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Risk Management and its Role in Reducing the Risk of Banking Operations (A Field Study on Some Commercial Banks in Khartoum)

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Abstract:- This study mainly aimed to know the role played by risk management in reducing various banking risk. The study adopted the inductive approach, the descriptive analytical approach and the historical approach. The questionnaire used to collect filed study's data from the sample of the study's community which represented in the employees of some Sudanese commercial banks in Khartoum. (55) Questionnaires were distributed to study's sample, it is 100% collected and analyzed. The results of the study reveal that efficient banking risk management contributes to reducing bank credit risk and efficient banking risk management contributes to reducing the risk of electronic operation, the study recommend several recommendations, among which is that, spreading the culture of awareness of the banking operations' risk among the public and providing the necessary protection and security devices to spare the bank the risk of electronic banking.

Keywords:- *Risk Management, Banking operations' risk.*

I. METHODOLOGICAL RAMEWORK

➢ *Introduction:*

Commercial banks are exposed to a range of risk on a daily basis as a result of carrying out their multiple banking operations, whether they are risk resulting from their traditional banking operations or those resulting from electronic banking operations created by the rapid technological developments and the resulting financial inclusion and digital transformation, which increased the burdens of bank risk departments and it became necessary to work hard and use all available means to reduce the risk and impact of banking operations, allowing commercial banks to provide services that meet the contemporary needs of customers and help them achieve their desired goals. And because commercial banks in Sudan are not immune to what their counterparts are exposed to all over the world, this study came to address the role of risk management in reducing the risk of banking operations.

➢ *The Study's Problem:*

The problem of the study represented in the risk of multiple banking operations, which the commercial banks are constantly exposed to and its negative effects, in addition to the added burdens on the bank risk departments. Accordingly, the study problem can be summarized in the following two questions:

- Does the efficiency of banking risk management contribute to reducing the risk of traditional banking operations?
- Does the efficiency of banking risk management contribute to reducing the risk of electronic banking operations?

➢ *The Importance of the Study:*

The scientific importance of this study is the increasing interest in the issue of banking risk, especially in light of the economic and technological developments that have organized the contemporary world, and the growing role of commercial banks' risk management in reducing it. While the practical importance of the study represented in explaining the way that risk management can reduce the various types of banking risk.

➢ *Objectives of the Study:*

This study mainly aimed to know the role played by risk management in reducing various banking risk, and the sub-objectives are as follows:

- Identifying the extent to which the risk departments in Sudanese commercial banks are concerned with the risk of traditional and electronic banking operations, their contribution to reduce it and minimizing their effects.
- Studying the relationship between risk management in commercial banks and the risk resulting from their various banking operations.
- Encouraging risk departments in Sudanese banks to devise modern means to reduce the risk of electronic banking operations as well as traditional ones.
- To find results and obtains recommendations that will help in reducing the risk of banking operations.

➢ *Study's Hypotheses:*

To achieve the objectives of the study, the following hypotheses were tested:

- The efficiency of banking risk management contributes to reducing the risk of traditional banking operations.

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- The efficiency of banking risk management contributes to reducing the risk of electronic banking operations.

➢ *Study's Methodology:*

The study adopted the inductive approach in identifying the nature of the study problem and formulating hypotheses, the descriptive analytical approach in analyzing data and testing hypotheses, and the historical approach in reviewing previous literature related to the subject of the study.

➢ *Sources of Data Collection:*

The primary sources were the questionnaire form, while the secondary sources were the references, scientific periodicals, theses and the Internet.

➢ *The Limits of the Study:*

The objective limits were to identify the role of risk management in reducing the risk of banking operations, while the spatial limits were represented in some commercial banks operating in the state of Khartoum, and the temporal limits were represented in the year 2023.

II. PREVIOUS STUDIES

The study of **(Harkat, 2018, 665-680)** aimed to identify the problem of the impact of the electronic banking risk management mechanisms on the banking service in order to identify the nature of the effect between the two previous variables. The study found several results, among which is that, the banking agencies under study attach great importance to the mechanisms of e-banking risk management in order to improve their banking services, which is justified by the positive impact between the study variables, and there is a positive impact of banking risk management on electronic banking services. The study recommended that, working on developing the performance of the banking system and applying electronic banking risk management mechanisms in order to enhance confidence in the banking sector. The study of (**Abdellah, 2019, 49-65)** aimed to highlighting the nature, and the effects of all the kinds of the risk that may face the speculation in the Islamic banks and to which extent the human resources accountancy contribute in managing and reducing such risk. The result of the study revealed that operational risk, risk of moral non-compliance and risk resulting from lack of ability and efficiency are among the most complex risk faced by common speculation in Islamic banks. The study recommended that, Islamic banks must build ethics for trade in accordance with the Islamic approach by paying attention to the management of human resources and giving it the necessary and sufficient priority through careful selection of customers with good and clean financial records. The study of **(Ibdah, 2020, 1-102)** aimed to examine the effect of bank credit risk management in its dimensions (non-performing credit facilities / total credit facilities, provision for losses of credit facilities / total credit facilities) on the banks financial performance at various dimensions (rate of return on assets, rate of return on equity, and the earning per share (in Jordanian commercial banks). The results show that there is an impact of bank credit risk management on the financial performance of Jordanian commercial banks. The study recommended working to develop deliberate mechanisms to classify credit risk within each bank so as to reduce the level of nonpayment by defaulted customers. The study of (**Hajiyev, 2021, 1-104)** aimed to determine the view of the risk management department heads of the banks operating in the Azerbaijani banking sector, the branch managers of this department and general risk experts on credit risk, to determine to what extent banks benefit from international experience in the assessment and calculation of credit risk, to analyze the functioning mechanism of credit risk in the Azerbaijani banking sector. The study results revealed that early detection of risk and taking appropriate measures have become an indispensable process for the effective functioning of the banking system, risk management plays an important role not only in ensuring the continuity of the bank's activities and preventing its bankruptcy, and an effective risk management system will contribute to increase the performance of banks. The study recommended increasing the acceptability of the national currency in the international financial system, that is, its convertibility, and ensuring its positive reflections on the sector. The study of **(Bin-Atif, 2021, 115-141)** aimed to identify the role of recent trends in the internal audit and risk management methods in Islamic banks and knowing the relationship between recent trends in internal auditing and risk management. The study found several results, among which is that, methods used for risk management in Islamic banks differ from those used in conventional banks, as they refrain from using methods associated with an interest rate (usury), recent trends in internal audit help risk management in Islamic banks by providing advice and recommendations to determine what appropriate methods to address each risk. The study recommended that, Commitment to the application of internal audit standards issued by the Institute of Internal Auditors (IIA) in Islamic banks so that the internal auditor can improve the bank's operations, including risk management processes.

By reviewing previous studies, the researchers notes that the study of (Harakat, 2018) focused on management of the risk of E-banking and its impact on banking service, while the study of (Abdellah, 2019) focused on the role of human resource accounting in managing risk resulting from lack of capacity and knowledge competence in Islamic banks, as for the study of (Hajiyev, 2021) dealt with risk in the banking sector and credit risk measurement methods: Research on Azerbaijan banking sector, as the study of (Bin-Atif, 2021) tested the role of recent trends in internal auditing and risk management methods in Islamic banks, and the study of (Abakar, 2021) concentrated on risk and challenges facing electronic banks in Sudan. The current study differs from those studies by addressing risk management and its role in reducing the risk of banking operations, there is also a difference in spatial and temporal limits.

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III. THEORETICAL FRAMEWORK OF BANKING RISK MANAGEMENT

The increase and diversity of banking services has led to their complexity, and to meet this development and the risk associated with it, it has become necessary to pay attention to banking risk management, as the repeated banking failures and crises in recent years have emphasized the importance of managing banking risk in a sound and effective manner.

➤ *The Concept of Banking Risk Management :*

Risk is defined as the possibility and uncertainty of obtaining the planned return, as it represents a situation in which the bank is likely to incur a loss on its investment because of its work in a business environment dominated by mistrust and uncertainty, and it can be guessed in it to know the possible results of any decision calculating the mathematical probability of the possibility of achieving future events, it arises when there is a possibility of more than one outcome, and it is measured by calculating the standard deviation from the previous results (Al Shabeeb, 2004, 36). As for banking risk management, it is defined as the system through which activities are directed and monitored at the highest level in order to achieve its objectives and meet the necessary standards of responsibility, integrity and transparency (Mudharren, 2011, 26). Risk management is also defined as an integrated scientific approach that works on economic control of risk that threatens the bank's revenue capacity (Belaidy, 2019, 52).

The researchers can define banking risk management as that department which uses specific strategies to predict potential risk and propose appropriate solutions to reduce their effects.

➤ *Importance of Risk Management:*

The importance of Financial risk management represented into the following (Horcher, 2005, 5):

- Identify and prioritize key financial risk.
- Determine an appropriate level of risk tolerance.
- Implement risk management strategy in accordance with policy.
- Measure, report, monitor, and refine as needed.

It becomes clear to the researchers that the importance of risk management is that it helps management identify potential risk by predicting it or providing the necessary data to reduce its effects.

➤ *Objectives of Banking Risk Management:*

Banking risk management aims to achieve the following (Waheeb, 2009, 10):

- Correctly identifying and measuring risk, and thus reducing it, controlling and confronting it with the best means and the least costs correctly at the level of the bank as a whole.
- Maintaining the bank's continuity, increasing its profitability, maximizing its value, strengthening its financial position, and avoiding a decline in its economic performance.
- Increasing the value of the bank and reducing the possibility of its insolvency.

It is clear to the researchers that the main objective of risk management is to reduce the risk that the bank may be exposed to as a result of economic, political and other factors that affect banking performance.

➤ *Banking Risk Management Functions:*

The main functions of banking risk management can be summarized in the following (Al-Khatib, 2014, 18):

- Ensure that the general framework for risk management complies with legal requirements.
- Carry out periodic review and update of the bank's credit policy.
- Determining the risk of each of the Corporation's activities and ensuring that they are properly identified classified and directed to the competent authorities.
- Monitoring the developments of credit risk and recommending the limits of the concentration of this risk, taking into consideration the total risk of specific products - the risk of the counterparty - the industry - the geographical area.
- Monitoring the use of limits, trends in the market and liquidity risk, and recommending appropriate limits for trading and investment activities.

It is clear to the researchers that the function of risk management in banks is a comprehensive function that aims to comprehensively monitor the bank's performance, predict financial crises or any emergency matters, and assist management in making rational decisions.

IV. BANKING OPERATIONS RISK

Banking operations ensure the receipt of funds from the public and loan operations, as well as placing payment methods at the disposal of customers and managing these means. Banking operations are also intended to accept deposits from the public and its use, in whole or in part, to grant credit and any other business that the Central Bank decides to consider as banking business by orders issued for this purpose .http://www.elearning.univdjelfa.dz

The researchers believes that banking operations mean all banking services provided by the bank to the public, whether by traditional or modern means, through direct and indirect channels of dealing with the public, provided that these services are characterized by accuracy, speed and reliability. The risk is defined as the measurable possibilities of achieving losses or not obtaining the value, and the risk differs from the uncertainty in that the uncertainty is not measurable (Goohman and Jordan, 1995, 491). Banking risk is also defined as the possibility of the bank's exposure to unexpected and unplanned losses and/or fluctuation of the expected return on a particular investment (Cuvittar and Amazith, 1997, 29).

The researchers can define risk as the unfavorable effects arising from expected or unexpected future events that affect the profitability of the bank and its capital.

➢ *Types of Banking Operations Risk:*

The risk of banking operations can be classified into the risk of traditional banking operations and the risk of electronic banking operations, as follows:

- *The risk of conventional banking operations: These include the following risk (Radwan, 2012, 42):*

✓ *Credit risk:* Arising from the inability or unwillingness of the transacting party to fulfill the obligations, and linked to these risk is the so-called country risk, and credit risk include items within the budget such as loans and bonds and off-budget items such as letters of guarantee or documentary credits. Credit risk is realized as a result of external and internal factors, including.

✓ *External factors:* They are changes in economic conditions such as the economy’s tendency towards recession or depression or an unexpected collapse in the money markets, risk of changes in interest rates, inflation rates, financial and monetary policies, and changes in market movement that have negative effects on the counterparty.

✓ *Internal factors:* They are represented in the bank’s weak credit or investment management, whether for lack of experience or insufficient training, lack of a rational credit policy, weak pricing policies, diversification of the credit portfolio of loans and weak risk monitoring and control procedures.

- *Market risk: Market risk is defined as the risk of exposure to losses resulting from market factors and includes the following risk (Hashad, 2005, 37):*

✓ *Interest rate risk:* Arising from fluctuations in interest rates, which may lead to tangible losses for the bank in the event of inconsistency in the terms of re-pricing of both obligations and assets, and interest rate risk escalate in the absence of an information system at the bank.

✓ *Pricing risk:* Arising from changes in the prices of assets, in particular the portfolio of financial investments, in addition to internal and external factors that affect pricing risk such as economic conditions.

✓ *Exchange rate risk*: Exchange rate risk arises from the existence of an open position in foreign currencies, and from unfavorable movements in exchange rates. The open position includes spot and forward transactions in their various forms, which fall under the name of financial derivatives.

✓ *Liquidity risk:* Arises as a result of the bank's inability to fulfill its obligations in the short term without realizing tangible losses or the inability to use funds appropriately.

✓ *Risk at the customer level:* That is, those related to the nature of the company's activity, the quality of its management, its operational performance and its financial position in general. Such as operational performance risk, cash flow, financial position, financial leverage, operating leverage, industry type, weak governance (Ibdah, 2020, 17)

It becomes clear to the researchers that the risk management should do what is necessary to assist the administration in reducing the negative effects resulting from the different types of banking risk.

➢ *Electronic Banking Risk:*

The provision of electronic banking operations is accompanied by multiple risks, and the Basel Committee on Banking Supervision has indicated that banks should set policies and procedures that allow them to manage this risk through their evaluation, control and follow-up. The risk of electronic banking operations are as follows: (Abdul Qader, 2006, 150)

- ***Operational risk:*** Operational risk arise from inadequate security of systems, inadequate systems design, work completion or maintenance work, as well as a result of customer misuse.
- ***Inadequate security of the systems*:** These risks arise from the possibility of unauthorized penetration of the bank’s account systems with the aim of identifying and exploiting customer information, whether that is done from outside the bank or from its employees, which requires the availability of sufficient procedures to detect and impede such penetration.
- ***Inadequate systems design or completion of work or maintenance work:*** It arises from the failure or inefficiency of the systems (slow performance) to meet the requirements of users and the lack of speed in solving these problems and maintaining systems, especially if the reliance increases on sources outside banks to provide technical support regarding the necessary infrastructure.
- ***Misuse by clients:*** This occurs as a result of clients not being informed of the preventive insurance measures, or by allowing criminal elements to enter the accounts of other clients, or to carry out money laundering operations using their personal information, or their failure to follow the due insurance procedures
- ***Reputational risk:*** Reputational risk arises in the event of a negative public opinion of the bank as a result of its inability to provide its online banking services in accordance with the standards of security, confidentiality and accuracy with continuity and immediate response to the needs and requirements of customers, which can only be avoided by intensifying The Bank's interest in developing, monitoring and following up performance standards for electronic banking activities. https://www.e3arabi.com/money-and-business

The researchers note that all electronic banking risk are risk created by technological developments that have organized the contemporary world in recent time, especially in light of the so-called digital transformation and financial inclusion, which requires the risk departments of banks to take this type of risk into consideration.

V. RISK MANAGEMENT AND REDUCING BANKING RISK

The banking industry based on the art of risk management, and without risk, profits are low or non-existent. The more the bank accepts to be exposed to a greater amount of risk, the more it succeeds in achieving a greater part of the profits, hence the importance of bankers discovering the risk of their work, not to avoid it but to deal with it intelligently to maximize return on investments which is ultimately the true measure of success. Accordingly, good risk management includes going through four basic stages; Defining the risk to which the banking business is exposed, the ability to measure those risk on an ongoing basis through appropriate information systems, choosing the risk that the bank wants to be exposed to and the management's monitoring of those risk, measuring it with appropriate standards, and taking the right decisions at the right time to maximize the return in exchange for minimizing the risk, which is a continuous effort that does not end and represents the heart of the banking business. https://platform.almanhal.com/Files/2/32761

The researchers concludes from the foregoing that the rational management of banking risk plays an important role in reducing banking risk in all its forms, which may help to achieve the goals of banks in growth, stability and continuity in the performance of their various activities, but also increases their competitiveness.

VI. FIELD STUDY

- *Field Study's Procedures*

The statistical program (SPSS) was used to analyze the data and reach the objectives set within the framework of this study, and it is based on the significance level (5%) corresponding to confidence (95%) to interpret the results of the tests that were conducted. Several statistical methods have been used, the most important of which are the reliability test (Cronbach alpha), descriptive and analytical statistical methods, percentages and the t-test.

- *Study's community and sample*

The study community consists of the employees of the some Sudanese commercial banks in Khartoum. As for the study sample, it was chosen randomly, where the questionnaire was distributed randomly to a number of the company's employees, and the sample size was determined with the help of expert arbitrators to include various job titles and administrative levels in the some commercial banks in Khartoum. (55) Questionnaires were distributed. All of them were retrieved at a percentage of 100%, and this percentage is considered very large from a statistical point of view.

- *Data analysis and hypothesis testing*

The hypotheses were tested by finding the weighted arithmetic means (answer power) and standard deviations for each of the questionnaire statements. All of these hypotheses are descriptive questions, according to the five-point Likert scale, as the variable that expresses the options (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree) ordinal scale, and weighted averages are calculated according to Likert scale through a number of steps, namely: Firstly, assign each value in the Likert scale a specific weight (Strongly Agree 5, Agree 4, Neutral3, Disagree 2, Strongly Disagree 1), secondly find the result by multiplying the number of the sample by the weight, and in the third step find the sum of the totals of multiplication results, then find the arithmetic mean by dividing the sum of the totals of multiplication results in the previous step / the number of the sample, to get the arithmetic mean. For the purpose of analyzing the sample, there is a so-called hypothetical average, which is equal to the sum of the weights divided by their number (the scale items), that is, the hypothetical mean = (5 + 4 + 3 + 2 + 1) /5 = 3. Accordingly, the averages were distributed according to their positive or negative deviation from the hypothetical mean, and the distribution of the averages becomes as follows (1 to 1.79 strongly disagree, from 1.80 to 2,59 disagree, from 2.60 to 3.39 neutral, from 3.40 to 4.19 agree, and from 4.20 to 5 strongly agree).

- *The First Hypothesis Testing*

Efficient banking risk management contributes to reducing the risk of traditional banking operations

Table 1 The frequency distribution of the responses of the sample members of the study for the first hypothesis phrases

No	**Sentences**	**Frequency and percentage%**									
		Strongly Disagree		**disagree**		**Neutral**		**Agree**		**Strongly agree**	
		f	P	f	p	f	P	f	P	F	p
1	Efficient banking risk management contributes to reducing bank credit risk	-	-	-	-	2	3.6%	17	30.9%	36	65.5%
2	Efficient banking risk management contributes to reducing interest rate risk	-	-	-	-	3	5.4%	26	47.3%	26	47.3%
3	Efficient banking risk management contributes to reducing pricing risk	2	3.6%	2	3.6%	4	7.3%	23	41.8%	24	43.7%
4	Efficient banking risk management contributes to reducing exchange rate risk	-	-	1	1.8%	4	7.3%	22	40%	28	50.9%
5	Efficient banking risk management contributes to reducing liquidity risk	2	3.6%	2	3.6%	3	5.4%	21	38.3%	27	49.1%
	Total	**4**	**1.5%**	**5**	**1.8%**	**16**	**5.8%**	**109**	**39.6%**	**141**	**51.3%**

Source: Preparation of the researchers, based on field study data, 2023

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It is clear to the researchers from Table 1 regarding the recurring distribution of the answers of the study sample members to the phrases of the first hypothesis which states that (Efficient banking risk management contributes to reducing the risk of traditional banking operations), that the 51.3% of the respondents answered strongly agree, 39.6% answered with agreement, 5.8% answered neutrally, 1.8% answered without agreement, while 1.5% responded strongly disagree. Where we found that, the majority of the study sample agreed with the phrases of the hypothesis as a whole with a percentage of 90.9%, while the percentage of neutrals is 5.8% and the percentage of disagreement is 3.3%.

Table 2 The mean and the mode of the responses of the sample members of the study for the phrases of the first hypothesis

No	Phrases	Arithmetic mean	Standard deviation	Chi square	Degree of freedom	Probability value	Interpretation
1	Efficient banking risk management contributes to reducing bank credit risk	4.65	0.520	34.111	2	0.000	Strongly agree
2	Efficient banking risk management contributes to reducing interest rate risk	4.44	0.572	21.333	2	0.000	Strongly agree
3	Efficient banking risk management contributes to reducing pricing risk	4.22	0.945	50.259	4	0.000	Strongly agree
4	Efficient banking risk management contributes to reducing exchange rate risk	4.44	0.634	17.333	2	0.000	Strongly agree
5	Efficient banking risk management contributes to reducing liquidity risk	4.31	0.886	55.630	4	0.000	Strongly agree
	Total	**4.41**	**0.485**				**Strongly agree**

Source: Preparation of the researchers, based on field study data, 2023

In Table 2 we note that the standard deviation of the phrases ranges between (0.520 - 0.845), where we find that the difference is less than the correct one, and this indicates the homogeneity of the respondents' answers for the statements of the first hypothesis. Looking at the probabilistic value, where we find that it is less than the level of significance 0.05 for all statements, and thus it is a function in all statements, that is, there are statistically significant differences at the level of significance (0.05) for the respondents' answers for the first hypothesis statements. According to the five-point Likert scale, we find that the direction of the respondents' answers is highly agreeable in all statements. We also find that the general trend of the hypothesis is strongly in agreement with an arithmetic mean (4.41) and a standard deviation (0.485), which proves the validity of the hypothesis that stated (Efficient banking risk management contributes to reducing the risk of traditional banking operations).

- *The Second Hypothesis Testing*

Efficient banking risk management contributes to reducing the risk of electronic banking operations.

Table 3 The frequency distribution of the responses of the sample members of the study for the second hypothesis phrases

No	Phrase	Frequency and percentage%									
		Strongly Disagree		**disagree**		**Neutral**		**Agree**		**Strongly agree**	
		f	P	f	p	f	P	f	P	F	p
1	Efficient banking risk management contributes to reducing the risk of insufficient safety of systems	1	1.8%	-	-	4	7.3%	30	54.6%	20	36.4%
2	Efficient banking risk management contributes to reducing the risk of misuse by customers	2	3.65	3	5.5%	3	5.5%	32	58.2%	15	27.3%
3	Efficient banking risk management contributes to reducing the risk of electronic operation	3	5.5%	2	3.6%	8	14.6 %	31	56.4%	11	20%
4	Efficient banking risk management contributes to reducing reputational risk	3	5.5%	10	18.2 %	19	34.65	13	23.6%	10	18.2%
5	Efficient banking risk management contributes to reducing the risk of inappropriate systems design	3	5.5%	3	5.5%	6	10.9 %	33	60%	10	18.2%
	Total	**12**	**4.4%**	**18**	**6.5%**	**40**	**14.%**	**139**	**50.6%**	**66**	**24%**

Source: Preparation of the researchers, based on field study data, 2023

It is clear to the researchers from Table 1 regarding the recurring distribution of the answers of the study sample members to the phrases of the first hypothesis which states that (Efficient banking risk management contributes to reducing the risk of electronic banking operations), that 24% of the respondents answered strongly in agreement, 50.6% answered with agreement, 14.5% answered neutrally, 6.55% responded with no agreement, and 4.4% strongly disagreed. Where we find that, the highest percentage of the study sample members agreed with the phrases of the hypothesis as a whole by 74.6%, while the percentage of neutrals reached 14.5%, and the percentage of those who disagreed was 10.9%.

Table 4 The mean and the mode of the responses of the sample members of the study for the phrases of the second hypothesis

No	Phrases	Arithmetic mean	Standard deviation	Chi square	Degree of freedom	Probabiliy value	Interpretation
1	Efficient banking risk management contributes to reducing the risk of insufficient safety of systems	4.30	0.603	19.111	2	0.000	Strongly agree
2	Efficient banking risk management contributes to reducing the risk of misuse by customers	4.06	0.856	63.407	4	0.000	Agree
3	Efficient banking risk management contributes to reducing the risk of electronic operation	3.85	0.960	53.037	4	0.000	Agree
4	Efficient banking risk management contributes to reducing reputational risk	3.35	1.102	13.963	4	0.000	Neutral
5	Efficient banking risk management contributes to reducing the risk of inappropriate systems design	3.85	0.920	60.630	4	0.000	Agree
	Total	**3.88**	**0.545**				**Agree**

Source: Preparation of the researchers, based on field study data, 2023

In Table 4 we note that the standard deviation of the phrases ranges between We find that the standard deviation of the statements ranges between (0.603-1.102), where we find that the difference is less than the correct one, and this indicates the homogeneity of the respondents' answers for the statements of the second hypothesis. Looking at the probabilistic value, where we find that it is less than the level of significance 0.05 for all statements except for the statement (4), and thus it is a function in all the statements, that is, there are statistically significant differences at the level of significance (0.05) for the respondents' answers about the statements of the second hypothesis except for the expression (4) There are no statistically significant differences. According to the five-point Likert scale, we find that the direction of the respondents' answers is highly agreeable in statement (1), agreeable in statements (2, 3, 5), and neutral in statement (4). We also find that the general trend of the hypothesis is in agreement with an arithmetic mean (3.88) and a standard deviation (0.545), which proves the validity of the hypothesis that stated (efficient banking risk management contributes to reducing the risk of electronic banking operations).

VII. CONCLUSION

The study basically aimed to investigate the role of risk management and its role in reducing the risk of banking operations. Its findings revealed that efficient banking risk management contributes to reducing bank credit risk. This result agreed with (Abdellah, 2019) and (Hajiyev, 2021) studies results, which ensure that, an effective risk management system will contribute to increase the performance of banks by reducing banking risk. And these results ensure the accuracy of the first hypothesis which state that efficient banking risk management contributes to reducing the risk of traditional banking operations. The study's findings also ensure that, efficient banking risk management contributes to reducing the risk of electronic operation, this result agreed with (Harkat, 2018) and (Abakar, 2021) studies results which showed that, there is a positive impact of banking risk management on electronic banking services and this findings improved the accuracy of second hypothesis which stated that, efficient banking risk management contributes to reducing the risk of electronic banking operations.

❖ *Results of the Study*

➢ *After completing the filed study, the study found the following findings:*

- Efficient banking risk management contributes to reducing bank credit risk
- Efficient banking risk management contributes to reducing exchange rate risk
- Efficient banking risk management contributes to reducing liquidity risk

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- Efficient banking risk management contributes to reducing the risk of inappropriate systems design
- Efficient banking risk management contributes to reducing the risk of insufficient safety of systems
- Efficient banking risk management contributes to reducing the risk of electronic operation.

❖ *Recommendations*

➢ *Based on the results of the study, the researchers recommended the following:*

- Spreading a culture of awareness of the risk of banking operations among the public.
- Gain customer loyalty by providing banking services accurately and as quickly as possible.
- Introducing electronic banking products and services through modern means of communication to reach the largest number of the target audience.
- Providing the necessary protection and security devices to spare the bank the risk of electronic banking.
- Developing the performance of employees in risk departments in Sudanese banks to enable it reducing the risk of traditional and electronic banking operations through training courses and workshops.

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