Educational Administration: Theory and Practice
2024,30(11), 1023-1034
ISSN:2148-2403
https://kuey.net/

Research Article

The Role Of The Internal Control System In Managing Inventory In The Economic Institution Case Study Of The National Corporation For The Sale Of Public Works Equipment Annaba Unit.

Dr. Amel Khedadmia*

*Badji Mokhtar –Annaba University-Algeria, Faculty of Economics, Commerce and Management, Department of finance Sciences, Economic Intelligence and Sustainable Development Laboratory. amel.Khedadmia@univ-annaba.dz

Citation: Dr. Amel Khedadmia, (2024), The Role Of The Internal Control System In Managing Inventory In The Economic Institution Case Study Of The National Corporation For The Sale Of Public Works Equipment Annaba Unit., *Educational Administration: Theory and Practice*, *30*(11), 1023-1034
Doi: 10.53555/kuey.v30i11.8979

ARTICLE INFO
Received:01-05-2024
Accepted: 30-10-2024
Published: 31-12-2024

ABSTRACT

This study aimed to highlight the role of the internal control system in inventory management and the reality of its application in the National Institution for the Sale of Public Works Equipment - Annaba Unit. The descriptive analytical method and the statistical program SPSS 23 were used to analyze the data and test the hypotheses related to the components of the internal control system.

Several results were reached, the most important of which is that there is no impact of the internal control system and its components on inventory management in the institution under study. The weakness and ineffectiveness of the system used became evident, which may expose the institution to potential risks. Therefore, the study recommended the establishment of an auditing and control department and the development of accounting and administrative systems to address deficiencies, with greater attention to inventory control.

Keywords: Internal control system, inventory management, inventory control, inventory.

First: Introduction:

The great economic development that the world has witnessed has had a significant impact on economic institutions, which has led to an increase in their size and the diversity of their activities, which has led to the spread of financial corruption and the emergence of crises, and thus the need for an effective system that ensures the smooth running of the institution's functions and the preservation of its assets and funds. This has enhanced interest in internal control as the most effective means to help the institution's management achieve the plans and objectives set for its operations, as the management is responsible for designing it and changing its procedures because the development of this system is dependent on the development of the institution, and it focuses on verifying the truthfulness and accuracy of financial and accounting data and making reports more accurate and reliable. The evaluation stage is one of the most important stages that sheds light on identifying strengths and working to value them and weaknesses to address them by conducting an in-depth examination and following scientific procedures to achieve efficiency and optimal use of available resources. One of the most important control systems is the internal control system in inventory management. Inventory is one of the most important assets in the institution that requires protection and control, as it plays a role in allowing it to face competition and changing purchasing and selling conditions that are characterized by movement according to environmental variables. Therefore, it is not possible to expect stability in purchasing and supply operations in the appropriate quantity and quality that provides the user entities with their needs to achieve their programs. Because inventory leads to freezing resources and thus incurring certain costs, it is necessary for those responsible for managing it to work to achieve balance at all levels because the success of management methods requires searching for the most appropriate scientific method to manage all changes until reaching a state of stability. The main goal of inventory management is to search for the optimal economic quantities that must be kept to meet expected demands. In order for

decisions related to inventory management not to be exposed to failure, all methods must be used that determine inventory levels and methods of evaluating it, as well as accuracy when counting the necessary quantities of its elements, which requires effective control, especially when issuing a report on the quantities that the institution has in its warehouses. The task of internal inventory control is to seek to manage it with the aim of organizing its movement and preserving it. And controlling the flow of materials to and from the warehouses in the required quantity and at the appropriate time without delay, so it is necessary to maintain and support it, especially since it seeks to implement the plans in place and verify the procedures followed from the entry of the stock until its exit and to ensure that the actual procedures are the planned ones, and to discover errors, deviations and violations committed during the completion and then work to determine their causes and develop solutions to avoid them in the future.

1-The problem:

National institutions face some challenges and problems related to mismanagement and the occurrence of financial and administrative violations to achieve certain gains and tampering with data in their annual reports, and the frequency of these practices is greater as a result of the absence of effective control systems, especially with regard to the institution's assets.

In light of the great importance of inventory management in the economic institution and the fact that the National Corporation for the Sale of Public Works Equipment is one of these institutions and in view of the prominent role played by the internal control system in monitoring this type of assets, the features of the study problem appear, which can be formulated as follows: What is the extent of the contribution of the internal control system with its components to inventory management in the National Corporation for the Sale of Public Works Equipment - Annaba Unit?

This main problem branches out into five questions according to the components of the internal control system, as follows:

Does the control environment affect inventory management in the institution under study?

Do control activities affect inventory management in the institution under study?

Does risk assessment affect inventory management in the institution under study?

Does information and communications affect inventory management in the institution under study?

Do monitoring and control affect inventory management in the institution under study?

2-Hypotheses:

To address the previous problems, a set of hypotheses were developed, the validity of which will be tested through this study, as follows:

Main hypothesis: There is no statistically significant effect of the internal control system and its components on inventory management in the National Corporation for the Sale of Public Works Equipment - Annaba Unit.

Ho.1: There is no statistically significant effect of the control environment on inventory management in the institution under study at the significance level (0.05 ≥a)

Ho.2:: There is no statistically significant effect of control activities on inventory management in the institution under study at the significance level at the level of significance (0.05 ≥a)

Ho.3: : There is no statistically significant effect of risk assessment on inventory management in the institution under study at the significance level at the level of significance (0.05 ≥a).

Ho.4: : There is no statistically significant effect of information and communications on inventory management in the institution under study at the significance level at the level of significance (0.05 ≥a)

Ho.5:. : There is no statistically significant effect of control and regulation on inventory management in the institution under study at the significance level at the level of significance (0.05 ≥a).

3-The importance of the study: The importance of the research stems from the importance of the internal control system over inventory, as it is one of the foundations on which the institution relies in protecting its assets, so that it works to identify strengths and weaknesses and address them, thus helping the institution to raise the level of its performance and provide accurate information for internal decision-making based on correct financial reports, in addition to shedding light on one of the most important investments of the institution represented by inventory, as any transgression in its management may threaten the institution, so this study came to stand on the importance of internal control over inventory management and provide the theoretical and practical framework for the subject.

4-Study objectives: The purpose of this research is actually an attempt to achieve the following objectives:

☐ Identify the impact of the internal control system with its components (control environment, control activities, risk assessment, information and communications, monitoring and control) on inventory management in the institution under study;

☐ Attempt to identify the role of the internal control system in inventory management in the institution;

☐ Identify the appropriate procedures that must be followed to reach an effective internal control system;

☐ Identify the optimal methods for managing and evaluating inventory that must be subject to the highest degree of control in terms of quantity and quality;

☐ Identify the problems and reasons that prevent the application of internal inventory control and provide solutions to them.
5-Methodology and tools used:

-Methodology:
To answer the main problem and sub-questions and test the validity of the hypotheses, the nature of the research and the specificity of the subject required the application of the descriptive analytical method because it is appropriate for the subject of the internal control system in inventory management and enables the determination of facts and understanding the components of the subject and describing it and analyzing its dimensions in the theoretical and applied aspects.

-Tools:
To accomplish this study, we relied on observation, interview and questionnaire as a main tool with the aim of identifying, analyzing and mastering the various aspects of the subject of the study.
independent variable :
-Control Environment
-Risk Assessment
Control Activities Information and Communication Monitoring
dependent variable:
inventory management

Second: The conceptual framework of the study

1-The conceptual framework of the internal control system

The institution designs the internal control system, which includes a set of different control operations related to administrative and accounting aspects, in order to ensure the smooth running of work and adherence to established policies. The effective control system is considered a prevention of errors and violations. Considering that internal control is the most important management function within the institution, its concept and objectives will be addressed, in addition to addressing its most important types.

1-1The concept of the internal control system:

The concept of the internal control system has developed as a result of the development of the size of economic institutions and the separation of ownership from management. This concept has been further improved by Lithuanian and foreign scholars such as A. Сонин (2000), D. Robertson (1993), M.R. Simmons (1995), I. Toliatienė (2002), V. Lakis (2007), R. Bičiulaiti (2001), J. Mackevičius (2001) and international scientific organizations such as COSO, INTOSAI, CICA, and the Information Technology Governance Institute, and the interest in the internal control system has increased by these bodies in order to ensure the optimal exploitation of available economic resources, and accordingly the most important definitions and reasons that contributed to the emergence of this system will be addressed.

1-2Components of the internal control system: The internal control system consists of five main elements (control environment, risk assessment, control activities, information and communications, monitoring), and the International Auditing Standard (315) confirms that this division provides a useful framework for auditors to consider how the various aspects of the institution's internal control can affect the audit process, and the division does not necessarily reflect how the institution considers and implements internal control, so the components of the internal control system include the following five elements:

-Definition of inventory management:
Inventory management has many definitions and each one looks at it from a different angle. Some define inventory management as the activity by which scientific methods are used to determine the quantity of raw materials, manufactured goods and semi-manufactured goods in a way that ensures meeting the requirements and conditions of operation and customer requests at the lowest possible costs 8, while others define it as the methods and principles used in preparing the materials plan and coordination, control and reviewing the flow of materials movement within the institution, as it focuses on the financial aspects related to the costs and benefits of maintaining inventory for all its categories.

_Quantity control:
The goal of control is to verify the quantities present in the warehouses and for the various items and their conformity to the planned levels, and to ensure the availability of all data for each item in the warehouse records in terms of the movement of incoming, outgoing, transferred and current balances. This data also includes everything related to the quantity of materials in the warehouses from units of measurement, estimating future needs, the supply period and the number of withdrawals, consumption rate, order costs,

and the discount that can be obtained when purchasing in the quantity subject to the discount granted by suppliers.

Third: Method and procedures for the field study

The researcher tried as much as possible to design the questionnaire phrases in a simple manner, so that they would be easy and understandable by the respondents who are supposed to be widely aware of the subject of the study, so that these phrases would allow answering the study hypotheses. Some references that dealt with "the role of the internal control system in inventory management" were used to prepare this questionnaire and to cover all aspects of the subject. The theoretical aspect of the study was relied upon as a primary source. The questionnaire included thirty-five 35 phrases, and was divided into three axes as follows:

☐ The first axis: discusses the personal data of the sample individuals and consists of 5 elements;
☐ The second axis: discusses the components of the internal control system and includes 25 phrases;
☐ The third axis: discusses inventory management and contains 10 phrases.

- Study Methodology:

The field study method means the method followed in order to reach the set objectives, and considering that the subject of the study came under the aim of studying the impact between the internal control system and inventory management, and in order to achieve this goal, the descriptive analytical method was used because it is the most appropriate for the subject of the study. Also, primary and secondary sources were used to collect data to conduct the study, where the primary data was processed using statistical analysis. A set of statistical methods were relied upon that were used in the analysis in order to answer the problem of the study and verify its hypotheses and analyze and process the data using the Statistical Package for Social Sciences (SPSS v23),

The researcher applied the study to a sample consisting of individuals working in the National Corporation for the Sale of Public Works Equipment. The sample studied is characterized by being a purposive sample, meaning that the questionnaire was distributed to individuals who have a relationship with inventory and its control, as 35 questionnaires were distributed to sample individuals distributed to each of the inventory management department, the commercial department, the after-sales services department, and the accounting department. Thus, the comprehensive inventory method was used, while 32 questionnaires were retrieved out of 35 distributed questionnaires.

4-Validity and reliability of the questionnaire:

-Validity test:

In order to verify the validity of the study tool, we relied on the apparent validity of the questionnaire, as it was presented to referee professors, to arbitrate it and express their opinion on it in terms of the suitability of the phrases to the main axes, and in terms of its comprehensiveness and diversity of content, and to provide any observations they deem appropriate. Most of the observations were actually taken into account when designing the final study tool.

- Stability Test

The stability of the questionnaire means the stability of the results and their non-change in a significant way if they were redistributed to the same sample members several times and under the same conditions and circumstances during a specific period of time. The stability of the questionnaire directed to the study was verified through the “Cronbach’s Alpha” coefficient to measure the degree of consistency in the respondents’ answers to all the statements in the scale.

It is clear from the results of the table 2 that the values of the "Cronbach's Alpha" coefficient for the various study axes were high, and the stability value for all questionnaire statements reached 0.833, which exceeds 0.60, indicating that the tool has a high degree of stability. Thus, we have confirmed the validity and stability of the questionnaire and its suitability for analyzing the results, testing the hypotheses, and answering the study questions.

Fourth: Analysis and discussion of the results

The data for the study sample were presented, namely: gender, age, educational level, professional experience, and current job, using descriptive statistics to extract frequencies and percentages.

Distribution of sample members according to the gender variable: The following table shows the distribution of sample members according to the gender variable to know

We note from the table that 4the majority of the sample members are between 31 and 40 years old at a rate of 56.3%, then the category from 20 to 30 years old at a rate of 40.6%, followed by the category from 41 to 50 years old at a rate of 3.1%, and the category 51 years old and above came in last place at a rate of 00%, which indicates that most of the institution's workers are young and this confirms the institution's endeavor to support its capabilities with young cadres capable of keeping pace with the transformations of the

environment with all its developments and changes and acquiring skills and experiences more quickly as a result of the development of work in institutions.

3-1Distribution of sample members according to the educational level variable: The following table shows the results of the analysis according to the educational level variable as follows:

-Distribution of sample members according to the variable of professional experience: The following table shows the results of the analysis of the variable of professional experience as follows professional experience

We note from Table 6 that most of the sample members have experience from 6 to 10 years at a rate of 43.8%, then the category from 11 to 15 years at a rate of 28.1%, followed by the category of 5 years or less at a rate of 25%, and the category of 16 years or older came in last place at a rate of 3.1%, which confirms the institution's endeavor to retain its workers and benefit from their experiences, and the presence of accumulated experiences and knowledge among the sample members enables them to form more accurate positive or negative opinions about the subject of the study, which enhances confidence in the results.

- Distribution of sample members according to the variable of current job:

We note from Table 7 that most of the sample members' current job is a framework at a rate of 53.1%, which enables them to form more accurate opinions about the subject of the study, which enhances confidence in the results, then the job of assistant at a rate of 21.9%, followed by the job of administrator at a rate of 18.8%, and the job of head of department came in last place at a rate of 6.3%. 1- Analysis and discussion of the results of the level of application of the components of the internal control system in the institution

Where data will be presented regarding the dimensions of the components of the internal control system, which are represented by five components according to Auditing Standard No. (55) Section (319) issued by the American Institute of Certified Public Accountants.

- Control activities:

We note from Table 9 that statement No. 7 "The institution uses administrative and financial records and documents as a control tool" ranked first with an arithmetic mean of 3.59, a standard deviation of 0.560, and an approval degree of "agree", then the statement "The control reports include recommendations to improve and develop performance" with an arithmetic mean of 3.44, a standard deviation of 0.801, and an approval degree of "agree", and the statement "The distribution of powers allows for improving internal control procedures" ranked last with an arithmetic mean of 2.94, a standard deviation of 0.840, and an approval degree of "neutral". In general, the control activities dimension recorded an arithmetic mean of 3.26, a standard deviation of 0.798, and an approval degree of "neutral". This means that the targeted workers have a consensus on the weakness of the availability of the control activities dimension in the institution under study, and the researcher believes that this weakness is due to the overlap in tasks and duties among workers

.

4-Presentation and discussion of the results related to testing the study hypotheses

-Presentation and discussion of the results related to testing the first sub-hypothesis:

The first sub-hypothesis states that "there is no statistically significant effect of the control environment on inventory management in the institution under study." This hypothesis was tested through simple linear regression analysis, where we reject the hypothesis if the significance level is less than or equal to 0.05. From Table 15, we note that the value of the significance level reached 0.624, which is greater than the significance level of 0.05, and as for the calculated F value, it recorded 0.246, which is less than the tabular F estimated at 2.042 at the significance level of 0.05 ≥a. From the above, the results confirm the acceptance of the null hypothesis, i.e.

-Presentation and discussion of the results related to testing the second sub-hypothesis

The second sub-hypothesis states that "there is no statistically significant effect of control activities on inventory management in the institution under study", this hypothesis was tested through simple linear regression analysis, where we reject the hypothesis if the significance level is less than or equal to 0.05.

From the above, the results confirm the acceptance of the null hypothesis, i.e. "there is no statistically significant effect of control activities on inventory management in the institution under study."

-Presentation and discussion of the results related to testing the third sub-hypothesis

From Table 17, we note that the significance level value reached 0.673, which is greater than the significance level of 0.05, and as for the calculated F value, it recorded 0.108, which is less than the tabular F estimated at 2.042 at the significance level of 0.05 ≥a.

From the above, the results confirm the acceptance of the null hypothesis, i.e. "there is no statistically significant effect of risk assessment on inventory management in the institution under study."

From Table 18, we note that the value of the significance level reached 0.866, which is greater than the significance level of 0.05, and as for the calculated F value, it recorded 0.029, which is less than the tabular F estimated at 2.042 at the significance level of 0.05 ≥a.

From the above, the results confirm the acceptance of the null hypothesis, i.e. "there is no statistically significant effect of information and communication on inventory management in the institution under study."

-Presentation and discussion of the results related to testing the fifth sub-hypothesis
The fifth sub-hypothesis states that "there is no statistically significant effect of monitoring and control on inventory management in the institution under study." This hypothesis was tested through simple linear regression analysis, where we reject the hypothesis if the significance level is less than or equal to 0.05.
From Table 19, we note that the significance level value reached 0.417, which is greater than the significance level of 0.05, and as for the calculated F value, it recorded 0.677, which is less than the tabular F estimated at 2.042 at the significance level of 0.05 ≥a.
From the above, the results confirm the acceptance of the null hypothesis, i.e. "there is no statistically significant effect of monitoring and control on inventory management in the institution under study".
Presentation and discussion of the results related to testing the main hypothesis
The main hypothesis states that “there is no statistically significant effect of the internal control system on inventory management in the institution under study. This hypothesis was tested through simple linear regression analysis (Simple Regression) where we reject the hypothesis if the significance level is less than or equal to 0.05.
From the previous table, we notice that the significance level value reached 0.784, which is greater than the significance level of 0.05, and as for the calculated F value, it recorded 0.077, which is less than the tabular F estimated at 2.042 at the significance level of 0.05 ≥a.

Conclusion:

Economic institutions attach great importance to protecting their assets and working to find the best means to manage and control them, especially with the increase in their size and the expansion of their scope of activity. Through this study, we tried to highlight the great and important role played by the internal control system in managing inventory at the level of the National Corporation for the Sale of Public Works Equipment, as the theoretical study showed us that it cannot always agree with reality, especially with regard to the reality of our national institutions. By examining the aspects of the subject, we found that it has become necessary to establish a good organization by harnessing all accounting, organizational, legal and human means and tools, to establish an effective internal control system that is capable of protecting the institution's assets from all types of manipulation and negligence and ensures the integrity of accounting and financial operations from cases of errors and forgery, while inventory management is one of the inevitable activities in the economic institution, especially the commercial one, whose inventory is diverse and the need to control it increases to ensure the continuity of its operations, which makes it the basic fabric on which it depends in order to achieve its goals.

Results: The study reached a set of results that we summarize in the following points:
The internal control system is considered an important and effective tool that helps the institution achieve its goals and protect its assets, based on commitment to the procedures established by the administration with the aim of ensuring compliance with laws and instructions as a means of management and prevention;
The presence of a sound and strong internal control system in the institution will reduce the occurrence of errors and deviations and ensure the accuracy of data and operations, which will be relied upon as a basis for judging the efficiency of the institution;
The lack of qualified workers to determine the highest and lowest level of inventory and avoid falling into excess or depletion of inventory;
The institution follows two types of physical and accounting inventory, and applies the weighted intermediate cost method according to the applicable accounting principles;

Suggestions:

After presenting the results, it became clear that there are many reasons that lead to shortcomings in internal control, which can be limited to not providing the appropriate environment through the policies and procedures set by the administration, and the poor implementation of control activities by qualified workers to deal with potential risks and respond quickly to them. Therefore, we suggest the following

recommendations:
The clarity of the institution's organizational plan so that it includes carrying out continuous and surprise control of all departments;
Defining authorities and separating tasks and responsibilities clearly, and emphasizing commitment to internal control procedures.

References and footnotes:

1) Mohamed Tahami Tawhar, Masoud Siddiqui, (2003): Auditing and Accounts Auditing, University Publications Office, no edition, Ben Aknoun, Algeria, p. 85.

2) Reda Khalasi, (2013): Internal Audit Tasks of the Institution, Dar Houma for Printing, Publishing and Distribution, no edition, Bouzareah, Algeria, p. 133.
3) Abdel Fattah Mohamed Al-Sahen, Mohamed Al-Sayed Saraya and Shehata Al-Sayed Shehata, (2006): Modern Internal Auditing and Control, University House, no edition, Alexandria, Egypt, p. 15.
4) Oussif Lakhdar, (2017): The Nature of the Relationship between the Quality of Internal Auditing and Corporate Governance, Risk Management and Internal Control in Light of Standard No. 2100 (Nature of Work), Journal of Economic Sciences, Management and Commercial Sciences, University of Mohamed Boudiaf, M'Sila, Algeria, Issue 17, p. 169.
5) Ahmed Helmy Juma, (2009): Introduction to Modern Auditing and Assurance (Educational Books Series Book One), Safaa Publishing and Distribution House, First Edition, Amman, Jordan, p. 197.
6) Haider Abbas Al-Attar, Ali Nazim Abdul Amir and Fawaz Khalif Rashid, (2018): Analysis of the Relationship between External Auditor Reports and the Weakness of the Internal Control System in Light of the Use of Accounting Standards, a Field Study on the Opinions of External Auditors in Governmental Institutions, Rafidain Development Journal, College of Administration and Economics, Al-Muthanna University, Iraq, Issue 199, pp. 43-44.
7) Balwadh Hussein, Suleimani Muhammad and Bin Zahia Muhammad, (2009): The impact of using quantitative models in rationalizing inventory management decisions, the case of Al-Hadna Dairy Company, an intervention, the International Conference on Rationalizing Decisions in the Company, University of Mohamed Boudiaf, Algeria, p. 02.
8) Abdul Sattar Muhammad Al-Ali, (2006): Modern Management of Warehouses and Purchasing, Dar Wael for Printing and Publishing, Second Edition, Amman, Jordan, p. 18.
9) Muqaddam Khaled, Abdullah Mayo, (2016): Internal Control System, Lectures, Faculty of Economics, Commerce and Management Sciences, University of Kasdi Merbah, Ouargla, Algeria, pp. 90-91

Appendices

Table No. (01): Components of the internal control system.

Component	Component Description	Component Elements
Control environment	The actions, policies and procedures that reflect the general direction, senior management, directors and owners of the organization and are related to internal controls and their importance.	Integrity and ethical values, commitment to adequacy, those responsible for governance of the organization (board of directors or audit committee), management philosophy and operating style, organizational structure, allocation of authority and responsibility, human resource policies and practices.
risk assessment.	Management's identification of risks related to the preparation and analysis of financial statements in accordance with generally accepted accounting principles.	Management assertions: existence, completeness, evaluation, purpose, disclosure, measurement, and occurrence.
Control activities	The policies and procedures established by management to achieve its objectives in preparing financial reports.	Adequate segregation of duties, appropriate authorization of operations and activities, adequate documentation and records, physical control of assets and records, independent testing of performance.
Information and Communication	Methods used to identify, collect, classify, record and report the operations of an entity and to maintain the ability to account for the associated assets.	Process-related control objectives are: existence, completeness, accuracy, tabulation, timing, posting and summarization.
Monitoring	Management's ongoing evaluation of the effectiveness of the internal control structure design to determine whether it is operating as intended and is modified as necessary.	Not applicable.

Source: Amin Al-Sayed Ahmed Lotfy, (2007): Modern Developments in Auditing, University House, Al-Ibrahimiya, Alexandria, Egypt, p. 260.

Table No. (02): Cronbach's Alpha Coefficient for Questionnaire Variables.

Cronbach's alpha coefficient	Number of phrases	Variables
0.886	25	Components of the internal control system
0.586	10	Inventory management
0.833	35	The questionnaire as a whole

Table No. (03): Distribution of study sample members according to gender variable.

	Frequency		
46.9%	15	Male	Sex
53.1%	17	Female	
100%	32		

Table No. (04): Distribution of study sample members according to age variable.

	Frequency	
40.6%	13	20to 30 years
56.3%	18	31 to 40 years old
3.1%	1	41 to 50 years old
00%	0	51 years and above
100%	32	

Table No. (05): Distribution of study sample members according to educational level variable

	Frequency	
34.4%	11	secondary
6.3%	2	Professional Diploma
56.3%	18	University
3.1%	1	Postgraduate studies
100%	32	

Table No. (06): Distribution of study sample members according to the variable of professional experience

	Frequency	
25%	8	5years or less
43.8%	14	6 to 10 years
28.1%	9	11 to 15 years
3.1%	1	16 years and above
100%	32	Total

Table No. (07): Distribution of study sample members according to the current job variable

	Frequency	
21.9%	7	Aid
18.8%	6	Administrative
53.1%	17	Framework
6.3%	2	Head of Service
100%	32	

Table No. (08): Analysis of the extent of agreement regarding the control environment dimension.

Arrangement		Standard deviation	Arithmetic mean		
4	neutral	0.842	3.00	There is a clear and flexible organizational structure that is compatible with the size of the organization	1
2	neutral	1.008	3.22	The organization is concerned with implementing internal control at all administrative levels	2
3	neutral	1.128	3.22	Highly qualified individuals are appointed to achieve effective control	3
5	neutral	0.916	3.00	The organization establishes the principles of ethical values in all activities	4
1	OK	0.669	3.44	The organization conducts a periodic review of work policies	5
-	neutral	0.913	3.18		

Table No. (10): Analysis of the extent of agreement regarding the risk assessment dimension

Arrangement		Standard deviation	Arithmetic mean		
5	neutral	0.833	2.63	The organization periodically assesses potential risks	11
4	neutral	0.896	2.69	The organization identifies and classifies controllable risks	12
1	neutral	0.792	3.22	The organization focuses on the risks of financial statement manipulation	13
3	neutral	0.999	2.97	The organization develops rapid procedures to address risks	14
2	neutral	0.871	3.13	The organization's acceptable level of risk is determined	15
-	neutral	0.878	2.93		

Table No. (09): Analysis of the extent of agreement regarding the dimension of control activities.

Arrangement		Standard deviation	Arithmetic mean		
4	neutral	0.967	3.03	The institution is keen to achieve separation of tasks and duties	6
1	OK	0.560	3.59	The institution uses administrative and financial records and documents as a control tool	7
5	neutral	0.840	2.94	The distribution of powers allows for improving internal control procedures	8
3	neutral	0.821	3.31	The control reports include comparisons between performance results for previous periods	9
2	OK	0.801	3.44	The control reports include recommendations for improving and developing performance	10
-	neutral	0.798	3.26		

Table No. (11): Analysis of the extent of agreement regarding the information and communication dimension

Arrangement		Standard deviation	Arithmetic mean		
5	neutral	0.833	2.63	The institution provides an information system with modern technologies to record operations	16
1	neutral	0.971	3.34	Displays all financial operations accurately and on the date of their occurrence	17
4	neutral	0.954	2.84	The institution provides effective communication channels to receive information on time	18
3	neutral	0.976	2.88	Employees have sufficient information to understand the internal control procedures	19
2	neutral	0.793	3.13	The information system in the institution is secure from hacking	20
-	neutral	0.905	2.96		

Table No. (12): Analysis of the extent of agreement regarding the monitoring and control dimension

Arrangement		Standard deviation	Arithmetic mean		
2	neutral	0.780	3.31	Deals with the internal control system as part of daily duties	21
4	neutral	0.933	2.97	The internal control system is developed to suit new circumstances	22
3	neutral	0.942	3.13	A periodic report is prepared to determine the extent of compliance with internal control	23
5	neutral	0.851	2.72	Work methods are improved and performance is developed continuously	24
1	neutral	0.902	3.34	Internal control workers have full authority to access records and documents	25
-	neutral	0.882	3.10		

Table No. (13): Level of availability of internal control system components.

	Standard deviation	Arithmetic mean	Dimension
neutral	0.913	3.18	Regulatory Environment
neutral	0.798	3.26	Regulatory Activities
neutral	0.878	2.93	Risk Assessment
neutral	0.905	2.96	Information and Communication
neutral	0.882	3.10	Monitoring and Control
neutral	0.875	3.09	Internal Control System Variable

Table No. (14): Analysis of the extent of agreement regarding the inventory management variable.

Arrangement		Standard deviation	Arithmetic mean		
3	OK	0.911	3.59	The inventory in the institution is managed under the responsibility of a special custodian	26
6	OK	0.840	3.44	The necessary inventory requirements are accurately determined	27
5	OK	0.669	3.44	The institution follows up the physical inventory under the supervision of more than one committee	28
9	neutral	0.897	2.97	The institution is committed to providing the quantities agreed upon with customers on time	29
10	neutral	0.941	2.78	The institution maintains safety stock to meet future demand	30
8	neutral	0.792	3.22	It is ensured that the storage cost is at the lowest level	31
4	OK	0.983	3.53	Inventory movement is accompanied by documents proving each process	32
1	OK	0.851	3.72	All inputs and outputs are monitored to determine inventory levels	33
7	neutral	0.942	3.38	The institution provides appropriate procedures to protect inventory from damage and theft	34
2	OK	0.787	3.66	Coordination is carried out between the Inventory Management Department and other functions	35
-	neutral	0.861	3.37		

Table No. (15): Results of simple linear regression analysis of the effect of the control environment on inventory management

Significance level	F	Regression coefficient	coefficient of determination	Correlation coefficient	Inventory management
0.624	0.246	- 0.105	0.008	0.090	

Table No. (16): Results of simple linear regression analysis of the impact of control activities on inventory management

Significance level	F	Regression coefficient	coefficient of determination	Correlation coefficient	Inventory management
0.591	0.295	0.167	0.010	0.099	

Table No. (17): Results of simple linear regression analysis of the impact of risk assessment on inventory management

Significance level	F	Regression coefficient	coefficient of determination	Correlation coefficient	Inventory management
0.673	0.108	- 0.108	0.006	0.077	

Table No. (19): Results of simple linear regression analysis of the impact of control and regulation on inventory management

Significance level	F	Regression coefficient	coefficient of determination	Correlation coefficient	Inventory management
0.417	0.677	- 0.228	0.022	0.149	

Table No. (20): Results of simple linear regression analysis of the impact of the internal control system on inventory management

Significance level	F	Regression coefficient	coefficient of determination	Correlation coefficient	Inventory management
0.784	0.077	- 0.018	0.003	0.051	

Table No. (18): Results of simple linear regression analysis of the impact of information and communications on inventory management

Significance level	F	Regression coefficient	coefficient of determination	Correlation coefficient	Inventory management
0.866	0.029	0.036	0.001	0.031	