for financial analysts and institutional decision-makers.

2. Fundamental Concepts of Credit:

Credit decisions—whether to approve, conditionally accept, or reject a customer's loan application—are made in light of the key credit factors governing banking activities. Such decisions require balancing the expected return against the associated risks and potential costs of the requested credit.

2.1 Definition of Credit: Credit refers to the sense of security or trust established between the creditor and the debtor. It is defined as the process of delivering money, goods, or services in the present in exchange for a promise of future repayment. (Jabr, 2008 ,p.220) This concept is based on several essential elements:

- **Trust**: The bank must conduct a comprehensive assessment of the customer’s creditworthiness to ensure the reliability of repayment.
- **Debt Relationship**: A legal and financial relationship is formed between a creditor and a debtor.
- **Interest Determination**: The interest charged on the credit represents the bank’s primary source of income from borrowers.
- **Credit Purpose**: It is important to identify whether the funds are intended to finance investment operations or working capital, and to determine the specific activity to which the financing will be directed.
- **Maturity Period**: A time gap must exist between the disbursement and repayment of the loan.
- **Collateral:** Collateral serves as a safeguard to enable the bank to recover its funds in the event of future default or adverse events.

- **Risk**: Risk increases with the length of the loan term due to the greater likelihood of unforeseen changes in future circumstances.

2.2 Credit Granting Conditions: This refers to the set of rules, procedures, and techniques applied in the process of granting credit to customers. These conditions include (Dawood, 2012, p. 32):

- Credit Limit: The maximum value of credit that the bank can extend to a customer.
- Collateral Requirements: The specific situations in which a customer is required to provide collateral to secure the credit.
- Types of Acceptable Assets as Collateral: The nature of assets that can be accepted as guarantees.
- Loan-to-Value Ratio (LTV): The ratio of the loan amount to the value of the pledged asset, which varies based on the nature of the credit and the volatility of the asset's market value.
- Procedures for Value Depreciation: Steps to be taken if the market value of the collateral decreases.
- Compensating Balance: The minimum balance that the customer must maintain in their bank account.
- Alternative Recovery Options: Other means the bank may resort to in order to secure repayment of its receivables.

2.3 Characteristics and Components of the Credit Granting Decision: the characteristics and essential components of the credit decision can be summarized as follows: (El-Shawarbi, 2002 ,pp. 552–554)

2.3.1 Characteristics of the Credit Decision: These characteristics revolve around the following points:

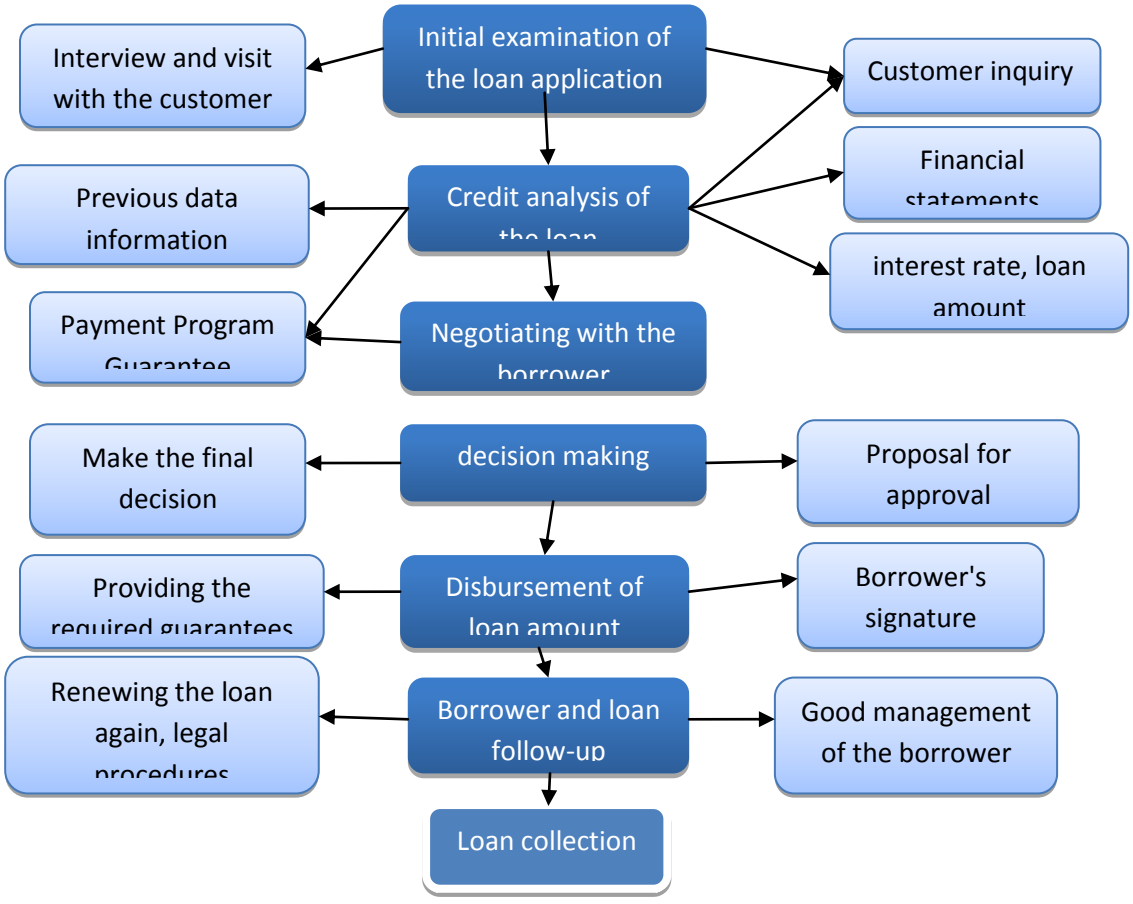
- Liquidity: The borrower's ability to repay the full loan amount on the agreed-upon date and under the agreed terms. The credit analyst must verify this capability and ensure that the credit is used for its intended purpose, with a clear repayment source identified.
- Profitability: The credit decision must balance the analyzed risk against the expected return, in alignment with the bank's overall credit policy. Profitability not only ensures adequate returns for shareholders but also covers operational costs. Nonetheless, decisions must not compromise credit quality for the sake of achieving targeted financial figures.
- Security: The assurance that loaned funds will be repaid by the due date, which stems primarily from the borrower's liquidity. Evaluating the creditworthiness of the customer is critical to this assurance.
- Credit Portfolio Diversification: Diversification aims to reduce concentration risk by avoiding excessive exposure to a single geographic area or economic sector. Unexpected fluctuations in such areas could significantly harm the bank's financial stability. Therefore, diversification enhances the overall security of the credit portfolio by mitigating potential risks.
- Collateral: While considered a last-resort safeguard against unforeseen adverse circumstances or high-risk scenarios, collateral remains essential. However, it ranks last in the hierarchy of the credit decision process. The foundation of a sound credit decision lies in accurate financial analysis of cash flows and a reliable assessment of the borrower's creditworthiness.

2.3.2 Components of the Credit Granting Decision: The main components that underpin the decision to grant credit can be summarized as follows:

- Credit is granted to customers who demonstrate strong creditworthiness.
- The credit must be directed toward a clear, legitimate purpose that aligns with the nature of the customer's business and the bank's credit policy.
- The amount of credit should be appropriate to its intended purpose and proportionate to the borrower's financial position and capital structure.
- The credit decision-making authority must possess the necessary personal and objective qualifications to make sound credit judgments.
- There must be a clear and well-defined source of repayment directly linked to the purpose of the credit, supported by a high degree of confidence and certainty.

2.4 Stages of the Credit Decision-Making Process: The decision to approve or reject a credit request follows a structured set of stages and steps that help guide the bank toward a well-founded conclusion. The credit department is not permitted to act on personal judgment alone in making such decisions. Instead, the process proceeds through a series of defined steps, illustrated in the following figure:

Figure 01: Stages of the Credit Decision-Making Process



Source: (Salam, 2000, p. 281)

2.5 Factors Influencing the Credit Granting Decision: To enhance the precision and objectivity of credit decisions, credit analysts have identified a set of key factors that help determine whether or not credit should be granted. These factors are categorized as follows:

Table No. (01): Shows the factors influencing credit decision-making.

Customer-related factors	Bank-related factors	Credit-specific factors
Character (trustworthiness and reputation of the client)	Bank objectives	Purpose of the crédit
Capital (financial strength)	Bank's material and human capabilities	Duration of the loan
Repayment capacity (ability to service the debt)	Market share in the banking sector	Loan amount
Collateral (available guarantees)	Liquidity position	Source of repayment
External conditions (environmental and economic factors surrounding the client)	Bank's strategic orientation	Method of repayment
		Type of credit requested

Source: (El-Shawarbi, 2002, p. 557)

3. Analytical Procedures for Examining Financial Statements:

The decision to grant credit is among the most critical decisions taken by a bank's management. As such, the bank evaluates a range of factors that may influence this decision. This process is referred to as credit analysis, wherein the credit department collects all necessary information, reports, and financial statements related to the client. These materials are then transferred to the specialized credit analysis unit, which reviews them and prepares a comprehensive and accurate report on the client.

3.1 Types of Financial Statements: Financial statements are the primary means through which information is communicated to external parties, such as banks. They present the financial position of an economic entity at a given point in time and the results of its operations over a past period. However, the true significance of these statements lies in their ability to inform users about the institution's future prospects—specifically in terms of returns on investment, profit distributions, and risks associated with cash flows. The principal types of financial statements are as follows:

- Balance Sheet: The balance sheet presents the financial position of an entity at a specific date. It details the entity's assets, liabilities, and owners' equity. Typically, it is prepared on an annual basis. Key components: assets (such as cash, inventory, and property), liabilities (such as loans and accounts payable), and equity (such as capital and retained earnings). (Al-Hadhouna, 2010,p42)
- Income Statement: Also referred to as the profit and loss statement, it summarizes the revenues and expenses of the entity over a given accounting period. It reflects the net income or loss by comparing revenues with corresponding expenses. (Haddad, 2009,p32)
- Cash Flow Statement: This statement outlines the cash receipts and disbursements of the institution during a specified period. Unlike other financial statements, it focuses on liquidity and assists users in evaluating the entity's ability to generate future cash flows. (Haddad, 2009,p40)

3.2 Analytical Procedures for Financial Statements: The most significant aspect of employing analytical procedures lies in selecting the most appropriate type for the specific context. There are five primary types of analytical procedures used in the analysis of financial statements. The most important of these include:

- Comparison of Client Data with Industry Data: Comparing a client's data with benchmarks from the industry in which they operate aids in understanding the client's business and provides an indication of potential financial failure. This information is

also useful to the auditor when assessing the relative adequacy of the client's capital structure and borrowing capacity.

There may be discrepancies between the nature of the client's financial data and those of the industry aggregates, making comparisons less meaningful. Industry data typically represent general averages that may not reflect the client's unique situation. The use of varying accounting practices across firms may affect the reliability of such comparisons. (Shehata, 2008, pp. 200–201)

- Comparison of Client Data with Corresponding Figures from Previous Periods: This includes several types of analytical procedures, the most notable of which is:

- Horizontal Analysis (Trend Analysis): This method focuses on analyzing the trends and changes in financial statement elements over multiple periods. It is based on the following formula: (al, 2007, p172)

Percentage Change} = {New Value} – {Old Value} ÷ {Old Value}× 100

- Vertical Analysis: Also referred to as common-size analysis, this approach involves comparing financial statement items within the same accounting period. The result of this comparison is expressed in percentages, allowing for the conversion of financial relationships into relative relationships. That is, each component is shown in proportion to the total of its respective category in the financial statement. This type of analysis is characterized as a static analysis. (Aqel, 2009, p. 305)

- Ratio Analysis: Financial ratios serve to convert large volumes of historical financial data into a smaller set of indicators that are more useful for decision-making. These ratios are typically classified according to the activity or function being evaluated as follows: (Adoun, 2008, pp. 79–84)
  - ✓ Liquidity Ratios: Assess the firm's ability to meet its short-term obligations.
  - ✓ Activity Ratios: Evaluate the firm's efficiency in managing its assets.
  - ✓ Profitability Ratios: Measure the firm's ability to generate profits.
  - ✓ Leverage Ratios: Indicate the extent to which the firm relies on external liabilities to finance its investments.

- Comparing Client Data with Forecasted Results: Most companies prepare financial operating budgets that reflect the client's expectations for the accounting period. A comparison between budgeted and actual results—especially in key operational areas—can help identify potential deviations. Conversely, the absence of any significant differences might suggest that no major deviations are likely to occur. (Lotfi, 2008, p. 578)

- Comparing Client Data with Auditor's Expectations: The auditor may perform independent calculations to derive expected balances for financial statement accounts. These projections represent the values that account balances should logically reflect, based on their relationship with other accounts in the balance sheet or income statement, or derived from historical trends. (Loebbecke, 2002, p. 261)

- Comparing Client Data with Expectations Using Non-Financial Information: Comparing actual figures with projected outcomes is not limited to financial data. In fact, non-financial indicators can be valuable in evaluating the accuracy and reliability of reported results, provided these indicators are relevant and objectively measurable (Lotfi, 2008, p. 579).

4. Key Concepts in Auditing:

Auditing is one of the most important newly established professions, resulting from the complexity of contemporary business, the spread of global trade, and the expansion of domestic trade.

4.1 Definition of Auditing: Auditing is a modern profession that has emerged in response to the increasing complexity of business operations, the globalization of trade, and the expansion of internal commerce. Although definitions of auditing vary, they generally converge on a core idea centered around examination, verification, and reporting. Some prominent definitions include:

- First Definition: The term audit is derived from the Latin word audire, meaning to hear. Although this word has only recently entered contemporary usage, various other terms—such as accounting audit, financial review, internal auditing—are often used interchangeably. (Al-Tawil, 2008)
- Second Definition: According to the American Accounting Association (AAA), auditing is: "A systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria, and communicating the results to interested users." (Valin, 1992, p. 20)

Therefore, Auditing is thus a systematic process of collecting audit evidence using technical tools to determine whether financial statements accurately represent financial transactions, in accordance with relevant accounting principles—whether Generally Accepted Accounting Principles (GAAP), International Financial Reporting Standards (IFRS), or local standards. The outcome is then communicated to the concerned parties.

4.2 Importance of Auditing: Auditing is not an end in itself but a means to an end. Its primary purpose is to serve individuals and institutions that rely on audited financial statements for decision-making and strategic planning. Among the most significant beneficiaries are managers, who depend on audited reports for planning and controlling activities.

Another key group includes investors, who base their investment decisions on the reliability and accuracy of the audited financial data provided by firms.

Commercial banks rely on audited financial statements, prepared by an impartial technical body, when evaluating the financial position of institutions applying for credit. Economists also depend on these statements to estimate national income and conduct economic planning.

Furthermore, various governmental bodies and state agencies rely heavily on audited financial statements for numerous purposes, including: strategic planning, implementation, oversight and monitoring of institutions of public relevance, taxation, price-setting of essential goods and services, and decision-making regarding grants. (Al-Hilal, 2002, p. 17)

5. Field Study:

In this section, we address the following elements:

5.1 Scientific Methodology Used in the Field Study: This study aims to identify the role of financial statement analysis in credit decision-making within Algerian commercial banks. To achieve this, a sample of Algerian banks was selected, and the descriptive-analytical method was employed to highlight key variables and mechanisms related to bank credit.

Additionally, the inductive approach was used by applying theoretical concepts to the operations of Algerian commercial banks. Two primary sources were adopted:

- Secondary Sources: These were used to establish the theoretical framework of the study and include books, journals, articles, and previous research related to the subject matter.
- Primary Sources: These were used to address the analytical aspects of the research. Data were collected through a questionnaire specifically designed for this purpose and distributed to employees working in the credit departments of the selected commercial banks. The responses were gathered, entered, and analyzed using SPSS software, version 22.

5.2 Study Population and Sample: The study population comprises all employees working in the credit departments of Algerian commercial banks. A random sample of six different bank branches was selected. Table (02) presents the distribution of the sample along with the number of questionnaires distributed, retrieved, and lost.

Table (02): Distribution of the Study Sample and the Number of Questionnaires Distributed and Retrieved

No	Bank Name		Recovered	Distributed	Lost
01	Banque Nationale d'Algérie	**number**	06	06	00
		ratio%	15	15	00
02	Banque de Crédit Populaire Algérien	**number**	04	05	01
		ratio%	10	12.5	2.5
03	Caisse Nationale d'Épargne et de Prévoyance	**number**	08	08	0
		ratio%	20	20	0
04	Banque de Développement Local	**number**	04	05	01
		ratio%	10	12.5	2.5
05	Banque de l'Agriculture et du Développement Rural	**number**	07	08	01
		ratio%	17.5	20	2.5
06	Banque Extérieure d'Algérie	**number**	07	08	01
		ratio%	17.5	20	2.5
Total		**number**	36	40	04
		ratio%	90	100	10

Source: Prepared by the researcher based on questionnaire data.

From Table (02), it is observed that 40 questionnaires were distributed to employees across six banks. Of these, 36 were retrieved, representing a 90% response rate, while 4 questionnaires were lost, constituting 10% of the total.

5.3 Field Study Instrument: Given the nature of the topic and the methodology adopted, it was determined that the most appropriate tool for data collection—capable of answering the research questions and achieving its objectives—was a structured questionnaire. The questionnaire included the following sections:

- First Section: Included the personal data of the study sample individuals, namely: gender, academic level, professional experience, specialization, and training.
- Second Section: Comprised 13 questions related to the respondents' answers regarding the use of financial statements by the Algerian commercial banks under study in making credit-granting decisions.
- Third Section: Contained 11 questions about the respondents' views on the most important indicators derived from the financial statements used in making credit-granting decisions in the Algerian commercial banks under study.

- Fourth Section: Included 15 questions related to the respondents' opinions about the positive impact of using the auditing approach in making credit-granting decisions in the Algerian commercial banks under study.

5.3.1 Questionnaire Design: In preparing the questionnaire, we adopted the closed-ended format, which specifies possible answers to each question. The five-point Likert scale was also used to measure the questionnaire responses, as shown in the following table:

Table (03): Five-Point Likert Scale Ratings

responses	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Score	5	4	3	2	1

Source: Mahfouz Joudah, Basic Statistical Analysis Using SPSS, First Edition, Wael Publishing and Distribution House, Amman, Jordan, 2008, p. 23.

To determine the length of each dimension of the Likert scale used in the study axes, the range was calculated as:

$$\text{Range} = 5 - 1 = 4$$

Then the class length was determined by dividing the range by the number of classes:

$$\text{Class Length} = 4 \div 5 = 0.8$$

Accordingly, the scale categories were as follows:

- Strongly Disagree: from 1.00 to 1.80 → Very Low Degree
- Disagree: from 1.81 to 2.60 → Low Degree
- Neutral: from 2.61 to 3.40 → Moderate Degree
- Agree: from 3.41 to 4.20 → High Degree
- Strongly Agree: from 4.21 to 5.00 → Very High Degree

5.3.2 Reliability and Validity of the Study Tool:

- Face Validity (Expert Validity): The study tool was designed based on previous research and reviewed by a panel of 3 academic experts from the Faculty of Economic, Commercial and Management Sciences at the University of M'sila. These specialists covered the fields of accounting, statistics, and financial and banking sciences.
- Reliability of the Questionnaire: The reliability of the questionnaire refers to its ability to yield the same results if redistributed under similar conditions. In other words, it implies the consistency of the questionnaire's results over repeated distributions across the same sample during different periods. The reliability of the questionnaire was tested using Cronbach's Alpha coefficient, as presented in the following table:

Table (04): Cronbach's Alpha Coefficient for Measuring the Reliability of the Study Tool

No	Axis	No. of Items	Cronbach 's Alpha	Validity*
2	The use of financial statements by the Algerian commercial banks under study in making credit decisions.	13	0.566	0.75
3	The most important indicators derived from financial statements used in credit decisions.	11	0.773	0.87
4	The positive impact of using the auditing approach in making credit decisions in the Algerian commercial banks under study.	15	0,743	0,861
Total Axes		39	0.812	0.90

*Validity was calculated as the square root of the reliability coefficient.

Source: SPSS Output, Version 22

As indicated in Table (04), the Cronbach's Alpha coefficient for the questionnaire axes ranged between 0.566 and 0.773, which are considered acceptable values. Moreover, the overall Cronbach's Alpha coefficient for both axes combined reached 0.812, which reflects a good and acceptable level of reliability. Regarding the validity measure, represented by the square root of Cronbach's Alpha, its value ranged between 0.75 and 0.87 for the individual axes, while the overall validity coefficient reached 0.90, which is considered high and confirms the stability and suitability of the questionnaire for analysis and interpretation of results.

5.4 Results Analysis and Hypothesis Testing: In this section, we aim to analyze the responses of the study sample to the questionnaire's questions and thematic axes, and to relate these findings to the research questions and objectives. This was conducted using appropriate statistical tools, such as frequencies, arithmetic means, standard deviations, and the t-test.

Before analyzing the study dimensions, we tested whether the data followed a normal distribution using the Kolmogorov-Smirnov test. The results of this test are presented in the following Table (05):

Table (05): Kolmogorov-Smirnov Normality Test Results

No	Axis	Number of Items	(K-S)	Significance Level (sig)
2	The use of financial statements by the Algerian commercial banks under study in making credit decisions.	13	0.790	0.561
3	The most important indicators derived from financial statements used in credit decisions.	11	0.690	0.727
4	The positive impact of using the auditing approach in making credit decisions in the Algerian commercial banks under study.	15	0,080	0,055

Source: SPSS Output, Version 22

From Table (05), it is evident that the significance values (sig) from the Kolmogorov-Smirnov test are greater than the significance level (α = 1%)—specifically 0.055 and 0.727 respectively for the axes—indicating that the data follow a normal distribution. Accordingly, parametric statistical tests, such as the arithmetic mean and t-test, are suitable for hypothesis testing.

5.4.1 Analysis of the First Axis: General Characteristics of the Study Sample

- Gender:

Table (06): Distribution of Study Sample According to Gender

Gender	Male	Female	Total
Frequency	24	12	36
Percentage (%)	66.67	33.33	100

Source: SPSS Output, Version 22

From Table (06), it is observed that the number of male participants was 24 (66.67%), while the number of female participants was 12 (33.33%). This indicates that the male category predominates within the commercial banks under study. This can be attributed to the nature of work in banks and the limited opportunities available for females to occupy positions within this sector.

- Educational Level:

Table (07): Distribution of Study Sample According to Educational Level

Educational Level	Secondary	University	Professional Diploma	Total
Frequency	05	23	08	36
Percentage (%)	13.89	63.89	22.22	100

Source: SPSS Output, Version 22

From Table (07), it is evident that the vast majority of respondents hold university degrees (63.89%), while 13.89% have below university-level education. Additionally, 22.22% of respondents hold professional diplomas. This indicates that the banks under study are staffed predominantly with university-educated personnel.

- Work Experience

Table (08): Distribution of Respondents by Work Experience

Years of Experience	< 5 Years	5–10 Years	10–20 Years	> 20 Years	Total
Frequency	10	12	08	06	36
Percentage (%)	27.78	33.33	22.22	16.67	100

Source: SPSS Output, Version 22

Table (08) shows that 33.33% of respondents have between 5 and 10 years of experience, followed by 27.78% with less than 5 years, 22.22% with 10–20 years, and 16.67% with over 20 years of experience. This reflects a generally experienced workforce in the banks under study.

- Field of Specialization

Table (09): Distribution of Respondents by Area of Specialization

Specialization	Economics	Accounting	Finance	Other	Total
Frequency	09	06	09	12	36
Percentage (%)	25	16.67	25	33.33	100

Source: SPSS Output, Version 22

As seen in Table (09), respondents with other specializations represent 33.33% of the sample. Those with degrees in economics and finance each represent 25%, while accounting specialists account for 16.67%.

- Training

Table (10): Distribution of Respondents Based on Training Received

Response	Yes	No	Total
Frequency	18	18	36
Percentage (%)	50	50	100

Source: SPSS Output, Version 22

Table (10) reveals an equal distribution between respondents who received training and those who did not, indicating that although training programs exist, they are insufficient and do not reach the majority of employees in the banks under study.

5.4.2 Hypothesis Testing: This section aims to explore the role of financial statement analysis in credit-granting decisions in the Algerian commercial banks under study. To achieve the research objectives and address the main research question, the following hypotheses were formulated:

- The use of financial statements by Algerian commercial banks in credit decision-making.
- The key financial indicators derived from financial statements relied upon in granting credit.

- The effect of audit procedures on credit decision-making in the commercial banks under study.

These hypotheses are based on comparing the means of responses. Since the study items were measured using a five-point Likert scale, the test mean (μ) is set at 3. Thus, the hypotheses are formulated as:

H_0: $\mu \geq 3$

H_1: $\mu < 3$

- Results of Analyzing the Statements of the Second Axis: Table (11) presents the results of analyzing the statements under the second axis of the study tool, using the arithmetic mean, standard deviation, and one-tailed t-test.

Table (11): Results of Analyzing the Statements of the Second Axis Related to the Use of Financial Statements in Credit Granting Decisions by the Commercial Banks Under Study

No.	Statement	Mean	Std. Dev.	T-test	Sig.	Level	Rank
1	The bank's internal regulations require the use of financial statements in credit decisions	4.0556	0.8600	28.293	0.000	High	06
2	Financial ratios are used by the bank in credit granting decisions	4.2500	0.7699	33.118	0.000	Very High	03
3	The bank has an information system that meets its needs	4.1944	0.9202	27.118	0.000	High	04
4	The bank organizes training sessions for staff to improve performance	3.9167	0.9373	25.071	0.000	High	08
5	Bank management places high importance on financial statement analysis	4.0000	0.9258	25.923	0.000	High	07
6	The bank uses the balance sheet to assess the firm's financial position	4.3333	0.8618	30.166	0.000	Very High	01
7	The bank uses the income statement to determine profitability	4.1389	0.9607	25.848	0.000	High	05
8	The bank uses the cash flow statement to determine available liquidity	3.6111	1.0495	20.643	0.000	High	09
9	The bank uses horizontal analysis in credit decision-making	3.5278	0.6540	32.363	0.000	High	10
10	The bank uses vertical analysis in credit decision-making	3.4167	0.7319	28.008	0.000	High	11
11	Auditing of financial statements is used in credit decision-making	3.4167	1.0790	18.999	0.000	High	12
12	Employees find it difficult to analyze financial statements	3.2500	0.9964	19.570	0.000	Moderate	13
13	Misuse of financial statements leads to an increase in non-performing loans	4.3056	0.9507	27.171	0.000	Very High	02
Axis Total		3.8782	0.36424	63.884	0.000	High	

Source: SPSS Outputs – Version 22

We note from Table (11) that the degree of agreement with the statements of the second axis ranges between 3.2500 and 4.3333. All statements generally fall within the "Agree" range, meaning that the respondents agree with all the statements under this axis. Statements 02, 06, and 13 fall within the "Strongly Agree" range, indicating that the majority of respondents strongly agree with them. This is further confirmed by the fact that the mean of each statement is above 3. The overall mean of the axis reached 3.8782.

As for the t-test values for all statements of the second axis, they range from 18.999 to 33.118 and are all statistically significant at a 0.01 significance level, since the Sig value for all items is below 0.01. The t-test for the entire axis is 63.884, which is also statistically significant at the 0.01 level. This confirms the validity of the first hypothesis, namely that Algerian commercial banks use financial statements to a high degree when making credit granting decisions.

- Results of the Analysis of the Third Axis Statements: Table (12) presents the results of analyzing the statements of the third axis related to the key financial indicators derived from financial statements used in credit granting decisions in the commercial banks under study.

Table (12): Results of the analysis of the third axis statements related to the key financial indicators used in credit granting decisions in the commercial banks under study

No.	Statement	Mean	Std. Dev.	T-test	Sig.	Level	Rank
14	Credit granting decisions rely on liquidity ratios	4.1389	0.7232	34.338	0.000	High	02
15	Credit granting decisions rely on activity ratios	3.8056	1.0642	21.456	0.000	High	10
16	Credit granting decisions rely on profitability ratios	3.7778	0.8979	25.242	0.000	High	11
17	Credit granting decisions rely on indebtedness ratios	3.9167	1.0790	21.779	0.000	High	07
18	Credit granting decisions rely on capital structure ratios	3.8056	0.8558	26.678	0.000	High	09
19	Credit granting decisions rely on comparison of financial indicators of the client's activity	3.8333	0.9710	23.687	0.000	High	08
20	Credit granting decisions rely on the collateral provided	4.3333	1.0690	24.321	0.000	Very High	01
21	Credit granting decisions rely on assessing collateral based on assets to ensure suitability	4.0000	0.8618	27.846	0.000	High	03
22	Credit granting decisions rely on the availability of sufficient capital to operate the client’s activity	3.9444	0.8926	26.513	0.000	High	06
23	Credit granting decisions rely on the transparency and reliability of financial statements	4.0000	1.0419	23.033	0.000	High	04
24	Credit granting decisions rely on the existence of a balance between the financing structure components of the client's activity	3.9722	0.9098	26.196	0.000	High	05
Axis Total		3.9571	0.52493	45.229	0.000	High	

Source: SPSS outputs, version 22.

It is evident from Table (12) that the degree of agreement regarding the statements of the third axis ranges between 3.7778 and 4.3333. All statements fall within the range of “agree,” indicating that the respondents agreed with all items under this axis. Exceptionally, statement No. (20) falls within the “strongly agree” range, which is confirmed by the overall mean of the axis at 3.9571.

Moreover, the t-values for all statements of the third axis range between 21.456 and 27.846, and all are statistically significant at the 0.01 level, as the sig. values for all items are less than 0.01. The t-test value for the axis as a whole is 45.229, also statistically significant at the 0.01 level. This confirms the validity of the second hypothesis, namely that some of the most important indicators derived from financial statements used in credit granting decisions in the Algerian commercial banks under study are liquidity ratios and activity ratios.

- Results of the analysis of the fourth axis's phrases: Table No. (13) shows the results of the analysis of the third axis' phrases of the study tool.

Table No. (13): shows the results of the analysis of the fourth axis' phrases related to the positive impact of using the audit method in making credit granting decisions in the Algerian commercial banks under study.

No.	Statement	Mean	Std. Dev.	T-test	Sig.	Level	Rank
25	The bank utilizes audit procedures in credit decision-making.	4,098	0,837	9,21	0,000	High	07
26	Credit decisions rely on audit reports.	3,844	0,833	5,88	0,000	High	13
27	Credit decisions rely on having specialized knowledge in accounting and auditing.	4,270	0,617	15,58	0,000	Very high	03
28	Auditing is considered a control procedure.	4,245	0,564	16,53	0,000	Very high	04
29	International auditing standards help improve auditor performance.	4,516	0,619	19,89	0,000	Very high	01
30	The adopted audit approach is effective in evaluating internal control systems.	4,131	0,667	12,10	0,000	High	06
31	Credit decisions depend on documented and implemented control procedures.	4,000	0,481	13,77	0,000	High	09
32	Credit decisions rely on the credibility of audited financial statements.	3,975	0,537	11,83	0,000	High	11
33	Audit programs are designed to select control points aligned with credit granting.	3,778	0,567	7,36	0,000	High	14
34	Internal control contributes to reducing the risk of credit default.	4,295	0,638	15,47	0,000	High	02
35	Failure to implement auditing procedures affects sound credit decision-making.	4,147	0,688	11,99	0,000	Very high	05
36	Audit samples are selected based on the efficiency of internal controls in detecting errors.	3,909	0,616	9,13	0,000	High	05
37	Audit samples are selected based on difficulty in obtaining sufficient and appropriate evidence.	3,745	0,710	5,37	0,000	High	12
38	Sample size is determined by the materiality level of the element being	3,991	0,567	11,51	0,000	High	15

	audited.						
39	Audit samples are selected based on auditor competence.	4,073	0,483	15,37	0,000	High	10
Axis Total		4,068	0,297	24,83	0,000	High	

Source: SPSS Outputs – Version 22

Table (13) shows that the majority of responses from the study sample regarding the positive impact of using the auditing approach in credit-granting decision-making in Algerian commercial banks lean toward agreement. This indicates a positive acceptance of implementing the auditing approach in the credit decision-making process. This conclusion is supported by the fact that most respondents agreed with the items, as reflected in the overall mean score of 4.068 across all items, while the standard deviation values remained below one, estimated at 0.297.

Furthermore, the t-test value for this axis was 24.83, which is greater than the tabulated t-value of 1.671. This confirms that the third axis is statistically significant at a significance level of 0.05. In addition, the sig. value (0.000) is lower than 0.05.

Based on these findings, at a significance level of $\alpha = 5\%$, we reject the null hypothesis (H0), which assumes that there is no positive impact from using the auditing approach in the credit decision-making process in Algerian commercial banks. Instead, we accept the alternative hypothesis (H1), which states that there is a positive impact from applying the auditing approach in making credit decisions in these banks. Thus, the third hypothesis is confirmed.

6. Conclusion:

Credit is one of the most essential operations carried out by commercial banks and other financial institutions, provided to individuals—whether natural persons or legal entities (such as companies)—to finance their economic projects, especially when they lack the capacity for self-financing. This function is also considered one of the riskiest services performed by banks, as the funds being granted do not belong to the bank itself but rather to other parties who deposited them in hope of earning interest.

Accordingly, it is crucial to utilize analytical tools that support sound credit decision-making. In this context, the credit analyst focuses on studying the customer's historical data and financial situation.

This study, therefore, was conducted to examine the effect of using financial statement analysis in the credit decision-making process in Algerian commercial banks.

6.1 Study Results:

- ✓ Based on the statistical analysis of the data collected to achieve the study's objectives, and through the examination and testing of hypotheses, the following results were concluded:
- ✓ Algerian commercial banks rely on the analysis of financial statements when making credit granting decisions;
- ✓ Financial statements have a significant impact on the decision-making process related to credit granting in Algerian commercial banks;
- ✓ Misuse of financial statements leads to difficulties in credit decision-making, increased risks faced by banks, a rise in non-performing loans, and greater reliance on guarantees;

✓ Internal banking regulations encourage the use of financial statement analysis as a fundamental basis for credit decision-making;

✓ The use of audit methods requires adherence to a set of recognized international standards that ensure professional care, scope of work, audit tools, and improved auditor performance in order to achieve high effectiveness;

6.2 Recommendations: Based on the above findings, the study presents the following recommendations:

- Emphasis on financial analysis by enhancing the ability of credit officers to conduct proper financial evaluations;
- Hiring qualified and experienced staff members;
- Ensuring that the financial information requested from clients is duly audited.

7. **Bibliography**:

- Abdelhamid Mohamed El-Shawarbi & Mohamed Abdelhamid El-Shawarbi .(2002) .*Credit Risk. Management: From Banking and Legal Perspectives* .Alexandria :Monshaat Al-Maarif.
- Ali Saad Mohamed Dawood .(2012) .*Banks and Investment Portfolios:A Decision Support Approach* . Alexandria: University Education House.
- Alian Al-Sharif et a .(2007) .*Management and Financial Analysis* .Amman: Al-Baraka Publishing and Distribution.
- Alvin Arens & James Loebbecke .(2002) .*Auditing: An Integrated Approach* .Riyadh: Al-Mareekh Publishing.
- Amin El-Sayed Ahmed Lotfi .(2008) .*Philosophy of Auditing*1 المجلد) st Edition .(Alexandria :University House.
- Hisham Jabr .(2008) .*Bank Management* .Cairo :Arab United Company for Marketing and Supplies.
- L. Collins & G. Valin .(1992) .*Audit et Contrôle Interne, Aspects Financiers, Opérationnels et Stratégiques* . Paris :DALLOZ.
- Mansour Ahmed Al-Badawi & Shehata El-Sayed Shehata .(2008) .*Studies in Modern Trends in Auditing (With Practical Applications to Egyptian and International Auditing Standards .(*Alexandria :University House.
- Mohamed Saleh El-Hanawi & Abdel Fattah Abdel Salam .(2000) .*Financial Institutions (Stock Markets and Commercial Banks .(*Alexandria :University House.
- Mohamed Sameer Al-Subban & Abdullah Al-Hilal .(2002) .*Scientific and Practical Foundations of Auditing* . Alexandria: University House.
- Mufleh Mohamed Aqel .(2009) .*Introduction to Financial Management and Financial Analysis* .Amman: Arab Community Library for Publishing and Distribution.
- Nasser Dadi Adoun .(2008) .*Case Studies in Institutions*1 المجلد) st Edition .(Algeria: Dar Al-Mohammedia.
- Ohoud Abdulhafid Al-Hadhouna .(2010) .*Principles of Financial Management*1 المجلد) st Edition .(Amman: Dar Al-Hamed Publishing and Distribution.
- Saleem Haddad .(2009) .*Financial Management* .Amman: Dar Al-Hamed Publishing and Distribution.
- Ammar Akram Omar Al-Tawil .(2008) .The Extent of Banks 'Reliance on Financial Analysis in Predicting Default – An Applied Study on National Commercial Banks in Gaza. Master's Thesis, Department of Accounting, Faculty of Commerce . Gaza: Islamic University.