
RISK ANALYSIS FOR INVESTMENT PROGRAMS OF NON-PROFIT ORGANIZATION: CASE OF THE REPUBLICAN CENTRE FOR SOCIAL ADAPTATION OF CHILDREN IN UZBEKISTAN

Rahimov Shohruh Abdukakhkor¹, Muhamad Arief Ramdhany²

¹Economics Education, Faculty of Economic and Business Education, Universitas Pendidikan Indonesia, Jalan Dr. Setiabudi No.229, Bandung Indonesia

²Accounting Education Faculty of Economic and Business Education, Universitas Pendidikan Indonesia, Jalan Dr. Setiabudi No.229, Bandung Indonesia

E-mail: raximov2_rsha@mail.ru; ramdhany@upi.edu

ABSTRACT

The objective of this study is to explore the factors that influence the risk analysis for investment programs of non-profit organization of the Republican Centre for Social Adaptation of Children (RCSAC) in Uzbekistan. The study included 57 volunteers from RCSAC as respondents, conducting survey utilized a structured questionnaire administered through Google Forms. To analyze the collected data and confirm the underlying factor structure of our latent variable, we employed Confirmatory Factor Analysis (CFA) using Partial Least Squares (PLS). Our findings emphasize the importance of financial stability, operational efficiency, reputation management, and program effectiveness in RCSAC's risk analysis. Diversifying funding sources, addressing operational inefficiencies, enhancing reputation through proactive communication, and conducting rigorous program evaluations are key strategies identified for the organization's success. The strong loadings provide empirical support for the relationships hypothesized in the research model, affirming that the manifest variables are meaningful indicators of the latent construct. Further research can explore the connections between these dimensions of risk analysis and their consequences for decision-making and program planning in both non-profit and for-profit enterprises.

Key words: Investment Program; Non-Profit Organization; Risk Analysis; Uzbekistan

INTRODUCTION

Non-profit organizations (NPOs) play a crucial role in addressing societal challenges and promoting the welfare of vulnerable populations. NPOs and for-profit organizations serve distinct purposes in society. NPOs are mission-driven entities addressing social, environmental, or humanitarian issues. They rely on donations, grants, and volunteers to achieve their objectives, emphasizing societal benefit over financial gain. In contrast, for-profit organizations aim to generate revenue and profits for shareholders. Their primary goal is financial success, often through selling goods or services. While both play vital roles, NPOs prioritize social impact, while for-profit organizations prioritize profitability (Zhu et al., 2016). The critical difference lies in their fundamental missions and how they allocate resources to achieve their respective goals.

There are so many NPOs in Uzbekistan. The Republican Centre for Social Adaptation of Children (RCSAC) or *Республиканский Центр Социальной Адаптации Детей* in Uzbekistan stands as an exemplar in this regard. The RCSAC is tirelessly working to provide social and psychological support to children facing adversities. RCSAC is a non-governmental non-profit organization created by a resolution of the Cabinet of Ministers of the Republic of Uzbekistan in September 2004. The Center carries out its activities in cooperation with state and economic management bodies, government and non-governmental organizations, non-profit organizations, civil society institutions, and other organizations (RCSAD, 2016).

RCSAC operates various investment programs that require financial resources to sustain and expand its mission. These programs encompass a wide range of activities, including educational support, vocational training, psychological counselling, and healthcare services for children who have experienced neglect, abuse, or other adversities. Its activities are guided by the Constitution and current legislation of the Republic of Uzbekistan, the UN Convention on the Rights of the Child, other norms of international law and the Charter of the Center. The mission of the Center is to provide comprehensive medical, social, psychological, and pedagogical assistance and advisory and legal assistance to children from socially vulnerable groups (children with disabilities, children without parental care, and children at social and legal risk).

In short, RCSAC is an effective model for providing targeted assistance in the field of social adaptation of children of vulnerable groups in Uzbekistan. This organization synthesizes the science and practice in the field of social protection of children. It is a platform for introducing innovative methods and technologies in the rehabilitation of children with special needs. It is also trying to form a positive attitude towards children with disabilities.

In its operation, the organization has been facing several challenges in risk analysis for investment programs. These challenges stem from the unique nature of non-profit endeavors, where financial sustainability relies heavily on external funding sources, such as donations and grants, making revenue streams less predictable. These challenges necessitate a tailored approach to risk analysis. Thus, risk analysis can balance the organization's social mission with financial stability and efficient program management, ensuring long-term success in its altruistic endeavors.

To comprehensively understand the context of RCSAC's work and the specific challenges it faces, it is essential to examine the state of the art in the relevant literature. The problems that NPOs usually face are financial, operational, reputation, and programmatic risks (Ceptureanu et al., 2018; Mataira et al., 2014; McDonald et al., 2015). Existing literature reveals that non-profit organizations like RCSAC often depend on external sources of funding, including donations, grants, and sponsorships, although the organizations have to focus on to become more performance oriented (Ferreira et al., 2017). Research has highlighted the vulnerability of such organizations to fluctuations in funding availability and donor preferences (Burkart et al., 2018). These challenges underscore the critical need for risk analysis in the context of financial stability (Ceptureanu et al., 2018).

The operational of the NPOs can lead to operational risk. The turnover rates among staff in non-profit organizations, as discussed in prior studies, can disrupt program continuity and impact the quality of services provided (Zulu et al., 2017). Moreover, the literature underscores the complexities of complying with evolving regulations and reporting requirements, which present operational challenges (Bella et al., 2023). Maintaining a positive public image is a common concern among non-profit organizations. Previous research has emphasized the risks associated with negative publicity and the importance of proactive reputation management strategies (Van den Heever, 2018). Lastly, the evaluation of the impact of non-profit programs, as highlighted in the literature, is a critical area of concern. Research has identified gaps in assessing the effectiveness of interventions and the need for robust monitoring and evaluation frameworks (Usmani et al., 2022).

The literature review demonstrates that while there is valuable information on risk factors faced by non-profit organizations, there is a noticeable gap when it comes to comprehensive risk analysis specifically tailored to investment programs within non-profit entities like RCSAC. This study seeks to bridge this gap by conducting an in-depth analysis of RCSAC's investment programs, considering the unique challenges and opportunities they present. Thus, this research aims to contribute novel insights into risk analysis management and strategies for non-profit organizations, particularly those working with vulnerable populations in Uzbekistan. Especially, the objective of this research is to explore the factors that influence the risk analysis for investment programs of non-profit organization of the Republican Centre for Social Adaptation of Children (RCSAC) in Uzbekistan.

METHOD

In this study, we aimed to investigate the latent variable "Risk Analysis for Investment Programs" within the context of The Republican Centre for Social Adaptation of Children (RCSAC) in Tashkent, Uzbekistan. The study included 57 volunteers from RCSAC as respondents with diverse demographic characteristics, including gender, age, and length of service within the organization. To assess the latent variable, we utilized a structured questionnaire administered through Google Forms. This questionnaire was specifically designed to measure the following manifest variables: (1) Financial Risk, (2) Operational Risk,

(3) Reputation Risk, and (4) Program Effectiveness Risk. The questionnaire consisted of items corresponding to each of these manifest variables. For each item, respondents provided their responses on a Likert scale, enabling us to quantify their perceptions and attitudes regarding risk analysis in RCSAC's investment programs.

To ensure the reliability and validity of our measurement instrument, we considered the following aspects: (1) The questionnaire comprised a total of 12 items, with a balanced distribution across the four manifest variables; (2) We tested the validity using Pearson correlation with Corrected Item-Total Correlation; and (3) We assessed the internal consistency of the questionnaire items using Cronbach's alpha.

To analyze the collected data and confirm the underlying factor structure of our latent variable, we employed Confirmatory Factor Analysis (CFA) using Partial Least Squares (PLS) as our statistical method (Afthanorhan, 2013). CFA allows us to test the hypothesized relationships between the latent variable (Risk Analysis for Investment Programs) and its manifest variables (Financial Risk, Operational Risk, Reputation Risk, and Program Effectiveness Risk). The statistical software used for data analysis was SmartPLS and SPSS, and we conducted a range of statistical tests and model fit indices to assess the goodness of fit of the measurement model. Figure 1 depicts the model of Risk Analysis for Investment Programs in RCSAC.

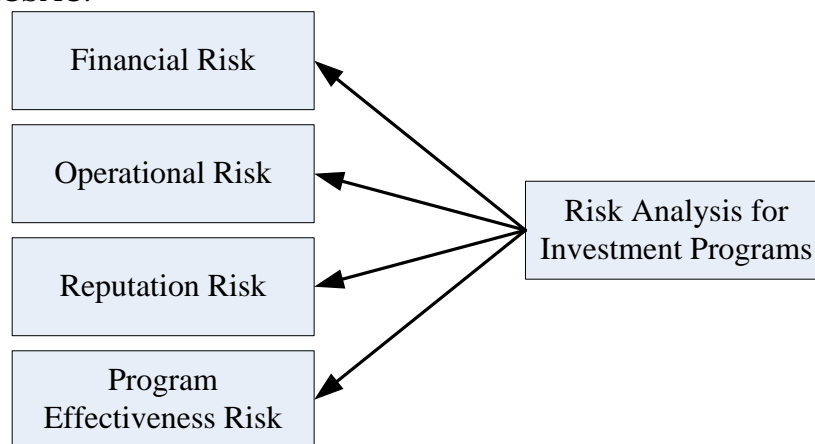


Figure 1. Model of Risk Analysis for Investment Programs

The null and alternative hypotheses can be formulated as follow:

Null Hypotheses (H0):

- H0: There is no significant relationship between Financial Risk and Risk Analysis for Investment Programs within RCSAC.
- H0: There is no significant relationship between Operational Risk and Risk Analysis for Investment Programs within RCSAC.
- H0: There is no significant relationship between Reputation Risk and Risk Analysis for Investment Programs within RCSAC.
- H0: There is no significant relationship between Program Effectiveness Risk and Risk Analysis for Investment Programs within RCSAC.

Alternative Hypotheses (H1):

- H1: Financial Risk has a significant positive relationship with Risk Analysis for Investment Programs within RCSAC.
- H1: Operational Risk has a significant positive relationship with Risk Analysis for Investment Programs within RCSAC.
- H1: Reputation Risk has a significant positive relationship with Risk Analysis for Investment Programs within RCSAC.
- H1: Program Effectiveness Risk has a significant positive relationship with Risk Analysis for Investment Programs within RCSAC.

RESULTS AND DISCUSSION

The survey results reveal a diverse group of volunteers at RCSAC in terms of education, age, and length of service (see Table 1). In terms of education level, the majority of respondents have at least a Bachelor's degree, constituting 54.4% of the sample. This suggests that RCSAC's volunteer base comprises individuals with a relatively high level of formal education. Additionally, 28.1% of volunteers have a High School education, and 17.5% hold Post-Graduate degrees. This diverse educational background within the volunteer group can contribute to a well-rounded and multidisciplinary perspective when assessing risk analysis for investment programs.

Table 1. Characteristics of the Respondents

Gender	Frequency	Percentage
Male	21	36,8
Female	36	63,2
Total	57	100,0

Level of Education	Frequency	Percentage
High School	16	28,1
Bachelor	31	54,4
Post-Graduate	10	17,5
Total	57	100,0

Age	Frequency	Percentage
Under 30	8	14,0
Between 30 - 40	12	21,1
Between 41 - 50	30	52,6
Above 50	7	12,3
Total	57	100,0

Length of Service	Frequency	Percentage
Under 6 years	13	22,8
Between 7 - 12	24	42,1
Above 12 years	20	35,1
Total	57	100,0

(Source: Data calculation, 2023)

Regarding age distribution, the data indicates that a significant portion of volunteers falls within the age group between 41 and 50 years old, comprising 52.6% of the sample. Volunteers aged 30 to 40 years constitute 21.1% of the group, and those under 30 and above 50 make up 14.0% and 12.3%, respectively. This age diversity suggests a mix of experience and fresh perspectives among RCSAC's volunteers, potentially contributing to a comprehensive evaluation of risk analysis.

When considering the length of service within RCSAC, 42.1% of volunteers have been with the organization for 7 to 12 years, indicating a considerable level of experience and dedication. Furthermore, 35.1% have served for over 12 years, demonstrating a long-term commitment to the organization's mission. With 22.8% having worked for under 6 years, RCSAC benefits from a blend of both experienced and newer volunteers who can provide different perceptions into the organization's risk analysis practices.

Figure 2 and Table 2 present the results of the Confirmatory Factor Analysis (CFA) conducted to assess the hypothesized relationships between the latent variable, "Risk Analysis for Investment Programs," and its manifest variables: Financial Risk, Operational Risk, Reputation Risk, and Program Effectiveness Risk. In the CFA, loadings are a crucial indicator

of how well the observed variables (manifest) are associated with the underlying latent construct. The loadings reflect the strength and direction of these relationships. The CFA results indicate that each of the manifest variables has a strong and positive relationship with the latent variable. Specifically, the loadings are as follows:

- The loading for Financial Risk is 0.846, suggesting a substantial and positive association between financial risk assessments and the broader concept of Risk Analysis for Investment Programs within RCSAC.
- The loading for Operational Risk is 0.882, indicating a robust and positive connection between operational risk considerations and the overall construct of Risk Analysis for Investment Programs.
- The loading for Reputation Risk is 0.812, signifying a significant and positive correlation between reputation risk evaluations and the latent variable, suggesting that how RCSAC manages its reputation relates closely to its risk analysis practices.
- The loading for Program Effectiveness Risk is 0.830, highlighting a substantial and positive linkage between assessments of program effectiveness risk and the overarching concept of Risk Analysis for Investment Programs within RCSAC.

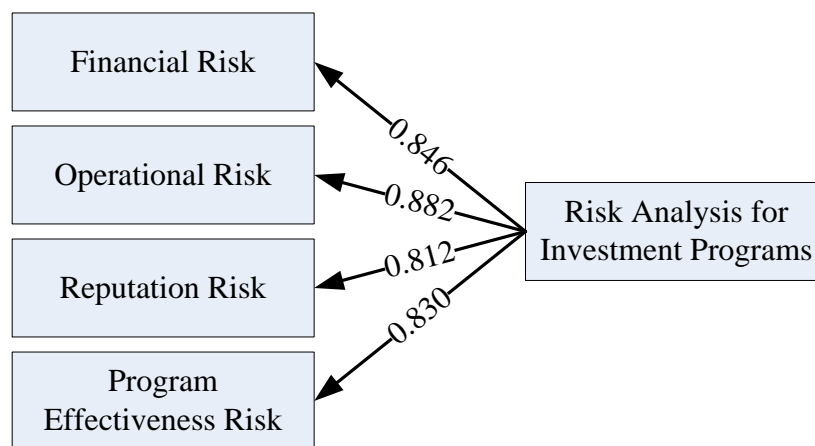


Figure 2. CFA Results of Risk Analysis for Investment Programs

Table 2. Characteristics of the Respondents

Path	Loading	Standard Deviation	T-statistics	P-values	Hypotheses
X11 <- X	0.846	0.054	15.790	0.000	Accepted
X12 <- X	0.882	0.035	25.284	0.000	Accepted
X13 <- X	0.812	0.044	18.378	0.000	Accepted
X14 <- X	0.830	0.052	15.824	0.000	Accepted

Table 2 displays the path loadings, standard deviations, t-statistics, p-values, and the status of hypotheses for the relationships between the latent variable (X) "Risk Analysis for Investment Programs" and its manifest variables (X11 = Financial Risk, X12 = Operational Risk, X13 = Reputation Risk, X14 = Program Effectiveness Risk). The "Accepted" status in the table indicates that all of the hypothesized relationships between the latent variable and its manifest variables have been supported by the data. In other words, the loadings for each manifest variable onto the latent variable are statistically significant, suggesting that these manifest variables are indeed reliable indicators of the underlying construct of "Risk Analysis for Investment Programs" within RCSAC. To compare the strength of the relationships between the latent variable and its manifest variables, we can examine the loading values.

Financial Risk (X1) has the loading value of 0.846. It indicates strong association with the latent variable. It suggests that when RCSAC's volunteers assess and consider financial risks associated with their investment programs, these assessments are closely related to their overall perception of risk analysis for those programs. Higher loadings signify that financial risk

assessments are highly relevant in shaping the broader construct of risk analysis for RCSAC's investment programs. This implies that financial considerations, such as budgeting, funding stability, and resource allocation, are integral aspects of the organization's risk analysis process.

We found that the financial stability of RCSAC is crucial for the sustained success of its investment programs. RCSAC relies on external donations, grants, and sponsorships, making it vulnerable to fluctuations in funding availability and donor priorities. Economic downturns can affect the disposable income of potential donors, leading to reduced financial support for RCSAC's programs. Thus, RCSAC can diversify its funding sources by exploring partnerships with local businesses, government agencies, and international organizations. Additionally, creating a financial reserve for emergencies can help buffer against economic uncertainties. These findings align with research highlighting issues related to budgeting, funding, and financial sustainability of financial risk as a critical aspect of risk analysis (Sacristán López de los Mozos et al., 2016). Moreover, the NPOs can rely on revenue stream diversification to improve their financial health against uncertainty (Hung & Hager, 2019).

Operational Risk (X12) has the highest loading value (0.882), indicating the strongest association with the latent variable. This suggests that operational risk considerations have the most substantial impact on the overall construct of "Risk Analysis for Investment Programs" within RCSAC. Operational risk encompasses factors related to the day-to-day functioning of an organization, including processes, systems, and human resources. In RCSAC's investment programs, operational risk includes challenges such as inefficient resource allocation, staff turnover, logistical issues, and process bottlenecks. These operational factors can directly impact the organization's ability to analyze and manage risks associated with its investment programs. This finding aligns with existing literature on risk management in non-profit organizations. Several studies emphasize the significance of operational risk in non-profit settings (such as resource allocation, volunteer management, and program delivery) due to its potential to disrupt the organization's ability to achieve its mission (Currie et al., 2022; Sacristán López de los Mozos et al., 2016; Zhai et al., 2017).

Reputation Risk (X13) has the loading value of 0.812, which is also substantial, signifying a significant influence on the latent variable. Managing reputation risk is also crucial in the context of risk analysis for RCSAC's investment programs. From a theoretical standpoint, RCSAC recognizes the importance of managing its reputation and ensuring the effectiveness of its programs as integral components of risk analysis. Reputation risk can affect donor trust and funding. The reputation of a non-profit organization is paramount for attracting donors and beneficiaries. Adverse media coverage or allegations of misconduct can tarnish RCSAC's image and credibility. Misunderstandings or insensitivity to local customs and traditions can harm its reputation. RCSAC should establish a proactive public relations and communication strategy, emphasizing transparency and accountability. Engaging with the local community and maintaining cultural sensitivity is essential. These findings align with research highlighting the significance of reputation management in non-profit risk management (Bali & Uslu, 2017; Hogarth et al., 2018).

Finally, Program Effectiveness Risk (X14) has a loading value of 0.830, highlighting a substantial and positive linkage between assessments of program effectiveness risk and the overarching concept of Risk Analysis for Investment Programs within RCSAC. The success of RCSAC's investment programs directly impacts the children it serves. Nevertheless, a lack of proper monitoring and evaluation can hinder RCSAC's ability to measure the effectiveness of its programs. Shifting societal needs and demographics may require RCSAC to adapt its programs to remain relevant. Then, RCSAC should invest in rigorous program evaluation and impact assessments to ensure its interventions are achieving their intended outcomes. Program effectiveness risk can impact the organization's ability to achieve its mission. Flexibility and adaptability are key in responding to changing needs. These findings align with research emphasizing the importance of program effectiveness evaluation in non-profit risk management (Liket & Maas, 2015; Rosman et al., 2016).

Our findings underscore the significance of financial stability for the sustained success of RCSAC's investment programs. Given RCSAC's reliance on external donations and grants, diversifying funding sources through partnerships and creating financial reserves to buffer against economic uncertainties emerge as crucial risk management strategies. Next, operational risk considerations emerged as the most influential factor in shaping risk analysis for RCSAC's investment programs. This finding aligns with existing research emphasizing the critical role of operational efficiency in non-profit risk management. Inefficiencies in resource allocation, staff turnover, and logistical challenges can directly impact the organization's risk assessment capabilities. Besides that, the study also highlights the need for proactive public relations and communication strategies, emphasizing transparency, accountability, and cultural sensitivity to protect and enhance RCSAC's reputation. Finally, our findings stress the need for rigorous program evaluation and impact assessments to ensure RCSAC's interventions align with changing societal needs and remain effective in fulfilling their mission.

CONCLUSION

The strong loadings provide empirical support for the relationships hypothesized in the research model, affirming that the manifest variables are meaningful indicators of the latent construct. This robust empirical foundation reinforces the validity of the model and underscores the importance of these risk dimensions in the context of RCSAC's investment programs. Our study underscores the critical importance of financial stability, operational efficiency, reputation management, and program effectiveness in shaping risk analysis for The Republican Centre for Social Adaptation of Children (RCSAC). Maintaining financial stability through diversified funding sources and financial reserves is vital, given RCSAC's reliance on external donations. Operational risk emerged as the most influential factor, emphasizing the need for operational efficiency to navigate resource allocation and staffing challenges. Proactive public relations and transparent communication strategies are essential for safeguarding RCSAC's reputation. At the same time, rigorous program evaluations ensure the organization remains adaptable to changing societal needs, aligning with its mission for sustained success in its investment programs. Further investigation can be conducted about the links between these risk analysis dimensions and their implications for decision-making and program planning in non-profit or for-profit organizations.

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