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#### **Abstract**

**Purpose:** This research study generally assessed the relationship between Investment risk management and financial performance of Rwanda Social Security Board. It equally important assessed the effect of risk environment, analyzed the effect of risk control, and assessed the effect of risk monitoring on the financial performance of the Rwanda Social Security Board (RSSB).

**Materials and Methods:** The used research design in this study was descriptive. A sample size of 125 respondents was drawn from 180 employees working in RSSB Headquarters. The study used a purposive sampling technique to select respondents. Information was collected using a structured questionnaire administered to respondents and statistically analysed using means, standard deviation and regression analysis via SPSS version 25.0.

Results: Results from the first objective shown by a mean M=5.87 and standard deviation SD=2.77 strongly agreed with the statement that a formal risk management system is in place and overall investment objectives are defined and communicated to staff. The study agreed that RSSB Board of Directors approves all investment policies and ensures management takes necessary action. As shown by the mean M =5.45, S.D=1.96. The study concurred that guidelines governing investments are in place and RSSB stands on it, demonstrated by M= 5.67, S. D=0.499. From the results, the second objective demonstrated that the respondents strongly agreed that RSSB ensures that principles and procedures relating to investment and risk response is followed consistently. By M =5.87, S.D=2.77, duties are separated at different levels of management and the Board strongly agreed by M=5.58, SD=2.037, and testing, auditing, assessments of RSSB investment procedures are performed by independent personnel strongly agreed by M =5.85, S.D. =2.07. A proactive way to deal with risk administration includes designating risk spending plans and setting risk resilience. Portfolio managers should practice vigilance inside plainly characterized boundaries as a component of their investment strategy. The result from the third objective revealed that there is a strong monitor of investment threshold and rating of sound investments by M = 5.58, S.D = 2.77. When the risks have been characterized and controls have been set around these risks, a methodical procedure of ordinary observing and detailing of these risks by a independent group guarantees approval and consistency of the approach. Regression analysis, a unit increment in risk environment may bring to increment in productivity by 2.008. A unit enhancement in risk control might bring an increase in productivity by 0.887.

**Recommendations:** From the research findings presented, the study recommended the need to dissect the risk of administrations and consumptions. There is a requirement for the management to completely comprehend their commitments and take fundamental activities in guaranteeing money back, train workers to change their center convictions and help to guarantee the effective achievement of firm objectives. Management should work to improve cost and expenses risk management, even if the current ratio was better, management will need to significantly reduce expenses.

**Key Words**: *Investment, Risk management, financial performance, Rwanda.* 



#### I. Introduction

The principle and practice of Investment is to presently forego consumption of funds for a while with the prospect of getting upcoming benefits that repay the financial investor with consideration of changes in prices and other affecting factors among which risk and the vulnerability of the upcoming installments are considered. The firm should be uninterested in investing now and changing those assets to tomorrow's overall revenues, on condition that a suitable rebate level is distinguished to a successful result (Felician, 2015).

Risk management is a process of determining what risks exist in an investment and then handling those risks in a best-suited way. Risk management is important because it can reduce or augment risk depending on the goals of investors and portfolio managers (Filbeck, et al., 2015). As per Banks (2004), the key focal point of risk monitor is also having control, instead of disposing of, chance presentations with the goal that all partners are completely mindful of how the firm may be affected. For the most part, risk can be seen as a possibility of disappointment in accomplishing destinations or objectives. Risk and return are firmly related. By and large, the higher the level of risk related to speculation, the higher the arrival required by financial specialists to acknowledge this chance.

Uncertainty and risk effects on the investment performance of emergent nations have been of particular interest in the recent economics literature especially given the declining fixed capital formation rates in major developing countries during the 1990s (Ezekiel, 2013). Any investor seeking to maximize returns of the asset at minimum possible risk. Must consider both a diversifiable and non-diversifiable risk. Non-diversifiable risk is a systematic risk that affects the whole market.

Diversifiable risk is a non-systematic risk which only affects a certain industry hence can be reduced or eliminated in a portfolio through diversification (Ingrid, 2015). Some theories like the current portfolio (Harry Markowitz,1952), the capital assets pricing theory(John Lintner et al.(1965), the arbitrage pricing theory (Stephen Ross,1976), the adaptive investment approach theory(Andrew Lo,2004) and the adaptive market hypothesis theory attempted to explain the effects of the asset allocation of investment.

These theories have tried to explain the impact of risk, how to balance risk and return in investment and the timing approach that the investors should apply in general to capitalize on income from a basket of assets in the market (Francis, 2017). Investment is driven by three essential needs: income, capital conservation, and capital increase. For the money, investments may be made in the desire for obtaining future income. For capital safeguarding, speculations are made to protect capital or the new esteem to meet a future requirement. Regularly, investment created for capital returns incorporates some risks to obtain the ideal return. Ideal venture suggests that on net revenues, the firm should be detached between contributing today and moving those assets to tomorrow, insofar as fitting markdown rate is distinguished to limit the result in the future time frame (Ezekiel, 2013).

Gruber (2012) identified that future performance is in part predictable from past performance, as the price at which funds are bought and sold is equal to net asset value and does not change to reflect superior management. Thus, investment risk management may not be a new subject in the



financial literature which seems to recognize this, as evidenced by the fact that the flow of new money into and out of the funds is the predictor of future performance.

The role of a financial system in a country is to aggregate capital from surplus sources and allocate the resources to deficits units' through formal and informal channels (Bryan, 2012). Since asset allocation is part of a portfolio management process, it should be done after careful evaluation of investment factors. It is obviously noted that excessive risks reduce the return on investment and create uncertainity about the value of assets(Francoise,2014). Considering the serious consequences of poor performance, Investment managers should attempt to achieve a reasonable balance between investments return and risks, and should guarantee that all investment risks are managed in the best interest of the investors for long.

Firm growth is very crucially affected by effective investments. After all the investors are interested in how the portfolios have performed and will even go the extra mile to compare their returns with those of other investment firms. A firm cannot be managed properly without making investment risk management to enhance the value of the firm. The role of the financial specialist is to guarantee that advantages are being overseen as indicated by the expressed venture procedure, steady with the portfolio targets, and as per proficient norms of observing, control and responsibility. More, importantly, shareholders are interested in investments that gave them the highest returns as outlined by (Musembi, et al., 2018).

Among the most prominent measures of performance is the return on investment which is computed by subdivision of net income by the number of assets. The decision of investment is a strategic decision and it is an integral part of the general policy of a firm (Mariana, 2016). Financial specialists are keen on deciding the money performance quality of an organization as a component in evaluating the organization's esteem. In expansion to these outside examiners, supervisors inside a company are worried about investigating its monetary presentation interior experts too look at the genuine exposure of the organization and its divisions and lines of business with plans, spending plans, or goals; they additionally contrast the organization's exposure and that of current and possible rivalry. The financial performance of an institution is of vital interest to many different groups and individuals (Felician, 2015).

After the Second World War, it is social security that helped Europe's reconstruction (Nkanagu,2008). Rwanda Social Security Board was established by law No.45/2010 of 14/12/2010 that determines its mission, organization, and functioning. The Rwandan Government has allowed Social Security to make investments to fund the economic progress of the country. This Institution was established after the merger of the Social Security Fund of Rwanda (SSFR) with Rwanda Medical Insurance (RAMA). Rwanda Social Security Board as a financial institution is supervised by the National Bank of Rwanda according to the banking law N°55/2007 of 30/11/2007, whereas its activities are overseen by the Ministry of Finance and Economic Planning. RSSB's investment portfolio is mainly composed of; Real estate projects (22.0%); Bank term deposits (35.7%) Corporate bonds, loans (1.8%); Treasury bonds/bills (21.4%); Foreign as well as local equity (18.6%); and Mortgage (0.5%).

The main objective of this research was to assess the relationship between Investment risk management and financial performance of Rwanda Social Security Board(RSSB). The specific objectives that guided this research were:



- 1. To evaluate the effects of risk environment on the financial performance of RSSB.
- 2. To analyze the influence of risk control on the financial performance of RSSB.
- 3. To assess the effect of risk monitoring on the financial performance of RSSB.

#### **Theoretical Literature**

Viable decision-making dynamics may be the essential duty and the reason for the board. Here administrators must choose to put some set sum today in return for a questionable stream of upcoming settlements. Every speculation includes unpredictability and vulnerability. Multifaceted nature is reflected, to a limited extent, by the number of elective strategies from which the decision-maker can pick (Ezekiel, 2013).

Vulnerability is inalienable in all ventures however especially relevant to the manager where the suggestions of their choices are regularly extremely critical for the organization. In addition, officials are typically attempting to satisfy different targets in the venture and in this manner need to make compromises among productivity and threat. Maybe, it is not astounding given this that business people; on normal have nine disappointments for each major victory, Lombard (2015). The part of risk and insecurity of investment is a matter that has increasingly attracted the attention of both practitioners and scholars. However, managers hold widely divergent views on the handling of risk and uncertainty in business situations, with some taking a more analytical approach, whereas others appear to operate on a more intuitive basis.

Similarly, researchers have historically developed explanations of how the investment is made under risk and uncertainty from a variety of theoretical perspectives, resulting in a fragmented and often contradictory body of literature on the subject (Pablo,1997). Lipshitz and Strauss (1997), observed that managers conceptualize risk and uncertainty differently and it affects the method of coping that managers use to cope with risk and uncertainty. The practice of contributing is not unused, it has most likely been in presence for long as the part of exchanging has been in presence, and financial specialists are available in all settings around the world (Levišauskait, 2010). The speculator needs the cash put separately with the affirmation that the assets were accessible, with no threat of loss of buying influence, at a future point in time or to have the estimation of the putaway cash develop at a quicker rate than swelling so there may be a promising return after the impacts of taxes and expansion.

The importance of risk can fluctuate. For a few, the risk is the chance of losing a bit of their venture because of market developments or a helpless choice. For other people, the risk may mean, insufficient salary is delivered from the venture.

According to Walewski (2003), no standard definitions or strategies exist for what comprises risk the executives' techniques. Risk contemplations are at the very center of the most venture. For the two people and organizations, the joining of risk factors in the administration procedure is of the most extreme significance. The threat of safety is the inconstancy in its normal upcoming profits. Great risk protections have great scattering around the meanwhile acceptable protections will have a little scattering around the mean. Risk, as estimated as the changeability of profits, has gotten far-reaching affirmation in a choice hypothesis.

A great risk monitoring system should be lined up with the venture procedure and empower the administration to guarantee that risk forms are as a rule productively characterized, controlled, and



observed. In risk monitoring, a prioritizing procedure must be monitored whereby for risk with the best degree of misfortune and the most noteworthy likelihood of an event is taken care of first and those threats with lower misfortune are dealt with later. Individual investors who trade excessively, expose themselves to a high level of risk and make a poor ex-post investment. For Barber & Odean (2011), there is no specific model to determine the balance between risks with the greatest probability and loss and those with lower loss, making risk management difficult. Risk management has been basically viewed as an instrument for estimating, checking, and forestalling misfortune, however fundamentally it serves a more extensive, progressively functional reason.

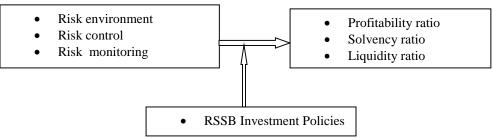
# **Conceptual framework**

# **Independent Variables:**

# **Dependent Variable:**

Investment risk managements

Financial Performance



**Figure 1:** Conceptual framework (Source: Researcher, 2020)

As per Ezekiel (2013), every speculation includes unpredictability and vulnerability. It is not easy to eradicate threats, on the other hand, to have its background allows to make and manage decisions to be taken. The reasons for risks clearly set before the occurrence of issues allows the overall look at risks. The aim of the risk environment is to have detailed possible risks for managing in an institution PMI (2004).

For having all possible risks that can affect an institution various activities can be done. It is good to go through the activity that the institution is used to. The purpose is to pinpoint possible issues to prepare the institution.

Since risk is a scientific build, not a passionate one, the capacity to appropriately comprehend and study risk is basic observed as stated by Pablo (1997). When we have a general idea of the institution's full aspects it is, therefore, easier to pinpoint issues that bring out harm. For diminishing the extent of risk the uncovered regions should be improved. It can be through a strategy of diminishing possible threats by mitigating related possibilities. The purpose for risk control is to have strategies for diminishing risk either through putting on investment other expenditures which can avail profits on a lengthy-term either through assurances or high-risk co-ownership or sharing with experts in the field as they may have other solutions for issues not considered by the institution, Ropel (2011).

As per Banks (2004), for the most part, risk can be seen as a possibility of disappointment in accomplishing destinations or objectives. As soon as risk cannot be controlled the better thing to do is to maintain the risk. In this situation, the risk must be closely observed, to minimalize the effect of its occurrence. Retention can also be a possibility while other proposed solutions are



inefficient (Mikaela, 2011). At present investors need relevant information; they demand accurate information on the operation and financial performance of a company. Financial performance is a general measurement of the organization's overall financial health which can reflect the firm's ability to generate new resources from day to day over a period of time (Ranjan, 2016).

Despite the fact that performance may have all the earmarks of being a simple idea, a remarkable definition in the writing does not exist. Additionally, scholastics regularly utilize extraordinary definitions customized to fit individual examination purposes (Langfield, 2008). Financial execution can be named as an emotional proportion of how well a firm can utilize resources from its essential method of business and produce incomes. This term is likewise utilized as an overall proportion of an association's general wellbeing over a given timeframe and can be utilized to think about comparative firms over a similar industry or to look at enterprises or parts in accumulation. As it was stated by Levasseur (2002) money back can be estimated utilizing intermediaries like a benefit, return, revenue development and all these can be separated from the budget summaries as well as reports. Data on monetary execution is helpful in anticipating the limit of the endeavor thus breaking down how well or inadequately a venture is doing against its set goals. For the most part money back of business associations can be estimated utilizing a mix of monetary proportions investigation, benchmarking, and estimating execution against the financial plan or a blend of these strategies.

Proportions of financial performance take an assortment of structures, however, these measures contrast from each other on a few measurements now and again different issues are associated with calling attention to the correct decision of the specific financial metrics to utilize it, is to utilize, for instance, measures might be supreme, return-based, inner, outside, a level for a solitary period, a mean or a development rate more than quite a long while or change about a mean or a pattern as shown in Almas and Loof (2008).

Andersen (2008), saw total risk management as the ability to respond to market factors beyond management control so as to stabilize corporate earnings. This in turn will lead to enhanced trust by investors and stakeholders and result in enhanced performance. Open area elements do not exist to produce a monetary quantifiable profit rather offer open types of assistance and merchandise as decided through the political procedure in a compelling and productive way Dabla et al. (2011). The chief reason for the open elements is to offer types of assistance that upgrade or keep up the prosperity of people in general.

Organizations are taken responsibly by measuring performance measurement; therefore become the consequences for performance (Westerfield & Jordan, 2008). Managers need these to improve execution just as worth decisions. ROI is a return per dollar invested. It is a measure of investment performance. In finance, a return is a profit on investment as explained by Groppelli and Nikbakht (2000). It comprises any change in value and interest or dividends or other such cash flows which the investor receives from the investment. It may be measured either in absolute terms or as a percentage of the amount invested. The latter is also called the holding period return. A loss instead of a profit is described as a negative return. Rate of return is a profit on an investment over a period of time, expressed as a proportion of the original investment as established inZviBodie et al. (2004). The time is typically a year, in which case the rate of return is referred to as an annual return. A solid discussion proceeds over the strategy of estimating and looking at returns.



Performance could be evaluated by either objective or emotional standards; undoubtedly they incorporate troubles with gathering subjective execution information from little associations and with unwavering quality of such information emerging from contrasts in bookkeeping strategies utilized by associations.

Banks (2004) argued that it is significant for each firm to hold and effectively deal with some degree of risk on the off chance that it is to expand its reasonable worth or if the likelihood of financial pain is to be brought down. For Campbell's (2002) selection in venture includes choosing what resources for procurement, what number of to buy when to buy them, and what advantages to broaden. A few financial specialists are more risk loath than others. These choices consistently include a type of execution estimation, most ordinarily anticipated return, and the risk related to this arrival for example the standard deviation of the arrival.

Investment involves the way we want to hold our assets. It is a fancy term for something we do all the time. The exposure of the company may be estimated by its budgetary outcomes, that is to reasonably mean by its dimension of income peril together with benefit are two central points that, together decide the estimation of the worry, as it was discussed by Pi and Timme (1993). Speculation which expands threats will diminish the estimation of the firm and then again, a venture which builds the benefit will expand the estimation of the firm. Risk and benefit are two basic elements of a trade concern. There has been a significant discussion about a definitive target of firm execution, regardless of whether it is benefit expansion or riches augmentation as outlined by Pi, M &Timme (1993). It is seen that while thinking about the performance, the benefit and expansion are connected and are affected by each other.

Money-back performance is of indispensable enthusiasm to a wide range of people. Banks are worried about the organization's capacity to reimburse advances just as whether it is keeping credit contracts. Specialists in buying different organizations are worried about its suitability as a provider or administrator of items. Partners are keen on deciding the quality of an organization as a component in surveying the organization's worth.

Equally important, these outside investigators, management inside the company are additionally worried about dissecting its financial results. These interior examiners relate the outcome of the organization and its subsections and lines of business with plans, spending plans, or targets; they likewise contrast the organization's presentation and that of modern and possible rivalry as outline by Scott (2007). The essential foundations of data these rsearchers utilize for assessment are its fiscal summaries. Evaluation by means of budget report examination depends on precedent information and circumstance from which it might be difficult to deduce future wants.

Any choice to be concluded because of such appraisal can influence just the upcoming as the longago is gone, or ruined. While past activity is fascinating, numerous administrators and experts are increasingly keen on what occurred later on. The previous presentation of an organization, as appeared in its budget summaries, might be utilized to help anticipate future execution (Pi &Timme, 1993). While investigating fiscal reports, one must remember the reason for the examination. Since various examiners are keen on various parts of a company's presentation, no single diagnostic strategy or sort of examination is fitting for all circumstances.



#### **II. Research Materials and Methods**

**Study design:** The investigation used a descriptive survey design in order to provide a deep study on investment risk management and financial performance at the Rwanda Social Security Board.

**Study duration:** The study depended on a 3 years study period from the year 2015 to 2017. A more extended range of the research can get different significances, for instance, impacts and downturns. This brought about a more prolonged time concentration, consequently given a more broad estimation of the problem.

**Sample size:** A purposive sampling technique was used to select a total of 125 respondents from 180 employees in the study. This sample is representative as it is drawn from the relevant departments. All respondents were involved or considered in answering the questionnaire. The sample size was calculated using the Yamane's formula.

 $n = \frac{N}{1+N(e)^2}$ ; n is the sample size, N is the study population and e is margin error (0.05).

 $n=180/1+180 (0.05)^2$ 

n=180/(1+0.45)

n=180/1.45

n=124.1379310344828

n=125

Through the use of the Yamane's formula above mentioned where e=0.05, N=180, the sample size was 125.

#### **Data Collection Instruments**

In order to identify the role of investment risk management on the financial performance of RSSB, a self-administered questionnaire was distributed among respondents.

The structured questionnaire survey was designed to get adequate and accurate information necessary to establish the role of investment risk management on the financial performance of RSSB's various investments.

**Statistical analysis**: Once the data was collected, the coding process was used in order to condense data by systematically arranging different responses that were categorized for easy explanation and study. The research focused on traditional areas such as descriptive and statistical inference and also gives special emphasis to establish as well as emerging applied areas. Frequency distribution tables were used after editing and coding of information. The statistical, analytical, descriptive, and synthetically research methods for data analysis offered the opportunity to measure and quantifies the results of research. The data were analyzed and interpreted by using statistical product and service solutions (SPSS-version 25.0).

#### III. RESULTS

The population in the interest of this study was 180 employees working in RSSB Headquarters according to Human Resource Department. A total of 125 respondents were involved in the study.



The sample is representative as it is drawn from the relevant departments. All respondents were involved or considered in answering the questionnaire.

# **Demographic Characteristics of Respondents**

The researcher collected socio-demographic information to provide baseline evidence with the intention to assess the effects of investment risk policies and the financial performance of the Rwanda Social Security Board. In the total survey 53.3% of respondents were male while 46.7% are female. This shows a sensitive representation of gender at RSSB.

The results infer that RSSB uses both females and males, and this is a worthy marker of sensibility the researcher considers it to check if they may or not be fairness in RSSB as equity in the sexual category, means ladies having indistinguishable open doors in life as men, as well as capacity to take an interest from the open circle. Education is an important input that impacts the appropriate execution of a person and any other work-related. The findings indicated that they are sufficiently qualified within the field of fund and accounting showed by a level of 56% who hold a bachelor's degree and 44% stand for who hold a Master's Degree.

The study indicates that the majority of the respondents had a graduate qualification. This is a positive sign since most of them can understand investment and finance and therefore ensures us a certain guarantee on the answers provided, that they are reliable. From the findings, it was confirmed that 68% are experienced in RSSB environment for six years and beyond followed with, a rate of 20% have working experience somewhere in the range of 3 and 5 years and by a level of 12% who may have somewhere in the range of one and 3 years of experience. This may affect performing obligations identified with account and investment.

To construct long-haul performance of any association experience must connect with the administrations and find out about network requirements and activities that provide all understanding. The researcher picked 58 personnel in the Department of Finance and Accounting and 67 personnel from Investment and Real Estate with respectively 46.7% and 53.3%.

# Presentation of findings on research objectives

The research was concerted along with three specific objectives. This section presents the findings along with these objectives.

## Findings on objective one:

The first objective of this research was to determine the effect of the risk environment on financial performance. This effect was determined through the following statement in Table 1.



Table 1 Risk environment

Risk environment	Mean	Std.
A formal risk management system is in place and overall investment objectives are defined and communicated to staff.	5.87	2.77
RSSB Boards of Directors approves all investment policies and ensures management takes necessary actions.	5.45	1.962
Guidelines governing investments are in place and RSSB stands on it.	5.65	0.499
RSSB has developed financial risk management strategies	5.33	2.641
RSSB Management is an integral part of the investment and each Staff can report foreseen risks in investment.	4.43	0.933

#### Source: Field data, 2015/17

The results from Table 1, show that a formal risk management system is in place and overall investment objectives are defined and communicated to staff, this demonstrated by (M=5.33, S.D=2.641) was concurred with the articulation. The respondents approved that RSSB Boards of Directors approve all investment policies and ensure management takes necessary actions as shown by the mean M =5.45, S.D=1.96. From Table 1, the respondents concurred that Guidelines governing investments are in place and RSSB stands to internal guidelines, demonstrated by a Mean of 5.87, S.D=2.07.Respondents additionally agree that RSSB Management is an integral part of the investment and each staff can report foreseen risks in investment (M =4.37, S.D=0.93).

From, the above discoveries, it is clear that the RSSB center around the risk environment as one of the usefulness of investment risk the executives' procedure that influences the financial performance of RSSB.

## Findings on objective two

The second objective of this research was to assess the effect of risk control on financial performance through the following statement in Table 2.



**Table 2 Risk control** 

Risk Control=125	Mean	Std. Deviation
RSSB investment ensures that principles and procedures relating to investment and risk response is followed consistently.	5.87	2.77
Duties are separated at different levels of management and the Board	5.78	1.70
Testing, auditing, assessments of RSSB investment procedures are performed by independent personnel.	5.85	2.07
RSSB has system controls to detect any fraud in an investment transaction.	5.08	1.75
RSSB has emergency plan backup and data files in a different location.	5.58	2.03

#### Source: Field data 2015/17

The findings in Table 2 indicated that the respondents strongly agreed with the statement regarding the fact that RSSB ensures that principles and procedures relating to investment and risk response are followed consistently which is identified by M =5.87, S.D=2.77. In Table 2, the respondents strongly approved that Duties are separated at different levels of management and the Board pointed out by M=5.78, SD=2.03, the respondent strongly admitted that testing, auditing, assessments of RSSB investment procedures are performed by independent personnel., demonstrated by M =5.85, S.D =2.07. The discoveries from Table 4.6, concurred that RSSB has system controls to detect any fraud in an investment transaction, this is demonstrated by a neutral M=5.08, S.D=1.75.

From the above data, the interviewees concurred that the management has recognized people who are responsible for planning the different investment exercises within the element, this showed by M=5.08, S.D=1.75. Table 2, demonstrated that the respondents concurred that RSSB has emergency plan backup and data files in a different location. This identified by M=5.87, S.D=1.70 concurred with this assertion A proactive way to deal with risk administration includes designating risk spending plans and setting risk resilience. Portfolio supervisors should practice watchfulness inside plainly characterized boundaries as a component of their speculation methodology.

## Findings on objective three

The third objective established the effect of risk monitor on financial performance. This effect was established using the following statements in Table 3.



**Table 3. Risk Monitoring** 

risk monitor =125	Mean	Std.
There is a strong monitor of investment threshold and rating of sound investments	5.58	2.77
RSSB regularly monitors investment performance by checking financial statement	5.87	1.96
RSSB regularly conducts simulation analysis benchmark and report	5.33	2.64
RSSB maintains live project risk databases and communicates ongoing feedback to the stakeholders on risk management	5.27	2.77

# Source: Field data, 2015/17

The results from Table 3 indicated that respondents agree that there is a strong monitor of investment threshold and rating of sound investments designated by M = 5.58, S.D = 2.77.

Table 3, identified that the interviewees strongly felt in the same line with the articulation that RSSB regularly monitors investment performance by checking financial statements, this specified by M =5.87, S.D=1.96. From identified data in Table 3, the interviewees confirmed that RSSB regularly conducts simulation analysis benchmark and report this was established by M=5.33, S.D=2.64. From Table 3, interviewees agreed with the articulation that RSSB maintains live project risk databases and communicates ongoing feedback to the stakeholders on risk management as shown by M=5.27, S. D=2.015.

When the risks have been characterized and controls have been set around these risks, a methodical procedure of ordinary observing and detailing of these risks by a free group guarantees approval and consistency of the approach. This along these lines emphatically affected the financial outcome of certain Rwandan Institutions, the respondents agreed that the announcing assists with assuring how well rules and approaches of RSSB are functioning and being actualized.

#### Level of Financial Performance at RSSB

The sources that have been used to collect essential information are given underneath: budget summary of Rwanda Social Security Board, for the year of 2015-2017, the Websites of Rwanda Social Security Board just as various Websites.



Table 4 Frequency distribution with respect to measures of RSSB's financial performance

Financial Performance	Mean	Std.
RSSB has a counterparty of standard cash	5.26	1.708
RSSB has investments tools for daily analysis of fund demands	5.87	2.029
RSSB performs risk weighting for all its assets	6.12	2.795
RSSB has strategies for continued funding and reports on self-supporting in times of cash crisis	5.58	2.012
RSSB has forecastable and easily analyzed and reported liquidity	5.33	2.641

#### Source: Field data 2015/17

From the results in Table 4, interviewees agreed that RSSB has a counterparty of standard cash, this showed by M=5.20, SD=1.708. RSSB has investment tools for daily analysis of fund demands revealed by M=5.87, S. D=2.029, this established that it helps to verify the return on investment and the IRR converge in the long run.

From the previous results, interviewees strongly confirmed that the RSSB performs risk weighting for all its assets. This is identified by a percentage M=5.58, S. D=2.85. The interviewees were agreeing that RSSB has strategies for continued funding and reports on self-supporting in times of cash crisis, this is shown by M=5.58, SD=2.079. The interviewees have confirmed that RSSB has forecastable and easily analyzed and reported liquidity, this is identified by M=5.338, S. D=2.641.

Execution endeavors thought meeting its commitment viably utilizing register of exchange on consistent schedule and report normally in light of the fact that administrators need them to settle on choices as reflect by 90%. This implies great risk the management procedure is a proportion of good monetary execution in the association and the other way around.

# Financial analysis of RSSB

**Table 5 Current ratio:** 

		Current asset	
	2015	2016	2017
<b>Current assets</b>	259,604,310,905	324,917,922,638	407,731,285,005
<b>Current liabilities</b>	11,761,825,837	33,377,232,192	50,081,696,258
<b>Current ratio</b>	22.1	9.7	8.1

Source: Secondary data, 2015/17



Liquidity ratios are a significant class of monetary measurements used to decide a borrower's capacity to take care of current obligation commitments without raising outside capital. Liquidity ratios measure an organization's capacity to pay obligation commitments and its edge of security through the count of measurements.

The study identifies if the Rwanda Social Security Board can match with their present liabilities utilizing its present resources it has 22.1 proportion of liquidity to the obligation in 2015, 9.7 proportions in 2016, 8.1 proportions in 2017 it diminished somewhat higher due to various operation of RSSB. It implies the RSSB's present resources were decline regardless of whether can meet its present liabilities utilizing its advantages. It is determined by the present resources isolating by present liabilities.

**Table 6 Net Working Capital** 

		Current asset	
	2015	2016	2017
<b>Current assets</b>	259,604,310,905	324,917,922,638	407,731,285,005
<b>Current liabilities</b>	11,761,825,837	33,377,232,192	50,081,696,258
<b>Net working Capital</b>	247,842,485,068	291,540,690,446	357,649,588,747

Source: Secondary data, 2015/17

Table 6 indicates that RSSB has sufficient money to deal with its everyday activities, which is the reason it is acknowledged as the active capital. Since Rwanda Social Security Board presents resources that surpass her present liabilities its WC is certain. This implies that the Rwanda Social Security Board can pay the entirety of its present liabilities utilizing just current assets. That the RSSB can produce adequate from tasks to give for its present commitments with present resources. A huge promising estimation could likewise imply that the Rwanda Social Security Board possesses accessible money to grow quickly. It can support its own development through its present developing tasks. On the off chance that an association cannot run into its present commitments with current resources, it will be compelled to utilize its drawn-out resources or pay to create resources, to take care of its present commitments. This can bring to diminished operations, deals, and may even be a marker of increasingly serious hierarchical and money performance issues.

**Table 7 Debt Equity ratio** 

		Debt equity ratio RSSB	
	2015	2016	2017
Debt	11,761,825,837	33,377,232,192	50,081,696,258
<b>Equity</b>	694,414,539,249	753,088,484,367	841,299,958,340
Equity ratio	1.7%	4.4%	6.0%

Source: Secondary data, 2015/2017

Table 7 shows that the increment of liability to equity ratio of Rwanda Social Security Board was improved from 2015 to 2017.



Table 8 Return on-assets ratio (ROA)

	Return on Equity RSSB 2015	2016	2017	
Net income	97,059,579,514	68,488,589,610	71,017,739,901	
Equity	694 414 539 249	753,088,484,367	841,299,958,340	
ROE	13.9%	9.1%	8.4%	

Source: Secondary data, 2015/17

From Table 8, it demonstrated that the arrival of resources of the Rwanda Social Security Board was in an acceptable situation, yet it appeared in diminishing over three years.

From 13.9% to 8.4%. It implies that the Rwanda Social Security Board may not be viably dealing with its advantages for produce a more prominent measure of cash contrasting with earlier years.

Table 9 Net profit margin of RSSB

	2015	2016	2017
Net income	97 059 579514 514	68,488,589,610	71,017,739,901
Contribution(Revenue)	98,446,815,949	138,575,550,653	146,126,211,570
Net profit ratio	98.5%	49.4%	48.6%

## Source: Secondary data, 2015/17

Table 9 indicated that the overall gain commitment proportion is 98.5% in 2015, a level of 49.4% in 2016, and a level of 48.6% in 2017. It estimates productivity as for commitment created. That implies, what level of commitment is staying after all costs are paid by the organization. Net high net revenue proportion shows that the organization is overseeing great. On the above pattern line, it can be clear that the Rwanda Social Security Board had a diminishing pattern. It was attempting to accomplish a greater proportion in the 2016, 2017 years.

At that point in 2015, it demonstrated significantly more benefits. In 2015, it came to the most noteworthy on 98.5%, which implies the Rwanda Social Security Board had the option to produce more income whereas keeping the cost steady.

Table 10 Net investment of RSSB

	Net investment of RSSB		
2015	2016	2017	
39, 730, 790,947	17,363,775,420	16,912,403,112	

# Source: Secondary data, 2015/17

The above Table 10 analysis, it identified that the net investment of Rwanda Social Security Board was in a good situation in 2015, in any case, it appeared in diminishing more than three



years it implies that Rwanda Social Security Board is not adequately dealing with its investment to produce income comparing to previous years.

# **Regression Analysis**

In this investigation, multivariate regression was finished up to build up the connection among risks as far as the investment management is concerned and money financial production of RSSB. The investigation used the Statistical Package for the Social Sciences to process the estimations of the different regression for the examination. The study was attempted at a 5% important level. The examination assessed the independent as well as dependent variables with questions. The findings are given in Table 10.

Table 11 Model summary of investment risk management and financial Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.957ª	.916	.757	.250

a. Predictors: (Constant), risk environment, risk controlling, and risk monitoring

# Source: Primary Data, 2015/17

Table 11 shows, the model summary of regression examination, underneath are the discoveries. The study demonstrates that the R the correlation coefficient equivalent to 0.957 indicating a high correlation among investment risk management together with the money-back of RSSB. In measurement, R squared disclose to us the variety in the dependent variable because of the independent variable. From the previously stated discoveries, the estimation of R squared demonstrates that 91.6 percent of the modification in the money-back of Rwanda Social Security Board is clarified by the modification in investment risk management so as to explain the level of contrast in the dependent variable as explained by the independent variable. There searcher-utilized coefficient of determination that was gotten from the model summary, the coefficient of determination was utilized to clarify whether the model is a good prediction.

From the after-effects of the investigation, the discoveries establish that the independent variables (risk situation, risk control, and risk monitor) added to 75.7% of the variety in budgetary execution as clarified by a balanced R2 of 0.757% which shows that the model is a decent forecast. The study conducted an ANOVA, in order to test the impact of the relationship between investment risk management and the financial performance of RSSB. The findings were as shown below in Table 11.



Table 12 Analysis of variance of investment risk and financial performance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.117	3	.4234	4.888	0.001
Residual	1.213	121	.0866		
Total	3.33	124			

Source: Research findings, 2015/17

The findings above uncovered that the degree of implication was 0.001 which is under 0.05. In this manner, the regression model is important in predicting expecting how investment risk management influences the money back of the Rwanda Social Security Board.

The F critical 5percent level of implication because F considered is 4.888 that is more prominent than F critical, this inferred this entire model was an important regression. Therefore, the decline model is important in predicting the connection between investment risk management and financial production.

Table 13 Test for coefficient between investment risk management and financial performance

Model		Unstandardiz ed Coefficients		Standardized Coefficients	f	Sig.
Model		В	Std. Error	Beta	- <b>,</b>	~ <del>*8</del> •
1	(Constant)	9.89	2.163		5.331	.000
	risk environment	.482	.395	.612	1.211	.004
	risk control	.213	.1331	.637	1.609	.003
	risk monitor	.264	.194	0.181	.1.365	.002

Source: Research findings, 2020

Table 13 shows the level of significance on the independent variables, it also provides the standardized and unstandardized coefficients. The outcome demonstrated that the risk environment showed a critical positive relationship on money back, it was presented that their p-regard was under 0.05. The first compelling variable was the chance condition with a relapse coefficient of 0.482(p-regard =0.004). The risk monitor with a coefficient of 0.213(p-value=0.003), a chance screen with a coefficient of 0.264(p-value=0.002) since all the p-regard were under 0.05, it suggests that independent elements had a promising connection on cashback of the organization



throughout this investigation. The investigator looked to shape the degree to which investment risk management affects the money back. The bellow regression condition was done:

Y = 0.989 + 0.482X1 + 0.213X2 + 0.264X3 + C

The outcomes of the regression model show that when all variables stay consistent, the benefit of speculation risks administration brings to solid money performance execution of the foundations. The after effects of the various regression model show that there may be a promising connection between investment risk management and the financial performance of RSSB.

# **IV. Discussion**

As for this research, in risk management, RSSB had accepted several risk administration strategies in their threats management and determinations. As it is a large institution having a higher risk extent, it, therefore, makes the institution own an inclusive risk management system in this regard, describe the reason it is monetary speaking continually viable and for long.

Considering risk management strategies, the study found that these results demonstrated that a unit increment in risk environment could result in an increment in financial performance by 0.482 every single other factor consistent, a unit increment in risk control might result in an increment in financial performance by 0.213.

A unit increment risk monitoring could result in an increment in financial performance by 0.264 all else held constant. The researcher observed that the risk environment is most important in affecting the performance of RSSB, followed by risk monitoring and risk control.

The reason that risk control ranked last as of the significance in influencing financial performance could be interpreted to imply that organizations may fail to mitigate risk but put in place measures of determining and maintain the level of risk if these strategies are well applied therefore the institution can continue to make a profit on a long term basis.

The approach is effective as it is not common as technical capacity to evaluate the effect risk affecting organizations.

The organization can see in advance possible harms and also have good benefits. On the other hand measures for risk, control will also be good for more benefits from its risk administration. This means that the institutions have to implement inclusive investment risk management for more money back. The research outcome is reliable to the conclusion of previous research Drzik (2005) study by which showed that institutions with high-risk management tend to provide high money returns.

#### V. Conclusion

It can be concluded from the results that the investment risk management, risk environment, risk control, and risk monitor have a huge impact on the financial performance of RSSB. The examination was to research the investment risk management and money back of RSSB. This goal was accomplished through a poll study.

Investment risk management includes risk set up by the management to guarantee the accomplishments of its arranged goals. As indicated by the above discoveries, the accompanying end can be drawn: we wrapped up that RSSB has effective investment risk management and



financial performance because the component of investment risk management which are risk environment, risk control and risk monitor have a hugeness important on the monetary performance of RSSB.

It was shown that risk control was done consistently by RSSB. This is upheld by away from obligations, oversight, endorsement exchange, spending survey, screen, and how the executives center on great risk and how took measure to address risks. This research concluded that RSSB solvency is still in need of improvement while RSSB's current ratio was excellent, the organization should be able to cover all its short-term obligations as they come due. RSSB's net profit margin was declined from 2015 to 2017. The examination infers that the financial plan is for accessible assistance to the foundation to meet its expected objectives.

As indicated by the above findings the respondents concurred that in RSSB approval and endorsement are relevant, Transactions ought to be approved and affirmed to help guarantee the action is predictable with targets. Since a reckless investment is accused of the management, which is dependable to build up the entire arrangement of interest so as to carry on the exercises of RSSB in a proficient way.

Investment risk management must work to help run the foundation and accomplish its points on progressing premise to guarantee that the association's money performance execution is improved. The findings of the investigation assist in underlining the gaps within the investment risk management and money back of RSSB. It is additionally of priceless advantages to the executives and those accused of administration and preparing in RSSB the most proficient method to smooth out the procedure of investment consequently guaranteeing improved monetary performance. It is clear from the investigation that investment risk the management clears away to great money-back of RSSB. Investment risk is fundamental; the examination presumes that there may be a significant positive connection between investment risk monitoring and financial performance.

#### Recommendations

The accompanying recommendations can be produced using this investigation; first, the examination uncovers that investment risk management affects financial performance:

- a. The investment office needs to persistently dissect the risk administrations and consumptions that they make and adjust them to the Institution's goal for them to be successful in their activities. Appropriate documentation is indispensable for a constant examination of investment in budgetary performance.
- b. There is a requirement for the management to completely comprehend their commitments and take fundamental activities in guaranteeing money back, management train workers to change their center convictions and help to guarantee the effective achievement of firm objectives. Management should work to improve cost and expenses risk management, even if the current ratio was better, management will need to significantly reduce expenses. Management needs to identify the major risk drivers as far as investment is concerned.
- c. Management should identify and assess the utilization of assets to generate money; RSSB's debt to equity ratio was increased over the three years. RSSB's solvency still needs improvement. The findings showed that investment made by RSSB generated a lower



- return, net investment was decreased over the three years, and management should do deep analysis before doing any investment.
- d. The investment department should ensure proper investment appraisals (qualified and skilled investment analysts). There is a need to take legal action against those who have mismanaged funds. The official entitled with the authority to incur and approve expenditure need also to be accountable for every resource utilized.
- e. The investigation suggests that observation of risk related to organizations, the objective is done standard so the administration can know whether the foundation target will be met. The components of investment risk management (risk environment, risk control, and risk monitor) should be enhanced to further improve firm financial performance in Rwanda.

# **Suggestions for Further Study**

The investigation focused on the investment risk management and financial performance of RSSB just, an investigation of the impact of investment risk on the monetary exhibition of different organizations can likewise be led, the outcomes can be looked into with those of this examination to distinguish the connection between impacts of investment risk management in multinational organizations with the impact that investment risk managements have on RSSB. Finally, since most RSSB's investments do not have sufficient documentation in terms of money back an investigation can be led to evaluate the impact in both the price and time horizon aspect of their financial performance.

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