

Relationship between accounting environment, accounting professional ethics, and sufficiency economy philosophy for sustainable business management on the Thai Stock Exchange

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Abstract

The accounting environment, accounting professional ethics, and sufficiency economy philosophy were the significant factors in this study. The purposes of this research were 1) to determine the structural equation model of these factors for Stock Exchange companies and 2) to develop the causal factors and relationship structure of the three factors using a questionnaire. The samples consisted of 200 accounting executives who analyzed the data using a statistical package for social sciences. The results showed that the structural equation model was consistent with the empirical data as a measure of consistency. These findings prove that the conceptual framework of the sufficiency economy philosophy is the core of professional accounting ethics and environmental accounting related to sustainable business management, thus leading to new financial knowledge in Thailand. Reference to this paper should be made as follows: Tonglad, P. and Kamwass, S. (2021). 'The relationship structure of accounting environment, accounting professional ethics and the sufficiency economy philosophy towards sustainable business management of companies registered in the Stock Exchange of Thailand', Int. J. Business Excellence, Vol. , No. , Biographical notes: Pornchanok Tonglad is a lecturer who completed her PhD from Ramchamhang University. This manuscript is a work of her own based on the work experience working as associate professor of accounting at Lampang Rajabhat University, Thailand. Supunnee Khamwass is a lecturer who completed her PhD in the Dhurakij Pundit University, Thailand. She works on the accounting program, Faculty of Management Science, Lampang Rajabhat University, Thailand.

Keywords: accounting environment; accounting professional ethics; sufficiency economy philosophy; sustainable business management.

1 Introduction

The Sustainable Business concept stems from cumulative problems in the past, especially the problem in extreme capitalism, which emphasizes quantitative growth rather than quality. Therefore, modern businesses should be involved and have broad responsibilities. They have emerged as a sustainable business trend or have run their businesses together to develop society and the environment. This is a new form of innovation for sustainable business development (Joyce & Paquin, 2016).

In Thailand, an economic and social development plan has been developed and applied to the Sufficiency Economy Philosophy initiative by the 9th Rama King since 2001 to be strong and sustainable with economic immunity for people to be self-reliant. This plan also includes communities and community networks to create a link to the sustainable development of both rural and urban areas. It also includes taking care of resources, environmental management, and science and technology development for Thai society. The 10th National Economic and Social Development Plan (2007-2011) was official. It prepares Thai people to be ready for changes and possible economic impacts under the "Philosophy of Sufficiency Economy" policy as a guideline to integrate national development and aim to be a "Green and Happiness Society," which encourages Thai people to have ethics and knowledge. Furthermore, this policy engages Thai people to live together in a warm environment, strong community, peaceful society, quality economy, stable and fair environment with good quality and sustainable natural resources and live in the world community confidently. This is the central national development plan that projects the Sustainable Development Goals (SDGs) (Office of the National Economic and Social Development Board, 2019).

From an accounting point of view, there are three main factors related to sustainable business management, which are 1) environmental accounting, 2) accounting professional ethics, and 3) sufficiency economy philosophy. Green accounting developed from an environmental problem that affected the organization by applying environmental conservation in accounting has been recommended a lot (Ray et al., 2020). Srijunpetch (2009) revealed that environmental information disclosure can be used in business evaluations to show concrete business responsibility in society and the environment. However, it has some limitations in terms of numerical measurements owing to cost measurement, environmental benefits, or the involved expenses, which are quite difficult and complex, such as measuring the right to cause pollution in the weather, atmosphere, air, and living things (Masanet-Llodra, 2006). Environmental accounting data, including environmental assets, liabilities, incomes, expenditures, and disclosures, does not have an accounting standard to support it. Therefore, the environmental accounting projected the disclosure of the environmental impacts (Srijunpetch, 2012) based on the TBL (Triple Bottom Line), including economic dimension, environmental dimension, and social and ethical dimensions (Hernadi, H. B., 2012) are required for this study.

Meanwhile, reporting the information presented to stakeholders emphasizes the organization's responsibility to society. It relates to the accounting ethics performance, which needs to be aware of the accounting morals and ethics to avoid causing damages and help the business grow steadily. It brings a good quality of life for the company's personnel and other related partners. It also generates income and helps improve the national economy (Mutta et al., 2021).

As mentioned above, those three factors would be intercepted and bring out some relationships that can be seen in a fit model. However, an average casual model would only explain some of their relationships because it could not analyze some errors from indirect measurement data. Therefore, a structural equation model technique is applied for this research LIRSEL program can solve the uncertainty measurement problems using the corroborative component analysis principle. The linear structural model between the observed and latent variables analyzes data that are likely to be error-free. LIRSEL program covers all types of that linear structure relationship characteristics. Therefore, the structural relationship model, one-way influence model, or recursive or non-recursive model with path analysis can be performed using the LIRSEL program. As a result, this program is applied to clarify the relationship between environmental accounting, accounting professional ethics, and the sufficiency economy philosophy toward sustainable business management of companies listed on the Stock Exchange of Thailand.

1.1 Problem statement

According to a modern business concerned with social and environmental responsibility, the organization is more thoughtful (Neto et al., 2020). Green accounting is a good example that has been discussed and developed from environmental issues affecting the organization. Business management under the Sufficiency Economy Philosophy also focuses on environmental problems affecting the organization. By trying to bring the concept of environmental conservation to be applied to accounting.

In Thailand, environmental accounting does not have an accounting standard to support it. The disclosure of environmental impacts to environmental accounting needs to be focused on (Srijunpetch, 2012). At the same time, the focus of environmental accounting is the presentation of information to stakeholders, thus emphasizing the concept of corporate social responsibility, which has goals consistent with the performance of duties with professional ethics by taking into account the morals and ethics of the profession to avoid the mistakes that will cause damage and help the business to grow steadily. Create a good quality of life for the company's personnel and related parties, generate income, and help improve the national economy (Mutta et al., 2021).

The main reason for this study is finding a structural model equation of the accounting environment, accounting professional ethics, and the sufficiency economy philosophy in sustainable business management of a Stock Exchange company in Thailand. Identifying the income and expenses related to the environment and the disclosure of environmental information that can be evaluated in various aspects to reflect the concrete social and environmental responsibility of the business are required (Srijunpetch, 2009). The challenge in environmental accounting is the limitation of measuring environmental benefits or the costs involved, such as measuring the right to pollute the atmosphere, air, living things (Masanet-Llodra, 2006). The environmental disclosure is based on the TBL (Triple Bottom Line) concept, considering three dimensions: economic, environmental, social, and ethical (Hernadi, H. B. 2012). Therefore, developing the relationship structure of environmental accounting and code of conduct is essential. How do the accounting profession and the Sufficiency Economy Philosophy affect sustainable business development?

1.2 The Main purpose of the study

Main objective

- To examine the relationship between environmental accounting, professional accounting ethics, and a sufficiency economy philosophy towards sustainable business management.
- To develop the relationship structure of environmental accounting, professional accounting ethics, and a sufficient economic philosophy towards sustainable business management.

1.3 Significance of the study

The focus of environmental accounting is the presentation of information to stakeholders, thus emphasizing the concept of corporate social responsibility, which has goals consistent with the performance of duties with professional ethics by taking into account the morals and ethics of the profession to avoid mistakes that will cause damage and help the business grow steadily. Create a good quality of life for the company's personnel and related parties, generate income, and help improve the national economy (Mutta et al., 2021). Therefore, it is crucial to develop a relationship structure between environmental accounting

and the code of conduct. How do the accounting profession and the Sufficiency Economy Philosophy affect sustainable business development?

2. Literature review

In the following section the paper presents the conceptual framework variables and the associated theories using various scholarly articles.

2.1 Sustainable business management: variables, their meanings and methods of measurement

Sustainable business administration is rooted in sustainable forest management developed in Europe during the 17th and 18th centuries (Ulrich Grober, 2007). In 1987, the United Nations World Commission on Environment and Development published "the Common Future Report," commonly known as the Brundtland Report. The report includes one of the most widely accepted definitions of sustainable development, "The World Commission on Environment and Development (1987) and Rees and Smith (1998) state that sustainable development refers to a way of development that can meet the needs of today's generations without sacrificing their ability to meet the needs of the next generation is." - Our Common Future. The elements of sustainable development consist of an economic society and the environment (Barbier, 1987). Phra Dhammapitaka (2013) explains, "Sustainable development has an integrated nature, that is, holistic way, where all relevant elements must be harmonized and balanced. One is to align human activities with the criteria of nature." Sustainable development must be the development that creates balance or interaction among the element dimensions that lead to the organization or human life's well-being in terms of economic, social, political, cultural, psychological, and natural resources and environment. Both current and future generations have a holistic approach to Sustainability Goals (Shaker, 2015).

There are three components of sustainable development: social, economic, and environmental. The three aspects interrelate with each other, and this interrelation leads to higher market opportunity upgrades. According to Tonglad et al. (2016), the economy, society, and environment can explain the components of sustainable business development for small and medium business entrepreneurs. This includes exciting findings on the balanced organizational health management of quality accounting firms in Thailand. A balanced business administration should consider all four dimensions based on the principle of the Balance Score Card: views of financial management, work processes in the organization, learning, growth, and customers (Kaplan & Norton, 1996). All four aspects describe the components of balanced business management (Tonglad et al., 2017). This study, therefore, focuses on the thriving nature of sustainable business management among the company executives and accounting executives from companies listed on the Stock Exchange of Thailand according to 5 aspects of the sustainable business management component in The World Commission on Environment and Development (1987) (1987), Rees and Smith (1998) and Kaplan and Norton (1996) with a 5-unit evaluation scales from "the highest" to "the least" in developing the questionnaire.

2.2 Reasons for sustainable business management

2.2.1 The concept of sufficiency economy

The Sufficiency Economy Driving Subcommittee analyzed the meaning of the Sufficiency Economy Philosophy using the parsing technique. The analysis result is a logical method to understand and establish the elements' connection from such analysis. It concludes that the philosophy of the sufficiency economy has a complete composition that could be used

as a basis for developing an economic framework. The philosophy consists of five parts: conceptual framework, sufficiency economy characteristics, definition of sufficiency, conditions, and decision-making. (Sufficiency Economy Driving Subcommittee, 2005; Economic Framework Development Group Philosophy of Sufficiency Economy, 2003; United Nations Development Program in Thailand, 2007). The conceptual framework is the guideline philosophy about the existence and behavior in the proper way. It is based on the traditional way of Thai society living. It can be applied at any time. It focuses on the stability and sustainability of development. Sufficiency economy characteristics can be applied to all levels of practice. It emphasizes the middle way of living and step-by-step development. It is a systematic world-viewing philosophy for sustainability development in environmental, social, and economic dimensions. The definition of "sufficiency" can be regarded as the basis for readiness for change and its external effects. Sufficiency refers to a behavior or action that consists of three qualifications: moderation, reasonableness, and good self-immunity. 1) Moderation means adequacy, which is equal, not too much in the various dimensions of action, production, and consumption at a modest level, which leads to a balanced level of readiness for changing situations. This includes self-sufficiency and simple living. 2) Reasonableness refers to decision-making in the moderation degree. This action must include rational taking into accounting which are relevant factors, as well as taking into account the expected consequences. These actions also include the accumulation of knowledge and experience, analytical ability, self-awareness, foresight, and compassion for others and 3) Immunity means being prepared for the impacts and changes which possibly occur in many situations. The situation might occur near and distant future based on self-reliance and self-discipline. Conditions, decision-making, actions, and activities at a sufficient level require

Knowledge, prudence, and caution in applying various academic disciplines in planning. Every step of the process, including the mental foundation to be aware of the virtue of integrity, honesty, proper knowledge, patience, perseverance, mindfulness, wisdom, and prudence, includes 1) knowledge conditions containing knowledge about various academic subjects. It is prudent to consider knowledge and link it together for planning. 2) Careful implementation—the moral conditions to be reinforced—includes the development of people to be both intelligent and good people. Both have vital mental and physical health and are ready to accept changes that must be strengthened in two areas: mental/intellectual by emphasizing knowledge and virtue, moral awareness being honest and having appropriate knowledge and inaction or way of life, and emphasizing patience, perseverance, wisdom, and prudence.

Tonglad et al., 2016 reported that the causal relationship of sustainable business development depends on Integrity (comprises patience and honesty) the most, followed by moderation (comprising consideration of business balance and taking into account the excellent business disadvantage) and knowledge (consisting of knowledge and understanding of business reality). Meanwhile, every variable of the sufficiency economy philosophy directly influences business sustainability, rationality (based on principles in business decision-making and connected thinking), and immunity (the common good and awareness of business changes). The causal variable in the model is knowledge, morality, rationality, modesty, and immunity. All contribute to sustainable business development or examine the structural equation model. In the application of financial management according to the Sufficiency Economy Philosophy. It was found that the two conditions, namely knowledge, and virtue, are all contributing factors to the rationality, moderation, and immunity of entrepreneurs (Tonglad et al., 2021).

2.2.2 Basic principles of professional ethics

The announcement of Federation of Accounting Professions No. 7/2019 regarding the Code of Conduct for Professional Accountants by the Board of the Federation of Accounting

Professions stipulates that professional accountants must follow six principal ethics. They are as follows: 1) Being honest in all professional and business relationships; 2) Being objective and independent, not allowing any prejudice or conflicts of interest or undue influence of others to override professional. All assurance engagements must be independent of their clients. Assurance engagement includes the psychological and empirical independence necessary to enable a professional accountant in public services to express an assurance obligation. They must reveal that they have reached their conclusions without bias. Any conflicts of interest or undue influences of a person on a professional accountant in a business unit independence must be considered in the performance of this fundamental principle as well. 3) Have knowledge, competence, attention, and maintenance of operational standards to maintain professional knowledge. Competence and expertise are needed to ensure that their clients or employers receive professional services that are up-to-date with the latest evolutions in methods or techniques. They must have their performance or legal and performing duties with care following the relevant professional standards. 4) Have confidentiality attached, which is the most important aspect of confidentiality of information obtained from professional and business relationships. Therefore, such information should only be disclosed to third parties with proper authorization. It is essential and specific to follow unless the disclosure is made under a legal or professional right or a duty to disclose or not use such information for personal gain or by a third party. 5) Have responsibility for complying with applicable laws and regulations and avoiding any actions that may jeopardize the profession's credibility. Being responsible for clients; and 6) being accurate in showing the operation's image under the laws, regulations, and professional standards set and not concealing facts or misrepresenting the facts, which leaves essential evidence that can be inspected.

The study of causal factors affecting the behavior of accountants' professional ethics in the northern region according to the interactionism theory model found that the basic principles of a professional accountant must adhere to all six elements that describe professional ethics in descending order of weight: objectivity, transparency, accountability, honesty, confidentiality, and fairness (Tonglad, 2012). There has also been a successful study of the relationship structure model of personality traits Ethical Courage to a Certified Public Accountant's Fiduciary Management by considering ethical courage in the dimensions of accounting ethics.

2.2.3 Environmental accounting

Environmental accounting deals with environmental assets, liabilities, income, expenses and disclosure. There is no standard for environmental accounting in Thailand. Therefore, accounting for the environment emphasizes disclosing environmental impact data (Srijunpetch, 2012). The disclosure of environmental information is based on the TBL (Triple Bottom Line) concept, considering three dimensions: economic, environmental, and social and ethical (Hernadi, 2010). According to Kitprach's (2015) study on the relationship between the development of environmental accounting and social responsibility and corporate image in the attitudes of executives in the energy and utility industries listed on the Stock Exchange of Thailand, environmental accounting is in 5 dimensions.

They are as follows: 1) Environmental measurement and financial statement presentation. It refers to environmental factors that are recorded and recognized as elements of financial statements. Further, we report the accounting event to meet the financial statement element and the recognition criteria. 2) Recognition of the environmental cost: This dimension means that an entity recognizes environmental costs as an expense in the period incurred or capitalized, and gradually recognizes it as an expense in each period as appropriate. 3) Recognition of the environmental liability: This dimension means an entity recognizes an environmental liability in its statement of financial position when it is probable that the

economic benefits of the resource will leave the entity to settle. An obligation is present when its value can be reliably measured. 4) Recognition recompense: This dimension means that the entity receives compensation from a third party such as an insurance company. 5) Recognition and disclosure: This dimension mean that the entity discloses information and reports to third parties in financial reports, such as non-financial reports, or may disclose information in annual or differential reports from financial statements. Environmental accounting is the disclosure of environmental impact information, which mainly consists of environmental assets, liabilities, income, costs, and disclosure.

3 Methodology

3.1 Sample

The population of this study is 788 companies listed on the Stock Exchange of Thailand (SET) (data from 788 companies listed on the Stock Exchange of Thailand, data as of December 7, 2019 from <https://www.set.or.th/set/commonlookup.do?language=th&country=TH&prefix=Z>

The sample groups are business executives and accounting executives of companies listed on the Stock Exchange of Thailand.

The sample size has an estimation error of not more than 5 percent according to the Zikmund (2003) formula. The sample size is 316 cases. The formula is as follows:

$$\text{sample size} = \frac{NZ^2P(1-P)}{Z^2P(1-P) + NE^2}$$

when for sample size

N for population

Z for standard score at 95 percent confidence level ($Z = 1.96$)

P (1-P) for variance (maximum value when given $P = 0.5$)

E for the tolerance of the data from the sample is 5 percent. ($E = 0.05$)

$$\text{sample size} = \frac{788 (1.96)^2 (.25)}{(1.96)^2 (.25) + (788)^2 (.05)} = 316 \text{ people}$$

The scope of the study period is one year from December - 2019 to December 2020. Area boundaries is a company listed on the Stock Exchange of Thailand

3.2 Data collection

The research instrument is a questionnaire to analyze the research instrument using the following processes:

Create indicator variables from operating definitions and document processing related to the variables studied in the conceptual framework, as follows:

Sustainable business management components are: 1) economic or financial management; 2) sustainable business management; external social is the customer, 3) sustainable business management on internal missions or work processes in the organization, 4) sustainable business management in learning and development, and 5) environmentally sustainable business management with a 5-level rating scale questionnaire. This questionnaire asks about sustainable business management in internal processes, for example, "There are operating rules that are conducive to the success of the business.", "There is an annual action plan and the plan implementation." and "There is an improvement in the internal operating system."

For professional accounting ethics, a 5-level rating scale was used. The sample questions focused on professional accounting ethics, knowledge, and competence. For example, how to seek accounting knowledge regularly to increase knowledge of accounting, follow accepted accounting standards, and be prudent in bookkeeping.

Environmental accounting was based on a questionnaire developed by Kitprach (2015). The question type has a 5-point rating scale, emphasizing the nature of the environmental impact disclosure from “the highest” to “the least.” Entities with higher scores were more likely to be exposed to environmental impacts. Valuation and reporting questions are related to the economic environment. For example, an entity focuses on clearly presenting environmental information in its financial statements to stakeholders. Entities pay attention to environmental transactions and events that make up their financial statements. The entity supports the consideration of accounting frameworks and standards to apply to environmental transactions and events in financial statements. The entity believes that professional bodies are likely to develop environmental accounting standards and procedures that enable effective environmental operations.

The questionnaire was given to accountants in Lampang Province to determine the appropriateness of the questions and revise them in order to make the same understanding.

The revised questionnaire was taken from an accountant to an expert to verify that the content was correct and that it was measured according to the content that needed to be measured. The statistic used to determine tool quality or validity is the index of item objective congruence (IOC). The criterion for finding the congruence of the questions with the objectives was that the IOC was 0.07 or 70%; therefore, these questions were considered to meet the conformance criteria. The questionnaire confidence value alpha (alpha coefficient) was between 0.59 - 0.80. The correlation structure of the variables was expected before the data were analyzed using the structural equation model, and the confirmation component analysis technique was used (confirmatory factor analysis (CFA)) to check or confirm whether the relationship met the expected objectives. The group of related variables was correlated to the same element for structural straightness analysis and it was found that every factor loading of each variable, thus leading to the analysis of the structural equation model.

The questionnaire is a closed-ended questionnaire with a total collection time of approximately four months.

4 Data analysis

Structural equation model (SEM) analysis was used to verify the validity and to prove that the hypothetical model was consistent with the empirical data. Further, SEM was used to statistically validate the preliminary agreement to meet the model validity verification criteria. The correlation between the variables was used as one of the preliminary investigations and it was found that the correlation between the independent variables was between 0.00 and 0.53 as the correlation between hedging the business risks and fairness, transparency, and integrity, which is less than 0.80. This indicates that none of the independent variables is higher than the specification. It can be used to analyze the structural equation model to verify its validity and prove that the model is consistent with the empirical data.

4.1 Examining the relationship model of environmental

Table 1 presents the relationship model of environmental accounting, accounting professional ethics, and sufficiency economy philosophy towards sustainable business

management of companies listed on the Stock Exchange of Thailand. It shows the statistical values of the correspondence of the hypothesis model with the empirical data of the relationship structure of environmental accounting, accounting professional ethics, and sufficiency economy philosophy towards sustainable business development of companies listed on the Thai Stock Exchange. The statistical value of the chi-square before adjustment was 424.93. After reduction, it went to 97.88. A lower chi-square value before adjustment indicates that the new model is more consistent with empirical data. The relative chi-square value before the adjustment was 4.88; after the adjustment, it equaled 1.81 (which should not be more than two, and the new model was better than before). The RMSEA (root mean square error of approximation) before adjustment was 0.14. After adjustment, it was reduced to 0.05 (should not exceed 0.05). The RMR before the model adjustment was 0.006. After revision, it decreased to 0.0036 (should not exceed 0.05).

Table 1 *The Comparison of the congruence statistics of the hypothesis model with the empirical data*

Test Statistic	Hypothesized Model	Modified Model
Chi-Square	424.93	97.88
df	87	54
P-value	.0000	.0014
χ^2/df	4.88	1.81
RMR	.006	.0036
GFI	.78	.94
AGFI	.69	.87
RMSEA	.14	.05

Considering adjusted harmonization, the index before adjustment was 0.78. After adjustment, it went to 0.94 (should be close to 1). Therefore, we examine the coherence of the hypothesis model with the empirical data of the correlation structure of accounting environment, accounting professional ethics, and sufficiency economy philosophy towards sustainable business according to the management of companies listed on the Stock Exchange of Thailand. This result is consistent with the empirical data provided by the developed model. It came from the professional ethics of accounting as the same element as the moral aspect, according to the concept of sufficiency economy. This variable is referred to as the decision according to professional ethics, and the findings are a statistical measure of conformity in Table 1. Therefore, we developed a suitable hypothesis model with empirical data on the relationship structure of environmental accounting and the sufficiency economy philosophy towards sustainable business management of companies listed on the Thai Stock Exchange.

The relationship structure of environmental accounting, professional ethics, and a sufficiency economy philosophy towards sustainable business administration of companies listed on the Stock Exchange of Thailand. The examination of the correctness of the environmental accounting structural equation model Accounting Professional Ethics and sufficiency economy philosophy towards sustainable business administration of companies listed on the Stock Exchange of Thailand indicated consistency with empirical data according to the conformity measurement criteria with the relationship structure of environmental accounting and accounting professional ethics, which is the central part of the concept of sufficiency economy (moral dimension) towards sustainable business administration, as shown in Table 2 and Figure 1.

4.2 The relationship structure of environmental accounting, professional ethics, and sufficiency economy philosophy towards sustainable business administration of companies listed on the Stock Exchange of Thailand

From the examination of the correctness of the environmental accounting structural equation model, Accounting Professional Ethics and sufficiency economy philosophy towards sustainable business administration of companies listed on the Stock Exchange of Thailand were found to be consistent with empirical data according to the conformity measurement criteria with the relationship structure of environmental accounting and accounting professional ethics, which is part of the concept of sufficiency economy (moral dimension) towards sustainable business administration, as shown in Figure 1 and Table 2.

Figure1 Structural equation model of environmental accounting sufficiency economy concept towards sustainable business management

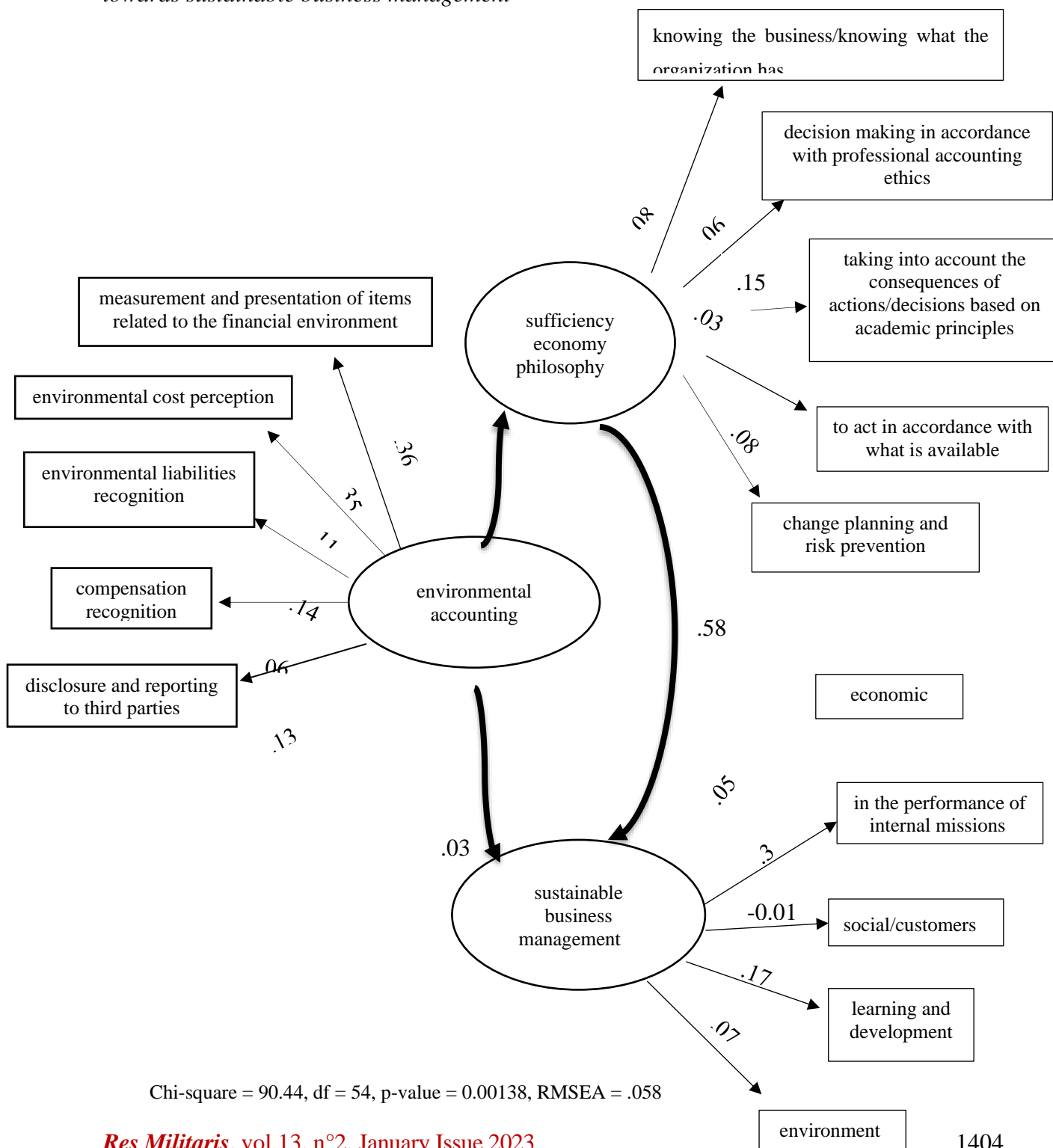


Table 2 Path coefficients, standard error and T-value of parameter of the structural equation model (N = 200)

Path Diagram	Path Coefficients	Standard Error	T-Value
LAMDA-X			
environmental accounting → measurement and presentation of items related to the financial environment	035.	011.	3.06
environmental accounting → environmental cost perception	011.	003.	3.06
environmental accounting → environmental liabilities recognition	014.	004.	3.30
environmental accounting → compensation recognition	006.	002.	2.34
environmental accounting → disclosure and reporting to third parties	013.	004.	3.49
LAMDA-Y			
sufficiency economy philosophy → Knowing the business/ knowing what the organization has	008.	-	-
sufficiency economy philosophy → decision making in accordance with professional accounting ethics	006.	002.	3.15
sufficiency economy philosophy → change planning and risk prevention	008.	02.	4.54
sustainable business management → economic sustainable business management → in the performance of internal missions	009.	-	-
sustainable business management → social/customers	031.	011.	2.96
sustainable business management → learning and development	-001.	003.	-018.
sustainable business management → environment	017.	007.	2.46
sustainable business management → environment	007.	004.	1.89
BETA			
sufficiency economy philosophy → sustainable business management	058.	024.	2.47
GAMMA			
environmental accounting → sufficiency economy philosophy	036.	012.	2.91
environmental accounting → sustainable business management	003.	005.	062.

4.3 The results of the study of the causal factors of business development to be sustainable from the sufficiency economy philosophy professional accounting ethics and environmental accounting

Table 2 and Figure 1 reveal that the cause of business development for sustainability came from environmental accounting in the order of factor loading from the highest to the lowest. The five components are as follows: 1) measurement and presentation of items related to the economic environment, 2) recognition of environmental liabilities, 3) disclosure and reporting to third parties, 4) environmental cost perception, and 5) recognition of compensation by environmental accounting. These components are causal variables related to the sufficiency

economy concept. The primary outcome variables in Table 2 and Figure 1 are business administration and sustainable business administration. The business administration follows the sufficiency economy philosophy; sorting by elements weight descending reveals the following: 1) taking into account the results of actions/decisions based on academic principles, 2) planning for change and risk prevention has the same weight as knowing the entity/knowing what the organization has, and 3) decision making according to professional accounting ethics.

Another outcome variable is sustainable business administration. It is arranged according to the weight of the components, from most to least, as follows: 1) internal missions and 2) learning and development. Three conclusions were drawn from the results. First, the statistics represent the congruence of the hypothesis model with empirical data on the development of the relationship structure of environmental accounting, professional ethics, and the sufficiency economy philosophy towards the sustainable business development of companies listed on the Stock Exchange of Thailand. The statistical values within the criteria of the conformity check revealed that the hypothesis model corresponded to observational data. Therefore, an appropriate model of the relationship structure of environmental accounting, professional ethics, and a sufficiency economy philosophy towards sustainable business development of companies listed on the Stock Exchange of Thailand is needed .

There were three components of the sufficiency economy concept in descending order of weight: 1) taking into account the consequences of an action or decision based on academic principles, and 2) planning for change response and risk prevention. The composition weight was equal to knowing the entity or what the organization had, and 3) decision-making according to professional accounting ethics. There were five components of environmental accounting for companies listed on the Stock Exchange of Thailand in descending order of weight components as follows: 1) valuation and presentation of financial environment-related items; 2) recognition of environmental liabilities; 3) disclosure and reporting to third parties; 4) environmental cost perception; and 5) recognition of compensation.

The development of the relationship structure model of environmental accounting and sufficiency economy concepts for Sustainable Business Development of Companies Listed in the Stock Exchange of Thailand revealed the following. Sustainable Business Management comprises Internal Missions, learning, and development. The business administration caused by the philosophy of the sufficiency economy consisted of action awareness or decision-making based on academic principles, change planning, and risk prevention, including knowing the business, knowing what the organization has, and decision-making according to professional ethics.

Originating from environmental accounting consisted of valuation and presentation of the environment, economic environment, liability recognition, disclosure and reporting to third parties, environmental cost perception, and compensation perception. Therefore, environmental accounting indirectly influences the concept of a good economy for sustainable business management.

5 Findings and discussion

In the discussion of the results, the focus will be on the objectives established as follows:

5.1 To examine the relationship of environmental accounting, accounting professional ethics and sufficiency economy philosophy towards sustainable business development.

From the correlation examination, a statistical representation of the hypothesis model's coherence with the development's empirical data was obtained. The relationship structure focuses on environmental accounting, professional accounting ethics, and the sufficiency economy philosophy towards the sustainable business development of companies listed on the Stock Exchange of Thailand. The Chi-square statistic was 97.88 at 54 degrees of freedom and 1.81 (which should not exceed 2). The RMSEA (root mean square error of approximation) was 0.05 (should not exceed 0.05), RMR was 0.0036 (should not exceed 0.05), the Goodness of Fit Index was .94, and the Adjusted Goodness of Fit Index was 0.87 (should be close to 1), all of which are within the criterion of the conformity check.

5.2 Relationship structure of environmental accounting, code of ethics and business administration in accordance with the sufficiency economy philosophy towards sustainable business development by presenting both the component analysis and the simultaneous path as follows:

Components of sustainable business development according to sufficiency economy philosophy, environmental accounting, and professional accounting ethics of companies listed on the Stock Exchange of Thailand. It was found that there are two elements: internal missions/working processes in the organization (internal business process) and learning and growth. Both elements appeared in the principles of equilibrium organization management or the dimension of Balanced Assessment or Balance Score Card of Kaplan and Norton (1996), which was in terms of internal missions/work processes in the organization and learning and development/growth. It emphasizes internal elements (people management or human resources) as strengths. If the inner elements are vital, then the outer elements are caused by strengthening the inner potential.

Moreover, in line with the philosophy of a sufficiency economy (Sufficiency Economy Driving Subcommittee, 2005), the focus on the explosion from the inside is that sustainable development change must start within the organization first. Meanwhile, the business administration components exhibited the following five elements:

- Estimating the operation of the business appropriately
- Decision-making according to the academic principles
- Planning for changes response and risks prevention
- Knowing the business or knowing what the organization has
- Decision-making according to the professional accountant ethics

These elements follow the framework of the Royal Philosophy or Sufficiency Economy (Sufficiency Economy Driving Subcommittee 2005). Simultaneously, it revealed the development of a structural equation model in the case of inherent variables. Professional ethical decision-making is considered a moral component of the sufficiency economy philosophy. Therefore, according to the sufficiency economy philosophy, professional and ethical variables are defined as one element in the business management model: decision making according to professional ethics.

Elements of environmental accounting, according to the companies listed on the Stock Exchange of Thailand, consist of

- valuation and presentation of items related to the financial environment,
- recognition of environmental liabilities,
- disclosure and reporting to third parties,

- environmental cost perception, and
- The recognition of the compensation for which these five elements conform to the educational principles of Srijunpetch (2012) and Kitprach (.(2015

5.3 Relationship structure of environmental accounting business administration according to the sufficiency economy philosophy, to the sustainable business development of companies listed on the Stock Exchange of Thailand ,The discussion issues were divided as follows:

From the structural equation model, it was found that Sustainable Business Management (internal missions/work processes in the organization, learning, and development/growth) comes from business management. It is based on the sufficiency economy philosophy (in terms of appropriately estimating business operations, making academic decisions, changing plans and risk prevention, knowing the entity or what the organization has, and complying with the Code of Professional Accounting Ethics). Further, following the Code of Professional Accounting) is an important cause of sustainability, which corresponds to the Sufficiency Economy Driving Subcommittee (2005) in the Sufficiency Economy approach, which emphasizes the fundamentals of self-sufficiency. It is a development that increases human capital or intellectual capital, which consists of knowledge management, morality, rationality, moderation, intelligence, and prudence to balance and be ready to accommodate rapid and widespread changes in material, social, environmental, and cultural aspects from the outside world. Gross-Gołacka et al., 2021 state that intellectual capital substantially contributes to business operations. Further knowledge of the importance of intellectual capital and its impact on business results. This allows operators to develop adequate strategies to better manage organizational performance.

This study also revealed the sustainable business management caused by environmental accounting (consisting of valuation and listing related to the economic environment, environmental liability recognition, disclosure and reporting to third parties, environmental cost perception, and recognition of compensation). It also affects sustainable business management through business administration according to the sufficiency economy philosophy, or indirectly influences sustainable business management. This result relates to the impact and response of businesses to the environment (Rodwana, 1995) in line with Shaker's (2015) sustainability concepts on environmental responsibility. Focusing on business administration according to the sufficiency economy philosophy is an appropriate way to develop or manage sustainable business companies. Similarly, to develop or manage a business sustainably, apart from emphasizing business administration according to the sufficiency economy philosophy, it also depends on the concept of environmental accounting through business administration according to the sufficiency economy philosophy. Although the hypothesis model is consistent with the empirical data, there may be better models to fit. Therefore, this structural equation model of companies listed on the Stock Exchange of Thailand should be applied to develop other desirable models in the business development mechanism, such as sustainable factors, for example, the internal and external environmental factors.

6. Conclusions

This study examines a structural equation model with an emphasis on factor analysis and path analysis simultaneously. This study found that the hypothesis model was consistent with the empirical data. Therefore, this study emphasizes the importance of sustainable

business development and management. Apart from emphasizing business administration according to the Sufficiency Economy Philosophy, it also depends on the idea that environmental accounting is transmitted through the business administration according to the Sufficiency Economy Philosophy.

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