



## Implementation of Internal Control Systems and its Relationship on the Financial Performance of Life Insurance Companies

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## **ABSTRACT**

As part of the financial market, life insurance companies must maintain a robust internal control system to ensure their services benefit their customers and the overall financial market. The study aimed to measure the level of implementation of internal control systems and the financial performance of four life insurance companies. The relationship between the two variables was also investigated. The study consisted of seven (7) respondents from four (4) life insurance companies located in first-class municipalities in Nueva Vizcaya. The researchers used a structured questionnaire to gather data using descriptive and correlational designs. The audited financial statements were also used to compute the financial ratios, which were used to determine the financial performance of the companies. The data was analyzed using the following statistical tools: frequency counts, median, mean, standard deviation, percentage, and Spearman-rho using the IBM SPSS. The researchers found that the companies implement all the internal control components at a high level. The results of the financial ratios also reflected that the financial performance of the life insurance companies is varied. The companies have good profitability and earnings ratios, but the financial strength ratios show weakness in the financial performance of the companies. It was also found that the level of implementation of most of the internal control components is not significantly related to the financial performance of the life insurance companies. Only the control activities significantly correlate with the return on equity and capital adequacy ratios.

**Keywords:** Control activities, control environment, information and communication, monitoring activities, risk assessment

## INTRODUCTION

## **Rationale**

In the early 20th century, businesses faced various challenges in maintaining their commercial activities and operational efficiency due to economic expansion and other factors (Alojado et al., 2020). To address this issue and ensure that businesses comply with rules and regulations and operate effectively and efficiently, internal control systems were developed. According to Velasco (2021), internal control is a strategic tool that every company can use to achieve its objectives, promote good governance, and strengthen financial management administration, particularly in countries with scarce resources. An internal control system is essential for proper and responsible management across all types of businesses (Eniola, 2020).

In the past, government and business leaders have recognized the importance of establishing systems and protocols to ensure the success of their operations. This has led to the development of various controls and methods to oversee the progress of operations and ensure that they function as intended. Over time, internal control has become increasingly crucial to the success of an organization, not only among its leaders but also the various stakeholders. As a result, internal control is now being applied to a broader range of issues

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than initially thought necessary. Events such as Watergate in the mid-1970s and the Foreign Corrupt Practices Act of 1977 have raised awareness and public concern about internal control and auditing. These events have prompted the Committee of Sponsoring Organizations (COSO) to introduce its first internal control-integrated framework (Siahkoohian, 2015).

COSO first introduced the internal control—integrated framework in 1992. Siahkoohian (2015) stated that the framework encompasses the definition of internal control and its limitations. Additionally, the framework outlines the roles and responsibilities of all employees within an organization, as they are all accountable for internal control. The framework is universally applicable to all entities; however, small and mid-size companies may modify the implementation of internal control components to better suit their needs compared to larger corporations. In July 2006, COSO released a guide titled "Internal Control over Financial Reporting — Guidance for Smaller Public Companies," aimed at assisting smaller public companies to implement the COSO Internal Control-Integrated Framework. This was in recognition that smaller companies may have more limited resources and struggle with implementing the framework without proper guidance (Rittenberg, 2006). The organization has since updated the framework to ensure that it remains relevant and effective for organizations. The most recent version was released in May 2013 and continues to be used by organizations as a valuable tool for operating effectively.

As another form of control, in the Philippines, auditors are expected to follow the Philippine Standards on Auditing (PSA) 315, which mandates the inclusion of an entity's internal control analysis in their audit procedures. This is because several controls relevant to the audit process may be linked to financial reporting, as stated by the Auditing and Assurance Standards and Practices Council in 2009. By understanding an entity's internal control, auditors can identify various errors or misstatements in financial statements and pinpoint the factors that could potentially increase the risk of material misstatement (Whittington & Pany, 2021).

In relation to this, Baal et al. (2018) conducted a study in Nueva Vizcaya to examine how internal control actions affect a multi-purpose cooperative's financial performance. The study's findings showed that the cooperative had effectively established internal control procedures. However, it was discovered that the cooperative's financial performance varied rather than held steady. The study's most important finding was a positive relationship between the multi-purpose cooperative's financial performance and the internal control measures that were put in place. This is similar to the conclusions of the study by Ibrahim et al. (2017) that the efficiency and effectiveness of internal controls are indicators of financial performance.

## **Insurance Companies**

Among the businesses that are operating presently are insurance companies. According to Fontinelle (2023), insurance companies sell a product or a promise to pay a specific expense in exchange for a fee, called a premium. Insurance companies offer financial protection from potential hazards known or detected within a given period. The activities of insurance companies include several types of risk, coverage terms, claims, accumulated funds, and managing the portfolio.

The insurance industry is a significant employer that generates substantial revenues involving multiple policies. These companies have a substantial impact on financial markets as intermediaries. They also have three main functions: underwriting, finance, and investment. These functions help them provide insurance coverage to their customers.

The three most common types of insurance are life, property, and casualty. Property and casualty insurances are different from life insurance. In contrast to property and casualty insurance, life insurance can only offer protection against a particular event. Life insurance also provides a means for individuals to safeguard the financial well-being of their loved ones if they pass away prematurely. Furthermore, it is an alternative for

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fulfilling individuals' savings and investment needs with limited knowledge or reservations concerning participation in mutual funds or the stock market. Meanwhile, it is significantly harder to anticipate the probable loss amount for property and casualty insurance. This makes property and casualty firms keep more liquid assets than life insurance companies due to these factors.

As aforementioned, insurance companies play a vital role in maintaining the financial system's stability. While the banking industry specializes in payment transmission, monetary policy, and reallocating savings to investments (Abdin et al., 2022), the insurance industry's equally important role in the financial system comes in obtaining premiums from the general public to carry out their operations as risk managers. Insurance companies then invest the premiums collected in anticipation of losses (Glickman, 2014). Insurance firms prefer direct investments in real estate, with mortgages backed by real estate since they are often long-term reliable sources of income flow.

As an institution involved in a number of financial operations, insurance companies need internal control actions to ensure that there is efficient management.

## **Internal Control Systems**

As per Risk Optics (2022), a company's internal control system ensures the proper execution of implemented protocols and procedures. A company's management must follow corporate governance standards and other laws to effectively handle potential risks arising from human interaction or business activities. This involves identifying, preventing, and responding to risks.

Effective internal control systems are essential for improving a company's financial performance. While preventing fraud is critical, internal controls also play a broader role. They investigate the links between disclosing material weaknesses, decreased revenue, earnings management, and restatements. Furthermore, internal controls objectively evaluate the managers' performance to determine how well they boost revenue (Beeler, 1999, as cited in Ng'etich, 2017).

## **Control Environment**

The control environment refers to an organization's internal control standards, practices, and frameworks. It is the ethical and moral standards an organization abides by and the governance and authority allocation parameters set by the board of directors. It also includes the processes for recruiting, developing, and retaining skilled employees and the effectiveness of performance standards, incentives, and penalties in ensuring accountability for performance. Modifying the environment is fundamental to internal control systems and establishes the leadership's tone, influencing the control proficiency of all personnel. Ajao and Oluwadamilola (2020) pointed out the association's style, theology, supporting station, ethical morals, faculty, enthusiasm, and responsibility as components of the control environment.

In relation, this study examined the relationship between an organization's control environment, as outlined by COSO, and its impact on employee control awareness and tone. It provides structure and discipline as the foundational element for all other internal control components.

## **Risk Assessment**

Internal control is a comprehensive approach to managing corporate affairs, encompassing transparency and effective risk management to safeguard and promote the interests of all stakeholders. It is crucial to strike a balance between the interests of shareholders and those of other stakeholders. Improper management of risk can result in significant losses for financial institutions, as seen in the global financial crisis. However, implementing reliable internal controls can reduce the likelihood of such crises. And because the success of

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a corporation is influenced by the potential conflict of interest between shareholders and managers, as well as their risk management practices (Rehman et al., 2021), it is important that some mitigating measures are in place.

Given how little has been written about internal control and risk management, one would question if risk management falls under the jurisdiction of internal control. Risk management inside a firm is ultimately under the control of the board of directors. Moreover, it can be examined as a moderating component in the link between corporate governance and financial success (Rehman et al., 2021).

## **Control Activities**

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2013) defines control activities as the steps outlined in policies and procedures that help guarantee that an operation's instructions to avoid obstacles to achieving goals are followed. Similar control conditioning aids in ensuring the fulfillment of the objectives. Control operations occur in all real-world circumstances, at various stages of corporate processes, and throughout the technological landscape. They include a variety of initial and automatic duties, such as approvals and gratitude, verifications, rapprochements, and company performance assessments. They may be of a preventative or logical nature. Both humans and machines are capable of carrying out these activities.

## **Information and Communication**

According to Nuswantara (2022), information is essential in recording, processing, summarizing, and reporting financial transactions. It also plays a significant role in ensuring accountability for assets, liabilities, and equity. Effective communication is crucial for clear comprehension of roles in financial reporting control. As such, organizations should identify all relevant information and communicate it to relevant parties.

Moeller (2014) further mentioned that organizations require information and communication to identify and communicate all necessary information to relevant parties. A reliable information system is necessary for management to make informed decisions and carry out operational activities. Information and communication are related to the availability and utilization of various means of communication, as well as the management, development, and updating of information systems on an ongoing basis. In financial reporting, an accounting information system must identify, assemble, analyze, and report financial transactions and hold accountability for assets and debts. Implementing effective communication practices within an organization can significantly improve the accuracy and precision of financial reports.

## **Monitoring Activities**

According to COSO (2023), all five components of internal control are regularly studied, either independently or in any possible combination, to ensure that they are present and functioning correctly. The evaluations are integrated into business processes at all levels of the organization to provide timely information. The frequency and scope of independent evaluations will depend on risk assessment, review efficiency, and managerial complexities. The results are compared to standards set by regulators, accrediting agencies, management, or the board of directors, and any deficiencies are reported to management and the board of directors, as necessary.

Insurance firms are advised to set up suitable processes for assessing the efficacy and efficiency of internal controls. Continuous monitoring, coupled with other assessments, is crucial. Insurance companies should conduct an all-encompassing internal audit performed by operationally independent, skilled, and capable experts as an integral part of their internal control system. The audit should align with the complexity and

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diversity of the activities undertaken by the insurers. Internal audits should be conducted using a thorough audit approach that provides a reasonable certainty that internal control objectives have been fulfilled. A positive internal audit operation should include a method for monitoring audit findings to ensure they are addressed effectively (Madrid Working Group).

## **Financial Performance**

Financial strength includes generating income, having enough cash flow, being competent with money, and repaying investors. Measuring financial strength includes the estimation of liquidity, identifying solvency, evaluating operating efficiency, and gauging probability (Send Pulse.com, 2023). Meanwhile, internal control systems are effective tools that companies can use to ensure financial success.

For insurance companies, the actions of stakeholders, such as interest groups, can impact a firm. Kyere and Ausloos (2021) found that if a corporation's activities are not pleasing to society, it can lead to unfavorable responses toward the company. Therefore, firms may change their usual focus from shareholder primacy, where actions are geared towards achieving shareholder goals, to socially responsible concerns. This is supported by the findings of Rodríguez-Fernández (2016) Additionally, there is evidence that investors are willing to pay higher prices for company shares with a strong internal control framework. The above statement highlights the correlation between the effectiveness of internal control measures and the business's financial success.

Kyere and Ausloos (2021) published a statement in which they reviewed the relationship between internal control and business financial success by analyzing the works of several academic researchers over the past few decades. The findings of most of these researchers suggest that effective internal control has a positive impact on a company's financial performance. In line with this, the agency theory proposes that companies can enhance their financial performance by minimizing costs. The agency cost represents the loss of value experienced by shareholders due to the divergence of interests between managers and owners.

Now there are financial ratios such as profitability, earnings, and financial strength that are essential tools businesses use to evaluate performance. The profitability ratio is a specific financial indicator that a company can employ to assess and analyze its financial position. This ratio examines a company's assets and how it generates profit and value. If a corporation's profitability ratios are high, the company is performing well financially, indicating significant revenues, profits, and positive cash flow (Indeed Editorial Team, 2022).

Furthermore, earnings ratios are necessary for insurance companies to operate their businesses as a going concern (Careratings, 2020). Managers consider earnings rates for other indicators, like premium growth or loss ratios. However, they are most frequently measured for a company's earnings, sales, or cash flows. The earnings ratio indicates the trustworthiness or stability of the insurance company and how it performs in the insurance sector.

## **Internal Control System and Financial Performance**

As stated above, the presence of efficient internal control systems affects a business' financial success. Ahmed and Muhammed (2018) conducted a study and found that a strong correlation between internal controls and financial performance does exist. According to their research, three out of the five components of internal control – control environment, risk assessment, and control activities – positively impacted financial performance. Similarly, Adesunkanmi and Oluwasola's (2022) study demonstrated that risk assessment had a significant and positive effect on the performance of insurance companies in Nigeria, further supporting the idea that internal controls are crucial for financial success. Therefore, conducting a thorough study in the Philippines to investigate the relationship between internal control systems and the

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financial performance of life insurance companies is essential.

Numerous studies have been conducted to evaluate the correlation between the financial performance of insurance companies in the Philippines and their internal control systems. These studies aimed to assess the internal control systems of life insurance companies and establish a relationship between their effectiveness and financial performance. The survey method was commonly used in these studies through which the respondents aired their opinions and perceptions of the company's financial performance.

In like manner, this study which mainly focused on identifying the level of implementation of the internal control systems of life insurance companies and their financial performance aimed to measure the companies' level of implementation of internal control systems through survey questionnaires and financial performance through various financial ratios using the companies' audited financial statements. Additionally, the study examined how internal control systems and financial performance are related. This research can significantly enhance our understanding of the competitiveness of the insurance industry and can improve our knowledge of internal control procedures and financial performance.

As part of the financial market, life insurance companies must maintain a robust internal control system to ensure their services benefit their customers and the overall financial market. A stable and efficient financial market is crucial for developing countries to remain competitive globally. Therefore, the findings of this study will be valuable to insurance customers, providing insight into how sound life insurance companies perform their services according to customer needs. The results of this study can provide valuable insights for making informed decisions regarding a company's internal control systems and financial performance. Moreover, employees and management of life insurance companies can also benefit from this study by gaining awareness of the internal control systems. This can guide them in performing their duties to achieve company goals by identifying potential risks, weaknesses, gaps, and control deficiencies. This helps them apply suitable techniques to lower the possibility of financial losses and enhance and strengthen procedures overall.

Furthermore, as a regulating body, the Insurance Commission can identify areas of noncompliance, address deficiencies, and assure regulatory compliance in the companies' internal control, as life insurance companies exist to serve the public and are entrusted with the public interest. This study will also provide a foundation for teaching and learning internal control for Accountancy and Business professors and students. Ultimately, this study will advance knowledge and can be further improved through future internal control systems and financial performance studies.

## **Statement of the Problem**

This study aimed to determine the level of implementation of internal control systems and its relationship to the financial performance of life insurance companies. The researchers sought to answer the following questions during the first semester of the Academic Year 2023-2024:

- 1. What is the level of implementation of the internal control system in terms of:
  - 1. Control environment;
  - 2. Risk assessment:
  - 3. Control activities:
  - 4. Information and Communication; and
  - 5. Monitoring Activities?
- 1. What is the financial performance of life insurance companies in terms of:
  - 1. Profitability Ratio;

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- 2. Earnings Ratio; and
- 3. Financial Strength?
- 1. Is there a significant relationship between the financial performance of life insurance companies and the level of implementation of internal control systems, specifically:
  - 1. Control Environment:
  - 2. Risk Assessment:
  - 3. Control Activities:
  - 4. Information and Communication; and
  - 5. Monitoring Activities?

## **Statement of Hypothesis**

There is no significant relationship between the internal control systems and the financial performance of the life insurance companies.

## **METHODOLOGY**

## **Research Design**

This study used the quantitative approach. In quantitative methods, variables are measured numerically and analyzed using one or more statistical models, and correlations and relationships between variables are documented. This approach requires processing the data before examining it to be effective. One example is the conversion of survey test data from text to numbers. According to Creswell (2014), a quantitative approach involves analyzing an idea through specific assumptions and collecting data to confirm or question these assumptions.

A descriptive design was also used to describe the internal control system's implementation level and analyze the life insurance companies' financial performance. A descriptive research approach aims to identify the traits of a population or specific phenomena. According to Babbie (n.d), using a descriptive research design can be advantageous in acquiring both qualitative and quantitative data. Employing this approach can foster the generation of precise information and facilitate the formulation of reliable predictions about a particular query or hypothesis. These research designs assist researchers in identifying the distinctive traits of their target market or a specific group, serving as an invaluable tool for conducting thorough investigations. These characteristics of a population sample can be identified, monitored, and analyzed to facilitate decision-making. A descriptive research design is a suitable approach for researching a specific subject matter and as a bridge to more quantitative studies (Shuttle worth, n.d.).

A correlational design can be helpful for insurance companies to study the relationship between their internal control systems (control environment, risk management, and control activities) and financial performance. This design allows for observing multiple variables and provides insights into the factors that affect financial outcomes. According to Fraenkel et al. (2012), correlation studies aim to find a causal relationship between two or more variables and are expected to study more than two variables. In addition, Creswell (2023) explains that fixed correlation is a statistical test designed to identify trends or patterns of consistent change between two or more variables.

In accordance with Bhat (2023), descriptive-correlational research is a research design that aims to establish the connection between two or more variables without assuming the causes and effects of the relationship. This type of research involves collecting and analyzing data on at least two variables to determine whether a relationship exists between them. The primary objective is to comprehensively explain the variables and their interaction without manipulating or assuming that one variable influences the other.

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## Research Locale

The study focused on the first-class municipalities within the province. The Department of Trade and Industry (2022) uses a 5-Pillar system to rank cities and municipalities based on their scores in the following categories: economic dynamism, government efficiency, infrastructure, resiliency, and innovation. As a result, the study focused on first-class municipalities since it is believed that the higher a municipality's score, especially in economic dynamism, the greater the opportunity for life insurance companies to expand into it. In other words, life insurance companies will likely be in municipalities with strong and prosperous economic conditions.

According to the 2022 Cities and Municipalities Competitiveness Index released by the Department of Trade and Industry, there are four (4) first-class municipalities in the province. Among 15 municipalities, the municipality of Bayombong scored the highest, scoring 30.7951. The second municipality on the list is Bambang, which scored 30.7537, followed by the third-ranked municipality of Solano, which scored 29.4423. Lastly, the fourth-ranked municipality of Alfonso Castañeda had a score of 27.7739.

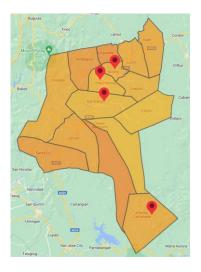
The province's economy is primarily based on agriculture, known for its fertile lands and favorable climate for farming. The cultivation of crops such as rice, corn, vegetables, and fruits, as well as the raising of livestock and poultry, form the backbone of the agricultural sector. Fishing also contributes to the province's economy, thanks to the presence of rivers and bodies of water (Nueva Vizcaya | RDC2, n.d.).

However, the province has experienced significant growth and development in commerce, trade, and industry alongside the agricultural sector's strategic location as a gateway to the Cagayan Valley region and has attracted various commercial endeavors. Due to its vibrant business environment, the province has witnessed the establishment of banks, financial institutions, and insurance companies, with Solano emerging as the commercial capital.

In line with this economic progress, Solano, Bayombong, Bambang, Alfonso Castañeda, and other municipalities in Nueva Vizcaya have become hubs for financial services. These towns offer a range of products and services, including insurance premiums and financial assistance, catering to the needs of both individuals and businesses. This diversification of the economy has further bolstered the province's overall growth and prosperity.

The research study was conducted in Solano, Bayombong, Bambang, and Alfonso Castañeda – two of the first-class municipalities in Nueva Vizcaya.

Figure 3. Map of Nueva Vizcaya



Source: https://cmci.dti.gov.ph/interactive-map.php?prov=Nueva % 20 Vizcaya





## **Research Respondents**

Table 1. The Research Respondents

RESPONDENT	Company	POSITION	WEIGHT
Respondent 1	Company A	Unit Manager	8.33%
Respondent 2	Company A	Unit Manager	8.33%
Respondent 3	Company A	Branch Head	8.33%
Respondent 4	Company B	Manager	12.5%
Respondent 5	Company B	Branch Head	12.5%
Respondent 6	Company C	Branch Manager	25%
Respondent 7	Company D	Branch Head	25%

The respondents were selected using the purposive sampling technique based on the list of life insurance companies with valid and existing certificates of authority as of April 30, 2023, released by the Insurance Commission. Regarding the records from the Insurance Commission, four (4) of the twenty-seven (27) life insurance companies met the considerations that indicate they are in the first-class municipalities of the province of Nueva Vizcaya that directly assess the internal control systems and their relationship to financial performance. A total of seven (7) respondents, who are actively involved in the daily transactions, as well as the implementation and monitoring of internal control systems and financial performance, were chosen since they are the ones who have enough knowledge to give information according to the factors mentioned.

The research respondents were employees of the life insurance companies registered with the Insurance Commission. These companies were determined through the list the Insurance Commission uploads on their website. Employees of other insurance companies and those on the list provided by the Insurance Commission were not considered respondents of the study. Moreover, those who are not direct employees of the life insurance companies were also not considered as respondents of the study.

## **Research Instrument**

This study used a survey questionnaire as the data collection instrument. The survey questionnaire was adapted from the study of Amissah (2017), entitled "Effect of Internal Control Systems on Performance in the Insurance Industry in Ghana," with minimal revision. The research questionnaire consisted of 50 questions which included items on internal controls: (a) control environment (15 items), (b) risk assessment (12 items), (c) control activities (9 items), (d) information and communication (9 items), and (e) monitoring (5 items). The Likert scale determined the range of respondents' preferences, ranging from strongly disagree (1) to strongly agree (4).

The questionnaire consists of two parts. The internal controls survey tool consisted of 50 questions divided into five parts: control environment, risk assessment, control activities, information and communication, and monitoring. The purpose of this tool was to collect data and evaluate the internal control systems of life insurance companies. This was done by analyzing key profitability ratios, such as net profit margin, earnings per share, and return on equity. The earnings ratio was also evaluated based on the premium growth and loss ratio. The financial strength of the companies was assessed using capital adequacy, financial leverage, and dividend payout ratio.

The table below shows the result of the reliability testing of the instrument adapted from Amissah's (2017) study. The table shows that the instrument is internally consistent and reliable for the study.

# Sales Sales

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Table 2. Reliability Coefficient Scores (Cronbach's Alpha Value)

Number	Constructs	No. of items	Cronbach's Alpha
Ι	Control Environment	15	0.891
II	Risk Assessment	12	0.832
III	Control Activities	10	0.816
IV	Information & Communication	9	0.916
V	Monitoring	5	0.755

Cronbach's alpha is a statistical measure of the internal consistency of a set of items, such as questions on a survey or test. It is a widely used measure of reliability, the extent to which a test or scale produces consistent results. Cronbach's alpha is a coefficient ranging from 0 to 1, where 0 indicates that the items are unrelated. A value of 1 indicates that they are perfectly correlated. A high Cronbach's alpha indicates that the items measure the same construct and that the test or scale is reliable.

The results above show that the reliability level of all the instrument parts is beyond the acceptable level. Based on the table below, the general interpretation of Cronbach's Alpha Values is that any value above 0.7 is acceptable. This means that the questions within the instrument are consistent and that the whole instrument is reliable. It can gather data and reliably reflect the respondents' answers.

Table 3. General Interpretation of Cronbach's Alpha Values

Coefficient of Cronbach's Alpha	Reliability Level
More than 0.90	Excellent
0.80 - 0.89	Good
0.70 - 0.79	Acceptable
0.6 - 0.69	Questionable
0.5 - 0.59	Poor
Less than 0.59	Unacceptable

Document scanning and review were also used to assess the life insurance companies' financial statements (Statement of Financial Position and Income Statement). The relevant financial statements were gathered from the most recently uploaded annual report and audited financial statements of the life insurance companies. Financial performance was evaluated using profitability, earnings, and financial strength ratios.

## **Data Gathering Procedure**

The first step taken by the researchers was to adapt and modify the questionnaire for their research. After that, the questionnaire was presented to the research instructor and adviser for approval. Once deemed sufficient and appropriate, the researchers drafted an informed consent form to request permission to disseminate the survey questionnaire. The questionnaires and informed consent forms were then issued to the respondents. The researchers contacted the respondents and asked them to answer the survey questionnaire at their convenience. The questionnaire was only available in pen and paper format, and the researchers personally handed it to the respondents. After distributing the questionnaire, the respondents were given enough time to answer it. The financial ratios were computed using the financial statements and reports available on each insurance company's official website. After collecting the data, the researchers returned to the respondents to retrieve the questionnaires. The survey was evaluated, and the results were interpreted using SPSS. The researchers took precautions throughout the research to ensure that the



information they acquired remained private. The figure below summarizes this process.

## **Treatment of Data**

After retrieving the questionnaires and calculating the financial ratios, the respondents' responses were tallied, tabulated, and analyzed. The data gathered from the questionnaire was treated using statistical tools and techniques through the Statistical Package for Social Science (SPSS). Mean and standard deviation were used to measure the internal control system's implementation level. The level of interpretation was based on the table shown below.

Table 4. Scale for Interpretation

Range	<b>Qualitative Description</b>	Interpretation
3.50-4.00	Strongly Agree	Highly Implemented
2.50-3.49	Agree	Moderately Implemented
1.50-2.49	Disagree	Slightly Implemented
1.00-1.49	Strongly Disagree	Not Implemented at All

The financial performance of life insurance companies was measured and analyzed through the different financial ratios identified.

## **Profitability Ratios:**

Profit Margin = Profit / Net Sales

Earnings Per Share = (Profit – Preferred Dividends)/ Average Common Shares Outstanding

Return on Equity = Net Income / Average Shareholders' Equity

## Earnings Ratios:

Premium Growth = Gross Premium  $\underline{\text{Current}}$  Year - Gross Premium  $\underline{\text{Previous Year}}$  \* 100/Gross Premium  $\underline{\text{Previous Year}}$ 

Loss Ratio = Claims and insurance benefits incurred / Net Premiums earned

## Financial Strength:

Capital Adequacy (RBC2 Ratio) = Net Worth / RBC requirement

Financial Leverage (Debt to Equity Ratio) = Total debt / Total Equity

Dividends Payout Ratio= Total dividends paid / Net income

In testing the significant relationship between the financial performance of life insurance companies and their level of implementation of internal control systems, Spearman-rho was used.

## **RESULTS AND DISCUSSIONS**

This chapter covers the data analysis, findings, and discussions. The main objective of this research was to determine the level of implementation of the internal control system, evaluate the financial performance of



the chosen life insurance companies using specific financial ratios, and investigate the correlation between the implementation of internal control systems and the financial performance of these companies. The data was collected through questionnaires and analyzed by getting the mean, standard deviation, frequency counts, and Spearman-rho using SPSS based on the study's objectives. The financial ratios were computed using the audited financial statements of the companies.

## Section 1. The Level of Implementation of Internal Control Systems

This section presents the level of implementation of the internal control systems, divided into different components.

Table 5. The Level of Implementation of Internal Control Systems in Terms of Control Environment

	Statements	Mean	SD	Interpretation
CE1.1	The objectives of the organization's governance and board of directors are reflected in the organization's statement of beliefs, principles, and rules of conduct, which guide the daily behavior of the staff.	3.86	.378	Highly Implemented
CE1.2	The organization and its service providers are provided with information and reminded of the standards of conduct at all levels.	3.71	.488	Highly Implemented
CE1.3	Performance evaluations are conducted for both staff and external suppliers to assess their compliance to prescribed standards of conduct.	3.57	.535	Highly Implemented
P1	The company adheres to a sense of ethics	3.71	.300	Highly Implemented
CE2.1	The Board of Directors establishes, continues, and regularly assesses the necessary skills and expertise of its members to enable them to successfully uphold and examine management's decisions and offer alternative perspectives.	3.43	.535	Moderately Implemented
CE2.2	The committee responsible for supervising internal control activities related to financial reporting and ensuring the integrity and transparency of such reports meets its deadlines.	3.86	.378	Highly Implemented
CE2.3	The board sets standards and examines the performance of the CEO or an equivalent position.	3.43	.535	Moderately Implemented
P2	The board of directors exhibits their independence from executive management and supervises the successful execution of internal control.	3.57	.317	Highly Implemented
CE3.1	The organizational framework of the company is suitable in relation to its size as well as its complexity.	3.43	.787	Moderately Implemented
CE3.2	Clear separation of authority and responsibility is instituted to ensure adherence to the legal and regulatory framework governing the insurance sector in Nueva Vizcaya	3.43	.787	Moderately Implemented
CE3.3	My company's management acknowledges the significance of internal controls, which encompasses the division of responsibility.	3.29	.488	Moderately Implemented





Р3	Management, under the supervision of the board, establishes structures, reporting lines, and assigns authorities and responsibilities to achieve objectives.	3.38	.525	Moderately Implemented
CE4.1	Employee evaluations are regularly documented and communicated to the employees.	3.29	.756	Moderately Implemented
CE4.2	The company offers continuing mentoring and training programs to recruit, train, and keep competent personnel.	3.71	.488	Highly Implemented
CE4.3	The company conducts background checks on prospective employees, which include verification of their credentials, references, and prior work experience.	3.71	.488	Highly Implemented
P4	The organization exhibits a dedication to recruiting, training, and retaining capable personnel in accordance with its goals.	3.57	.460	Highly Implemented
CE5.1	The company conducts regular training sessions to guarantee that employees are educated about their responsibilities regarding internal control.  Training needs undergo constant re-evaluation.	3.71	.488	Highly Implemented
CE5.2	Documentation and controls are implemented to verify that employees have received regular training and understand their responsibilities regarding internal controls.	3.71	.488	Highly Implemented
CE5.3	Disciplinary measures are recorded and accessible for employee review. The company has a corrective action program/coaching strategy for employees undergoing disciplinary actions.	3.71	.488	Highly Implemented
P5	The organization implements accountability among individuals for their internal control responsibilities in achieving objectives.	3.71	.356	Highly Implemented
	Overall for Control Environment	3.59	.242	Highly Implemented

Legend: 1.00-1.49 - Not Implemented at All 2.50-3.49 - Moderately Implemented 1.50-2.49 - Slightly Implemented 3.50-4.00 - Highly Implemented

As reflected in Table 5, it shows the overall level of implementation of life insurance companies in Nueva Vizcaya in terms of the control environment. Noticeably, the companies' implementation of a control environment, specifically in Principles 1 and 5, surfaced with a mean of 3.71, which means that the companies highly implement the employee's adherence to a sense of ethics and accountability among individuals for their internal control responsibilities in achieving objectives. They are closely followed by Principles 2 and 4 at 3.57 mean, indicating that the exhibition of the board of directors' independence from executive management and supervision and the successful execution of internal control and dedication in recruiting, training, and retaining capable personnel to attain its goals are highly implemented by the companies. However, these indicators are followed by Principle 3, which resulted in moderate implementation in the control environment with a mean of 3.38. It shows that companies need a clear line of responsibility and structure when reporting and assigning authorities to achieve their company goals.

Moreover, as seen in the table, there is an in congruence between the level of implementation of Principles 3 and 5. The in congruence conflicts with the usual connection between the two, wherein the two principles are expected to be implemented at a similar level since they are closely related. The implementation of





board supervision in terms of management structures, reporting lines, and assigned authorities and responsibilities is moderately implemented, even though the accountability among them for their internal control activities is highly implemented. This difference can be caused by a need for more daily supervision from their main offices. Since some of the insurance companies in provinces are just branches of each company and the main offices are located in other parts of the country, the board of directors has no direct and daily control and monitoring over the employees on whether they fulfill their tasks. However, even if the board does not closely monitor them, all employees are expected to work with utmost accountability. Being workers, they are inevitably expected by the board to be accountable for their tasks, even if the management supervision in their branches is only moderately executed due to the location of their main offices with the office branches. Thus, considering they are not closely supervised, the board still expects them to be accountable for their responsibilities.

Overall, it resulted in the life insurance companies implementing a controlled environment in their operations, indicating that implementing a sound environment will serve as a foundation for every internal control system component. This indicates that a highly implemented control environment is necessary for businesses to detect and evaluate risks. This encourages proactive risk management by creating an environment where openness and communication prevail when identifying and assessing organizational risks. The leadership team's perspective, attitude, and actions toward control, as well as their comprehension of the significance of control, comprise the control environment in the life insurance industry. Maintaining an effective control environment for the insurer can mitigate the lack of control procedures (Nguyen & Mai, 2023). However, there is a need to add controls when it comes to managing the line of structure in the management. This echoes the statements of Minyashal (2016) that there is no defined line of authority and no predetermined reporting structure in the control environment of some of the resident charitable organizations in Ethiopia, which affects the effectiveness of the implementation of their internal control.

Table 6. The Level of Implementation of Internal Control Systems in Terms of Risk Assessment

	Statements	Mean	SD	Interpretation
RA6.1	The organization provides clear specifications that allow for the identification and assessment regarding objectives.	3.43	.535	Moderately Implemented
RA6.2	Operational objectives serve as a framework for resource allocation by management to achieve the desired operational and financial performance.	3.86	.378	Highly Implemented
RA6.3	The company evaluates its internal controls and associated risks for potential material misstatements, inaccuracies or omissions in the financial statements. Risk acceptance or avoidance is applicable only when the identified risks do not result in significant misstatements, errors, or omissions, either individually or in combination.	3.71	.488	Highly Implemented
P6	The organization offers clear specifications that facilitate the identification and evaluation of objectives.	3.67	.272	Highly Implemented
RA7.1	Management conducts a comprehensive risk identification process that takes into account internal as well as external factors and their impact on achieving objectives.	3.71	.488	Highly Implemented
RA7.2	The organization proficiently manages and reduces identified risks through well-designed internal controls.	3.57	.535	Highly Implemented
RA7.3	The company formulates performance indicators for significant objectives and tracks their progress.	3.86	.378	Highly Implemented

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P7	The organization assesses risks to its objectives and analyzes them to determine appropriate management strategies.	3.71	.405	Highly Implemented
RA8.1	The company conducts regular inspections to evaluate its vulnerability to acts of fraud and their potential impact on operations.	3.71	.488	Highly Implemented
RA8.2	The company conducts regular inspections of its operating locations to identify potential exposure to fraudulent activity and assess the potential impact on operations.	3.86	.378	Highly Implemented
RA8.3	The company's fraud risk assessment examines the potential to unethical acquisition, use, and disposal of assets, manipulation of reporting records, and other negligent behaviors.	3.86	.378	Highly Implemented
P8	The organization examines the risk of fraud in relation to meeting objectives.	3.81	.325	Highly Implemented
RA9.1	The company implements measures to detect and respond to potential risks arising from alterations in the government's legislative, economic, operational, or other circumstances that may slow down the attainment of its objectives.	3.57	.535	Highly Implemented
RA9.2	The company consistently identifies the most significant risks	3.86	.378	Highly Implemented
RA9.3	The identified risks have corresponding controls that effectively mitigate their associated risks.	3.86	.378	Highly Implemented
P9	The organization evaluates potential changes that may significantly affect the internal control system.	3.76	.371	Highly Implemented
	Overall for Risk Assessment	3.74	.238	Highly Implemented

Legend: 1.00-1.49 – Not Implemented at All 2.50-3.49 – Moderately Implemented 1.50-2.49 – Slightly Implemented 3.50-4.00 – Highly Implemented

Presented in Table 6 is the level of implementation of internal control systems in terms of risk assessment, specifically Principles 6 through 9. The results show that companies have a high level of implementation regarding risk assessment according to the overall mean (mean=3.74). The eighth principle had the highest mean of 3.81 among the principles, suggesting that the organizations highly evaluate the risk of fraud in meeting objectives. They are followed by the ninth principle (mean=3.76), indicating that the organizations highly implement the evaluation of potential changes that may significantly affect the internal control system. Conversely, the seventh principle (mean=3.71) indicates that the organizations highly implement the assessed risks according to its objectives and analyzes them to determine appropriate management strategies. Lastly, the sixth principle obtained the lowest mean (mean=3.67), indicating that the organizations highly implement precise specifications to identify and evaluate objectives.

Overall, the results indicated that most respondents agreed that this component is at a high level of implementation. As can be gleaned from the above information, it can be inferred that the life insurance companies' internal control systems for risk assessment are essential.

Risk assessments are essential because they raise awareness of hazards and threats, identify who may be at risk, and establish if effective control mechanisms are in place. A risk assessment aims to identify workplace vulnerabilities so that control measures may be implemented to eliminate or reduce risks as much as possible. This, in turn, will contribute to a safer working environment. Furthermore, risk assessments should be carried out in collaboration with workers. This will aid in spotting difficulties that may otherwise



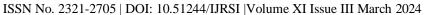
go unreported (Yeung, 2023).

Kaye (2003) agrees that risk assessment from contract pricing to the administration of insurance and reinsurance companies to overall industry regulation is essential in the insurance industry. Also, according to Aditya Birla Sun Life Insurance, actuaries and underwriters in the insurance industry rely on risk assessment. The procedure aids in determining the premium amount after assessing the risk of loss so that companies can achieve the goal of successful financial management.

This conforms with a study conducted by Shi (2020), which asserted that it is essential to identify the company's audit risk, recognize the risk and identify potential risk indicators, analyze the various factors that may cause the risk, assess the risk management system, evaluate the likelihood of the risk, and examine the quality of internal audit control activity—the extent of the potential impact. Then, based on the results of the company risk assessment, risk response strategies should be developed to reduce risks to the maximum degree possible and limit business activities that are considered a risk to the firm.

Table 7. The Level of Implementation of Internal Control Systems in Terms of Control Activities

	Statements	Mean	SD	Interpretation
CA10.1	Management identifies the appropriate business procedures that necessitate control activities.	3.86	.378	Highly Implemented
CA10.2	Control activities are evaluated by management across different levels of the organization.	3.71	.488	Highly Implemented
CA10.3	Management implements segregation of incompatible duties and, if not feasible, employs alternative control activities.	3.71	.488	Highly Implemented
P10	The organization chooses actions that reduce risks to acceptable levels and support the attainment of objectives.	3.76	.371	Highly Implemented
CA11.1	Management chooses and executes control activities to limit technology access to authorized users based on their job responsibilities and safeguard the entity's assets from external threats.	4.00	.000	Highly Implemented
CA11.2	Management implements control activities to achieve their objectives related to technology and infrastructure acquisition, development, and maintenance.	3.71	.488	Highly Implemented
CA11.3	The company follows a procedure that mandates regular backing up of computer files and verification of the backup files to guarantee their proper operation.	3.71	.488	Highly Implemented
P11	The organization implements and enhances technology-based control activities to facilitate the attainment of its objectives.	3.81	.325	Highly Implemented
CA12.1	The company has developed effective policies and procedures on information and communication.	4.00	.000	Highly Implemented
CA12.2	The company has established policies and procedures to ensure appropriate segregation of duties among authorization, custody, and recordkeeping tasks, as applicable. This subject matter refers to financial and administrative aspects of an organization, including cash management, equipment acquisition and maintenance, expenditure distribution, purchasing processes, and employee compensation.	3.86	.378	Highly Implemented





CA12.3	Regular assessments of policies and procedures are conducted by management to assess their ongoing relevance and to update them as needed.	4.00	1 ()()()	Highly Implemented
CA12.4	The organization has implemented procedures and rules to ensure that transactions are recorded and accounted for in accordance with regulatory requirements.	4.00	.000	Highly Implemented
P12	The organization implements control activities through policies and procedures, which accordingly establish expectations and implement the policies.	3.96	.094	Highly Implemented
	Overall for Control Activities	3.86	.190	Highly Implemented

Legend: 1.00-1.49 – Not Implemented at All 2.50-3.49 – Moderately Implemented 1.50-2.49 – Slightly Implemented 3.50-4.00 – Highly Implemented

Table 7 above gives an overview of the control activities implemented in the life insurance sector. The overall mean score of 3.86 suggests that the insurance companies highly implement control activities. Among these tasks is selecting steps that bring risks down to acceptable levels and promote accomplishing goals. In addition, the insurance companies are working to support organizational goals by installing technology, policies, and processes, with respective means of 3.76, 3.81, and 3.91. These efforts contribute to the development of financial statements that are efficient and effective, as well as sound risk management. These methods further contribute to a more responsible governance structure inside insurance businesses. This implies that the life insurance companies know the importance of suitable set control activities. By putting up strategies and policies that mitigate risks, the investments of the customers and company assets are accounted for properly. This study aligns with Baal et al. (2018) which found high levels of implementation of internal control activities in a multi-purpose cooperative in the province.

Another factor under control activities is the correct segregation of duties, which pertains to an organization's financial and administrative components. According to Guyud et al. (2014), segregation of duties has a substantial beneficial relationship with maintaining records and documents. From the results stated above, the companies have a high level of implementation in terms of the procedures and standards placed to guarantee proper segregation of duties between authorization, custody, and record keeping functions.

In addition, according to the Committee of European Insurance and Occupational Pensions Supervisors (2017), it is fundamental for internal control systems to ensure the establishment of suitable independence between investment trading operations and financial controlling functions, namely between the front and back offices. Internal control systems are crucial in enhancing risk identification, assessment, and mitigation, particularly within the insurance industry. This sector revolves around pursuing business prospects within the context of risk. Furthermore, competitiveness advancement can be facilitated by implementing suitable regulatory measures, both in the immediate and extended periods. This measure will mitigate the consequences of unforeseen circumstances or prevent them entirely. The implementation of internal control measures is executed by individuals, rendering it susceptible to the influence of human fallibility. Effective training programs, along with an ethical framework integrated into the organization's operations, can contribute to the alleviation of this predicament.

Life insurance firms are subject to both controllable and unforeseeable risks. Individuals are subjected to risks that are internal as well as external. The possible risks might be further aggravated due to the extended





duration of specific insurance contracts, spanning many years. Fortunately, the respondents exhibit a significant degree of implementation of internal control systems regarding control activities.

Table 8. The Level of Implementation of Internal Control Systems in Terms of Information and Communication

	Statements	Mean	SD	Interpretation
IC13.1	Rules and regulations have been reviewed with one or more of the following: Board, audit, finance, or other committee.	3.86	.378	Highly Implemented
IC13.2	The company complies to regulations by implementing procedures for the storage, retention, and disposal of accounting records and supporting documents.	3.86	.378	Highly Implemented
IC13.3	The accounting system of the company allows for independent identification of individual transactions.	3.86	.378	Highly Implemented
P13	The organization acquires and utilizes relevant and high- quality information to facilitate the operation of other internal control components.	3.86	.378	Highly Implemented
IC14.1	Effective communication between management and the board of directors is vital for fulfilling their respective roles in achieving the company's objectives.	3.86	.378	Highly Implemented
IC14.2	The management is prohibited from overriding internal controls as per the Code of Conduct and other policies.	3.86	.378	Highly Implemented
IC14.3	The management follows a structured approach to create, authorize, and execute policy revisions, and disseminates them to the employees.	3.86	.378	Highly Implemented
P14	The organization interacts internally to provide information on objectives and responsibilities related to internal control, which is essential for supporting the functioning of other internal control components.	3.86	.262	Highly Implemented
IC15.1	The company has established a whistle-blower policy to enable individuals to report any suspected improprieties related to financial reporting errors, inappropriate procurement transactions, improper utilization of equipment, and misrepresentation or false statements.	4.00	.000	Highly Implemented
IC15.2	The company has established procedures for distributing accurate and up-to-date data to external stakeholders.	3.86	.378	Highly Implemented
IC15.3	The company has established procedures for disseminating the findings of reports furnished by external auditors, independent non-executive directors, and executives of the National Insurance Commission.	3.71	.488	Highly Implemented
P15	The organization engages in external communication regarding internal control components that may impact their functioning.	3.86	.262	Highly Implemented
	Overall for Information and Communication	3.86	.210	Highly Implemented





Legend: 1.00-1.49 – Not Implemented at All 2.50-3.49 – Moderately Implemented 1.50-2.49 – Slightly Implemented 3.50-4.00 – Highly Implemented

Table 8 shows the result for information and communication. If implemented, internal controls will operate seamlessly within the company, and extensive conveyance of information will be imparted throughout the company. The overall mean (m=3.86) shows that Principles 13, 14, and 15 are applied in the companies' internal control with strict compliance. This indicates that the information and communication components, which form an integral part of the internal control of the respondents, are functioning efficiently.

According to Oseifuah and Gyekye (2013), information serves as the means to reinforce policies and procedures, while communication serves as the backbone of employees and managers to ensure that roles within the company are fulfilled. Together, information and communication serve as the foundation for the organizational success of the nature of the business.

One possible reason for the high implementation of information and communication is the technological advancement in these times. Technology plays a significant role in the daily transactions of insurance companies in terms of processing information and conveying information through various modes of media. It is important to not though that in terms of correcting errors and updating data involved in the day-to-day transactions, the management is prohibited from overriding internal controls as per the Code of Conduct and other policies involved in the processing and conveying information through various means.

Table 9. The Level of Implementation of Internal Control Systems in Terms of Monitoring

	Statements	Mean	SD	Interpretation
M16.1	The organization conducts regular assessments of its business processes, including cash management, budget compliance, procurement, and contracting.	3.71	.488	Highly Implemented
M16.2	The organization holds responsibility for ensuring that the requirements for the duration of availability are met.	4.00	.000	Highly Implemented
M16.3	The management of the organization conducts routine checks of the facilities to ascertain the level to which established protocols and protocols are observed properly.	3.71	.488	Highly Implemented
P16	The organization conducts regular assessments to determine the presence and effectiveness of internal control components.	3.81	.262	Highly Implemented
M17.1	The company conducts regular assessments of its internal controls, performs compliance tests in accordance with the National Insurance Commissions' regulations, and reports the findings to its board of directors.	4.00	.000	Highly Implemented
M17.2	The company oversees its branches to verify that the funds allocated are utilized solely for appropriate activities and reports this information to the board of directors.	3.71	.488	Highly Implemented
P17	The organization promptly informs responsible parties, including senior management and the board of directors, of any identified deficiencies in evaluation and control, for the purpose of taking corrective action.	3.86	.244	Highly Implemented
	Overall for Monitoring	3.83	.180	Highly Implemented





Legend: 1.00-1.49 – Not Implemented At All 2.50-3.49 – Moderately Implemented 1.50-2.49 – Slightly Implemented 3.50-4.00 – Highly Implemented

Table 9 depicts the level of implementation of the monitoring activities of the respondents. The respondents highly implemented the monitoring activities based on the overall mean obtained (m=3.83). Both Principles 16 and 17 are implemented at a high level. Principle 16 which refers to conducting ongoing and separate evaluations got a mean of 3.81 and Principle 17 which refers to evaluating and communicating deficiencies got a mean of 3.86. This means that monitoring activities operate effectively as part of their internal control. The companies are taking measures that can monitor business procedures to identify and correct problems on time. According to Julleen Snyder (2022), when monitoring is appropriately planned and carried out, gaps in internal control can be promptly identified and communicated to the relevant parties, allowing for the implementation of corrective measures. The issues must also be communicated to the board and management. However, Yihun's study (2021) contradicts the results, as he found that monitoring activities could be better implemented in one of the Ethiopian Insurance Corporations due to a lack of monitoring system evaluation.

The high level of implementation of monitoring activities can be attributed to the high level of implementation of the control activities, previously shown in Table 7. Since the companies are aware of and highly implement control activities that lead to effective and efficient business procedures, then the monitoring of such activities should follow. A high level of monitoring activities should be in place to ensure that the activities are working properly as the business operates and grows.

Table 10. Summary of the Level of Implementation of Internal Control Systems Components

	Statements	Mean	SD	Interpretation
Control Environment		3.5905	.24169	Highly Implemented
Risk Assessment		3.7381	.23780	Highly Implemented
Control Activities		3.8571	.19024	Highly Implemented
Information and Communication		3.8571	.20998	Highly Implemented
Monitoring		3.8286	.17995	Highly Implemented

Legend: 1.00-1.49 – Not Implemented At All 2.50-3.49 – Moderately Implemented 1.50-2.49 – Slightly Implemented 3.50-4.00 – Highly Implemented

Table 10 above summarizes the level of implementation of internal control systems in all components. It shows that all components are implemented at a highly implemented level. Among all the components, both the control activities and the information and communication components got the highest overall mean of 3.8571. Meanwhile, although highly implemented, the component, control environment, got the lowest mean of 3.5905. This conforms with the study conducted by Bautista et al. (2019) which examined the implementation of internal control systems of a multi-purpose company and concluded that all internal controls are implemented to a high extent.

Based on the results mentioned above, the internal control of the respondents is in place and highly implemented. The companies' processes are highly implemented with strict compliance with the standards, and the investments are adequately accounted for. As a result, better performance is expected from the employees and the companies themselves. Strong internal controls are of utmost importance in achieving organizational goals and objectives. It ensures accurate financial reporting, which helps management make informed decisions. Good internal controls also ensure compliance with applicable laws and regulations,

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mitigating risks of public scandal (The Importance of Good Internal Controls – Office of Internal Audit, 2019).

However, the study of Antonio et al. (2019) had contradicting results as it revealed that a private Catholic educational institution has implemented all the internal control components at a moderately strong level. In their study, the component that has the highest mean is control environment, while risk assessment got the lowest mean. This is not the same as the study's findings, where the control environment got the lowest mean while the mean of risk assessment was higher than the control environment. This difference can be caused by the nature of the business and its operations. Life insurance companies inherently operate in a risky environment; thus, it is reasonable to have a high implementation of risk assessment. The control environment of a private educational institution is also a priority because it is designed to align the institution's operations with its principles rooted in education and faith.

## **Section 2. The Financial Performance of the Respondents**

This section shows the financial performance of the life insurance companies. The computed financial ratios based on the audited 2022 financial statements of the companies were used to measure the financial performance.

Table 11. The Profitability Ratios of the Companies

	Profit Margin	Earnings per share	Return on Equity
Company A	31%	N/A	11.13%
Company B	5%	<b>₱</b> 1	7.43%
Company C	6%	<b>₱</b> 0.49	14.67%
Company D	1%	₱1.32	0.64%

The profitability ratios of the life insurance companies included in this study are shown in Table 11, specifically their profit margin, earnings per share, and return on equity.

According to the ratios, Company A has the highest percentage for the profit margin, with a rate of 31%, but it also does not have earnings per share. This is because Company A is a non-stock corporation, which results in them not declaring or issuing any stocks or shares according to how much income they earn. So, such a company only focuses on selling insurance premiums that will result in the main values of their revenues, less the necessary expenses incurred on the business operations. In other words, the business successfully maintained an optimal balance between its income and expenditures, enabling it to achieve solid financial performance in generating profits. This was a significant departure from the practices of the other insurance firms that were active at the time.

Company C and Company D have a profit margin of 6% and 1%, respectively, while Company B's profit margin is 5%. Company B, Company C, and Company D's earnings per share are 1 peso, 0.49 peso, and 1.32, respectively, which attracts investors to invest in such companies because of how much they can earn based on the company's net income.

Upon reviewing the profit margin and earnings per share ratio of the life insurance companies, it can be inferred that most of the companies are in a favorable position. Maverick (2023) stated that any company should have a higher profit margin because it earns more profit from its sales. Similarly, a high earnings-pershare ratio is preferable for life insurance companies. Investors use EPS as a reliable financial metric to assess a company's profitability. A high earnings-per-share ratio indicates that a company is more likely to have surplus profits to distribute as dividends to its shareholders (Staff, 2023).





The table also shows the life insurance companies' return on equity. According to the findings, the companies effectively use their shareholders' investments. The insurance companies increased their return on equity, especially Company C, which increased to 14.67% despite a declining net income, resulting in higher total equity. Company A was raised to 11.13% due to greater use of equity and improved net income. Company B and Company D obtained relative increases of 7.43% and 0.64%, respectively. Company D had less equity in 2022, with a decrease in net income that resulted in the lowest profitability among other life insurance companies in terms of return on equity. In agreement, Agsunod et al. (2016) said that a lower return on equity is caused by lower shareholder equity, which decreases net income. A greater ratio is preferable, as it indicates how well the company uses its investments and yields a higher rate of return for shareholders (Choiriyah et al., 2021).

The median EPS of ₱0.745 shows that half of the companies in the sample have EPS values lower than this amount, while the other half have higher EPS values. The mean EPS of these companies is slightly lower at ₱0.7025, which could be due to a few companies reporting exceptionally low EPS figures. The standard deviation of ₱0.579792 indicates that the EPS in the dataset for insurance businesses has moderate variability.

Table 12. Summary of the Profitability Ratios

Profitability Ratios	Median	Mean	SD	
Profit Margin	5.5	10.75	13.67175	
Earnings Per Share	0.745	0.7025	0.579792	
Return on Equity	9.28	9.2175	7.115033	

Table 12 summarizes the profitability ratios: profit margin, earnings per share, and return on equity. Since the median profit margin for these insurance companies is 5.5%, half of the businesses in this dataset have lower margins than 5.5%, and the other half have more significant profit margins. The average profitability of the companies in the dataset is higher than the median, as seen by the higher mean profit margin of 10.75%. This implies that the average may be being skewed upward by some businesses with noticeably larger profit margins. The high standard deviation (SD) of 13.67175% shows a significant range in these insurance businesses' profit margins. While some businesses may be very profitable, others may be less successful or even lose revenue.

The median EPS of ₱0.745 shows that half of the companies in the sample have EPS values lower than this amount, while the other half have higher EPS values. The mean EPS of these companies is slightly lower at ₱0.7025, which could be due to a few companies reporting exceptionally low EPS figures. The standard deviation of ₱0.579792 indicates that the EPS in the dataset for insurance businesses has moderate variability.

Given that the dataset's median ROE is 9.28%, half of the companies have ROEs lower than 9.28%, and the other half have higher ROEs. The median return on equity (ROE) for insurance companies in the sample is 9.28%, and the mean ROE is exceptionally close to that figure at 9.2175%. The standard deviation of 7.115033% indicates moderate ROE variation across these insurance companies. Some companies may have ROE numbers that are noticeably higher or lower than average.

In conclusion, this data indicates that there is a significant variation in the profitability of insurance



businesses. While some businesses claim to be highly profitable (as seen by high EPS, ROE, and profit margins), others lack profitability and liquidity. Furthermore, some outliers occasionally alter the mean values higher. Investors and analysts should consider all these factors when evaluating insurance businesses' performance and financial health in this dataset.

Table 13. The Earnings Ratios of the Companies

	<b>Premium Growth</b>	Loss Ratio
Company A	9.06%	29.38%
Company B	12.11%	62.41%
Company C	8.88%	63.33%
Company D	-1.63%	91.83%

Table 13 shows the financial performance of the insurance companies based on their earnings ratios. The premium growth of insurance companies resulted in a substantial increase, particularly in Company B at 12.11%, followed by Company A and Company C at 9.06% and 8.88%, respectively. This is caused by an increase in their gross premium from 2021 to 2022, indicating that the organization can positively attract new policyholders while increasing income through premium payments. On the other hand, Company D experienced negative premium growth (-1.63%) due to a decrease in premiums made by the company for 2022. According to CARE Ratings (2019), the premium growth ratio measures the increase in business conducted by an insurance company. A higher premium growth is more beneficial to the company as it shows that it is growing and expanding its operations and business.

The loss ratio for Company A falls within the ideal range of 40% to 60%. Companies B, C, and D resulted in a high loss ratio that exceeded insurance companies' ideal range of loss ratios. According to Relativity6 (n.d), the ideal range for loss ratio typically lies between 40% and 60%. Within this range, an insurance company achieves a balance between claims payouts and premium collection, ensuring both profitability and sustainable growth. A loss ratio falling below the ideal range may suggest that the insurer is adopting overly conservative underwriting practices, potentially missing out on business opportunities. While a low loss ratio may boost short-term profitability, it can adversely affect the company's competitiveness in the long run. Conversely, a loss ratio surpassing the ideal range implies deficiencies in underwriting, pricing, or risk management practices.

On the other hand, the loss ratio of all life insurance companies resulted from a normal range of loss ratio from 1 to 100%. The four life insurance companies have normal loss ratios; however, Company D had some near hiccups, resulting in 91.83% and maintaining the normal range. According to Berhe and Kaur (2017), a high loss ratio signifies that the company needs to generate more premiums to cover its expenses and pay claims, which could affect its financial performance. Over the optimal range, a high loss ratio indicates poor underwriting, pricing, or risk management procedures. This may result in a higher frequency or severity of claims, putting the company's financial resources under strain and jeopardizing its long-term viability. The insurance business should review its plans, strengthen risk management methods, and adjust pricing to improve its loss ratio and maintain financial stability. A loss ratio falling below the optimal range can signal that the insurer is exercising excessively conservative underwriting practices. This caution may lead to missed opportunities for acquiring new business, overpricing premiums, and, consequently, causing customer dissatisfaction, potentially resulting in a decline in market share. Although low loss ratios boost short-term profitability, they can exert a detrimental, lasting impact on the company's ability to remain competitive.

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Table 14. Summary of the Earnings Ratios

<b>Earnings Ratios</b>	Median	Mean	SD
Premium Growth	8.97	7.105	6.008963
Loss Ratio	62.87	61.7375	25.53138

Table 14 summarizes earnings ratios, namely premium growth and loss ratio. Premium growth indicates the growth rate in premium revenue over a given time frame. It shows how well the business can bring in new clients or raise premium prices. Positive premium growth implies an increase in revenue. The loss ratio shows the percentage of insurance premiums used to cover losses and claims. Since the company keeps more premium revenue as profit, a lower loss ratio typically denotes better underwriting and risk management techniques.

In conclusion, the median value for premium growth (8.97) is higher than the mean (7.105), indicating a right-skewed distribution, with some values significantly higher than the median. The standard deviation (6.008963) shows moderate variation in premium growth over time. The median (62.87) for the loss ratio is higher than the mean (61.7375), indicating a similarly right-skewed distribution and that some periods have higher loss ratios. The relatively high standard deviation points to significant variation in the company's loss ratios over time, which may signify different claim experiences

In summary, the companies are performing well in the earnings ratio because the premium growth has shown a positive change, and the loss ratio is within the normal range and is close enough to be at the optimal range.

Table 15. The Financial Strength Ratios of the Companies

	Capital Adequacy	Financial Leverage	Dividends Payout Ratio
Company A	269.00%	1.933	N/A
Company B	134.19%	3.125	0%
Company C	628.00%	7.032	38321%
Company D	125.00%	6.861	705.94%

Table 15 shows the financial performance of the life insurance companies based on their financial strength. Based on the ratios computed, all the insurance companies are performing well financially.

Specifically, the capital adequacy or the RBC2 ratio shows that the insurance companies are compliant with the regulations and are maintaining the required level of capital higher than the required level set by the Commission. Based on the memorandum issued by the Insurance Commission (2016), life insurance companies must have at least 100% annual capital concerning their investment and insurance risks. A high capital adequacy ratio indicates solvency and ensures the company can pay its claims. Therefore, a higher capital adequacy ratio indicates better resilience against financial downturns (Beers, 2021).

The financial leverage of the four companies resulted in some abnormalities in the normal range of debt-to-equity ratio ranging from 2 to 2.5. Company A's financial leverage indicates that the company has a reasonable payout ratio and lower risk. Meanwhile, Company B, Company C, and Company D have a higher risk of accumulating liabilities, and it can result from investors prying out of their companies.

The dividend payout ratio is also reflected in the table, which measures the percentage of net income allocated to the dividend program that determines the dividend's sustainability. Dividend payout ratios represent the percentage of a company's earnings distributed as dividends to shareholders. According to Ani (as cited in dividend.com), a good payout ratio is between 0% and 35%, while an ideal payout ratio is

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between 35% and 55%. High payout ratios, between 55% and 75%, are considered good but may indicate less retained earnings for growth. Very high payout ratios, above 75%, are considered unsustainable and may result in dividend cuts or eliminations.

The results showed that two of the life insurance companies (Company A and Company B) have a no and 0% dividend payout ratio, respectively. This is because Company A is a non-stock corporation, and Company B did not declare dividends for 2021 and 2022. According to Guberti and Mc Vearry (2023), a company with a lower payout ratio will almost certainly generate a lower yield. However, some companies will likely have higher share price gains. Hence, dividend investors should consider an asset's overall return rather than just the yield. Dividends and asset appreciation are included in total returns.

On the other hand, two life insurance companies (Company D and Company C) have a very high dividend payout ratio which exceeds 100%. A high dividend payout ratio indicates that the company is putting less money into its business and allocating more earnings to shareholders. Such companies usually appeal to investors, prioritizing a reliable income stream over the possibility of share price appreciation (CFI Team, 2023).

However, having a very high dividend payout ratio may not be the best position for the companies. Since the companies are distributing more monies than they earn, it can pose a threat to the company. The companies retain less earnings for other purposes, such as reinvestment, debt reduction, or building up cash reserves. So, the companies need to manage their dividend payout and make moves to lower the ratio and get closer to the ideal range.

Table 16. Summary of the Financial Strength Ratios

Financial Strength	Median	Mean	SD
Capital Adequacy	201.595	289.0475	235.3601
Financial Leverage	4.993	4.73775	2.597393
Dividends Payout Ratio	352.97	9756.735	19045.75

Table 16 summarizes the financial strength ratios: capital adequacy ratio, financial leverage, and dividends payout ratio. These ratios help assess the company's ability to withstand financial challenges, manage debt, and distribute profits to its shareholders.

The table indicates that the mean and median of all life insurance companies in capital adequacy exceed the required level set by the commission, making it a very safe level. The median ratio was 201.595, indicating that the organizations have sufficient capital to support its operations and financial obligations. The mean ratio of 289.0475 suggests that, on average, the companies have slightly higher capital adequacy levels. However, the standard deviation of 235.3601 indicates a significant variation in capital adequacy among organizations, reflecting differing levels of risk exposure. Overall, all the companies have a good capital adequacy ratio, as they have exceeded the required level set by the commission.

On the other hand, the financial leverage ratio shows that in both the median and mean ratios of 4.993 and 4.73773, respectively, the companies are borrowing more capital from the market than from their equity to fund their operations. A high financial leverage ratio may pose potential risks to the companies; thus, managers should be able to manage and create strategies to lessen the risks.

Lastly, the dividends payout ratio measures the proportion of earnings distributed to shareholders as dividends. The mean ratio of 9756.735 suggests that, on average, the companies distribute a significantly more significant proportion of their earnings to shareholders. The standard deviation 19045.75 confirms a



wide disparity in dividend payout ratios, reflecting organizational profit distribution policy variations.

A thorough analysis of financial strength ratios enables a comprehensive assessment of an organization's financial health. These ratios vary considerably across companies, indicating diverse risk profiles, capital structures, and dividend policies. This information is crucial for stakeholders, including investors, creditors, and management, to evaluate an organization's financial strength and performance.

## Section 3. Significant Relationship Between the Financial Performance of Life Insurance Companies and the Level of Implementation of Internal Control Systems

This section presents an analysis to examine the correlation between the implementation of the different components of the internal control system and various financial ratios. The primary goal is to evaluate the relationship between internal control systems and the financial performance of life insurance companies.

Table 17. The Relationship Between the Financial Performance of Life Insurance Companies and the Level of Implementation of Internal Control Systems

Variables		Profit Margin	Earnings Per Share	Return on Equity	Premium Growth	Loss Ratio	Capital Adequacy	Financial Leverage	Dividends Payout Ratio
	ρ	.426	426	.569	315	.019	.574	.204	.382
Control Environment	p- value	.341	.341	.183	.492	.969	.178	.661	.398
	n	7	7	7	7	7	7	7	7
	ρ	051	.051	130	.273	- .152	132	152	231
Risk Assessment	p- value	.914	.914	.780	.553	.745	.778	.745	.619
	n	7	7	7	7	7	7	7	7
	ρ	.712	712	.896	096	- .212	.904	.173	.355
<b>Control Activities</b>	p- value	.073	.073	.006	.837	.649	.005	.711	.435
	n	7	7	7	7	7	7	7	7
	ρ	010	.010	.314	747	.543	.317	.543	.700
Information and Communication	p- value	.983	.983	.492	.053	.208	.488	.208	.080
	n	7	7	7	7	7	7	7	7
	ρ	.262	262	.606	476	.282	.612	.476	.622
Monitoring	p- value	.570	.570	.149	.280	.541	.144	.280	.136
	n	7	7	7	7	7	7	7	7

Legend:  $\rho$  – Spearman's rho

Table 17 shows the relationship between the different financial ratios and the level of implementation of internal control system components of the insurance companies. It shows that most financial ratios and

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internal control components have a p-value greater than 0.05. This means that relationships between the variables are statistically insignificant, so the null hypothesis is accepted. Specifically, the ratios of profit margin, earnings per share, premium growth, loss ratio, financial leverage, and dividends payout ratios do not have a significant relationship with all of the internal control system components.

The table above shows that the component, control environment, has no significant relationship with the financial performance of the insurance companies. It can be seen with the p-value of the variables: profit margin (p=.341), earnings per Share (p=.341), return on equity(p=.183), premium growth (p=.492), loss ratio (p=.969), capital adequacy (p=.178), financial leverage (p=.661), and dividends payout ratio (p=.398). Noticeably, there is a negative relationship between the internal control component and the premium growth and earnings per share ratios. However, their p-values are more significant than 0.05, indicating no correlation between the two variables, making this negative relationship insignificant.

Similarly, the risk assessment component has a negative but insignificant relationship to most financial ratios. The table shows that the p-values of the variables are profit margin (p=.914), earnings per share (p=.914), return on equity(p=.780), premium growth (p=.553), loss ratio (p=.745), capital adequacy (p=.778), financial leverage (p=.745), and dividends payout ratio (p=.619). None of the p-values are below the normal significance level of 0.05, indicating that the correlations are not statistically significant at the 0.05 level. The same fact also goes with the rest of the internal control components used in the study.

The p-values of the information and communication with the following financial ratios are profit margin (p=.983), earnings per share (p=.983), return on equity(p=.492), premium growth (p=.053), loss ratio (p=.208), capital adequacy (p=.488), financial leverage (p=.208), and dividends payout ratio (p=.080). Notably, the p-value of the premium growth is almost equal to 0.05. However, since it is still greater than the normal significance level, it can be concluded that the variables do not have any relationship.

Moreover, the p-values of the monitoring activities about the financial ratios are profit margin (p=.570), earnings per share (p=.570), return on equity(p=.149), premium growth (p=.280), loss ratio (p=.541), capital adequacy (p=.144), financial leverage (p=.280), and dividends payout Ratio (p=.136). All these p-values also indicate that no relationship exists between the monitoring activities of the company and the financial ratios used to measure the company's financial performance.

In sum, most of the financial ratios do not have any significant relationship with the control activities of the companies. The fact is revealed with their p-values of profit margin (p=.073), earnings per share (p=.073), premium growth (p=.837), loss ratio (p=.649), financial leverage (p=.711), and dividends payout ratio (p=.435).

However, it is highlighted that the control activities about the return on equity have a p-value of 0.006, and the capital adequacy or RBC2 Ratio has a p-value of 0.005. Both ratios are significantly related to the company's control activities. Both ratios are also related to the mentioned internal control component. The RBC2 ratio, with a p-coefficient of 0.904, has an almost perfect positive relationship, while the return on equity has a p-coefficient of 0.896, which also implies that there is a strong correlation between the two. This shows that as the level of implementation of the control activities of the companies increases, their return on equity and capital adequacy ratios increase. This results in higher and better financial performance. Blaney (2023) stated that a high ROE is preferable since it indicates a higher return on shareholders' equity. ROE rises with faster expansion, profitable products, and cost control. Also, the higher capital adequacy or RBC2 ratio is preferable. The greater the capital adequacy or RBC2 ratio from the commission's mandated ratio, the more solvent the company is and the better equipped it is to handle unforeseen losses because of the availability of sufficient capital.

The analysis indicates that most internal control components and financial ratios do not show a significant

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relationship. However, a positive and noteworthy connection exists between control activities and the return on equity and capital adequacy ratio. The study also highlights that companies with well-executed control activities achieve better financial performance, especially regarding return on equity and capital adequacy ratios. This suggests that an increase in the implementation of control activities corresponds to higher returns on equity and increased capital adequacy for these companies.

There is a relationship between the identified ratios and control activities component because they all relate to the overall goal of effective internal control in an organization. Obtaining sufficient capital and engaging in control activities are two essential elements that contribute to the financial stability of an insurance firm. Having sufficient capital and being financially stable can positively impact the owners' return on equity and confidence.

Since life insurance companies are mandated by a regulatory body to maintain a required level of capital, strong control activities shall be implemented to ensure that the company achieves the requirement. Similarly, suppose control activities are not in place, the company may be exposed to risks that could lead to financial instability, inadequate level of capital, decreasing ROE, and loss of investor confidence.

Moreover, as stated in the work of De Castries (2005), capital adequacy and control activities in insurance firms are related to one another since both are necessary for guaranteeing the company's financial stability. This is the reason why there is a link between the two. An insurance company may only be able to pay claims to policyholders if it has sufficient capital, which may result in the firm experiencing economic distress. If an insurance firm does not have sufficiently effective controls, it may be vulnerable to risks that might result in monetary losses.

Overall, the relationship between these ratios and COSO control activities lies in the fact that control activities play a crucial role in maintaining accurate and reliable financial information. Implementing control activities helps ensure that the ratios calculated and analyzed are based on accurate and complete financial data. On the other hand, if control activities are weak or not effectively implemented, it can lead to errors, fraud, or material misstatements in the financial statements. This can impact the ratios calculated and make them less reliable and informative. Therefore, the relationship between identified ratios and COSO control activities is that strong control activities enhance the reliability and accuracy of the financial data, which in turn positively affects the ratios calculated and analyzed.

According to the results of this study, there is no evidence to support Ahmed and Muhammed's (2018) research that proposed a link between risk evaluation and the control environment. While monitoring is found to be negatively correlated with financial performance, activities related to information, communication, and control are positively associated with financial performance. Moreover, a study by Ashiagbor et al. (2019) found a positive relationship between economic performance and internal control systems, contradicting this study's findings. According to the latter study, the sampled companies mainly adhered to the internal control policies formulated by management, and the performance of the selected life insurance companies was closely linked to the components of the COSO integrated framework for internal controls.

The research reveals that control activities significantly correlate with two financial ratios. The study suggests that while there is a positive relationship between internal control components and the financial performance of companies, this relationship is only partially supported by the findings. This implies that the strength of the correlation between these variables is not absolute and may be influenced by other factors.

## CONCLUSIONS AND RECOMMENDATIONS

This chapter presents conclusions and recommendations from the study on the implementation level of

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internal control systems and its impact on the financial performance of life insurance companies.

## **Conclusions**

The study revealed that all components of the internal control system are highly implemented in the selected life insurance companies in first-class municipalities in Nueva Vizcaya. Also, the financial ratios of the companies show good financial performance. The companies have favorable outcomes in most of the financial ratios. Specifically, the profitability ratios show that the companies have the potential to have a good financial performance and the earnings ratios where favorable financial ratios are achieved. On the other hand, the financial strength ratios show a slight weakness in the companies.

Furthermore, the study has also revealed that no significant relationship exists between most of the internal control systems components and the financial performance of life insurance companies. The control environment of insurance companies does not directly relate to their financial performance. The risk assessment component has a negative but insignificant relationship to the financial performance of insurance companies. The control activities employed by the insurance companies have a positive significant relationship with the return on equity and capital adequacy ratio (RBC2). The other financial ratios do not have a significant relationship with the former. Information and communication controls of the insurance companies are not significantly related to their financial performance. Monitoring activities do not have any significant relationship with the financial performance of the life insurance companies.

## **Recommendations**

Based on the findings and conclusions of the study, the following recommendations are suggested:

To the current and future insurance customers. It is recommended that life insurance customers review insurance companies' financial statements and financial ratios. It helps give them a view of how their investments are managed. Also, check on the existence and implementation of the processes and controls in the company since some of the controls are positively related to the company's financial performance.

**To the employees and management.** It is recommended that employees and management maintain good implementation of internal control systems. Also, proper business procedures should be improved to enhance financial performance.

**To prospective investors.** Potential investors should carefully evaluate insurance companies' financial performance and controls before making any financial transactions. This involves evaluating insurance companies' financial performance and controls before engaging in any transaction.

**To the School of Accountancy and Business professors and students.** It is recommended to the professors of the School of Accountancy and Business to use studies as materials to teach accounting courses. This will be very helpful in contextualizing the topics and letting the students understand and view reality and connect it with the topics they are learning.

To future researchers. Since this study was limited to the life insurance companies that are in two first-class municipalities of Nueva Vizcaya, it is recommended that future researchers conduct their study in a broader environment. Further studies that include internal control systems and financial performance variables are also recommended. Future studies can include the employees of non-life or mixed insurance companies in the list of respondents. In addition, they can also take the company level to a higher level and gather their respondents from the main office or headquarters of the companies. They can also include insurance companies outside the province as their respondents. Furthermore, they can include the profile of the respondents and the company, which will be then used to test the difference in the results when grouped

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according to their profile. Lastly, they can investigate the connection between the two variables using predictors or regression analysis.

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