Concepts, Uncertainties, and Reaction to Financial Risk in the Sudanese Manufacturing Sector

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Abstract: - The study aimed to highlight the uncertainties about, reactions to, and perceptions of the financial risks which prevail in the manufacturing sector in Sudan. The study adopted the descriptive analytical approach to examine the coherence between concepts, reactions, and doubts to manage financial risks in the Sudanese manufacturing sector. Manufacturers from Khartoum were asked to fill out the study questionnaire. At a later time, responses were analyzed using the statistical package for the social sciences (SPSS) version 22.0. The results chiefly focused on developing an effective risk management system in the manufacturing sector. The study on the other hand focused on identifying the manageable financial risks that the manufacturing sector in Sudan suffers from. The potential results showed that 95.6% of manufacturers believe that effective risk management is combined with appropriate financial management. Moreover, 3.1% of manufacturers considered risk management as a separate function. While 1.3% believe that risk management is related to the rate of production in the manufacturing sector. The main uncertainties prevailing in the Sudanese manufacturing sector were due to low manpower, machinery, and low-quality materials.

Key-Words: - Concepts, Financial Risk Management, Manufacturing Sector, Reaction, Sudan, Uncertainties

Received: May 4, 2023. Revised: September 27, 2023. Accepted: October 2, 2023. Published: October 13, 2023.

1 Introduction

1.1 Background to the Study

The industrial sector in Sudan is relatively narrow. The manufacturing industry alongside the mining, contributes less than a third of the country's GDP, Soap industry, and cotton textiles represent the low percentage of the labor force. In addition, Sudan produces shoes, chemical fertilizers, and cement. Further, oil refining is also part of the industrial activity in Sudan. It is worth noting that most factories in Sudan operate far below their capacity. The growth rate of the industrial sector production in Sudan, according to 2017 statistics, is only 2.5%, and the contribution of the industry sector to the country's economy is only 2.6%. The agricultural sector contributes 39.6%, while the service sector has the largest share with a percentage of 57.8%. More than half of Sudan's total financial revenue comes from its exported oil, livestock, cotton, gum Arabic, sesame, and sorghum are among the main exports of Sudan. As for what the Sudanese government imports, it is represented in machinery, equipment, and manufactured goods in addition to cars and wheat. China is Sudan's largest trading partner, in addition to other countries such as Japan, Egypt, and Saudi Arabia.

In business and everyday life, the term risk has many different connotations. Risk is used to characterize numerous situations where the result is unknown. Risk is frequently used in probability and statistics, financial management, and investment management to represent potential variability in outcomes around certain predicted values, [1]. With the development of economic globalization, enterprises are experiencing dual rivalries and difficulties from within and beyond. To remain indomitable, firms must be able to swiftly adjust to variables in the economic environment in local and international contexts, to extend the operating scale, boost market share, and maximize company value. Thus, financial risk can not be avoided in the process's financial activity. As a result, figuring out the origins of the financial risks and implementing effective actions to eliminate them while they are still manageable are critical. For instance, using listed manufacturing businesses. This essay seeks to examine the causes of financial risk and provide financial risk countermeasures, [2].

1.2 Previous Studies

In the study conducted by, [3], the author wished to create a geographical database for the industrial zones in Sudan and a spatial analysis of the characteristics of the problems that the industry suffers from. The rationale of the study is to investigate the extent of the contribution of the manufacturing industry to the economic development in Sudan. To develop solutions to the problems and obstacles of the manufacturing industries, workers with the poor infrastructure of the Sudanese economy, and energy problems. The study employed the deductive method to ensure the validity of the hypotheses through the spatial analysis of the industrial problems. Further, the study stated recommendations to increase the contribution of the industrial sector in Sudan.

Research by, [4], examined the manufacturing sector's contribution to the Sudanese economy and evaluated how the aerospace industry in particular may operate as a catalyst for Sudan's sustainable growth. Based on a thorough industrial survey conducted in 2001 with support from the United Nations Industrial Development Organization and the United Nations Development Program, the study assessed and analyzed the contribution of the industrial sector to the Sudanese economy. After that, it evaluated how the aerospace sector would help this sector contribute to the Sudanese and regional economies more effectively and contribute to sustainable development evidence derived from global industrial perspectives, international economic assessments, and the experience of other nations in a scenario comparable to Sudan.

The research by, [5], investigates the factors that contribute to poor foreign and domestic investment in Nigeria, including corruption and an adverse macroeconomic climate. The report concludes with some recommendations on how to combat corruption, establish good governance, accountability, transparency, and the rule of law, as well as how to lessen the dangerous environment now present in Nigeria to draw in both domestic and foreign investors. The document also explores the macroeconomic situation in Nigeria is quite precarious. Why aren't Nigerians eager to make investments in their nation while foreigners are withdrawing their money from Nigeria? The straightforward response is that corruption and an alien mindset are major issues. The corruption problem is.

A methodology for risk management that is inexpensive and useful for small and medium-sized businesses in the industrial industry in particular was developed by research, [6]. It is feasible to pinpoint crucial risk indicators that might jeopardize corporate performance (as measured in terms of cost, time, quality, and safety) by combining the Bayesian Belief Network (BBN) with Analytical Hierarchical Process (AHP) search algorithms. The study's findings support the notion that risk management for a manufacturing process can be successfully implemented if risk factors that negatively affect project cost, delivery quality, lead cycle, takt time, and worker health and safety can be identified using BBN and the framework developed in this study.

The paper by, [7], investigates operational problems. The disruptions expose a company to dangers to its workforce, economy, and production. The objective of this paper is to help an organization build a suitable risk management plan to cope with these risks. In this regard, the study developed a conceptual framework that specifies the basic approach to risk assessment and the weaknesses in the assessment phases that might obstruct the successful implementation of risk management. The model has been established by an empirical investigation in New Zealand using several case studies. Finally, a comprehensive framework is developed for the successful implementation of risk management in manufacturing organizations.

The authors of the study, [8], investigated how entrepreneurial marketing risk management affects organizational competitiveness in the context of Nigerian companies that manufacture industrial goods. The study used an explanatory research design, a causal investigation, and a cross-sectional survey research design. The study's conclusions show that entrepreneurial marketing innovation has a favorable and considerable influence on the indicators of organizational competitiveness. According to the study, Nigerian companies that manufacture industrial goods should implement a framework for managing risks to reduce possible losses in the market.

Originality and Value - Although there are studies that examine uncertainty and reaction to financial risks in the manufacturing sector, this study is a unique effort to gauge the effectiveness of risk management in Sudan. More specifically in light of the difficult political and economic conditions that the country is currently experiencing. It also sought to gauge the best level of financial risk management during the Sudanese economic crisis.

1.3 The Objectives of Risk Management

Providing top management with a high level of knowledge regarding the risks associated with the organization to incorporate appropriate systems to manage these risks is the main objective of risk management. In addition to ensuring proper communication of risk management at organizational levels and reducing overall organizational losses.

The risk exposures differ from traditional property causally to financial risks such as credit risks and currency fluctuations, in addition to trademark risks cyber attacker risks, human resources risks, and business interruption threats.

1.4 Benefits of Risk Management

Business organization's strategies encompass mission, vision, and objectives so by linking these strategies with risk management; organizations gain a competitive advantage by looking at how risks might violate the achievement of the ultimate goals, [9]. That competitive advantage depends on the flexibility to market, so the organization can benefit in the medium and long range.

In addition, the risk management process leads to stabilized investor confidence by reducing volatility and protecting the business from disturbances, and as a result, the likelihood of higher share prices, hence enhancing the economic value of the organization and improving the capital efficiency, [10]. In addition, the risk management process generates information, which is the key element for the decision-makers to proceed and select adequate and effective management strategies.

The risk management process allows organizations to develop working relationships with risk management partners, such as banks, insurance companies, and regulators, since an organization has an effective process of identifying, measuring, and prioritizing its significant risks, then it can purchase insurance coverage, which would meet its specific needs.

1.5 Manufacturing Sector Challenges

The manufacturing sector is facing challenges and competition together with the development of economic globalization. The position of different organizations is threatened within the market if financial risks are not managed effectively after the globalization of the financial sector. It would prevent the organizations from achieving their corporate objectives. The expansion of market share, operation scale, and value maximization of any sector is dependent on the adaptation to change of economic environment, [2]. The degree of modernization and comprehensive strength of any country can be measured through the level and scale of the manufacturing sector. The manufacturing sector faces financial risks and an increasingly complicated economic environment, due to the continued development of an accelerated international economy, which spreads the global financial crisis, [2]. This situation ultimately leads to a severe financial crisis in the manufacturing sector.

The handling of risks and uncertainties sometimes adversely affects the performance of the manufacturing sector. Although the manufacturing sectors are threatened by risks constantly, they try to optimize their resources to achieve their desired goals, [11]. Previously, inadequate attention was paid to the handling of risks, and insurance policies were only purchased in emergencies with considerable duplicated and overlapped coverage. During a financial crisis, the insurance company enables the manufacturing sector to deal with uncertainties and to assume that the risks do not affect the probability or loss, [12]. It is believed that the insurance sector influences the behavior of the manufacturing sector in two ways:

- Adverse selection
- Moral hazard

Risk management is sometimes also known as insurance management, but they are not similar. The risks that are handled by insurance companies are known as pure risks; whereas, the risks managed by other methods other than insurance are known as speculative risks. Risk management includes different methods of managing financial risks; while insurance management is only associated with the administration of a firm's insurance program, [13]. The courses of action are needed to be formulated from the best available evidence because the outcomes of insurance management decisions are uncertain. It is necessary to reduce the expected financial outcomes to an acceptable probability as the risk outcomes may vary, depending on the current situation.

Sudan being an under-developed country mainly relies on the industrialization of potentials for eradicating unemployment and poverty. It is necessary to assume reasonable rational measures and savings to manage certain risks that depend on the cost-benefit analysis. This planning is needed in most of the manufacturing sectors. The financial status of new companies formulates the major component in the development of the manufacturing sector. Apart from the risks associated with different properties (machinery and equipment), there are other financial risks associated with the manufacturing sector. This study has mainly focused on the concepts, reactions, and uncertainties associated with the manufacturing sector as a result of the financial crisis.

The manufacturing sector must ensure the protection of its financial facilities and loans against financial risks. The results of the study will contribute to an improved understanding of the basic features compatible with the manufacturing sector of Sudan to remain secure from the financial crisis. It is crucial to investigate the impact of the implementation of risk management strategies on the desired goal of the manufacturing sector. The study identified uncertainties, reactions, and concepts towards the application of sound risk management processes by the manufacturing sector in Sudan, which is considered one of the leading sectors in Sudan. It also highlighted the responsibility of the insurance sector in dealing with actual and potential losses in this sector. Moreover, the study has analyzed the uncertainties, concepts, and reactions toward financial risks prevailing in the manufacturing sector of Sudan.

2 Significance of the Study

The study mainly aimed to point out the significant role played by the industrial sector in the economic development of Sudan, which contributes to absorbing a large part of the labor force in addition to its significant impact on the gross domestic product (GDP), the balance of payments, and the national product. The star stems from the nature of this activity, such as the risk of fire, natural hazards, and machinery downtime, in addition to financial risks, uncertainty, and reaction. Therefore, the study tries to identify these problems and find solutions to them.

3 Problem of the Study

The industrial sector ranks second after the agricultural sector in terms of its contribution to the gross domestic product. That is due to Sudan's recent interest in the industrial sector and its contribution to exports and the balance of payments. In addition to shedding light on the concepts, reactions, and uncertainty toward the prevailing financial risks in the industrial sector. The centralized question the study is attempting to answer is what is the role of concepts and uncertainty and how they act towards financial risks in the industrial sector in Sudan.

4 Questions of the Study

The study set out to answer the following questions:

- What are the financial risks to the manufacturing sector in Sudan?
- The extent to which appropriate financial management in the industrial sector contributes to effective risk management and mitigation of these risks
- What is the extent to which good risk management is related to the rate of production, especially in the manufacturing sector?

5 Methodology of the Study

The study has incorporated a descriptive-analytical approach to analyze the relationship between main variables including uncertainties, reactions, and concepts to financial risk in the Sudanese manufacturing sector. The study covered the period (2010 – 2020) since the reporting systems of insurance companies in Sudan were unified due to the introduction of the Islamic insurance system during such years. The survey about the manufacturing sector has been conducted in Khartoum state and the respondents were asked to fill out the questionnaires after the briefing. All the manufacturers listed in the survey in the state of Khartoum were recruited in the study. The manufacturers enrolled in this study constituted approximately 19% of the total number of manufacturers in Sudan. The state of Khartoum was selected for conducting this study as it features diverse manufacturing sectors in comparison with other states. For instance, 64% of the large manufacturing sectors are situated in the state of Khartoum. The questionnaire given to the respondents was divided into two parts; the first part concentrated on the perception of risk management; whereas, the second part focused on the actual situation of risk management that defined various applications among the respondents. All the respondents were interviewed personally to obtain data. The collected data has been analyzed using Statistical Package of Social Sciences (SPSS) version 22.0 using a confidence level of 95%.

6 Literature Review

Financial risk in many situations is described as uncertainty regarding the outcome at a general level. In previous years, the Sudanese manufacturing sector has contributed about 10% to the GDP. Moreover, these sectors are dominated by small family-owned processing firms. It makes it difficult for under-capitalized banks to finance large manufacturing sectors in Sudan. Banking finance is mainly limited to working capital; whereas, the investments of the manufacturing sector depend on the resources of the investors. Sudan has been regarded as the main food supplier; therefore, it has well-established manufacturing status. The uncertainty in the production from the manufacturing sector is greatly affected by unexpected changes in government policies and unexpected price changes, [13].

The economic situation of Sudan has been characterized based on the contribution to GDP and employment through the manufacturing sector, [14]. The financial risk in the manufacturing sector is defined as the uncertainty or lack of knowledge regarding the outcome. Efficient risk management protects the manufacturing sector against property and liability risks. The process of risk management used by risk managers includes the following steps:

The industrial activities in Sudan started with small rural industries before the First World War. Risk is defined as something unplanned that hits the manufacturing sector and causes financial damage. However, risk management functions to identify, analyze, and control the financial risks that are a threat to the operational activity within a manufacturing sector, [15]. All the uncertainties regarding risks are the responsibility of the risk manager. The uncertainties and reactions towards the financial crisis can be managed through the association between various techniques and ideas that provide an efficient set of tools for the analysis and control of financial risk, [16]. The two important techniques that efficiently manage financial risks include asset liability management and insurance policy. A study involved different business organizations across the world to analyze various prevailing uncertainties and financial risks within the organization, [17].

According to, [18], operational risk is known as the risk of subsequent financial loss that prevails in an organization due to the breakdown of technology or various human resource processes. Different working practices, cultures, and systems increase the certainty of risk development during acquisitions and mergers. The different insurance conditions and agreements define the obligations towards the insurer after facing financial loss. The financial crisis differs from one country to another based on its economic development. Moreover, the economic development of any country depends on the expansion and growth of industries and manufacturing sectors, [14], the manufacturing sector must guard against incidents, reducing the production of goods.

After the 20th century, the role of risk management expanded further for the protection of the manufacturing sector during the financial crisis, [19]. At the time of financial risk within an organization, risk management mainly focuses on the establishment of a culture that handles the risks associated with rapid changes in a business environment. Although different industries have different capabilities of managing financial risks, the techniques involved in risk management are referred to as Probabilistic Risk Assessment or Probabilistic Safety Assessment.

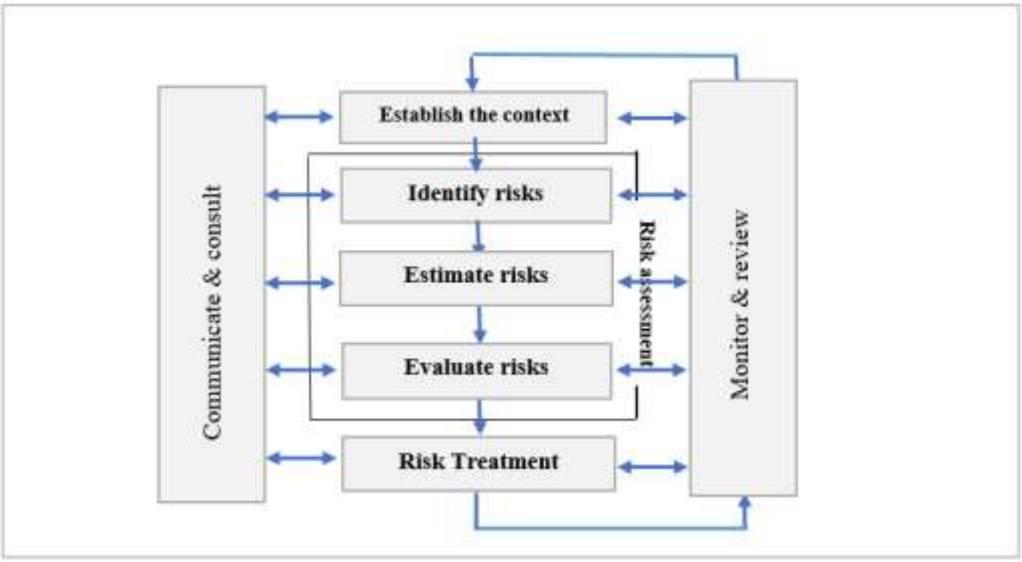

Fig. 1: Process of risk management

Table 1. Various uncertainties and financial risks prevail in different organizations

Year 2018	Year 2019	Year 2020
Fire	Business Interruption	Loss of Reputation
Business Interruption	Physical Business	Failure to Change
Employee Risks	Product Liability	Business Interruption
Environmental Risk	Loss of Reputation	Product Liability
Computer Crime	General Liability	Computer Crime

Industrial uncertainties are caused by technological innovation and changes in input/output prices, while external uncertainties are caused by the risk within a country's operating environment, [19]. To understand and assess emerging risks and prepare accordingly, the manufacturing sector employs risk departments, risk management tools, and outsourced risk management teams. The manufacturing sector needs to review the efforts to ensure the effective integration of strategic and operational decisions with an increase in corporate risk management.

7 Result and Discussion

The study has recruited various manufacturers from the industry. The results are mainly concerned with the introduction of an efficient risk management system within the sector. An efficient risk management system would rapidly assist and contribute to the process of identification and prioritization of the manageable financial risks faced by the manufacturing sector in Sudan. However, it is necessary to monitor and control the risks to survive in a world of uncertainty. Regarding the management of financial risks, 95.6% of the manufacturers responded that risk management is associated with financial management. However, 3.1% of the respondents considered risk management as a separate and individual function. Moreover, only 1.3% of the manufacturers believed that risk management is associated with the rate of production in the manufacturing sector (Table 2).

The manufacturers are significantly associated with risk management and function at 0.05% of the significance level. The results showed that there is a significant contribution from finance managers (69.4%) in managing financial risks in association with the financial management sector. The insurance manager works in association with the financial management to overcome the prevailing financial crisis in the manufacturing sector (Table 3). The results showed that financial risks had been managed by risk managers designated in all sectors of the manufacturing industry, including foods and beverages, machinery and equipment, petrochemicals, and others (Table 4).

Regarding the situation of risk management, 95.6% of the respondents indicate that it is combined with finance, 3.1% consider it as a separate function whereas only 1.3% consider it as combined with production (Table 5).

Table 2. The perception of risk managers towards the function of risk management

	Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
Separate function	10	2.6	3.1	3.1
Combine function with Financial management	304	77.7	95.6	98.7
Combined function with the production sector	4	1.0	1.3	
Total	318	81.3	100.0	100.0
Not determined	73	18.7		
Total	391	100.0		

Source: Primary Data (2020) (author's work)

Table 3. The management of financial risks by different managers in the manufacturing sector

			Risk Management Function		
			Separate Function	Combine Function with Financial Management	Total
Financial Risk Management	Insurance Manager	Count		35	35
		%		19.1%	19.1%
	Insurance and Risk Manager	Count		13	13
		%		7.1%	7.1%
	Risk Manager	Count	6	1	7
		%	3.3%	0.5%	3.8%
	Finance Manager	Count		127	128
		%		69.4%	69.9%
Total		Count	6	176	183
		%	3.3%	96.2%	100.0%

*Source: Primary Data (**2020**) (author's work)*

Table 4. Chi-square Test

Manufacturing Sector	Value	df	Significance
Food and Beverages	156.364a	6	0.000
Machinery and Equipment	37.000 a	2	0.000
Electrical Machinery	39.000 a	1	0.000
Petrochemicals	7.239 a	2	0.027
Others	8.165 a	2	0.017

*Source: Primary Data (**2020**) (author's work)*

Table 5. Risk management function

	Frequency	Present	Valid Percent	Cumulative Percent
Valid A separate function	10	2.6	3.1	3.1
Combined with finance	304	77.7	95.6	98.7
Combined with Production	4	1.0	1.3	100.0
Total	318	81.3	100.0	
Missing Not determined	73	18.7		
Total	391	100.0		

*Source: Primary Data (**2020**) (author's work)*

Concerning the reporting situation 54.1% of the respondents show that the risk manager reports to the finance manager, 31.8% show that he should report to the chief executive, 9.1% indicate that he should report to both the board of directors and chief executive and 5% indicate that he should report directly to the board of directors (Table 6).

Regarding the circulation of the risk management philosophy manual to all the enterprise departments, 59.2% of the respondents indicated that there is no policy of circulation, but policy directions given from time to time, 31.8% indicated that no circulation at all, whereas only 9% indicated that the policy has been circulated to enterprise departments (Table 6).

For the period of safety audit within the surveyed organizations 84.8% of the respondents indicate that it is only once a year so far, 1.3% indicate that no safety audit was carried out in their enterprise at all, and 5% indicate that it is once in two years (Table 7).

Table 8 presents the risk management department – involved in evaluating the risk of new projects/purchases of capital to incorporate prevention or loss control measures.

Table 6. The philosophy of risk management is embodied in a manual circulated to all departments

	Frequency	Present	Valid Percent	Cumulative Percent
Valid Yes	35	9.0	9.0	9.0
No, such manual but Policy direction given From time to time	231	59.1	59.1	68.2
No	124	31.7	31.8	100.0
Total	390	99.7	100.0	
Missing Not determined	1	3		
Total	391	100.0		

*Source: Primary Data (**2020**) (author's work)*

Table 7. The period of safety audit – been carried out:

	Frequency	Present	Valid Percent	Cumulative Percent
Valid Yes, only once so far	63	16.1	16.1	16.1
Once in one year	320	81.8	82.1	98.2
Once in two years	2	5	5	98.7
Not at all	5	1.3	1.3	100.0
Total	390	99.7	100.0	
Missing Not determined	1.0	3.0		
Total	391	100.0		

*Source: Primary Data (**2020**) (author's work)*

Table 8. Risk management department

	Frequency	Present	Valid Percent	Cumulative Percent
Valid Yes	26	6.6	6.7	6.7
No, as prerogative of Technical department	364	93.1	93.3	100.0
Total	390	99.7	100.0	
Missing Not determined	1.0	3.0		
Total	391	100.0		

*Source: Primary Data (**2020**) (author's work)*

8 Discussion

The supply chain of the manufacturing sector is complex and exposed to different risks, which are emanated within the sector or present outside of their value chains. The manufacturing sector experiences various difficulties and uncertainties that include; geo-political pressures, social responsibilities, environmental conditions, regulatory requirements, and financial challenges, [20]. Therefore, it is necessary to consider the financial risks that are associated with the financial investments. If the risks are not managed carefully, it may increase the financial complexities prevailing in the manufacturing sector, [21].

The successful and effective risk management practices adopted by the risk managers include the periodic presentation and integration of risk assessments with appropriate strategic planning within the manufacturing units. Significant uncertainties and risk factors associated with the manufacturing sector in Sudan, including continuous conflict, lack of political stability, imbalanced development strategies, increased unemployment rate, regional disparities, and poverty, [14]. However, technological developments can overcome the strategic challenges and problems faced by the economic development in Sudan.

The financial risks are certainly a concern for the finance manager as these risks subsequently pose physical as well as psychological challenges to the manufacturing sector, [15]. The manufacturing sectors are facing great challenges and competition along with the development of economic globalization. Quick adaptation to the change in the economic environment is necessary to remain invincible. It might help in the expansion of operation scale, maximizing enterprise value, and increasing their market share, [2].

The interest on loan and yield of enterprise management are uncertain, due to the increased magnitude of risk and debt scale. The condition of bankruptcy prevails when the manufacturing sectors are not able to pay back the heavy debt, [20]. The managers are only in charge of the financial activities of the manufacturing sector, which are composed of the country’s economic condition. The recent financial crisis revealed that the manufacturing sector is being subjected to different dislocations and interventions. Therefore, a strong association between the availability of trade finance and liquidity flow is necessary, [22].

The developing countries are at greater risk of facing structural difficulties and worse financial situations, including the manufacturing sector in Sudan. It is because the ability of local financial sectors to support trade does not match the fast-moving production networks, [22]. The manufacturing sector is exposed to a variety of financial crises that are managed through the implementation of different strategies. Internal factors; including human error, disruption of production, fraudulent activities, and system failure, are among the major operational risks that interrupt profit within the manufacturing sector. Although the effective management process is helpful for the organization to respond wisely to financial risks, it is difficult to control and minimize the external factors prevailing in the country itself, [23].

The control of production in the manufacturing sector is associated with desired output, which determines the needed input, planning, and scheduling of the production processes, [24]. The effective management of financial risks significantly contributes to the GDP and employment of the labor force. The comprehensive process of risk management assists risk managers to manage financial risks by reducing the operational risks, prevailing in the manufacturing sector. Moreover, it indicated certain promotional processes, which would lead to the production of high-quality goods, services, and products, [23]. The constant monitoring of production processes and average performance within the manufacturing sector help control the equipment's reliability and prediction of future breakdowns.

9 Conclusion

The results revealed that the identification of potential risks is the extremely crucial stride that must be taken toward the effective management of financial risk prevailing in the manufacturing sector. Proceeding with the recognition of the risks, it is necessary to assess the potential severity of the risks and the probability of their occurrence. The major uncertainties associated with the manufacturing sector, include machinery, manpower, methods, and quality of materials. However, an appropriate risk management process functions to provide a solution for overcoming financial instability and its associated risks. Moreover, the communicational skills and abilities of a risk manager play a significant role in contributing to the management of financial risks.

Appropriate risk management has proved to be a good source of help to manufacturers in attaining their desired goals. The risk manager needs to ensure the correct implementation of strategies to manage the financial risks, which adversely affect the economic situation within the manufacturing sector. However, it is the executive responsibility of risk managers to observe and monitor the profit of the manufacturing sector and work to attain maximum profit within the sector. The main objective of risk management is to maintain the financial stability of the manufacturing sector and enable a proper management plan.

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Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

The authors equally contributed in the present research, at all stages from the formulation of the problem to the final findings and solution.

Sources of Funding for Research Presented in a Scientific Article or Scientific Article Itself.

This work was supported by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia [Grant No. 3468].

Conflict of Interest

The authors have no conflicts of interest to declare.