



**UNIVERSITY OF RWANDA
COLLEGE OF BUSINESS AND ECONOMICS
SCHOOL OF BUSINESS**

**INVESTMENT RISK MANAGEMENT AND FINANCIAL
PERFORMANCE OF PHARMACEUTICAL COMPANIES IN
RWANDA**

**A CASE STUDY OF DEPOT PHARMACEUTIQUE LE
MEDICAL**

**A DISSERTATION SUBMITTED TO UNIVERSITY OF RWANDA IN PARTIAL
FULFILMENT OF THE REQUIREMENT FOR AWARD OF MASTER'S IN BUSINESS
ADMINISTRATION (MBA) IN FINANCE**

By

AUGUST, 2022

DECLARATION

This thesis is my original work and has not been presented for a degree in any other University or for any other award

Name: **NIYIGENA Philomene**

Sign _____ Date _____

I confirm that the work reported in this thesis was carried out by the candidate under my supervision

Name : Dr MUTARINDWA Samuel

Sign  Date: 23.07.2022

DEDICATION

To the Almighty God

To my Managing Director

To my beloved husband and friends

To my relatives, colleagues, and all those who know me

To all of you who supported me during my studies

To my co-workers and classmates

I dedicate this dissertation

«God bless you»

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There are several people without whom this research could not have been a success and to whom I am greatly indebted.

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ABSTRACT

This study intended to find the impact of risk management on the performance of pharmaceutical investment companies operating in Rwanda. The specific objectives were to explore risks facing pharmaceutical investment companies and their management strategies; to analyse the financial performance of pharmaceutical investment companies and to find the relationship between risks management and the performance of pharmaceutical industry. The study used a survey research design and data was collected from one of the pharmaceutical businesses companies operating in Rwanda. Data was analyzed using SPSS. The study revealed that pharmaceutical investment companies operating in Rwanda face several risks in their operations due to environments, the quality of facilities that are put in place and the business structure that rely on product shipment incite probable risks. Much expired products to the reduction in demand that led to the accumulated loss in business. Thus, the effectiveness in risks management processes will significantly increase project performance. Risk identification contributes to the performance of the company. Enhancing the risks identification and responses in pharmaceutical investment company significantly boost the company performance as statistically significant to the company performance. The study suggests the company to enhance risks management process as it is a vital importance towards financial performance.

Key words: Risks management; financial performance

CHAPTER ONE

GENERAL INTRODUCTION

1.1. Background to the study

One of the most crucial areas of management is risk management because poorly managed risks are one of the main causes of project failure (Chou, 2015). Over the past two decades, there has been a tremendous rise in risk mitigation understanding and application, according to an analysis of earlier risk management studies. Taroun (2014) discovered that risk management is one of the themes that appear the most frequently in significant project management publications. Prior to making any decisions, managing risk frequently requires conducting a comprehensive study of the information and dangers that could have a significant impact on project goals. The management team should ensure the risk management process as a primary influence on goal achievement. To manage risk, a business must first understand the threats it confronts. This aids in identifying potential project hazards and documenting their features in order to effectively handle the necessary remedial actions.(Muiro, 2004).

As markets develop and huge firms consolidate, the pharmaceutical environment is always evolving. These businesses need to specialize and adapt if they want to stay ahead and obtain a competitive advantage. Because of this, the significance of project management, especially risk management, in the creation of new products cannot be overstated if a powerful brand is to be released into the industry. The findings of numerous researches have demonstrated "the constraints of the industry's diminishing productivity, the change in commercial models, and the expansion of emerging markets." The industry needs invest more in product development to handle the issues, change, and competition in order to create a new product that will provide it a strong position in the market (Gautam, .2016).

Risk management approaches must be utilized to manage investment efforts since project management theories state that every project is exposed to a variety of risks. Scrum methodology depends heavily on the discovery, measurement, and reduction of risks (Mastroianni. 2011). Assessment, assessment, and prioritizing of risks are all steps in the systematic process of managing risk. The next step is the planning of resources to reduce, monitor, and control the

likelihood and impact of unfavorable events” (Wang et.al 2010). The reason for creating such a systematic risk management strategy comes from the fact that risk control offers adequate management.

Dealing with risks before they arise and reducing their negative effects on the progress of a project or conclusion are both possible. To maximize the benefits of risk management, it is crucial to ensure that the procedure complies with organizational guidelines and sector standards. Additionally, efficient technologies that support the procedure and aid in the appropriate use of monitoring and assessment techniques should be implemented.

The goal of risk management is to reduce negative outcomes by recognizing and reducing hazards while maximizing possibilities (Iqbal et al. 2015). Furthermore, precise risk detection can aid in modifying the likelihood that a danger will occur. It's critical to realize that risk management cannot totally eliminate all investment-related dangers. A risk must first be determined through a risk identification procedure in order to be managed. Every investment carries some risk because of the nature of the industry. Despite the requirement to identify all potential hazards, efforts would concentrate on the most severe threats (Zavadskas et al. 2010).

Several options of country legibility to some pharmaceutical products, import verification and tax clearance that vary day to day make a challenge in pharmaceutical businesses. Pharmaceutical items in Rwanda are extremely vulnerable to improper storage conditions. Pharmaceutical products' quality decreases, their shelf lives are reduced, their active components and diluents deteriorate, and some even become dangerous to patients if crucial storage requirements are not followed. Therefore, in order to protect public health, pharmaceutical storage conditions must be carefully researched and implemented.(Lieberman, 2013).

Since pharmaceuticals account for a significant portion of the budget for the medical sector, they should always be carefully maintained to avoid wasting the money spent on them and the risks associated with using dangerously deteriorated medications. To do this, it is necessary to provide the tools needed to maintain the products in the condition in which the producer developed them (Lieberman, 2013).

The studies conducted by Bajema, Barstis, and Lieberman (2013), Berman (2008) emphasize on risks management process towards pharmaceutical companies by assessing counterfeit drugs, and anti-counterfeiting measures. The studies didn't consider other common challenges in pharmaceutical investment like prices fluctuation, long lead time, import verification and tax clearance that vary day to day make a and sophisticated supply chain process. Other empirical review explored of Addison & Villach, (2002) and (Almajali, 2012) analyzed risks management and investment business performance in insurance companies and they didn't consider pharmaceutical company.

Several facts from the empirical reviews indicated a gap in studies conducted on risks management process and the financial performance of investment business companies. The studies didn't consider other common challenges in pharmaceutical investment like prices fluctuation, long lead time, import verification and tax clearance that vary day to day make a sophisticated supply chain process. Moreover, there is no similar study conducted in Rwanda specifically on pharmaceutical company and the data analysis process used by other scholar is regression analysis while the researcher intends to apply ratio analysis to analyze financial performance and residual equation to investigate the connection between the two variables being investigated.

1.2. Problem statement

Evaluation is regarded as a yardstick for measuring a company's success or failure. Investment firms are in the industry of identifying business threats and responses; they deal with risks of their customers as well as their own. It has received little attention in recent years. This study project aims to highlight the importance of risk assessment in business. Business firms have historically affected the growth of businesses, particularly in emerging countries. However, these businesses confront various issues as a result of risk assessment processes.

According to Agyei and Yeboah (2011), certain commercial businesses have had difficulty increasing inappropriate risk assessment policies and procedures are probably the main reasons of these organization difficulties and poor performances, but some of them even shut their accounts. Risk assessment techniques are critical in company since they are the foundation of

success, but few research have been undertaken to investigate the relationship between risk assessment methods and financial performance.

The process of supply chain in pharmaceutical companies is susceptible to several risks due to its long process and shipments barriers. The process includes requisitioning, acquiring, storing, distributing, and overseeing the proper use of supplies and medications. For the processes to take place easily knowledge on the distribution network, quality control, and sourcing are key in each step of the cycle. Management Sciences for Health (MSH, 2012) report on quantification agrees with the above statement and adds that the effectiveness and efficiency of the processes helps to avail the right drugs to the right patient at an affordable and competitive price in the right time.

In this regards, depot pharmaceutique under study imports medical products from abroad and due to a long distribution channel, delay, and lead time are often the barriers that the company exerts that lead to price fluctuations. Moreover, several options of country legibility to some pharmaceutical products, import verification and tax clearance that vary day to day make a challenge in pharmaceutical businesses. The carry out this study, the researcher is prompted by the exposure of pharmaceutical investment to several operational risks inherent to counterfeiting, products price fluctuations and effective product storages that require effective risks management.

The study is convinced by the fact that Rwanda currently has no local production of medical products and equipment. Medical Procurement and Production Division handles local distribution for government-owned medical facilities, whereas BUFMAR handles distribution for faith-based hospitals and centers. Through international tenders, both MPPD and BUFMAR fill their warehouses with foreign exporters/importers. Wholesale pharmacies directly import or represent overseas exporters and manufacturers to supply private hospitals and local retail pharmacies.

Moreso, the fact that private pharmaceutical companies import pharmaceuticals under the government procurement agency (GPA) and the prices are determined by International Medical Product Price Guide (IMPPG) lead to overrun and long lead time as pharmaceutical investment companies are not operating in free environment (Bizimana., 2020). On the basis of the empirical review presented in this study, several facts indicated a gap in studies conducted on risks

management process and the financial performance of investment business companies. The studies didn't consider other common challenges in pharmaceutical investment like prices fluctuation, long lead time, import verification and tax clearance that vary day to day make a sophisticated supply chain process. Moreover, there is no similar study conducted in Rwanda specifically on pharmaceutical company and the data analysis process used by other scholar is regression analysis while the researcher intends to apply ratio analysis to analyze financial performance and residual equation to analyze the relationship between the two variables under study. Thus, this study seeks to address the effective strategies towards risks in the field of pharmaceutical business investment with a specific reference of Depot Pharmaceutique Le medical

1.3. Research objectives

1.3.1. General objective

The general objective of this study is to investigate the impact of risk management on financial performance of pharmaceutical companies in Rwanda.

1.3.2. Specific objectives

1. To explore risks management process applied by Depot pharmaceutique le medical
2. To analyse the financial performance of Depot pharmaceutique le Medical
3. To establish a relationship between risks management and the financial performance of Depot pharmaceutique le medical

1.4. Research questions

The researcher examined the risk management and projects' performance in order to address the aforementioned purpose by putting forth several questions designed to assess various facets of risk management and the performance of pharmaceutical businesses operating in Rwanda.

1. What are the risks management processes applied by pharmaceutical companies in Rwanda?
2. What is the effectiveness of financial performance of pharmaceutical companies?

3. Is there a relationship between risks management and the financial performance of pharmaceutical companies?

1.5. Research hypothesis

After defining the research questions that guided this study, the researcher thought of their respective predicted outcome termed as hypothesis. The following hypotheses were tested throughout the conduct of this study.

H₀: Is there a relationship between risks management and the financial performance pharmaceutical companies in Rwanda?

H₁: Is there a relationship between risks management and the financial performance of pharmaceutical companies in Rwanda?

1.6. Significance of the study

1.6.1. The researcher

This study intends to inform the researcher as to whether project risk management enhances the performance of Investment Company. The researcher will also be able to complete the requirements of a master's degree in business administration.

1.6.2. Management of the case study

The study intends to help the management of investment companies operating in Rwanda given that the study's findings should be repeated to strengthen mitigation measures and boost of pharmaceutical investment companies.

1.6.3. Private investment companies

As the study emphasizes on project risk management in the field of, private investment pharmaceutical companies, other companies in the same sector intend to benefit from this study as they implement multiple projects in the same sector.

1.6.3. Future researchers

Researchers and academics can use the study's materials. This will serve as the foundation for upcoming scholarly investigations as a source of secondary data in the area of risk management and performance pharmaceutical investment firms.

1.7. Justification of the study

The researcher's motivation for doing this study project stems from the fact that numerous pharmaceutical corporations have put up significant obstacles, such as obsolescence of drugs, poor starting conditions that lead to obsolescence of products prior to the expiration date, Thus, the researcher got prompted to investigate project risk management and pharmaceutical company performance with a specific reference of Depot Pharmaceutique le Medical.

1.8. Organisation of the study

The report on the research project was divided into five chapters: the chapter one that details the general introduction of the study. Associated literature evaluation is presented in chapter two with references to various data sources, particularly from books, publications, and the internet. Theoretical and empirical literature on project risk management and the performance of investment companies were the main topics discussed. Critical literature and gap analysis were then presented. The third chapter describes the research strategy, data gathering procedures, and data analysis techniques used in this study. In Chapter 4, the research findings are analyzed and interpreted in light of the study's research questions. The research findings are summarized in chapter five, along with recommendations and conclusions for additional study.

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

In order to build an efficient and precise awareness of project risk management and pharmaceutical investment businesses, this chapter examines the most recent research, provides the literature on the major themes of the research based on the main variables under study. It is organized into three Theoretical literatures, a theoretical framework, and empirical researches on investments risk mitigation are included in the main areas and the performance of pharmaceutical companies.

2.1. Conceptual review

2.1.1 Understanding Risk and Risk Assessment

Understanding the risk in the primary business operations and surrounds of the organization is the first step in the risk assessment process. According to numerous researches, knowing risk and risk assessment is a crucial aspect in risk assessment methods (Hassan, 2009).

2.1.2 Risk identification

Risk identification is the process of labeling risks that could impair the project as well as documenting such dangers. The four elements of effective risk identification are risk sources, hazard factors, hazards, and risk exposure. Risk identification is the main step in the risk assessment process because once a risk has happened, one wants to know where it came from. Instruments used to increase chances of knowing dangers present in particular systems, facilities, or items are techniques for recognizing risks. These tools are categorized into three types: inductive, deductive, and intuitive methods (Ndwiga & Ngugi, 2012). After establishing a framework for recognizing risks, methodologies are now employed in many goods, organizations, systems, or situations.

2.1.3 Risk assessment and analysis

Risk evaluation and analysis are also important in business since they ensure a balance between the risks incurred and the rewards gained by the organization. It has been revealed that gauging the danger of business failures is the primary focus of company rules. It is believed that building a successful risk management environment in a corporation requires a strategy or model for assessment process and appraisal that is appropriate, accurate, and adaptable.

2.1.4 Risk prevention practice

There will always be some element of risk in every business. Risk management is only possible by choosing one or a combination of the risk assessment approaches available for reducing liability through risk control and risk management (Rejda, 2005). Risk mitigation suggests the following risk management approaches to limit or reduce a firm's exposure to unpredictability at the lowest possible cost: Risk avoidance refers to decisions made not to accept a risk when the potential gain is less than the potential loss due to a high claims ratio. Risk reduction refers to actions taken to lessen the possibility that a loss will occur (Vaughan, 2008).

2.1.5 Risk monitoring practices

Risk management is the process of lowering or reducing minimizing a company's level of risk, and it recommends the next risk management practices: Risk reduction refers to efforts taken to reduce the likelihood of a loss occurring, whereas risk avoidance is used to describe choices taken not to take a risk whenever the perceived benefit is less than the possible liability despite a high complaints ratio (Ndwiga & Ngugi, 2012).

Soyemi & Ashogbon, (2014) a functioning management information system should be implemented by experienced managers to assess likelihoods and enable prompt reviews of positions at risk and their exceptions. After risk monitoring, control should be implemented by the establishment of standards, policies, and procedures that outline who is in charge of what. This guarantees that risk exposure is kept to a minimum.

2.2. Financial performance indicators

Nonetheless, the extent to which the organization's goals are met is determined by its organizational performance. The efficacy, efficiency, stakeholder satisfaction, creativity, product or service quality, and capacity to maintain a particular human pool are the typical metrics used to assess profitability (Katou & Budhwar, 2007).

2.2.1. Liquidity

Liquidity is an organizational capacity to pay its debts as they become due in the immediate term without affecting its regular business activities. Current and quick ratios, which measure a company's short-term solvency, are used to calculate liquidity. The firm's investment is limited by its net worth. According to the current asset to accounts payable ratio, the private sector is anticipated to improve liquidity. The majority of research on comparing business performance during privatization in developing nations came to the conclusion that privatization enhances business performance, particularly a considerable increase in the liquidity ratio (Kikeri & Nellis, 2004).

2.2.2. Financial leverage

Leverage refers to any technique that multiplies gains and losses. Most commonly, it entails borrowing money to buy more of an asset in the hope that the asset's income or price appreciation will be greater than the cost of borrowing. Almost always, this involves the risk that borrowing costs will exceed the asset's income or that the asset value will fall, resulting in losses. (Kikeri & Nellis, 2004). Leverage ratio also aids in short- and long-term forecasting, and growth can be identified using performance analysis.

2.2.3. Profitability

The ability to afford gain, benefit, or gain is what is known as productivity. The metrics used to assess profitability include return on revenue, return on asset, and return on equity ratios derived from a company's profit. The majority of research shows that privatization increases a firm's profitability. The most of the resources in the studied companies were privatized, and the government's controlling rights were given to private landowners (Megginson & Netter, 2001).

Gross profit ratio: The link amongst prices, sales volume, and costs affects the gross margin. Most of these variables may change, changing the gross profit. Good management is indicated by a greater profit-to-sales ratio since it suggests that the company has relatively low manufacturing expenses. It might also mean that the cost of items sold hasn't increased but the sale value increased. A relatively low gross profit is unquestionably a warning sign, necessitating a careful and detailed examination of the factors responsible.

$$\text{Gross Profit Ratio} = \frac{\text{Grossprofit}}{\text{Netsales}} \times 100$$

Net profit ratio: The net profit ratio illustrates company's capacity to run the company profitably enough to pay period income, sales price, overhead cost, and accumulated interest, as well as to provide a suitable margin of remuneration for the shareholders who risked their cash. The cost savings of the operation is mainly expressed by the net profit to percentage of sales.

$$\text{Net profit ratio} = \frac{\text{Netprofitaftertax}}{\text{Netsales}} \times 100$$

Return on Assets: The profitability in this instance is determined by the correlation between profits and assets. Profit-to-assets ratios can also be used to determine ROA. This is how it is calculated: Return on assets (ROA) = $\frac{\text{netprofitaftertax}}{\text{Averagetotalassets}} \times 100$

The ROA gauges a company's overall financial and investment success. It does not, however, shed any light on how profitable the various funding sources are that are used to finance all of the assets.

Return on equity (ROE): One of the ultimate objectives of every economic endeavour is to make a profit. Return on equity (ROE), which is determined by dividing operating revenue by shareholders' equity, can be used to measure profit. Earnings, also known as retained profits and owners' equity, are the components of shareholders' equity. Even if there are various profit metrics available, we favour using return on equity (ROE), which is the most popular profitability metric in the finance industry.

$$\text{Return on Equity (ROE)} = \frac{\text{Netprofitaftertax}}{\text{Equityshareholders" funds}} \times 100$$

It has an impact on the market price of equity shares. It shows how the funds of the owners have been used by firms and whether the firm has been able to earn the satisfaction of the owners or not.

2.2.4. Effects of pharmaceutical risks on performance

However the theories on businesses and project implementation demonstrated that risks are common characteristic of any economic and business activities, risks in pharmaceutical sector bear harm effects that beyond the bankruptcy of businesses. Their effects affect profoundly the performance such investment company as they also lead to loss of life of community members. Therefore great effort are envisaged to combat such malpractices facing pharmaceutical investment companies. Tracking approaches involve using specific markers input into medications to verify their Authenticity .A wide range of markers have been investigated, and these offer varying utility in the bid to ensure a clandestine supply chain that is free from exploitation by counterfeiting entities; these technologies include – bar codes, radio frequency identification tags.

2.3 Theoretical Framework

2.3.1. Agency theory

Agency theory broadens the firm's analysis to incorporate managerial incentives and the division of shareholdings Ndungu & Njeru (2014) mentioned that the theory portrays interdependence of principal agency conducting operations together helping to resolve issues between them known as agency issues that result from having different goals. Another issue arises when the principal and agent do not share the same attitudes toward business risks, resulting in decisions that are not consistent. (Ndungu & Njeru, 2014). The theory also suggests a potential misalignment of interests between debt holders, administration, and investors as a result of profits distribution asymmetries, which might result in the company taking on too much risk or refraining from engaging in projects with positive net value (Mayers& Smith, 2007).

In responding to a conflict involving corporate governance and shareholder interests, risk assessment is strongly supported by agency theory. The goals of managers and shareholders in the organization are diverse, and each stakeholder has different goals for risk management.

Investors' desire for high-risk, high-return opportunities may come from shareholders, whereas management favors low-risk, high-return opportunities. The agency theory places a strong emphasis on the value of risk management in bringing managers' and shareholders' interests into alignment and enhancing the profitability.(Stulz, 2004). Since it is thought that managers work for the company shareholders, they are worried about both the return on. Reducing business variability is important returns and hence obtain, they are more inclined to minimize risk. Because managers strive to maximize the wealth of shareholders by lowering the uncertainty of their firms' return, risk assessment allows business owners save funds on agency charges (Stulz, 2004).

The current study relies on this agency theory due to the fact that the theory suggests that the corporate governance should be well carried out by discouraging or avoiding the conflicts of interest that may arise in the corporate company and take into account all stakeholders interest. The common barrier of risk management which is the topic under study was much emphasized by the theory stating that risk assessment is strongly supported by agency theory. The goals of managers and shareholders in the organization are diverse, and each stakeholder has different goals for risk management. It is obviously clear that the theory supports this study.

2.4. Empirical literature

This section refers to the presentation of findings inherent to past studies conducted in the field of risks management process and the performance of investment companies. The researcher explored the past studies emphasizing on risk management process, financial performance and interaction between the study's objectives; financial success, and the risk management process

2.4.1. Empirical review on the risks management

Bajema, Barstis, and Lieberman (2013) discuss a screening tool that can help fight the market for contraband drugs. The authors highlight the negative consequences of contraband pharmaceutical products. When active ingredients are under-dosed, people can die. Among the screening tools are greater liquid chromatographic, spectrometry, and infrared spectroscopy. The authors suggest a screening technique that is accurate, affordable, and efficient. The method makes use of an analytical apparatus made of paper. Using the technologies in this gadget,

screening tools for practically any medicine can be easily created. For the study preparing for the effectiveness, experimental groups are asked to examine pill samples created from known substances, take pictures of the outcomes, and report the results to the researcher's database. The test findings were analyzed by the researchers. Only 5% of false positives were found in the final data, demonstrating the efficacy of the strategy.

Deisingh (2005) discusses the scope of pharmaceutical counterfeit goods, the effects of counterfeit goods on interested parties, multiple techniques for identifying counterfeiters, and anti-counterfeiting measures. According to the author, antibiotics and steroids are one of the most pirated drugs. Some of the identified consequences of counterfeiting include death, exposed to large damage assertions for healthcare professionals, and civil suits against automakers. Bulk property testing, which encompasses physiologically trying to describe the tablet and trying to measure the medication's solubility, viscosity, and weight, has been used to aid in anti-counterfeiting efforts. Specific heat and thin-layer capillary electrophoresis are two additional techniques. The author identified anti-counterfeiting initiatives such as transplanting holograms and security print features, using tracers, tangents, and inks on the drugs, and electronic tracking methods. This study's data was gathered through a review of the literature. The author recommends that everyone involved in the drug supply chain enact and enforce strict anti-counterfeiting legislation, develop new tracking technology, and implement secure business practices.

Haman (2010) discusses some of the initiatives undertaken by African businesspeople to combat counterfeiting in the article, the author analyzes some recent developments and projected to cause solutions to the problem. According to the author, the increasing African economy creates a market for certain products, which leads to counterfeiting to meet market demands. Counterfeit goods are smuggled into Africa due to a lack of resources at the borders. Intellectual property owners' willingness to collaborate to combat counterfeiting is one example of progress. Trademark legislation has also helped in the battle against counterfeiting. Public health activists who claim that enacting the legislation will prevent the importation of generic medications are among the roadblocks to progress. Governments focusing on reforming intellectual property laws and establishing collaboration to enforce said legislation are among the author's proposed solutions.

Hoetch and Trott (2014) reviewed anti-counterfeiting techniques used to fight the emergence of counterfeit goods the research looked into the available anti-counterfeiting literature. The study has identified 11 anti-counterfeiting strategies as well as the circumstances that led to the achievement of the techniques. The investigators advise businesses to invest in maintaining their science and technology competitive edge. According the author, some Japanese companies are already using this method of data protection. These companies have chosen to safeguard their sensitive data by restoring it to Japan and ceasing production of high-tech products in high-risk areas. The authors also advocate for governments to use complementary anti-counterfeiting strategies rather than relying heavily on a single approach. Legal action against pirates, as well as aggressive advertising, is two conditions that promote anti-counterfeiting strategies.

2.4.2. Empirical review on financial performance

A study conducted by Almajali (2012), The goal of this study was to ascertain how Jordanian insurance businesses listed on the Amman Stock Exchange's profitability were affected by age, leverage, liquidity, and size. Twenty-five insurance businesses listed on the Amman Stock Exchange between 2002 and 2007 were sampled for the study. The study found that while size, leverage, liquidity, and managerial skill have a substantial statistical effect on banking performance of insurance businesses, age of the organization had no significant statistical impact on that performance. After learning that firm size had no discernible effect on financial performance, Mwangi & Iraya (2014) conducted a study on the drivers of financial performance of general insurance underwriters in Kenya. Their findings were contradictory about company size.

Omondi & Muturi (2013), Stoke Exchange in Kenya disclosed that According to their analysis of the variables impacting the financial performance of listed firms, liquidity has a substantial positive impact on the financial performance of insurance underwriters while leverage has a big negative impact. Magali (2014) from February to May 2013, researchers in Tanzania surveyed 37 rural financial institutions from the Dodoma, Morogoro, and Kilimanjaro areas as part of a study on the impact of management, financial reporting, and regulations on credit risk management. The research's findings indicate that acceptable credit risk management in rural banking institutions was achieved through corporate governance, effective leadership, and governmental laws while avoiding political influence.

2.4.3. Empirical review on risks management and financial performance

Brinson and Brian (2001) conducted research in the United Kingdom to determine how investor risk management affects the sustainability of financial portfolios. The study sought to ascertain whether the economic risk project manager influences financial profitability. To collect data, a questionnaire was created, and a sample of 10 mutual and pension funds in the United Kingdom was chosen using cross-industry sampling. The findings revealed a significant positive relationship between investment risk management and financial profitability; however, the success indicators were qualitative rather than quantitative, and thus biased ($b=0.16$). According to the study, investors' risk risk management, risk identification, risk prevention, vulnerability assessments, risk information integration into investment risk management, and risk management formalization all have a positive impact on their investment portfolio.

Addison and Villach (2002) conducted research on how Singaporean financial institutions' influences and is influenced by capital portfolio management. Using a survey method, the study. A structured questionnaire was used to collect data, and respondents were asked the survey's objective through the use of queries. Using the "snow ball" sampling technique, 150 administrators from several private pensions were chosen. All 150 questionnaires that were dispersed were returned. The study found that Risk and subcontractors commonly occur in investment portfolio, motivating management to adopt suitable countermeasures, affecting investments done and fulfilled successfully. Investment opportunities Recognition of the risks associated with inadequate or misinterpreted competencies, tight expectations and finances, a lack of appropriate skills and knowledge, and an ineffective management approach. The study also found that the danger of unclear or misinterpreted scope/objectives tends to reduce with increased management engagement, and economic stability appears to improve. At a 95 percent confidence level, the p-value indicated a strong correlation exists with performance and risk detection.

2.5. Gap identification

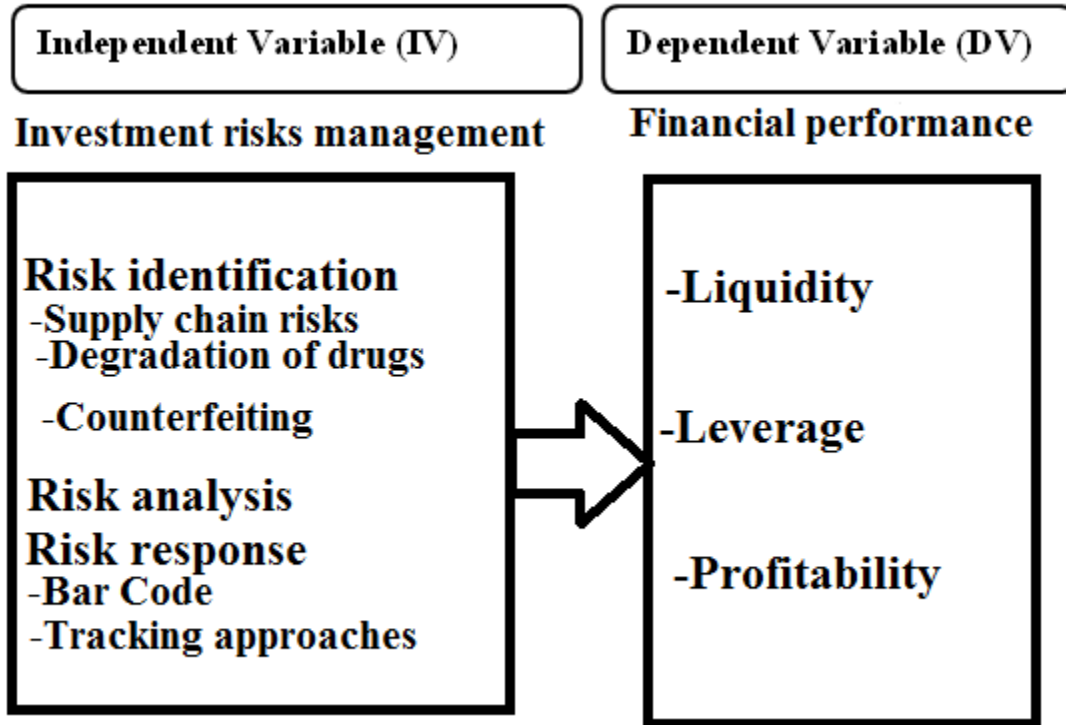
On the basis of the empirical review presented in this study, several facts indicated a gap in studies conducted on risks management process and the financial performance of investment business companies. The studies didn't consider other common challenges in pharmaceutical

investment like prices fluctuation, long lead time, import verification and tax clearance that vary day to day make a sophisticated supply chain process. Moreover, there is no similar study conducted in Rwanda specifically on pharmaceutical company and the data analysis process used by other scholar is regression analysis while the researcher intends to apply ratio analysis to analyze financial performance and residual equation to analyze the relationship between the two variables under study.

2.6. Conceptual framework

There are two types of variables: dependent) variable and independent variables. Independent variables are variables that change in a given model or equation. Project risk management, which includes the subthemes of risk identification, investment risk analysis, and investment risk response, is the independent variable in this study. The dependent variable is the company's financial performance and the indicators that go with it, such as liquidity, leverage, and profitability. The following figure depicts a pictorial representation of risk management and Le Medical's financial performance, as well as the independent and dependent variables and sub-variables for this study.

Figure 2.1: Conceptual framework



Source: Researcher compilation, 2022

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

The sampling procedures, procedures and techniques used to gather processes for processing, evaluating, and interpreting the results acquired, data pertinent to the research issue, sampling design and the reliability of the tool to be utilized, are all covered in this chapter of the study. The board of directors of Le Medical Company was employed to choose respondents by purposeful sampling.

3.1. Research design

The study is quantitative in nature. It used a case study approach, with a pharmaceutical company operating in Rwanda serving as the reference. A survey is a data collection method in which people are asked to answer a series of questions. The effectiveness of the company's risk management was evaluated by survey research, and financial performance was evaluated by ratio analysis and statistical techniques.

3.2 Study population and sample size

This study was conducted on staffs of Depot Pharmaceutique le medical situated in town of Kigali, Nyarugenge District, Muhima sector, Ingenzi cell. It aims to analyze the effect of investment risk management on the financial performance of pharmaceuticals investment companies. The researcher deducted the sample size from the total number of employees that are 46 employees. They include executive members, suppliers, potential customers and the auditors of the company.

In sampling, the research used Solvin's formula.

$$n = N / (1 + Ne^2)$$

Where:

n: sample size

N: total population

e^2 : confidence level of 95% (margin of error 0.05)

Therefore, $n = 46 / (1 + 0.46) = 31.5 = 32$ respondents.

3.4. Sampling procedure

To choose the sample for this investigation, ordinary random sampling was used. This technique refers to a selection without bias from the targeted population. It aims to give to all population the equal chance of being selected in the sample. It is preferred to this study because the researcher ensured that all population is represented in the sample thus raising the external validity of the study.

3.5. Data collection

3.5.1. Primary data

The primary data is said to be the firsthand observation and investigation. During this study, primary data were collected from the staff of Depot Pharmaceutique Le Medical through the questionnaire and guided.

3.5.2. Secondary data

Secondary data were gathered from previously compiled information by others. It is usually extracted from the original data and is frequently an examination of another person's study on a specific topic or an assessment of analysis. On the course of this study, Primary data were collected through a questionnaire to analysed risk management process in investment pharmaceutical company while to gauge the liquidity and analyse efficiency and effectiveness of financial performance annual reports were applied. With financial statement reports, the following variables were used: liquidity ratio, leverage ratio, and profitability ratio. In addition, liquidity and profitability ratio are the indicators of measuring managerial efficiency.

3.6. Measurement of variables

Variable	Measurement	Source of data
Independent variable:		
Risks management process		
i . Risks identification	Questionnaire and interview	Primary data
ii. Risks analysis	Questionnaire and interview	Primary data
iii. Risk response	Questionnaire and interview	Primary data
Dependent variables		
i. Liquidity		
1. Liquidity ratio	Current assets/Current liabilities	Annual reports
2. Acid test ratio	Current assets- Inventory/current liabilities	Annual reports
ii. Leverage	Debt/Equity *100	Annual reports
iii. Profitability		
1. Net profit margin	Net profit/Sales*100	Annual reports
2. Gross profit margin	Gross profit/Sales *100	Annual reports
3. Return on assets	Net profit /Total assets *100	Annual reports

Source: Authors construct (2022) based of reviewed literature

3.7. Data analysis

The research applied regression analysis with Ordinary Least Squares (OLS) to measure the effect of risk management on financial performance.

Table 3.1: Interpretation of Correlation

Coefficient Value	Strength of Association
$0.1 < r < .3$	Small correlation
$0.3 < r < .5$	Medium/moderate correlation
$ r > .5$	Large/strong correlation

Where $|r|$ means the absolute value of r (e.g., $|r| > 0.5$ means $r > 0.5$ and $r < -0.5$). where the square of the correlation coefficient is used to determine the coefficient of determination, which is the percentage of variance in one variable that can be explained by another (r^2).

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

4.0. Introduction

The impact of investment firm risk management on the financial performance of pharmaceutical companies in Rwanda is the subject of this chapter, which includes data presentation, data analysis, and discussion. The financial performance of the company under study was analyzed using secondary data retrieved from financial statements and annual reports, while primary data was used to explore the impact of risk management on the financial performance of pharmaceutical companies operating in Rwanda.

4.1 Introducing the case study

Depot pharmaceutique le medical is pharmaceutical company which imports medical products which include medical products, laboratory reagents and medical equipment. It was established in 2008, by Aloys Nzabonimapa and his wife Nyirandayambaje Donathille. The company now employs 46 employees among them are the pharmacists, the sellers, the marketing officers, and the stores keepers, and the accountant. The company has total assets of 2,416,175,860 frw in 2021

4.2. Demographic characteristics of respondents

In this section, the researcher presented the repartition of the respondents who participated in this study. The aspects analyzed are gender, distribution by age and their educational level as presented in the following table.

Table 4.1. Demographic characteristics of the respondents

		Frequency	Percent
Valid	Female	14	43.7
	Male	18	56.3
	Total	32	100
Age		Frequency	Percent
Valid	21-28 Years old	5	15.6
	29-36 Years old	8	25.0
	37-44 Years old	10	31.3
	45 Years and Above	9	28.1
Educational level		Frequency	Percent
Valid	A2 certificate	24	75.0
	Bachelor's Degree	6	18.8
	Master's degree	2	6.8
Total		32	100

Source: Primary data, 2022

Table 4.1. Reports demographic characteristics of respondents. 43.7 percent of total number of respondents are female while 56.3% of total numbers of respondents are male. According to the respondents' age distribution, 15.6 percent of all respondents are between the ages of 21 and 28, 25.0 percent are between the ages of 29 and 36, 31.3 percent are between the ages of 37 and 44, and 28.1 percent are 45 years of age or above. In terms of education, 75% of all respondents completed secondary school. 18.8 percent of all respondents have a bachelor's degree, and 6.8 percent have a master's degree. The results displayed in this table indicate that the participants to this survey are sufficiently educated to offer trustworthy relevant data.

4.3. Presentation and discussion of data relevant to investment risks management

In this section, the researcher investigated, analysed, and discussed the findings regarding to the risks management process in the company under study. The researcher considered the main aspects that are the risks probability, risks occurrence and risks response in pharmaceutical company under study.

Table 4. 2.Probability of pharmaceutical investment company

	N	Min	Max	Mean	Std. Dev
Accuracy of investment company	32	1.00	4.00	3.351	.662
Counterfeit drugs	32	1.00	4.00	3.457	.751
Variation of tax clearance over leading time	32	1.00	3.00	3.822	.526
Product expiration/obsolescence	32	1.00	4.00	3.601	.718
Poor product quality	32	1.00	4.00	1.862	.8203
Poor storage conditions	32	1.00	3.00	1.646	.872
Poor contract design with shipment agency	32	1.00	4.00	2.292	.839
Management team (suitability, experience, and performance)	32	1.00	4.00	2.683	.854
High operational costs	32	3.00	4.00	2.462	.792
Delay of import	32	1.00	3.00	3.846	.504
Technology risk	32	1.00	4.00	3.992	.883
Currency convertibility/ transferability	32	1.00	4.00	3.483	.785
Inspection, testing & approval of completed shipment	32	3.00	4.00	3.862	.752
Level of communication within the contractor during supply chain	32	1.00	3.00	1.615	.954
Labor cost/availability/supply productivity	32	1.00	3.00	4.154	.254
Foreign exchange rate	32	1.00	5.00	4.017	.254

	N	Min	Max	Mean	Std. Dev
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High operational costs	32	3.00	4.00	2.462	.792
Delay of import	32	1.00	3.00	3.846	.504
Technology risk	32	1.00	4.00	3.992	.883
Currency convertibility/ transferability	32	1.00	4.00	3.483	.785
Conflict between partners	32	2.00	5.00	2.521	.615
Shipment time & cost overrun	32	1.00	3.00	3.614	.654
Unfavorable local/ global economy	32	1.00	4.00	3.820	.512.
Force majeure	32	1.00	4.00	3.909	.518
Delayed permits insurance	32	1.00	4.00	3.629	.718

Source: Primary data, 2022

As shown in Table 4.2. the probabilities that pertain the accordance of the risks on the management process of pharmaceutical investment businesses. The analysis is expressed by risks mean and standard deviation. The findings from the table show that the respondents asserted that there is a high probability of the company towards risks. Accuracy of investment company mean=3.351;Counterfeit drugs mean=3.457;Variation of tax clearance over leading time=1.822;

Product expiration/obsolescence mean=3.601;Poor product quality=1.862, Poor storage conditions mean =1.646,Poor contract design with shipment agency mean=2.292;Management team (Suitability, experience and performance mean=2.683;High operational costs=2.462;Delay of import=3.846,Technology risk mean =3.992,Currency convertibility/transferability mean =3.483,Inspection, testing & approval of completed shipment mean=1.615,Level of communication within the contractor during supply chain mean=3.561,Labor cost/availability/supply/performance/productivity mean=4.15;Foreign exchange rate mean=4.017,Conflict between partners mean=2.521,Shipment time & cost overrun =3.614,Unfavorable local/ global economy mean=3.820 Force majeure mean= and Delayed permits insurance mean=3.909.The findings from the table show that pharmaceutical investment companies face several risks. On one side, most of the risks presented on the questionnaire some were not found as the barriers of pharmaceutical businesses. The one presented in this table are the ones threat pharmaceutical investment businesses. The researcher discloses that the threats like counterfeit of drugs, product expiration and poor storage conditions are specific to pharmaceutical business operating in Rwanda.

The results from the findings indicate that investment pharmaceutical companies face many risks as they are numerous in this table. In the views of the researcher due great probability are due to the products traded are not manufactured in Rwanda that increase the probability of risks caused by many parties involved in the business.

Table 4.3: Risk Severity of pharmaceutical investment company

	N	Min	Max	Mean	Rank	Std. Dev
Accidents and safety	32	1.00	5.00	3.351	11	.662
Delayed permits insurance	32	1.00	5.00	3.489	10	.751
High operational cost	32	1.00	5.00	3.951	4	.718
Foreign exchange rate	32	1.00	5.00	3.932	3	.883
Inadequacy of technology	32	1.00	5.00	3.483	9	.785
Inflation due to currency convertibility	32	3.00	5.00	3.862	4	.752
Delay of imports	32	1.00	5.00	4.254	1	.254
Currency convertibility/ transferability	32	1.00	5.00	4.078	2	.254

	N	Min	Max	Mean	Rank	Std. Dev
Accidents and safety	32	1.00	5.00	3.351	11	.662
Delayed permits insurance	32	1.00	5.00	3.489	10	.751
High operational cost	32	1.00	5.00	3.951	4	.718
Foreign exchange rate	32	1.00	5.00	3.932	3	.883
Inadequacy of technology	32	1.00	5.00	3.483	9	.785
Force majeure	32	2.00	5.00	3.573	8	.615
Unavailability of medical drugs requested	32	1.00	5.00	3.617	6	.574
High cost of supply chain	32	1.00	5.00	3.230	12	.412.
Quality of drugs requested	32	1.00	5.00	3.607	7	.918
Shipment time & cost overrun	32	1.00	5.00	3.629	5	.718

Source: Primary data, 2022

Table 4.3 reports the views of the respondents on the severity the risks exercised by Depot pharmaceutique Company operating in Kigali. After analysis of the probability of risks that the industry experiences, the researcher investigated at which extent the risks occurred and hindered the business over the last five years involved by the study. As depicted by the study, the greatest challenge that the company experienced ranked at the first place is the delay of imports requested mean=4.254, the second most severe risks that the company experienced is currency convertibility and transferability. The third risk is foreign exchange rate as it fluctuate day to day, inflation of currency is expressed by mean =3.86, the risk inherent to shipment time is also asserted by the respondents at the mean=3.62., unavailability of drugs mean=3.61; the quality of drugs requested mean=3.607, force majeure mean=3.57; delayed permit insurance mean=3.4 and the accidents and safety during products shipments was stated by the respondents a severe risk at the mean of 3.35. The findings show that they are severe risks that impede the business. Most of the threats are common to other businesses that rely of the imports as well as those that rely on shipments of products .Operating risks that are specific the researcher noticed are the threats like counterfeit of drugs, product expiration and poor storage conditions are specific to pharmaceutical business operating in Rwanda.

4.3.2. Investment risk management strategies

This section contains primary information about the risk management practices used by the people in charge of depot pharmaceutique company ltd. Prior to investigating, assessing, and evaluating the effectiveness of risk management strategies used, the researcher identified the types of risks, analyzed the severity of the risks, and determined the impact that the risks had on the implementation of Depot Pharmaceutique Company Ltd, as discussed in the following sections of this chapter. As a result, the segment focused on risk management strategies in Depot Pharmaceutique company Ltd

Table 4.4: Strategies of risks identification

	N	Min	Max	Mean
Application of interview tool	32	1.00	5.00	3.913
Usage of questionnaire instrument	32	1.00	5.00	3.817
Use of observation instrument	32	1.00	5.00	4.087
Valid N (listwise)	32			

Source: Primary data, 2022

Table 4.5 reports the respondents' opinions on the company's tactics and strategies for identifying and disclosing the risks associated with pharmaceutical investment hazards. As shown in the table, three techniques are used: application of observation with a strong mean of 4.087, application of interview with a strong mean of 3.913, and use of the questionnaire with a strong mean of 3.817. The findings prove that the company applies methods that integrates all stakeholders to find the risks that hinder the business. This indicates the effectiveness of risks identification that can lead to the minimum of risks in the business.

Table 4.5: Risks analysis approaches

	N	Min	Max	Mean
Application of ranking technique	32	1.00	5.00	4.511

Monitoring and evaluation	32	1.00	4.00	4.195
Impact assessment	32	1.00	5.00	4.093
Risk probability	32	1.00	5.00	3.903
Prioritization	32	1.00	5.00	4.174
Valid N (listwise)	32			

Source: Primary data,2022

Table 4.5 shows the respondents' perspectives on risk analysis methodologies used in the management of depot pharmaceutical. As shown in the table, the parties involved used a strong mean of 4.195 for monitoring and evaluation, a strong mean of 4.511 for allocating risk severity by ranking, a strong mean of 4.093 for impact assessment, a strong mean of 4.174 for risk prioritization, and a strong mean of 3.903 for determining risk probability. The researcher discovered that there has been successful risk analysis that could contribute to financial performance based on the findings shown in the table above.

Table 4.6: Application of risk response

	N	Min	Max	Mean
Application of risk allocation technique	32	1.00	5.00	3.921
Risk transference technique	32	1.00	4.00	3.897
Application of risks mitigation	32	1.00	5.00	3.610
Application of risks avoidance technique	32	1.00	5.00	3.603
Risks acceptance	32	1.00	5.00	3.714
Valid N (listwise)	32			

Source: Primary data,2022

The management team took decisions about the discovered and evaluated risks after detecting and analyzing the risks that could harm the investment company. As shown in the table, risk allocation techniques were used with a strong mean of 3.9, some risks were transferred to parties that were able to manage them effectively with a strong mean of 3.897, some risks were avoided with a strong mean of 3.61, the respondents claimed that risk avoidance was used with a strong

mean of 3.603, and some risks were accepted including cost overrun with a strong mean of 3.714.

4.4. Analysis of financial performance

This section refers to the analysis of financial performance of LE MEDICAL Company over the last five years corresponding to this study. The researcher considered the liquidity, the leverage, and activity and profitability ratios as presented in the subsequent sections.

Table 4.7: Descriptive statistics for financial performance variables

	Current ratio	ROE	ROA	NP ratio	Gross profit
Mean	2.53	17.83	29.76	14.78	13.91
Standard Error	0.52	4.043	3.52	10.83	3.23
Median	2.2	17.55	27.6	4.9	14.65
Mode	1.6				
St Deviation	1.28	9.90	8.62	26.54	7.91
Sample Variance	1.64	98.063	74.38	704.86	62.64
Kurtosis	1.54	-2.65	-0.79	5.55	-0.08
Skewness	0.53	0.042	0.54	2.33	-0.62
Range	3.2	23.4	23.3	68.2	21.8
Minimum	1.2	6.4	19.4	0.2	1.3
Maximum	4.4	29.8	42.7	68.4	23.1
Sum	15.2	107	178.6	88.7	83.5
Count	6	6	6	6	6

Table 4.7 reports the statistical figures relevant to the financial performance analyzed using ratios. Financial performance is measured by liquidity (current ratio) and profitability ratios (Return on equity, Return on assets, Net profit ratio, and Gross profit margin). Results show that the average liquidity (current ratio) ratio over six years is 2.5 which is much greater than the rule of thumb (1:1), mean ROE=17.3, mean ROA=29.7 indicating that the assets were used

optimally to generate the profit of the company, and profitability was found sufficient as mean NPR=14.7% and mean GPR=13.9%.The findings indicate that the company experienced sound liquidity, sufficient profitability, and effective operations. The breaches related to financial management observed from these finding, is the unsound scope of net profit ratio as min is 0.2 and maximum 8;Gross profit ratio which display min 23.1 and max 83.1

Table 4. 7: Financial performance trends

FYRS	Current ratio	Quick ratio	NPR	GPR	ROA	ROE
2016	1.2	0.86	1.1	1.3	6.4	19.4
2017	1.6	0.88	1.5	9.5	10.3	24.5
2018	1.6	0.82	0.2	12.6	10.4	25.3
2019	4.46	2.85	68.4	16.7	29.8	29.9
2020	2.80	1.53	8.3	20.3	25.4	42.7
2021	3.6	2.4	9.2	23.1	14.7	36.8

Primary data, LE MEDICAL Ltd 2016-2021

Regarding the current ratio, Depot Pharmaceutique Company Ltd experience a positive current ratio over ten years that carries between 1.2 to 4.6.The analysis discloses that the company experienced huge liquidity(sufficient at all) due to the fact that the rule of thumb suggest a liquidity of 1:1 and throughout the period the ratio is highly greater than 1 and it increased progressively from 20116 to 2019 and considerably increased from 2019 to 2021:In a nutshell, the ratio demonstrates the company's adequate performance. The fact files from the table show

that LE MEDICAL Ltd was able to meet obligations out of inventory during the last six years, which is the indicator of fluent liquidity as the key indicator of performance.

The net profit ratio and gross profit ratio of Depot Pharmaceutique Company Ltd in the last six years from 2015 to 2020. The net profit ratio within the period under study is positive which indicates effective performance. The net profit ratio increased over the period under study from 1.1% to 68% . The fact that Depot Pharmaceutique Company Ltd experienced a slight decline of the ratio from 2017 to 2018, it indicates a moderate performance and inconsistent in minimizing expenses as the revenue kept the same decreasing ratio. The gross profit ratio also was positive throughout the period and varied between 1.3% and 20.3% which indicated that the company accumulated sufficient sales in the period. The net profit ratio declined from

1.5% in 2017 to 0.2% in 2018 and rose from 0.2% to 68.2% in 2019. As the net profit ratio declined from 2017 to 2020 while the gross margin ratio boosted it implies that Depot Pharmaceutique Company Ltd didn't suffer from low revenue but much more administrative costs and other expenses from 2017 to 2020. Briefly, both net profit and gross profit indicate a sufficient and effective performance of the Depot Pharmaceutique Company Ltd.

The ROA and ROE ratios of Depot pharmaceutique company Ltd As shown in the table, the company exerted positive ROA and ROE over last six years. The extent to which the assets were utilized to generate the profit slightly declined from 2016 to 2017 and considerably increased within the subsequent time from 2018 to 2020. Regarding the equity, the facts file indicate that the equity was used well than assets at the ratio is greater. On the basis of data represented, the researcher found out that the ratio relevant to investment proves efficient financial performance.

4.5. Relationship between Risk management and the performance

Table 4.8: Regression analysis

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.880	3	4.293	120.765	.000 ^a
	Residual	.995	28	.036		
	Total	13.875	31			

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.880	3	4.293	120.765	.000 ^a
	Residual	.995	28	.036		
	Total	13.875	31			

a. Predictors: (Constant), Risk identification, risk analysis, risk response

b. Dependent Variable: Performance

Source: Primary data,2022

The results from the table show that the P-value is 000 that is less than 0. 005. Therefore, the result is significant. The statistical value F (120.675) is much greater than the critical value F=1.It implies that the sub variables risk identification, risks analysis and risk response can be critically predicted to influence the performance of pharmaceutical investment company.

Table 4.9: Predictive power of independent variables on financial performance

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.224	.090		2.486	.019
	Risk identification	.329	.151	.327	2.181	.038
	Risk analysis	-.099	.141	-.104	-.706	.486
	Risk response	.515	.057	.773	9.000	.000

a. Dependent Variable: Performance

Table 4.10 reports results on the effect of independent variables on the financial performance. The findings in table indicate that the effectiveness in risks management processes will significantly increase project performance. The study findings prove that risk identification contributes to the performance of the company. According to the data, enhancing the risks identification and responses in pharmaceutical investment company significantly boost the

company performance as statistically significant to the company performance as person correlation coefficients are $P\text{-value}=0.000<0.005$ and $P\text{-value}=0.008<0.005$ with positive coefficients, the regression output is in contract with the fact that risks analysis doesn't indicate a positive impact on the performance of pharmaceutical investment company.

on financial performance. Risk response negatively (Coeff= -0.099) financial performance. However, the statistical significance is modest (0.486) implying that there are no strong incentives for investing in risk response than it is for risk identification and risk response.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0. Introduction

The chapter summarizes the key findings that were taken from chapter four in relation to the study's objectives that are to explore risks facing pharmaceutical investment companies and their management strategies; to analyse the financial performance of pharmaceutical investment companies and to establish a relationship between risks management and the performance of pharmaceutical industry.

5.1. Summary of Key findings

5.1.1. Findings related to investment risks management

The study revealed that pharmaceutical investment companies operating in Rwanda face several risks in their operations. The greatest challenge that the company experienced ranked at the first place is the delay of imports requested, the second most severe risks that the company experienced is currency convertibility and transferability. The third risk is foreign exchange rate as it fluctuates day to day, inflation of currency, the risk inherent to shipment time, unavailability of drugs; the quality of drugs requested, force majeure; delayed permit insurance and the accidents and safety during products shipments. The findings show that they are severe risks that impede the business.

5.1.2. Findings related to financial performance

The analysis discloses that the company experienced huge liquidity (sufficient at all) due to the fact that the rule of thumb suggests a liquidity of 1:1 and throughout the period the ratio is highly greater than 1 and it increased progressively from 2016 to 2019 and considerably increased from 2019 to 2021: In a nutshell, the ratio demonstrates the company's adequate performance. The net profit ratio within the period under study is positive which indicates effective performance. The gross profit ratio also was positive throughout the period and varied between 1.3% and 20.3% which indicated that the company accumulated sufficient sales in the period.

5.1.3. Risks management and financial performance

The findings indicate that the effectiveness in risks management processes will significantly increase project performance. Risk identification contributes to the performance of the company. Enhancing the risks identification and responses in pharmaceutical investment company significantly boost the company performance as statistically significant to the company performance as correlation coefficients are $P\text{-value}=0.000<0.005$ and $P\text{-value}= 0.008<0.005$ with positive coefficients. The respondents strongly asserted that the company effectively managed the risks that helped the board to active to the effective and efficient performance .As the business structure relies on product shipment that incite several risks and the company exerted great achievement, the risks mitigation and profitability are closely related.

5.2. Conclusion

The study revealed that pharmaceutical investment companies operating in Rwanda face several risks in their operations. The working environments, the quality of facilities that are put in place and the business structure that rely on product shipment incite probable risks. The greatest challenge that the company experienced ranked at the first place is the delay of imports requested, the second most severe risks that the company experienced is currency convertibility and transferability. The third risk is foreign exchange rate as it fluctuates day to day, inflation of currency, the risk inherent to shipment time, unavailability of drugs; the quality of drugs requested force majeure; delayed permit insurance and the accidents and safety during products shipments. The findings show that they are severe risks that impede the business. In order to overcome such challenges, several methods of risks management are applied like Risk allocation techniques were used, some risks were transferred to parties that were able to manage them effectively, some risks were avoided, the respondents claimed that risk avoidance was used, and some risks were accepted like additional cost due to shipment delays.

5.3. Recommendations

The study revealed that pharmaceutical investment companies operate under several risks. Including much expired products. Due to the reduction in demand this led to the accumulated loss in business because you see so many products are expiring without being sold. Investment pharmaceutical companies should apply well the methods of risks management to achieve to the objectives of their businesses.

5.3. Future research

The study disclosed that great probability are due to the products traded are not manufactured in Rwanda that increase the probability of risks caused by many parties involved in supply chain. The study suggests future researchers to work in the factors that influence supply chain management in pharmaceutical companies operating in Rwanda.

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INTRODUCTORY LETTER TO THE RESPONDENTS

Dear Respondents,

I am a student in University of Rwanda. I am carrying out a research study on Investment **company risk management and the financial performance**. I request my kind respondents to answer the entire questionnaire by exhausting your opinions; the data provided will be kept confidentially and used purely for academic purpose. Thank you very much for your assistance.

QUESTIONNAIRE ADDRESSED TO THE EMPLOYEES LE MEDICAL

Please tick the appropriate box or explain where necessary.

SECTION A

BACKGROUND INFORMATION

1) Gender

a) Male

b) Female

2) Age

a) 21 – 28

b) 29 – 36

c) 37 – 44

d) 45 – above

3) Level of education

a) Bachelors Degree

b) Masters Degree

c) PhD level

4) Marital status

a) Married

b) (Single

c) Widow

5. Position.....

6. Experience

a) Less than 1 year

b) Less 2-5 years

c) 6-10 years

d))Above 10years



SECTION TWO: INVESTMENT RISK MANAGEMENT

Instructions: please respond to the questions of your choice by using the corresponding letter(s) as guided;

SA : Agree with no doubt

A : Agree with some doubt

N : Neutral

D : Disagree with some doubt

SD :Strongly disagree with no doubt

Response code: SA=1; A=2; N=3, D=4, SD=5

PART ONE : RISKS PROBABILITY

STATEMENTS	SA	A	N	D	SD
I.Risk identification					
Accuracy of investment project					
Counterfeit drugs					
Variation of tax clearance over leading time					
Product expiration/obsolescence					
Poor product quality					
Poor storage conditions					
Poor contract design with shipment agency					
Management team (Suitability, experience and performance)					
High operational costs					
Delay of import					
Technology risk					

Currency convertibility/ transferability					
Inspection, testing & approval of completed shipment					
Level of communication within the contractor during supply chain					
Labor cost/availability/supply/performance/productivity					
Foreign exchange rate					
Conflict between partners					
Shipment time & cost overrun					
Unfavorable local/ global economy					
Force majeure					
Delayed permits insurance					
Accidents and safety					

PART TWO : RISKS SEVERITY

Instructions: please respond to the questions of your choice by using the corresponding letter(s) as guided;

VS : Very high

S : Severe

M: Moderate

LS : Less severe

PART ONE : RISKS PROBABILITY

STATEMENTS	VS	S	M	LS
I.Risk identification				
Accuracy of investment project				
Counterfeit drugs				

Variation of tax clearance over leading time				
Product expiration/obsolescence				
Poor storage conditions				
Poor contract design with shipment agency				
Management team (Suitability, experience and performance)				
High operational costs				
Delay of import				
Technology risk				
Currency convertibility/ transferability				
Inspection, testing & approval of completed shipment				
Level of communication within the contractor organization				
Labor cost/availability/supply/performance/productivity				
Completeness & timeliness of project information				
Foreign exchange rate				
Conflict between partners				
Shipment time & cost overrun				
Unfavorable local/ global economy				
Sovereign and contractual risk				
Force majeure				
Delayed permits insurance				
Accidents and safety				

PART THREE : RISK MANAGEMENT STRATEGIES

Instructions: please respond to the questions of your choice by using the corresponding letter(s) as guided;

SA : Agree with no doubt

A : Agree with some doubt

N : Neutral

D : Disagree with some doubt

SD : Strongly disagree with no doubt

Response code : SA=1 ; A=2; N=3, D=4, SD=5

STATEMENTS	AS	A	N	D	SD
Risk identification strategies					
1.Interview					
2..Questionnaire					
3.Observation					
II.Risks analysis					
4.Ranking					
5.Evaluation					
6.Impact assessment					
7.Probability					
8.Priorization					
III. Risks response					
9.Risk allocation					
10.Risk transference					
11.Risk mitigation					
12.Risk avoidance					
13.Risk acceptance					

PART FOUR: RELATIONSHIP BETWEEN RISKS MANAGEMENT AND THE PERFORMANCE.

Instructions: please respond to the questions of your choice by using the corresponding letter(s) as guided;

SA : Agree with no doubt

A : Agree with some doubt

N : Neutral

D : Disagree with some doubt

SD :Strongly disagree with no doubt

Response code : SQ A=1 ; A=2; N=3, D=4, SD=5

STATEMENTS	SA	A	N	D	SD
1)Le medical exerted efficient and effective risks management					
2)Le medical experienced an efficient liquidity over last six years					
3). Le medical experienced effective performance over last six years					
4) Risks are barriers to the performance of the company					
5) Risks management contributed to the financial performance of Le Medical					

Thank you for your cooperation!

3rd check

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