



CMA National Management Accounting Conference - 2022

***“Crises an Opportunity to Re-Build Sri
Lanka”***

Conference Proceedings Book

Organized by

Institute of Certified Management Accountants of Sri Lanka (CMA)

30th October 2022, Taj Samudra, Colombo, Sri Lanka.

As an integral part of the CMA National Management Accounting Conference – 2022

CMA Research Symposium (CMARS) - 2022 is organized.

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Preamble

Cutting-edge contemporary research contributes to the development of new knowledge about a field of study while allowing practitioners to exploit opportunities with significant practical and policy implications. With this noble objective, the “***CMA Research Symposium (CMARS) - 2022***” is organized by the Institute of Certified Management Accountants of Sri Lanka (CMA) as an integral part of the CMA National Management Accounting Conference - 2022. Accordingly, the ***CMARS -2022*** provides a platform to discuss cutting-edge contemporary and futuristic concepts, empirical findings, and approaches in the field of accounting.

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Message from Founder and Incumbent President, CMA



It is with great pleasure that I write this congratulatory message to the CMA Research Symposium (CMARS) - 2022 organized by the Institute of Certified Management Accountants of Sri Lanka.

The Research symposium is a part of CMA National Management Accounting Conference, which was held on 30th October 2022 at Taj Samudra, Colombo, Sri Lanka. The Research Symposium is organized by the Institute of Certified Management Accountants of Sri Lanka (CMA) and the symposium facilitated the integration of different perspectives representing academia, professionals, economists, regulatory bodies, etc. to form a discussion on “Crises an Opportunity to Re-Build Sri Lanka”, which is the theme of CMARS - 2022. The symposium primarily focused on providing insights into how Sri Lanka could be re-build by exploiting opportunities in the context of socio-economic crises.

We are delighted to have a rich set of 20 contributions from various disciplines and multi-sector representations from Public, Private, Universities and Non-Governmental organizations. These proceedings are a milestone achievement for CMA and contains 20 extended abstracts under 4 themes. While the larger interest is probably partly due to the relevant theme “Crises an Opportunity to Re-Build Sri Lanka” with its 4 tracks with the research topics and tracking for the submission of research and academic papers. This publication of the proceedings will be made available on the CMA website with open access.

The Scientific & Evaluation Committee of CMA Research Symposium (CMARS) - 2022 consisted of eminent academics from national universities of Sri Lanka, and it was chaired by Prof. Roshan Ajward from the Department of Accounting, Faculty of Management Studies and Commerce, University of Sri Jayewardenepura. I would like to take the opportunity to thank Prof. Roshan Ajward for his great contribution as the Chairman of the CMARS – 2022 Committee. Other Committee members were Dr Sandya Jayasena from the Rajarata University, Dr Isuru Manawadu from the University of Sri Jayewardenepura, Ms. Thilini Cooray from the University of Sri Jayewardenepura, Ms Fathima Nuskiya from the University of Peradeniya, and Ms. Amali Henadirage from the University of Sri Jayewardenepura. Furthermore, the general secretary to the committee was Ms. Sumudu Pagoda, the Actg. CEO/Senior Director - Administration and Operations of CMA. I appreciate the tremendous dedication and effort made by the CMARS – 2022 Committee in making this event and proceedings a reality. They performed the extended abstract reviews using a double-blinded review process, acted as panellists at the symposium, and selected the best presenters. The criteria for selection of the best presentations were based on scientific novelty, scientific content, clarity of presentation, appropriate audio-visuals, ability to handle questions and timing. My congratulations and best wishes to the team!

Finally, I wish to extend my sincere thanks to all the authors, co-authors and presenters who have submitted the extended abstracts and wish you all the best for your future endeavours in your educational and professional careers.

Prof. Lakshman R Watawala
Founder and President
CMA Sri Lanka

Message from the Chairman of the Scientific and Evaluation Committee



As the Chairperson and the Head of the Scientific and Evaluation Committee, it is a great pleasure to send a message to this book of proceedings. In line with the CMA National Management Accounting Conference - 2022, the “**CMA Research Symposium (CMARS) – 2022**” was organized by the Institute of Certified Management Accountants of Sri Lanka (CMA). I sincerely appreciate Prof. Laksman R Watawala, the President of CMA Sri Lanka, Mr. Hennayaka Bandara, the Vice President and the Council for initiating and enabling this great endeavor. You have made it possible for professional organizations and academia to collaborate.

Being the premier national body in management accounting in Sri Lanka, the commitment of CMA to support and facilitate the advancement of scientific knowledge is highly appreciated.

Due to the Covid - 19 pandemic and the economic crisis, the current socioeconomic climate has faced grave difficulties. It has evolved into a fundamentally troubling problem that is seen as a huge challenge for emerging countries like Sri Lanka. In this situation, developing and implementing crisis management strategies and initiatives are observed to be vital. Accordingly, the theme “**Crises an Opportunity to Re-Build Sri Lanka**” has been selected as the theme of “**CMA Research Symposium (CMARS) – 2022**”, in line with the CMA National Management Accounting Conference - 2022. This symposium primarily focuses on providing insights on how Sri Lanka could be re-built by exploiting opportunities in the context of this socio-economic crises.

Based on this main conference theme, there are four tracks (i.e., Digital Technology to Transform and Rebuild Economy; Governance, Ethics, Prevention of Fraud and Corruption for the benefit of the Society; Value creation through Sustainability and Integrated Reporting and Management Accounting Practices in the New Normal) for which we called for extended abstracts. Accordingly, 20 extended abstracts were received on these tracks with cutting-edge research findings. These extended abstracts were subjected to a double-blinded review process to ensure the quality.

I need to highly appreciate the review panel and the members of the scientific and evaluation committee, Dr. Sandya Jayasena, Dr. Isuru Manawadu, who were the co-secretaries, Ms. Thilini Cooray, Ms. Fathima Nuskiya and Ms. Amali Henadirage for providing us with the maximum support, which is highly appreciated. I would also want to take this opportunity to express my gratitude and admiration for Ms. Sumudu Pagoda, who is serving as the research symposium's general secretariat and has provided us with the most assistance and coordination. She is the pillar who supplied the coordination and facilitation that were crucial to the success of this conference.

I am immensely thankful to the researchers for their unwavering dedication to advancing our understanding of science and for sharing their insights at the symposium. At the symposium's technical sessions, cutting-edge new knowledge and discoveries were presented and deliberated. I strongly hope that the information and ideas presented at the Symposium will help us rebuild our motherland and re-establish our position as the pearl of the Indian Ocean. Thank you very much again let me wish you all the very best!

Prof. Roshan Ajward
Chairperson and the Head of the Scientific and Evaluation Committee

Professor in Accounting
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Gangodawila
Nugegoda
Sri Lanka

CMA RESEARCH SYMPOSIUM (CMARS) – 2022



THE THEME OF THE SYMPOSIUM

The contemporary socio-economic environment has been subject to existential challenges due to the Covid – 19 Pandemic as well as the economic crisis. It has become an intrinsically problematic issue that is considered a disruptive phenomenon in determining the development of emerging economies such as Sri Lanka. Although these challenges are unpredictable and uncertain, entities navigated to rethink and redesign their approaches. In this context, creative insights require in crafting and executing strategies in a crisis to rebuild Sri Lanka.

Accordingly, the symposium facilitates the integration of different perspectives representing academia, professionals, economists, regulatory bodies, etc. to form a discussion on “***Crises an Opportunity to Re-Build Sri Lanka***”, which is considered the theme of CMARS - 2022. The symposium primarily focused on providing insights on how Sri Lanka could be rebuilt by exploiting opportunities in the context of socio-economic crises.

CORE THEMES/TRACKS OF THE SYMPOSIUM

The Scientific & Evaluation Committee of CMA cordially invites prospective interested individuals to submit extended abstracts for consideration as oral presentations. This symposium provides a leading interdisciplinary platform for the presentation of new and advanced research findings in the fields of Management Accounting, Financial Reporting and other related disciplines. The symposium will bring together leading academic scientists, researchers, scholars and practitioners to exchange and share their experience, and knowledge on all aspects of the discipline of accounting and beyond from all around the world.

Accordingly, national and international academics, professionals, policymakers, postgraduates, graduates and undergraduates from higher educational and professional institutions will present their research findings in the symposium under four tracks as explained below.

1. Digital Technology to Transform and Rebuild Economy

Socio-economic crises led institutions to focus on digitalization to drive a transformative change in private and public sector institutions. Thus, the Covid – 19 pandemic as well as the economic crisis intensely demonstrated the necessity to use the potential of digital technologies in achieving socio-economic development in the areas of *Economy, Governance and Education*.

2. Governance, Ethics, Prevention of Fraud and Corruption for the benefit of the Society

The contemporary society and organizations within it are stimulated by the desire to prevent fraud and corruption by establishing better governance mechanisms, which can be ameliorated by internalized ethical conduct to ensure organizational trust and confidence. In this context, the focus of the track is on Good Governance, Corruption and Ethics.

3. Value creation through Sustainability and Integrated Reporting

Socio-economic crises could be overcome through value co-creation by integrated thinking that leads to sustainability. Accordingly, based on integrated thinking, Corporate Integrated Reporting recognizes the process of value creation and ensures the sustainability of the entities. This track seeks contributions from researchers and practitioners who deal with,

- Sustainability in Food Production,
- Value Creation through Integrated Reporting,
- Creating Sustainable SME Businesses, and
- Environment, Social and Governance (ESG) for Sustainable Business.

4. Management Accounting Practices in the New Normal

Management Accountants are confronted with new challenges as a consequence of socio-economic crises. These contemporary issues initiate a significant development in management accounting practices in the 'new normal context. Within this scope, research papers are expected on trending topics such as,

- Modern costing techniques,
- Managerial and Societal Costing Framework and application of Cost Accounting, Records & Standards to provide affordable pricing to consumers,
- Cost and Efficiency Audit for Transforming Business,
- Restructuring State Owned Enterprises (SOEs) by application of Cost & Management Accounting Principles.

CHAIR - RESEARCH SYMPOSIUM

Prof. Roshan Ajward
(Ph.D, MBA, BSc Accountancy (Special), FCA, FCMA)
Professor in Accounting
Department of Accounting
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SCIENTIFIC & EVALUATION COMMITTEE

The scientific and evaluation committee comprises persons with sound academic and industrial backgrounds in the particular subject area. They will overlook the review of extended abstracts and presentations. The committee members will be disclosed on Conference Day.

SYMPOSIUM VENUE

The Research Paper Presentation sessions of the Symposium were held on 30th October 2022 from 09.00 a.m. to 05.00 p.m. at the Longdon and Gregory Halls, Taj Samudra, Colombo, Sri Lanka.

CMA Sri Lanka is the national professional management accounting institute in Sri Lanka incorporated by Act of Parliament No. 23 of 2009. The institute was initially established as the "Society of Certified Management Accountants of Sri Lanka" in 1999 with technical assistance from CMA Canada now CPA Canada and financial assistance from Canadian International Development Agency (CIDA) and was inaugurated on 3rd June 2000. CMA is a member of the International Federation of Accountants (IFAC) the global body for professional accounting bodies, the South Asian Federation of Accountants (SAFA) and the Confederation of Asian & Pacific Accountants (CAPA). Currently, CMA has a student population of over 15,000 and 2500 members (ACMAs & FCMAs).

FOR FURTHER INFORMATION



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CMA National Management Accounting Conference - 2022

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PROCEEDINGS



THE FACTORS INFLUENCING THE SAVING BEHAVIOUR OF THE SMALL AND MEDIUM ENTERPRISE OWNERS: A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

Purpose: The purpose of this study is to determine the factors influencing the saving behaviour of SMEs and find out the possibilities to enhance saving behaviour among SMEs in Sri Lanka.

Design/methodology/approach: Through a systematic literature analysis, based on The PRISMA 2020 statement: an updated guideline for reporting systematic reviews, the current study presents an essential research conceptual model for understanding the variables impacting the saving behaviour of small and medium-sized business owners.

Findings: According to the findings of the study, financial literacy, saving intention, demographic characteristics, saving attitude, and social influence have a beneficial impact on saving behaviour.

Research implications: Unfortunately, access to finance is a significant obstacle to SME expansion; it is the frequently stated barrier to SME growth in emerging markets and developing nations. However, the execution and coordination of such policies remain inadequate, necessitating significant changes in the implementation process to increase the saving behaviour of SMEs. And therefore, the government should focus on the factors which affect saving behaviour to eliminate the issues posed by those factors.

Originality/value: This paper enriches existing knowledge of SME-related finance accumulation issues. Also, it contributed to saving behaviour-related knowledge.

Paper type: Review Paper

Keywords: Financial Literacy, Saving Behaviour, Small and Medium Enterprises

INTRODUCTION

Small and Medium Enterprises (SMEs) are widely considered the most important entity to create jobs and contribute to the growth of the Gross Domestic Product (GDP). SMEs allow the rural poor, including some of the most marginalised and vulnerable people such as rural women and youth to diversify their incomes, create new sources of economic growth, and generate additional employment in rural areas. SMEs account for the majority of businesses worldwide and are important contributors to job creation and global economic development. They represent about 90% of businesses and more than 50% of employment worldwide. Formal SMEs contribute up to 40% of national income (GDP) in emerging economies. These numbers are significantly higher when informal SMEs are included (World Bank Group, 2022).

Unfortunately, access to finance is a significant obstacle to SME expansion; it is the second most frequently stated barrier to SME growth in emerging markets and developing nations. There are so many struggles of SMEs concerned to be answered. Such as Expanding Globally, Profitability, Rising Costs, and Reduced Revenues. Also, Small businesses often suffer from poor, dated or disconnected IT systems. Due to poor savings behaviour bedevilling small and medium-scale business owners, they are faced with poor access to loans (Lahiri, 1989). And most of the research found a lack of saving behaviour causing many financial issues to the business and they found out that saving behaviour also determines the duration or lifetime of a SME (Jamal et al., 2015). The SME performance is significantly regressed by saving behaviour. It seems that access to finance and saving behaviour is an entranceway to the SME's wealth creation activities. It leads to high turnovers in SMEs. Therefore, a saving culture causes accessibility requirements to loan services. (Kio et.al, 2021)

To improve the standard of living of the people in the country through enhancing the economic growth of the country, the productivity of the country should be increased. SMEs give a major contribution to the Gross Domestic Product (GDP) and employability of the country. In the case of Sri Lanka, SMEs are one of the important segments in the creation of GDP and employability. According to the Central bank of Sri Lanka, the major problems of SMEs are limited access to finance, low adoption of technology, and limited access to the local and global supply chain. The reason for this limitation is subordinate knowledge of financial literacy and it finally leads to borrowing from unregistered money lenders for higher interest rates. (Central Bank of Sri Lanka, 2021).

So, this kind of borrowings with higher interest rates is the main challenge to the viability of SME business capital. It will affect the regulatory process of the SME. This lack of financial literacy will lead to capital-related issues for SMEs. The governmental initiatives must be combined with national policies to engage SMEs, who are widely ignored to integrate them into the mainstream business climate. One of the most important factors in eliminating financial troubles is increasing savings. Lack of savings might be detrimental since SMEs are not immune to a future economic crisis in the country, where money is necessary. The fact is that many entrepreneurs start their businesses with debt, making a quick take-off difficult.

Both governmental and non-governmental organisations have made attempts to assist Small and Medium Enterprises in various periods in the past. For example, in Sri Lanka, the Ministry of Industry and Commerce's National Policy Framework for Small and Medium Enterprises Development (2016) includes specific action plans for the development of the SME sector. The vision of the National SME Policy Framework is to create a significant number of globally competitive, dynamic, innovative, technologically driven, eco-friendly, and sustainable SMEs that contribute greatly to national economic development. (Ministry of Industry and Commerce, 2016). However, the execution and coordination of such policies remain inadequate. Also, financial risks were becoming a big threat to the SME holders, and further, increasing interest rates and decreasing value of the money and financial challenges posed by the economic crisis were accelerating the decline of their desire for investment.

Therefore, significant changes are necessary for the implementation process to increase the Saving Behaviour of SMEs so that it will lead to the development and bring back the SME to the business environment. It will also help to mitigate the financial risks of SMEs and increase the investment towards SME development. Therefore, the objective of this study is to determine the factors influencing the Saving Behaviour of SMEs and find out the possibilities to enhance the saving behaviour among SMEs in Sri Lanka.

METHODOLOGY

The article is based on secondary data. It is a conceptual model to determine the factors affecting the saving behaviour of SMEs. The Systematic Literature review based on The PRISMA 2020 statement: an updated guideline for reporting systematic reviews (Page, et al., 2021), has been undertaken to reveal the determinants of SME saving. Altogether 75 articles were gathered from databases including Google Scholar, Academia and Web of Science, and websites including journals, conference proceedings, reports and theses of postgraduate students. These papers

were evaluated based on the relevance of the topic. 25 papers were removed because of the irrelevance and duplication of works. Finally, 40 papers were taken for data evaluation through digital reading (Figure 1).

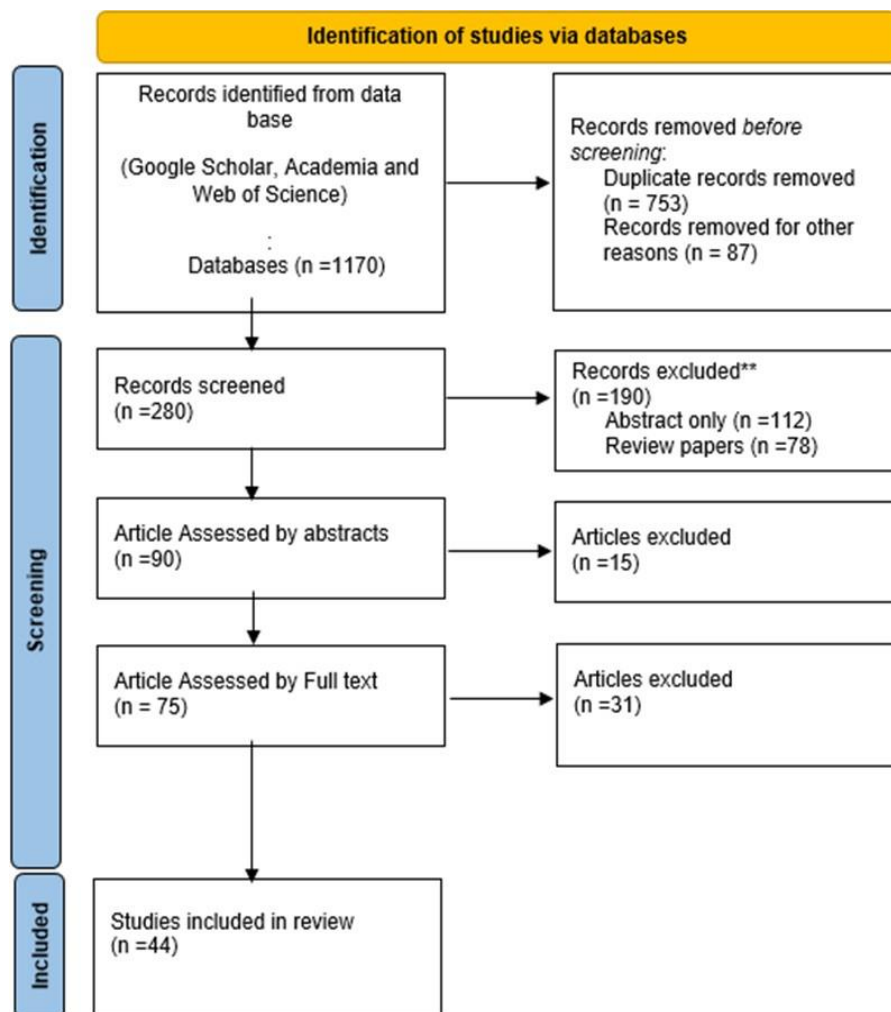


Figure 1: Workflow for SLR for Factors Determining Saving Behaviour of SME

Source: Author constructed based on The PRISMA 2020 statement 2021

RESULTS AND DISCUSSION

There are several factors affecting Saving Behaviour that were discussed in research studies, subject to area or place, type of the SME firm, and size of the firm. Some important factors are discussed below.

Financial Literacy

Financial literacy is the cornerstone of your relationship with money, and it is an ongoing learning process throughout the business. Financial literacy refers to the capacity to comprehend and use various financial abilities, such as personal financial management, budgeting and

investing. It is also defined as the ability to govern and manage financial problems, and also the capacity to switch one's behaviour and attitude to improve one's financial situation (Chen & Volpe, 1998; Raju et al., 1995). Financial literacy is a key driver of saving behaviour (Sabri & Aw, 2019; Sabri & MacDonald, 2010). Awareness-based behaviour is developed to manage money in the future and meet their demands. As a result, the research aimed to improve knowledge of money loan functions, savings, banking services, pensions, and other topics (Falahati et al., 2012). Since it provides people with a better comprehension of their financial holdings, it changes their attitude, thinking, and awareness (Thung et al., 2012; Ameliawati & Setiyani, 2018).

When consumers pay more attention to transaction correctness, double-check financial statements, plan for retirement, and choose wiser financial assets, their personal finances will improve. (Magendans, 2014), although some research revealed no significant association between financial literacy and saving data and showed that financial literacy has a favourable link with saving behaviour (Thung et al., 2012) (Jamal et al., 2015; Widyastuti et al., 2016; Abebe & Mano, 2016; Alwi et al., 2015)

Intention to Saving

Intention to Saving refers to understanding or appreciating individual saving for different motives. It is highly dependent on economic variables (monetary variables) like income money supply and interest rate (Peiris, 2021). Income is one of the important determinants of saving. People will be saved according to their income. Keynes (1936) identified eight different motives: Precaution, Foresight, Calculation, Improvement, Independence, Enterprise, Pride, and Avarice. Despite this, Lusardis, Browning and Lorshin (1996/7) added the ninth one which is to gather deposits to purchase luxury goods, and other durables (the down-payment motive).

According to Udry and Drezeand (1994/5), roughly 30% of family saving in the United States can be explained by precautionary considerations, particularly concerns about old age. Friedman (1957) discovered that Asian refugees save mostly for crises and their children's education in a study of this population. According to Komicha, (2007) and Issahaku, (2011), Japanese households save mostly for retirement and for contingencies, which is consistent with the life cycle concept. In Australia, Masson et al. (2005) discovered that the three most often stated reasons are Retirement, (a life cycle-related motivator), Holidays, and Rainy Days, (a precautionary motive). Tsega and Yeman, (2014) label the first saving as a continuous habit. This is a well-established habit of saving which is not related to any specific goal.

Demographic Variables

Several Demographic factors play a major role in determining the saving behaviour of the firm owner (Madison, 1992; Osundare, 2019). The life-cycle hypothesis establishes a clear link between ageing and saving behaviour in the theoretical concept (Modigliani & Brumberg, 1954). Individuals aged 60 and higher save at a lower rate than those in the immediate younger age groups in practically all nations. Gender has a substantial impact on saving, but the number of dependents, age, and other demographic characteristics also have an impact (Odoemenem et al., 2013). Meanwhile, age, female-to-male ratio, and marital status had little effect on saving levels in the lower-income category (Rehman et al., 2011). According to (Ashok Kumar & Jagadeshwara, 1985), savings is low for younger groups, high for middle age groups, and again low among old age groups.

According to Gedela (2012), the majority of the respondents were between the ages of 18 and 65, indicating that they were economically engaged in saving activities and likely to participate heavily in banking operations. The gender of the home's head of household stresses the need for saving since male populations are higher; males are assumed to be the family's head, and they should, unsurprisingly, be more active in banking operations to keep their family afloat Male family heads save more than female household heads (Yusuf et al., 2020).

Attitude Towards Saving

The response and appraisal of a person's negative or positive thoughts toward an item, which results in favourable or bad behaviour evaluation effects, is referred to as attitude (Berkowitz, 1972). Affective, Cognitive, and Conative factors all influence one's attitude.

The affective component is made up of unique emotional experiences, whereas the cognitive component is made up of individual beliefs or views of an item (Berkowitz, 1972). The cognitive component shows up as a predisposition to behave in ways that are influenced by individual attitudes (Secord & Backman, 1965). A person's attitude toward saving reflects his mood as well as a positive or negative response to saving habits. Individuals who are enthusiastic about saving are more likely to do so at the same time. Saving with a positive attitude entails instilling a sense of security, providing benefits, and following societal trends (Widyastuti et al., 2016). According to Furnham and Tankel (2015), there is a link between a saving mindset and saving behaviour.

Social Influence

Individual saving is an important part of every society's social environment, and it is expected to aid in economic growth and development. It is vital to evaluate the social context in which the individual lives to take the proper saving action. Individual saving is viewed as a social background component in every culture, and it is thought to be beneficial to economic growth and development. It is critical to assess the individual's social setting to take the appropriate rescue action. Social impact is a major direct predictor of saving behaviour among Ugandans, according to a previous study (Homan, 2016). Social influence is the effect of other people's actions on the social environment around them.

The use of social power by a person or group to affect the attitudes or actions of other people or groups in a certain way is known as social influence. Social interactions Saving Behaviour is difficult since it requires being favourably influenced by one's circumstances. Aside from relationships, the habit necessitates the acquisition of critical abilities such as the capacity to plan a savings strategy and the formulation of calculations (Lusardi & Mitchell, 2014). As a result, people must be taught and encouraged to use positive social influence as well as successful saving behaviour (Khatun, 2018), (Jamal et al., 2015).

Social Influence is generally calculated by asking respondents how likely their closest friends, family, or co-workers would be to urge people to participate in a given action (Dinc & Budic 2016). To meet the current study, Dangol and Maharjan (2018), Hanachi (2005), Dinc and Budic (2016), and Kim et al. (2019) adapted and modified their measuring items.

The Above discussion is summarised in Table 1.

Table 1: Factors Determining Saving Behaviour

Factors	Relationship and Connectivity
1. Financial literacy	(Abebe, & Mano, 2016) (Alwi et al., 2015) (Ameliawati & Setiyani, 2018) (Chen & Volpe, 1998) (Falahati et al., 2012) (Jamal et al., 2015) (Magendans, 2014) (Raju et al., 1995) (Sabri & Aw, 2019) (Thung et al., 2012)
2. Intention to Saving	(Bayoumi, and Samiei 2005) (Friedman 1957) (Issahaku 2011) (Keynes, 1936). (Komicha, 2007) (Lusardis et al., 1996/7) (Udry & Drezeand, 1994/5)
3. Demographic variables	(Ashok Kumar & Jagadeshwara, 1985) (Gedela, 2012) (Modigliani & Brumberg, 1954) (Odoemenem et al., 2013) (Rehman et al., 2011) (Yusuf et al., 2020)
4. Attitude towards saving	(Berkowitz, 1972). (Furnham & Tanel, 2015), (Secord & Backman, 1965) (Widyastuti et al., 2016).
5. Social Influence	(Dangol & Maharjan, 2018), (Dinc & Budic, 2016), (Hanachi, 2005), (Homan, 2016). (Jamal et al., 2015) (Khatun, 2018) (Kim et al., 2019) (Lusardi & Mitchell, 2014).

Source: Author, 2022

CONCLUSIONS AND IMPLICATIONS

Through a systematic literature analysis, the current study presents an essential research conceptual model for understanding the variables impacting the saving behaviour of small and medium-sized business owners, as well as the connections between the components. Financial literacy, saving intention, demographic characteristics, saving attitude, and social influence are all low or moderate, according to the study, and have a beneficial impact on saving behaviour. Savings have a disproportionately negative societal impact. The importance of financial literacy cannot be overstated. Most essential, both SME owners and people with strong financial literacy should be able to teach others how to save properly. Mixed methods research should be

conducted in the future, as they may show other factors that impact people's saving habits. Furthermore, the survey might be entirely qualitative, allowing for the collection of extensive data on saving habits. Finally, this study (cross-sectional) looks at a person's saving behaviours at a single moment in time; it proposes a longitudinal study for more trustworthy results.

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REFERENCES

- Abebe, G., Tekle, B., & Mano, Y. (2016). Changing saving and investment behaviour: the impact of financial literacy training and reminders on micro-business. CSAE Working Paper Series 2016-08, Centre for the Study of African Economies, University of Oxford.
- Almeida, R. (2007). The labor market effects of foreign owned firms. *Journal of international Economics*, 72(1), 75-96.
- Alwi, S., Amir Hashim, I. Z., & Ali, M. S. (2015, August). Factors affecting savings habits within millennials in malaysia: Case study on students of Taylor's university. In *Proceedings of the Fourth Asia-Pacific Conference on Global Business, Economics, Finance and Social Sciences* (pp. 1-10).
- Ameliawati, M., & Setiyani, R. (2018). The influence of financial attitude, financial socialization, and financial experience to financial management behavior with financial literacy as the mediation variable. *KnE Social Sciences*, 811-832.
- Ashok Kumar, P., & Jagadeshwara, M. (1985). Demographic Change and Household Savings Behaviour in India. *Indian Journal of Economics*, 65, 95-111.
- Berkowitz, L. (1972). Social norms, feelings, and other factors affecting helping and altruism. In *Advances in experimental social psychology* (Vol. 6, pp. 63-108). Academic Press.
- Central Bank of Sri Lanka. (2021). Annual Report. Colombo: Central Bank of Sri Lanka.
- Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial services review*, 7(2), 107-128.
- Dangol, J., & Maharjan, S. (2018). Parental and peer influence on the saving behavior of the youth. *International Research Journal of Management Science*, 3, 42-63.

- Dinc, M. S., & Budic, S. (2016). The impact of personal attitude, subjective norm, and perceived behavioural control on entrepreneurial intentions of women. *Eurasian Journal of Business and Economics*, 9(17), 23-35
- Falahati, L., Sabri, M. F., & Paim, L. H. (2012). Assessment a model of financial satisfaction predictors: Examining the mediate effect of financial behaviour and financial strain. *World Applied Sciences Journal*, 20(2), 190-197.
- Franzoi, S. L. (2006). *Social Psychology*. 154, 354-373.
- Friedman, (1957). *A Theory of the Consumption Function*. Princeton, NJ: Princeton University Press for the National Bureau of Economic Research.
- Furnham, A., & Goletto-Tankel, M.-P. (2002). Understanding savings, pensions and life assurance in 16-21-year-olds. *Human Relations*, 55(5), 603-628.
- Gedela, S. P. R. (2012). Determinants of saving behaviour in rural and tribal households (An empirical analysis of Visakhapatnam District). *International Journal of Research in Social Sciences*, 2(3), 108-128.
- Hanachi, P. (2005). Development of a questionnaire for assessing factors predicting blood donation among university students: a pilot study
- Jalalian, M., Latiff, L., Hassan, S. T. S., Hanachi, P., & Othman, M. (2010). Development of a questionnaire for assessing factors predicting blood donation among university students: a pilot study. *Southeast Asian journal of tropical medicine and public health*, 41(3), 660.
- Homan, A. M. (2016). The influence of parental financial teaching on saving and borrowing behaviour. Unpublished master's thesis, University of Groningen.
- Issahaku, and Haruna, (2011). Determinants of Saving and Investment in Deprived District Capitals in Ghana - A Case Study of Nadowli in the Upper West Region of Ghana. *Wilolud Journals, Continental J. Social Sciences*, 4(1), 1 – 12.
- Jamal, A. A. A., Ramlan, W. K., Karim, M. A., & Osman, Z. (2015). The effects of social influence and financial literacy on savings behavior: A study on students of higher learning institutions in Kota Kinabalu, Sabah. *International Journal of Business and Social Science*, 6(11), 110-119.
- Keynes, (1936). *The general theory of employment, interest and money*. London: Macmillan Press Ltd.
- Khatun, M. (2018). Effect of Financial Literacy and Parental Socialization on Students Savings Behaviour of Bangladesh. *International Journal of Scientific and Research Publications (IJSRP)*, 8(12), 296-305.

- Kim, J., Eys, M., Robertson-Wilson, J., Dunn, E., & Rellinger, K. (2019). Subjective norms matter for physical activity intentions more than previously thought: Reconsidering measurement and analytical approaches. *Psychology of Sport and Exercise*, 43, 359-367.
- Kio, M. Y., & et.al. (2021). Loans and Savings in Business Growth of Small and Medium Enterprises (SMES) In the North Central Nigeria: An Empirical Analysis. *International Journal of Business and Management Invention*, 10(1), 57-65.
- Komicha and Hussien, (2007). Farm Household Economic Behaviour in Imperfect Financial Markets, Doctoral thesis, Acta Universitatis Agriculturae Sueciae, 2007: 78.
- Lahiri, A. (1989). Lahiri A (1989): Dynamics of Asian Savings: The Role of Growth and Age Structure, IMF Staff Papers. 36: 228-61. IMF Staff Papers, 228-261.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic literature*, 52(1), 5-44
- Lusardis, Browning and Lorshin, (1996/7). Flexible Exchange Rates and the Theory of Employment. *Review of Economics and Statistics*, 281-299.
- Magendans, J. (2014). The cost of self-protective measures: psychological predictors of saving money for a financial buffer. University of Twente.
- Masson, Bayoumi and Samiei, (2005). International Evidence on the Determinants of Private Saving. *The World Bank Economic Review*, 12(3), 483–501
- Modigliani, F., & Brumberg, R. (1954). Utility Analysis and the Consumption Function: An Interpretation of Cross-Sectional Data.
- Madison, S. (1992). In Uremadu S.O. (2007) Core determinants of financial savings: an empirical analysis for national monetary policy formation. *International Review of Business Research Papers*, 356-367.
- Odoemenem, I. U., Ezihe, J. A. C., & Akerele, S. O. (2013). Saving and investment pattern of small-scale farmers of Benue State, Nigeria. *Global Journal of Human Social Science Sociology and Culture*, 13(1), 7-12.
- Osundare, F.O. (2019). Social Economic Determinants of Income, Savings and Investments among Cocoa Farmers in Idanre Local Government Area of Ondo State, *Nigeria International Journal of Agriculture and Food Science*, 5(2)
- Peiris, T. U. I. (2021). Effect of Financial Literacy on Individual Savings Behaviour; the Mediation Role of Intention to Saving. *European Journal of Business and Management Research*, 6(5), 94-99.

- Raju, P. S., Lonial, S. C., & Mangold, W. (1995). Differential effects of subjective knowledge, objective knowledge, and usage experience on decision-making: *An exploratory Journal of Consumer Psychology*, 4(2), 153-180.
- Rehman, H., Chaudhry, I. S., Farid, Z. M., & Bas, Z. M. (2011). Rural-Urban Saving Differentials in Pakistan: Investigation from Primary Data. *A Research Journal of South Asian Studies*.
- Sabri, M. F., & Aw, E. C. X. (2019). Financial literacy and related outcomes: The role of financial information sources. *International journal of business and society*, 20(1), 286-298.
- Sabri, M. F., & MacDonald, M. (2010). Savings behavior and financial problems among college students: The role of financial literacy in Malaysia. *Cross-Cultural Communication*, 6(3), 103-110.
- Secord, P. F., & Backman, C. W. (1965). An interpersonal approach to personality. *Progress in experimental personality research*, 2, 91-125.
- Thung, C. M., & et al. (2012). Determinants of Saving Behaviour among the University students in Malaysia. University Tunku Abdhul Rahman.
- Udry, C., & Drezeand, (1994/5). Risk and insurance in rural credit market. An empirical investigation into northern Nigeria. *Review of economic studies*, 2, 115 – 130.
- Widyastuti, U., Suhud, U., & Sumiati, A. (2016). The impact of financial literacy on student teachers' saving intention and saving behaviour. *Mediterranean Journal of Social Sciences*, 7(6), 41.
- World Bank Group. (2022). Small and Medium Enterprises (SMEs) Finance. Retrieved from The World Bank: <https://www.worldbank.org/en/topic/sme/finance>
- Yusuf, S. A., Yusuf, S. A., Adesope, A. A., & Adebayo, A. A. (2020). Assessment of Factors Influencing the Saving Culture Among Rural Households in Ibarapa East Local Government of Oyo State, Nigeria. *Journal of Research in Forestry, Wildlife & Environment*.

A PROPOSED ANALYTICAL FRAMEWORK FOR THE CONTENT ANALYSIS OF CORPORATE DISCLOSURES ON A CIRCULAR ECONOMY

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ABSTRACT

Purpose: This paper proposes an analytical framework for examining how and to what extent the circular economy concepts exist in company disclosures.

Design/methodology/approach: This paper presents the conceptual development of an analytical framework to content analyse corporate entities' annual/sustainability or integrated reports. It is developed by combining the extant literature on circular economy development stages and the assessment of the quality of corporate sustainability disclosure.

Findings: The analytical framework developed in the study suggests that corporate disclosures on the circular economy may be studied along two dimensions; a) different stages of circular economy application (eco-efficiency and product stewardship and eco-effectiveness), and b) the quality of disclosures of their reporting practice. Under the above stages, keywords about a circular economy can be evaluated under two main systems of resources and energy. Based on these, the quality of disclosure is divided into four categories: “buzzwords”, “initiatives”, “practice or reporting”, and “accounting.”

Research implications: This study provides future scholars with an analytical framework for assessing company commitment to a circular economy as evidenced by disclosures that go beyond counting the number of disclosures (i.e., a dichotomous analysis). It also assists managers in identifying circular economy disclosure mechanisms to improve their reporting level and foster deeper stakeholder communication.

Originality/value: This is one of the first studies to propose a structured analytical framework/approach for evaluating how organisations report on their commitment to circular economy concepts. In proposing the analytical approach, it blends circular economy concepts with the quality of corporate disclosure research.

Paper type: Concept paper

Keywords: Circular Economy, Content Analysis, Corporate Reporting, Sustainability and Integrated Reports

INTRODUCTION

A positive relationship between economic growth, resource consumption, and waste generation is a critical challenge in the traditional linear economy. Therefore, countries are compelled to decouple resource utilisation from economic growth; hence, models such as the circular economy (CE) have become prominent in recent years. The CE is undoubtedly becoming a widely discussed concept in sustainability literature and the global business community (Centobelli et al., 2020). The goal of a CE is to replace the existing linear consumption model, where raw materials are extracted and processed into finished products and become waste after they have been consumed. With closed systems, they reuse resources and conserve energy, thus, decoupling resource consumption from economic growth. The proponents of the CE call for a transformation of current corporate practices from a linear “take-make-waste” into an infinite loop where the “cradle-to-cradle” approach is being used. The CE principles are applied at various levels in an economy, including global, national, city, company, and individual levels (Gunarathne et al., 2020).

CE requires organisations to rethink their supply chains and business models. For instance, several scholars have identified the importance of adopting and integrating CE principles into business practices. Accounting is envisioned as a key aspect in the organisational transition towards corporate sustainability development, such as CE, by providing corporate decision-makers with the requisite information to plan, make decisions, and control. Further, the extant literature largely agrees that the creation of contributions to corporate sustainability can be supported with measurement, management, and communication approaches if performance measurement and management are fundamentally reorganised to better consider social and environmental issues.

There are significant developments in financial accounting and reporting procedures for social and environmental initiatives. This is predominantly owing to the advancements in integrated reporting and sustainability reporting, with a substantial body of academic work on Social and Environmental Accounting. However, there is still a lack of implementation of accounting standards and low expertise of accountants in areas such as CE, leading to inferior accountability measures (Tiscini et al., 2021). Further, the conventional corporate reporting practice has been subjected to heavy criticism due to its excessive reliance on historical financial performance, ignorance of non-financial performance, and limited consideration of stakeholders’ relationships and value creation. However, it is argued that there is an opportunity

to support CE actions and initiatives by adapting novel reporting practices such as integrated reporting. Despite the importance of CE-related corporate reporting, the way companies communicate their transition toward a CE through sustainability and integrated reporting has not yet been adequately examined (Gunarathne et al., 2021).

Furthermore, studies carried out about sustainability-related disclosure mainly target quantity over quality. For instance, Gunarathne et al. (2021), in one of the first papers to analyse the CE disclosures in annual reports, follow a dichotomous frequency counting of CE-related keywords. Therefore, these studies do not analyse how effectively and deeply the information is provided to the users. Hence, this paper provides an analytical approach covering both quantitative and qualitative aspects of disclosures. This paper, thus, aims to explore how and to what extent the CE notions appear in annual, sustainability, or integrated reports and seeks to answer, ‘How to analyse the extent to which the CE principles are portrayed in sustainability and integrated reports?’

METHODOLOGY

This concept paper is a part of a large project that intends to identify the accounting disclosures of early adopters of CE. The early adopters are selected using purposive sampling by focusing on the companies that voluntarily contributed to developing the “Circulytics¹” initiative of the Ellen McArthur Foundation. There are 126 volunteering companies as of October 2022, and their corporate reporting documents are evaluated to select the best sample to include in the study. The availability of sustainability/integrated reports for three consecutive years will be considered the primary criteria.

The analytical framework developed in the study combines two dimensions: a) CE development stages and b) assessment of the quality of corporate sustainability disclosure. Firstly, based on extant literature, the framework distinguishes between two different stages of CE development, namely, (1) eco-effectiveness and product stewardship, and (2) eco-efficiency (Niero et al., 2017). The framework categorises the CE principles for each stage under two main systems: resources and energy. The keywords for each category are developed by authors based on multiple sources, including scholarly articles such as Gunarathne et al.

¹ Circulytics supports a company’s transition towards the CE, regardless of industry, complexity, and size. Going beyond assessing products and material flows, this free company-level measuring tool reveals the extent to which a company has achieved circularity across its entire operations.

(2021) and Centobelli et al. (2020), Tiscini et al. (2021), and industry/consultation agency publications such as the reports of Ellen MacArthur Foundation and Platform for Accelerating the Circular Economy (PACE).

Secondly, this framework captures the disclosure quality of CE notions. Following Staden and Hooks (2007), the disclosure quality is measured using a scale considering the nature and the depth of information provided for stakeholders. The framework categorises the disclosure quality on a scale of 1 to 4, and each number is assigned key characteristics, as presented in Table 1.

Table 1: The Quality Scale of CE Disclosures

Number	Description
1	Buzzword – Uses the keyword freely without substance. However, no proper explanation is provided and not linked with a particular initiative, practice, measurement, or comparison.
2	Initiative – Talks about an initiative taken by the company. The concept is presented, either in progress or being formed. However, specific practices and measurement methods are not provided.
3	Practice or Reporting – Explains a particular CE-related practice undertaken by the company with specific examples. However, performance is not disclosed in sufficient detail to determine whether the practice is measured OR Operations aligned with CE principles disclosed and relevant business practices in place; there is no evidence provided to substantiate the level and the extent of the practice.
4	Accounting – Explains a particular CE-related practice together with output or outcome measured in monetary or non-monetary terms to substantiate the level and extent of the practice. Clear outcomes are derived from the practice, and such practices are measured and reported against/as relevant to the practice. The results may be compared with previous years.

DISCUSSION, CONCLUSIONS, AND IMPLICATIONS

In developing the study's analytical framework, the above parameters are linked in a matrix structure combining CE keywords and disclosure quality (Figure 1).

Development stage of CE	CE system	Keywords	Quality of disclosures			
			Buzzword	Initiatives	Practice or reporting	Accounting
Eco-efficiency and product stewardship	Resources					
	Energy					
Eco-effectiveness	Resources					
	Energy					

Figure 1: Framework to Analyse CE-Related Disclosures in Corporate Reports

It suggests that corporate disclosures on the CE should be analysed based on the development stages of CE and the quality of disclosures. They can be further analysed under two CE systems, resources, and energy. To the best of the authors' knowledge, this is the first study to propose a comprehensive framework to analyse CE disclosures in corporate communications.

By extending the previously developed dichotomous analysis methodologies, the framework proposed in the study offers future sustainability researchers an analytical approach to examine the extent of corporate disclosures pertaining to CE. Additionally, it enables the managers in charge of corporate communications to pinpoint ways to raise the grade of their disclosures in emerging sustainability domains like CE for better and deeper stakeholder communication. The proposed analytical approach will be used in the future to assess the corporate disclosures of the early CE principles adopters.

REFERENCES

- Centobelli, P., Cerchione, R., Chiaroni, D., Del Vecchio, P., & Urbinati, A. (2020). Designing business models in circular economy: A systematic literature review and research agenda. *Business Strategy and The Environment*, 29(4), 1734-1749. <https://doi.org/10.1002/bse.2466>
- Gunarathne, N., Wijayasundara, M., Senaratne, S., Kanchana, P., & Cooray, T. (2021). Uncovering corporate disclosure for a circular economy: An analysis of sustainability and integrated reporting by Sri Lankan companies. *Sustainable Production and Consumption*, 27, 787-801. <https://doi.org/10.1016/j.spc.2021.02.003>
- Niero, M., Hauschild, M., Hoffmeyer, S., & Olsen, S. (2017). Combining eco-efficiency and eco-effectiveness for continuous loop beverage packaging systems: Lessons from the Carlsberg Circular Community. *Journal of Industrial Ecology*, 21(3), 742-753. <https://doi.org/10.1111/jiec.12554>
- Tiscini, R., Martiniello, L., & Lombardi, R. (2021). Circular economy and environmental disclosure in sustainability reports: Empirical evidence in cosmetic companies. *Business Strategy and the Environment*, 31(3), 892-907. <https://doi.org/10.1002/bse.2924>
- van Staden, C., & Hooks, J. (2007). A comprehensive comparison of corporate environmental reporting and responsiveness. *The British Accounting Review*, 39(3), 197-210. <https://doi.org/10.1016/j.bar.2007.05.004>

THE IMPACT OF INTEGRATED REPORTING ON FIRM PERFORMANCE: EVIDENCE FROM LISTED COMPANIES IN SRI LANKA

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ABSTRACT

Purpose: The paper aims to identify the impact of the adoption of Integrated Reporting (IR) on the firm market and financial performance.

Methodology: A quantitative research approach is used in this study. Panel Regression was employed to examine the impact of IR on the firm performance. This research relies on secondary data which was collected from published annual reports of listed companies on the Colombo Stock Exchange (CSE). Data was collected from a sample of 50 companies listed in different sectors over consecutive five financial years from 2016 to 2020. There were 250 firm-year observations.

Findings: According to the results of the study, there is a significant and weekly negative relationship between IR and ROE. That means IR has a significant impact on financial performance. Market Capitalisation and IR have a significant relationship indicating IR exhibits a substantial influence on market performance.

Research implications: The findings of this study will assist annual report preparation and regulators in implementing IIRF in the Sri Lankan context. Findings have several implications for annual report preparers and policymakers since IR has a significant impact on both financial performance and market performance. Regulatory bodies and standard setters may have implications in relation to the laws and regulations governing voluntary disclosures. More importantly, the study highlights implications for policymakers and practitioners on how investors make use of the accounting information and the voluntary information disclosed in annual reports in their decision-making

Originality/value: This study has contributed to the existing literature on the adoption of Integrated Reporting (IR) as it is examined whether IR significantly impacts firm performance.

Paper type: Research paper

Keywords: Colombo Stock Exchange, Firm Performance, Integrated Reporting

INTRODUCTION

With the release of the International Integrated Reporting Framework (IIRF) by the International Integrated Reporting Council (IIRC) in 2013, integrated reporting (IR) received attention as a new reporting format. Many previous studies have revealed a growing trend to adopt IR practice in the preparation of annual reports, and these guidelines appear to have a dramatic impact on IR adopters around the world, including in Sri Lanka. It is critical in this context to measure its impact on IR users in terms of the financial performance and market performance of firms. IR entails providing both financial and non-financial information in addition to environmental, social, and governance data, in the same document (Adams & Simnett, 2011). Although several studies have seemingly addressed this issue, these studies are constrained by their choice of method and contextual setting. Therefore, the impact of IR on firm performance is still questionable and it makes this area to be further investigated. However, in the Sri Lankan context, there are limited studies on this issue. For instance, in South Africa where IR adoption is mandatory, Lee and Yeo (2016) found a positive association between the quality of IR information and the firm value. Islam (2021) investigated the relationship between IR and firm's performance in terms of operational, financial, and market growth performance and revealed that IR has a significant positive impact on all three types of performance of companies in Bangladesh where IR adoption is voluntary. As IR seeks to explain to financial capital providers how an entity develops value over time, this study assessed the influence of integrated reporting on the firm performance of Sri Lankan listed companies by filling an empirical gap.

METHODOLOGY

This research relies on secondary data which was collected from published annual reports of listed companies on the Colombo Stock Exchange (CSE). Data was collected from a sample of 50 companies (Both IR adapted and not adapted companies) listed in 19 sectors over five consecutive financial years from 2016 to 2020. The stratified sampling method was used to select the sample from each sector. This research belongs to the positivism category which is connected with the deductive approach.

IR was the independent variable in this study. An integrated reporting index including 40 items was developed based on the International Integrated Reporting Framework (IIRF) to measure the Integrated Reporting. Firm performance was the dependent variable. Return on Equity (ROE) was used to measure the firm financial performance while Market Capitalisation was

used to measure the market performance. Firm size and firm age were considered as control variables. Figure 1 illustrates the conceptual framework of this study.

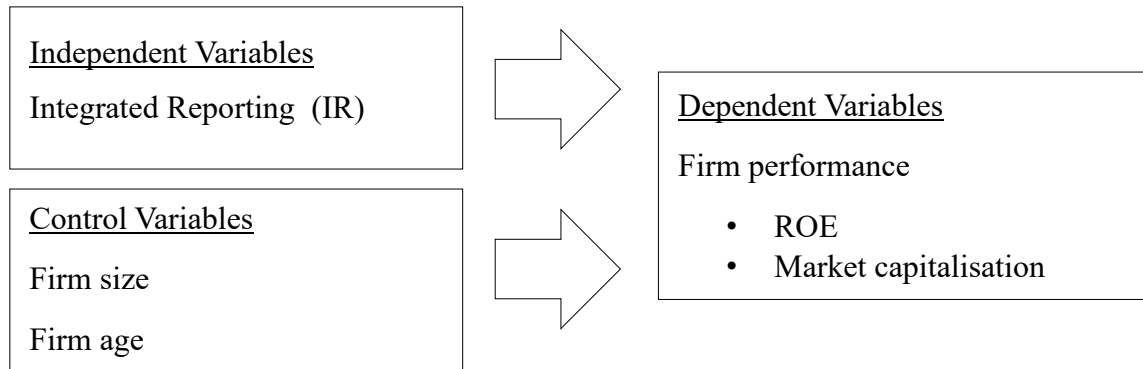


Figure 1: Conceptual Framework

The following regression models can be developed in accordance with the conceptual framework:

Model 1

$$ROE = \alpha + \beta_1 IGRI + \beta_2 FZ + \beta_3 FA + \varepsilon$$

Model 2

$$MC = \alpha + \beta_1 IGRI + \beta_2 FZ + \beta_3 FA + \varepsilon$$

This study will use panel regression analysis with panel data to measure the impact of the independent variable on the dependent variables. The conceptual framework, models, and existing literature are used to construct the following hypotheses, which are consistent with the research objectives.

H₁: There is a significant positive impact of the adoption of Integrated Reporting on ROE

H₂: There is a significant positive impact of the adoption of Integrated Reporting on Market Capitalisation

RESULTS AND DISCUSSION

The findings of this study revealed that the average companies have complied with IIRF at 77.6% level when they are preparing their integrated annual reports. The Hausman test was used to select the most appropriate regression model (Fixed Effect Model or the Random Effect model) to analyse the panel data. The models developed under the Hausman test are as follows,

Model 1 = Random Effect Model is Appropriate

Model 2 = Fixed Effect Model is Appropriate

When considering the ROE, the probability value of the Chi-Square Statistic is 0.025, which is significant at the 5% significant level suggesting that the alternative hypothesis is accepted. Thereby Hausman test concluded that the fixed effect model is more appropriate to analyze model 01 (Table 1).

Table 1: ROE (Fixed effect model)

Variable	Coefficient	t-Statistic	Prob.
<i>C</i>	1.660	1.364	0.173
<i>IGRI</i>	-0.518	-3.087	0.002
<i>FZ</i>	-0.045	-0.851	0.395
<i>FA</i>	-0.0007	-0.225	0.821
<i>R-squared</i>	0.901	F-Statistic	6.336
<i>Adjusted R-squared</i>	0.875	Prob(F-Statistic)	0.0003

The following equation can be derived using the Fixed Effect Regression Model's results.

$$ROE = 1.660 - 0.518 IGRI - 0.045 FZ - 0.0007 FA$$

This independent variable is significant since the p-value ($p=0.0023$) is less than 0.05. And the t-statistic value is -3.087. According to this study, it is specific that there is a significant impact of integrated reporting on ROE. The coefficient value is -0.518. It specifies that there is a negative impact of integrated reporting on ROE. This will course to accept *H1* to satisfy the first objective.

When considering **market capitalisation**, the probability value of the Chi-Square statistic is zero, which is significant at a level of 5%. Accordingly, the fixed-effect model is the best model to assess Model 02 which explains market capitalisation as the dependent variable of the model.

Table 2: Market Capitalisation (Fixed effect model)

Variable	Coefficient	t-Statistic	Prob.
<i>C</i>	21.173	10.174	0
<i>IGRI</i>	-0.839	-2.922	0.003
<i>FZ</i>	0.094	1.042	0.298
<i>FA</i>	-0.008	-1.609	0.109
<i>R-squared</i>	0.970	F-Statistic	164.70
<i>Adjusted R-squared</i>	0.963	Prob(F-Statistic)	0

Based on the results of the Random Effect Regression Model, the following equation can be identified,

$$MC = 21.173 - 0.839 IGRI + 0.094 FZ - 0.008 FA$$

The coefficient value is -0.839. It specifies that there is a negative impact of integrated reporting on MC. The Probability value of the coefficient is 0.0039 which is significant at a 5% confidence level. Based on the above result, it can be concluded that there is a negative and statistically significant impact of integrated reporting on market capitalisation. This will course to accept *H2* to satisfy the second objective.

However, the results are contradicting the findings of other researchers (Yeo, 2016; Islam, 2021) who revealed a positive impact of IR on ROE and market capitalisation. This result may be due to the complexity of the integrated annual report which is not understandable for the users of corporate annual reports. Abhayawansa et al. (2018) also pointed out that the improvements resulting from the adoption of integrated reporting are not relevant to analysts, as the reports do not provide the information required by analysts in sufficient detail or preferred format.

CONCLUSIONS AND IMPLICATIONS

The objective of this study was to identify the impact of the adoption of IR on the firm market performance and financial performance. Results revealed that there is a significant negative impact of IR on ROE and also has a significant negative impact on Market Capitalisation. Thereby, all hypotheses are rejected. The findings of this study will assist annual report preparers and regulators in implementing IIRF in the Sri Lankan context. Findings have several implications for annual report preparers and policymakers. Annual report producers should

concentrate more on delivering important information clearly in their annual reports. Furthermore, policymakers should develop more specific guidelines for conveying non-financial information via annual reports. However, there are some limitations of the study. This study is based on secondary data and there may be inherent limitations of using secondary data such as low accuracy of data. Future researchers can continue this study further by expanding the sample size and increasing the number of firm performance variables and also considering the views of managers.

REFERENCES

- Abhayawansa, S., Eljido-Ten, E., & Dumay, J. (2018). A practice theoretical analysis of the irrelevance of integrated reporting to mainstream sell-side analysts. *Accounting & Finance*, 59(3), 1615–1647. <https://doi.org/10.1111/acfi.12367>
- Adams, S., & Simnett, R. (2011). Integrated Reporting: An Opportunity for Australia's Not-for-Profit Sector. *Australian Accounting Review*, 21(3), 292-301.
- El-Deeb, M. S. (2019). The impact of integrated reporting on firm value and performance: Evidence from Egypt. *Alexandria Journal of Accounting Research*, 3(2), 1-34
- Ghosh, S. (2019). Integrated Reporting in India: Research Findings and Insights. *Journal of Intellectual Capital*, 14(2), 365-386
- Islam, M. (2020). Investigating the relationship between integrated reporting and firm performance in a voluntary disclosure regime: insights from Bangladesh. *Asian Journal of Accounting Research*, 6(2), 228-245.
- Lee, K.W., Yeo, G. H. H. (2016). The association between integrated reporting and firm valuation *Review of Quantitative Finance and Accounting*, 47(4), 125-148.
- Matemane, R., & Wentzel, R. (2019). Integrated reporting and financial performance of South African listed banks. *Banks and Bank Systems*, 14(2), 128-139.

IMPACT OF CORPORATE GOVERNANCE AND AUDIT QUALITY ON THE EARNINGS MANAGEMENT: EVIDENCE FROM SRI LANKA

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ABSTRACT

Purpose: This paper examines the impact of corporate governance and audit quality on the earnings management of listed companies in Sri Lanka.

Design/methodology/approach: This study adopts a quantitative research approach. The data was extracted from the audited financial statements of a sample of 41 companies for the period from 2014/15 to 2018/19. Descriptive statistics, correlation analysis, and multiple regressions are used to analyse the quantitative data of the study.

Findings: The findings of the study reveal that corporate governance mechanisms have a significant impact on the degree of earnings management in Sri Lanka, while audit quality does not show a significant relationship with earnings management. Audit committee size, CEO duality, and board independence are negatively and significantly associated with discretionary accruals. Board size shows an insignificant but positive relationship. Both the proxies of audit quality (audit firm size and audit fees) show an insignificant relationship with discretionary accruals. Leverage and return on assets are positively related to earnings management, while the cash flow from operations shows a negative relationship.

Research implications: The findings of this study are useful to investors in instances of taking decisions based on financial statements to be mindful of relying on financial statements in decision-making. Moreover, the findings are of interest to the owners of the business in executing corporate governance mechanisms.

Originality/value: The findings also provide useful insights to regulators, policymakers, and professional accounting bodies to devise corporate governance mechanisms.

Paper type: Research paper

Keywords: Audit Quality, Corporate Governance, Earnings Management, Investors, Sri Lanka.

INTRODUCTION

Financial statements are the most important source of information for investment decisions. The most significant variable in the financial statement that attracts attention is the earnings of the company. The earnings of a company are the residual income, which depicts the underlying financial performance of that company (Pakianathan, 2017). Theoretically, the value of equity is the present value of the entity's future earnings. Therefore, the reported earnings of a company further communicate information regarding corporate performance in addition to the base on which investment and allocation decisions are made. When making such decisions, investors believe and base their opinion on the reported earnings of that company. However, the extent to which the reported earnings are reliable is still a reasonable question in the minds of the investors. Apart from all these questions, still, there is a trust between the preparers and the users of the financial statements that the reported financial information is prepared in accordance with relevant accounting standards and ethics, and with extreme economic reality.

Literature indicates that such investor trust is broken into pieces when earnings are managed to create a falsified picture than showing the reality (Pakianathan, 2017). Earnings management is the manipulation of reported income through accounting practices and decisions. The evolution of accounting has given a considerable extent of space for the professional judgments of accountants. However, managers and accountants misuse this chance to exercise their professional judgment from an opportunistic perspective rather than efficiency, to create a falsified picture of profitability. Earnings management occurs mainly due to the inconsistency between the interests of the shareholders and the management, which is described by the agency theory. The contract between the principal and the agent may give rise to a conflict of interest if an agent fails to act in accordance with the principal's wishes. In the corporate context, this conflict may result in the agent preparing financial statements in such a way that benefits their interests only. Therefore, the agent may manipulate the original performances to gain some benefit.

In the pursuit of solutions to this issue, companies began to practice corporate governance practices and established internal audit departments. The requirement of an external independent audit of the financial statements prepared by the management of the company was also made compulsory for the listed companies in the Colombo Stock exchange in the

context of Sri Lanka. Practising corporate governance and external auditing plays an important role in these solutions. Corporate governance is the set of processes, rules, regulations and policies that governs corporate behaviour. The function of corporate governance is to effectively monitor top management and decrease agency costs stemming from conflicts of interest between shareholders and the management. There is a strong belief that the presence of effective and good corporate governance practices in an entity minimises earnings management.

On the other hand, external auditing has also laid the foundation to eliminate agency costs and earnings management. Thus, it reveals that the audited statements of financial information are trustworthy, reliable, and accurate. Despite all these control measures, we can still experience earnings management. This can be proved by scandals. The fall of Pramuka Bank, Touchwood Investments, Golden Key PLC, and ETI Finance were some prominent cases reported recently in Sri Lanka (Pakianathan, 2017). In the global context, Enron, WorldCom, Tyco and Satyam are the most popular examples.

The results of the study contribute to the existing literature on corporate governance, audit quality, and earnings management in the following ways. Prior research on corporate governance, audit quality, and earnings management has been carried out in developed countries and there is a dearth of literature pertaining to developing countries, particularly in the Sri Lankan context. Available literature provides mixed evidence and thus comprehensive evidence on the subjects is missing. Against this background, the present study contributes to the existing literature by answering the research question of how corporate governance and audit quality affect earnings management in the listed companies in Sri Lanka.

This study examines the impact of corporate governance and audit quality on earnings management in the listed companies in Sri Lanka. However, there is a dearth of literature available in the Sri Lankan context. Moreover, the extant literature provides mixed results and therefore, comprehensive evidence is missing relating to the subject. In such contexts, this study contributes to the existing literature by integrating both corporate governance and audit quality on earnings management which is an under-researched area in Sri Lanka.

METHODOLOGY

The aim of this study is to identify the impact of corporate governance and audit quality on the earnings management of listed companies in Sri Lanka. Accordingly, the listed companies in the Colombo Stock Exchange (CSE) of Sri Lanka, excluding banks, insurance companies, and finance companies, is the population of the study. Out of such population, this study focuses primarily on 41 companies with the highest market capitalisation of which the final year ending is 31st March. Further, the study covers the present five-year period from 2015 to 2019 as the sample period of the study. The data used in the study is secondary data. It was obtained from the published audited annual reports of the sample companies from the website of CSE. The independent variables of the study are corporate governance and audit quality. The proxies used under corporate governance and audit quality are justified by the relevant literature. Accordingly, the board size, CEO duality, Audit committee and board independence are the proxies used to measure corporate governance while audit firm size and audit fees are the proxies used to measure audit quality. Earnings Management is measured using the discretionary accruals approach and specifically using the Modified Jones Model. This model measures the discretionary accruals for a company as the difference between total accruals and nondiscretionary accruals. Table 1 below defines the variable measurements. The study uses the discretionary accruals defined as in Modified Jones Model, $TACC = NI - CFO$.

The expected discretionary accruals ($DACC_{it}$) are then calculated using the below.

$$DACC_{it} = TACC_{it} - NDACC_{it}$$

Table 1: Variable Description and Measurement

Variables	Acronym	Measurement
<i>Board Size</i>	BoardSiz	Number of Board members of the company
<i>Board Independence</i>	BoardInd	Ratio of independent non-executive directors in the board to total board members of company
<i>Audit Committee</i>	AuCom	The number of members in the audit committee
<i>CEO Duality</i>	CEODual	"1" if the roles of the CEO and chairman are combined and "0" otherwise.
<i>Audit firm size</i>	AuSiz	"1" if auditor is a member of Big Four, "0" otherwise.
<i>Audit Fees</i>	AuFee	The amount paid to auditors as audit fees
<i>Earnings Management</i>	EM	Discretionary accruals based on Modified Jones Model
<i>Company Size</i>	ComSiz	Natural Logarithm of Total Assets
<i>Leverage</i>	Lev	Total Liability/Total Assets
<i>Cash flow from Operation</i>	CFO	Cash flow from operation/Total Assets
<i>Return on Assets</i>	ROA	Profit before interest and tax/Total Assets

Source: Author

The quantitative data analysis was adopted using e-views statistical software to generate descriptive statistics and correlation analysis. Panel data analysis is carried out using the panel techniques such as Pooled OLS. The regression model used in this study is,

$$\text{DACC} = \beta_0 + \beta_1 (\text{AuCom}) + \beta_2 (\text{CEODual}) + \beta_3 (\text{BoardIn}) + \beta_4 (\text{BoardSiz}) + \beta_5 (\text{AUSiz}) + \beta_6 (\text{AuFee}) + \beta_7 (\text{Lev}) + \beta_8 (\text{ROA}) + \beta_9 (\text{CFO}) + \beta_{10} (\text{ComSiz}) + \varepsilon$$

RESULTS AND FINDINGS

The audit quality, corporate governance, and earnings management variables along with the control variables are analysed using descriptive statistics to provide a general overview of the sample. Mean, minimum, maximum, median, standard deviation, skewness, and kurtosis are calculated in this regard (Table 2).

Table 2: Descriptive Statistics

	Mean	Min	Max	Std. Dev	Skewness	Kurtosis	Jarque - Bera	Prob.
<i>AbsDACC</i>	0.110	0.002	0.884	0.133	0.543	2.474	844.86	0.502
<i>AuSiz</i>	0.853	0	1	0.354	0.452	1.563	171.15	0.230
<i>AuFee</i>	943955	125000	4845000	803052	0.632	1.651	427.31	0.053
<i>AuCom</i>	3.4	2	7	0.8	0.751	2.531	47.06	0.865
<i>CEODual</i>	0.124	0	1	0.505	-0.283	1.6354	18	0.945
<i>BoardInd</i>	0.594	0.125	1	0.271	0.181	1.846	12.05	0.897
<i>BoardSiz</i>	8.3	3	14	2.311	0.254	2.069	9.600	0.823
<i>Lev</i>	0.337	0.002	0.89	0.227	0.407	2.368	9.076	0.106
<i>ROA</i>	0.06	-0.132	0.642	0.097	0.573	2.789	491	0.063
<i>CFO</i>	0.031	-0.225	0.234	0.087	-0.127	1.981	1.096	0.577
<i>ComSiz</i>	21.840	20.078	24.543	1.078	0.487	2.425	10.932	0.453

As per the results, the absolute value of discretionary accruals (*AbsDACC*) of the sample has a mean value of 0.110 with a maximum of 0.884 and a minimum of 0.002. This provides evidence that listed companies in Sri Lanka do manage their earnings. In terms of the audit quality proxies, it is clear that 85% of the sample companies (Mean 0.853) are audited by the big-Four audit firms in Sri Lanka – KPMG, Ernst & Young, PricewaterhouseCoopers, and Deloitte – implying big-four domination in the segment of listed companies. The non-big four audit firms audit the remaining 15% of the sample. The mean value of audit fees indicates that

listed companies in Sri Lanka incur an audit cost of approximately Rs.943, 955.00 annually to get their financial statements audited by independent auditors. Moving on to the variables detecting corporate governance, the audit committee size shows a mean value of 3.4, which is approximately close to that of Soliman and Abd-Elsalam (2014) of which the results indicate that the mean size for an audit committee at 4.69 members.

CEO Duality shows an average value of 0.124 which means that 12% of the companies' CEO and Chairperson positions are combined and are held by one single person in Sri Lankan listed companies. In terms of board independence, an average is only 59% of the board comprises independent non-executive directors. It shows a mean value of 8 indicating that the board comprises of the directors at an average of 8 members. When incorporating board size and board independence in this study out of 8 directors of the board, approximately 5 are independent non-executive directors while the remaining 3 are executive directors. Finally focusing on the control variables, leverage shows a mean value of 0.337. The average performance of the companies is reported at a return on total assets of 6%. The company records positive cash flows marginally from its operations, which on average amounts to 3.1% of its total assets.

Table 3: Correlation Analysis

	DACC	AuSize	AuFee	AuCom	CEODual	BoardInd	BoardSiz
<i>DACC</i>	1						
<i>AuSize</i>	-0.084	1					
<i>AuFee</i>	-0.142	0.131	1				
<i>AuCom</i>	-0.828	0.343	0.242	1			
<i>CEODual</i>	-0.701	-0.036	-0.057	-0.160	1		
<i>BoardInd</i>	-0.982	-0.247	0.034	-0.095	0.185	1	
<i>BoardSiz</i>	-0.807	0.075	0.380	0.375	-0.010	0.059	1
<i>Lev</i>	0.726	0.102	0.238	0.059	-0.205	-0.072	0.164
<i>ROA</i>	0.197	0.328	-0.047	0.163	-0.018	0.127	0.094
<i>CFO</i>	-0.935	0.168	-0.087	0.170	0.046	-0.033	-0.027
<i>ComSiz</i>	-0.980	0.546	0.691	0.308	0.030	0.033	0.610

Table 3 shows the correlation results of the variables. The correlation values show that almost all of the independent variables, except that of audit quality proxies, have a strong correlation with the dependent variable. The correlation between the independent variables indicates moderate and weak relationships which indeed conveys that there are no issues of multicollinearity in the study. This implies that higher debt-driven companies manage earnings using discretionary accruals more as a means to avoid the consequences of a technical

default (by breaching debt covenants). Similarly, improvement in return on total assets, which indicates the performance of the company, has a weak positive correlation to discretionary accruals. To ascertain the relationship between the dependent variable and the independent variables, the regression analysis was done using Pooled OLS.

Results of the Pooled OLS model show (Table 4) that three variables out of the four which is used to define corporate governance indicate a strong relationship with discretionary accruals except for the board size (*BoardSiz*). In addition, they show a negative significant relationship with discretionary accruals. The positive relationship between board independence and discretionary accruals is not statistically significant. Further elaborating on the control variables leverage and return on assets are positively and significantly related to discretionary accruals.

Table 4: Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	0.423029	0.215400	1.963924	0.0510
<i>AuCom</i>	-0.024437	0.012211	-2.001243	0.0468
<i>CEODual</i>	-0.043193	0.018231	-2.369153	0.0188
<i>BoardInd</i>	-0.018646	0.034823	-0.535444	0.0430
<i>BoardSiz</i>	0.922505	0.004393	0.013480	0.9893
<i>AuSiz</i>	0.040230	0.030038	1.339283	0.1821
<i>AuFee</i>	-0.148908	1.438908	-1.503610	0.1343
<i>Lev</i>	0.138438	0.043048	3.215923	0.0015
<i>ROA</i>	0.204627	0.101972	2.006693	0.0462
<i>CFO</i>	-0.154386	0.104895	-1.471817	0.1427
<i>ComSiz</i>	-0.011865	0.010490	-1.131048	0.2594
<i>R-squared</i>	0.283034	F-statistic	4.323981	
<i>Adjusted R-squared</i>	0.320704	Prob (F-statistic)	0.000018	
<i>S.E. of regression</i>	0.123520	Durbin-Watson stat	1.863703	

Dependent Variable: DACC

Method: Panel Least Squares

Moreover, other statistical components such as adjusted R-squared account for 32% and it implies that 32% of the change of the dependent variable (*DACC*) is explained by the independent variables in the study. The F-Statistic p-value is statistically significant and thus can be considered a good sign which reflects that the overall model is statistically significant and good enough to predict the dependent variable. The standard error of regression accounts for 0.12 and it is a low level of deviation in error which is at an acceptable range. Durbin-Watson value is 1.863 which is merely close to 2 and thus, it implies that the model doesn't suffer from autocorrelation.

DISCUSSION

Hypothesis testing was performed to achieve the objectives set out in the study. As per the results of Table 4 of regression analysis, board size accounts for a coefficient of 0.922505 with a p-value of 0.9893. This indicates a positive relationship between board size and discretionary accruals which is not statistically significant at a 95% confidence level. This is supported by the findings of Pakianathan (2017) who found that there is no statistically significant relationship between board size and earnings management. In another perspective of earnings management, a study carried out in Sri Lanka based on corporate governance and corporate failure by Lakshan (2012) found that board size did not appear to be a significant determinant in predicting corporate failure. Inconsistent with the findings of the study, Randika (2019) found that there is no significant relationship between board size and corporate failure which may result due to earnings management. However, Ruparatne et al. (2018) have found that board size has a significantly positive relation to earnings management.

In the regression analysis, board independence accounts for a coefficient of -0.018646 with a p-value of 0.0430, showing a negative relationship. Supporting this finding, Pakianathan (2017) found that there exists a negative relationship between board independence and earnings management in Sri Lanka. Tulung and Ramdani (2018) found the same.

The regression results indicate that CEO Duality has a coefficient of -0.043193 with a p-value of 0.0188. Further, it conveys that, when these two positions are held by the same person or when the roles duties and responsibilities of these two positions are not clearly described, there are more chances for the preparers of the financial information to manipulate the earnings. Ruparatne et al. (2018) found that CEO duality has a negative impact on earnings management which supports the current finding of this study. Apart from this, Lakshan (2018) found that when the roles of chairperson and CEO are held by one person in a company, there is a possibility for corporate failure. In addition to this, CEO duality has a negative significant relationship with earning management, which depicts that firms with two separate individuals for the positions of chief executive officer and chairman are more effective in reducing earning management in Sri Lanka (Rajapaksha & Tilakasiri, 2020).

As per the results of regression analysis, the audit committee size shows a coefficient of -0.024437 with a p-value of 0.0468 showing a negative relationship. The same has been examined by several authors such as Juhmani (2017) and Sanjaya (2006) who have highlighted this claim. Further, Chtourou et al. (2001) found that the audit committees constrain the activities of earnings management indicating that the presence of more expertise in the audit committee can limit or else restrict the earnings management activities in that organisation. However, Soliman and Abd-Elsalam (2014) revealed that there exists no significant relationship between audit committee size and earnings management in Egyptian companies.

As per the results of the pooled OLS, audit firm size accounts for a coefficient of 0.040230 with a p-value of 0.1821. This shows no relationship between these two. Thus, it concludes that the audit firm size does not have a significant relationship with earnings management. This can be supported by the findings of Pakianathan (2017) in Sri Lanka who found that there is no statistically significant relationship between audit firm size and earnings management. In Indonesian companies, audit quality measured by audit firm size showed no significant relationship with earnings management (Firnanti & Pirzada, 2019). However, firms audited by the Big 4 have higher accrual earnings management than firms audited by non-Big-4 in Indonesian companies (Challen & Siregar, 2012).

In analysing the results of the regression, the results show a coefficient of -0.148908 with a p-value of 0.1343. Therefore, it can be concluded that the audit fees do not account for the earnings management in the companies. The findings of this study are supported by that of Pakianathan (2017) who has used the non-audit fees, but the study concluded that auditor independence is not related to earnings management.

CONCLUSION

Recent corporate scandals put the spotlight on the effectiveness of corporate governance mechanisms and external audit in detecting material misstatements, thus reducing the likelihood of earnings management. The purpose of this study was to investigate corporate governance, audit quality, and earnings management in the listed companies of Sri Lanka. The results of the regression model show that three out of four proxies of corporate governance are significant predictors of earnings management. Therefore, the study concludes that corporate governance has a significant impact on earnings management measured by discretionary accruals.

The findings conclude that audit quality has no significant impact on the degree of earnings management in Sri Lankan listed companies. The insignificant association could be due to the presence of a weak oversight mechanism that fails to motivate auditors to improve quality or due to earnings considered in the study having been already rectified for any material misstatements. Nevertheless, the results of the study confirm the claim that the notion of audit quality constraining the degree of earnings management is not always valid in developing countries.

Furthermore, the study has practical implications for regulatory bodies and investors. The study provides empirical support to regulatory bodies as it highlights that effective regulation and constant monitoring is required to influence the quality of audit in Sri Lanka. Regulatory bodies could improve disclosure requirements with regard to the audits provided (audit hours spent, non-audit services provider and related fees) in order to increase transparency. The findings of the study thus provide evidence that there is no effective control on earnings management through companies reporting higher compliance to governance regulations. This would enable shareholders to question the role and importance of independent non-executive directors and whether they are indeed independent and knowledgeable to perform an effective oversight function.

The scope of this study was limited to public limited companies listed on the Colombo Stock Exchange (CSE). This scope limitation confines the generalisability of the findings. Moreover, the analysis of audit quality is limited to the two proxies due to the limited information disclosed in the annual reports of listed companies in Sri Lanka. The findings and results of this research could stimulate future research in several areas. Following are some avenues recommended and laid open for future research efforts.

The study reports an insignificant relationship between audit quality and earnings management which could be due to the audit environment and institutional setting of the country considered, as highlighted by various literature. Hence, future studies could study the impact of the audit environment on the relationship between audit quality and earnings management in Sri Lanka or undertake studies to test the level to which audit quality is constraining the degree of earnings management is not always valid in developing countries, by considering data from several developing countries. Furthermore, this study excludes the banking, finance, and insurance

sectors which is a key sector of the economy due to the difference in the nature of assets and liabilities as opposed to the non-financial firms. However, Sri Lanka has witnessed notable scandals from the financial sector companies (Pramuka Bank, Golden Key PLC and ETI Finance). Hence, future studies could focus on the impact of audit quality on the degree of earnings management in this sector. Additionally, qualitative studies can also be undertaken to have an in-depth analysis of corporate governance, audit quality and earnings management.

REFERENCES

- Challen, A. E. & Siregar, S. V. (2012). Audit Quality on Earnings Management and Firm Value, *Finance and Banking Journal*, 14(1), 30–43.
- Chtourou, S. M., Bédard, J. & Courteau, L. (2001). Corporate Governance and Earnings Management, 4 (April), 1–35.
- Firnanti, F. & Pirzada, K. (2019). Company Characteristics, Corporate Governance, Audit Quality Impact on Earnings Management, 4(2), 43–49.
- Juhmani, O. (2017). Audit Committee Characteristics and Earnings Management: The Case of Bahrain, (March), 10–31. doi: 10.5296/ijafr.v7i1.10447.
- Lakshan, A. M. I., & Wijekoon, W. M. H. N. (2012). Corporate governance and corporate failure, 5671(May 2012). doi: 10.1016/S2212-5671(12)00079-2.
- Lakshan, A. M. I., & Wijekoon, W. M. H. N. (2018). Predicting Corporate Failure of Listed Companies in Sri Lanka', (December). doi: 10.5176/2010-4804.
- Pakianathan, A. E. (2017). Audit quality and its impact on the degree of earnings management: evidence from Sri Lanka'.
- Rajapaksha, R. A. S. & Tilakasiri, K. K. (2020). The Influence of Corporate Governance on Earnings Management in Listed Manufacturing Companies in Sri Lanka, 11(3), 8–10.
- Randika, M. (2019). Do corporate governance variables predict corporate failure: evidence from an emerging economy, (May 2020).

- Ruparatne, C. H. H. K. M. P. (2018). Corporate Governance and Earnings Management: Board Characteristics in a Sri Lankan Perspective, *Field of Accounting Research*, 1–25.
- Sanjaya, I. P. S. (2006). The Influence of Audit Committee to Earnings Management, 7(1), 97–112.
- Sitanggang, R. P. & Karbhari, Y. (2020). Audit quality and real earnings management: evidence from the UK manufacturing sector, *I6*(2), 165–181. doi: 10.1108/IJMF-03-2018-0095.
- Soliman, M. M. & Abd-Elsalam, M. (2014). Audit committee effectiveness, audit quality and earnings management: an empirical study of the listed companies in Egypt. *Research Journal of Finance and Accounting*, 5(2), 1292–1297. Available at: <http://ssrn.com/abstract=2257815>.
- Tulung, J. E. & Ramdani, D. (2018). Independence, size and performance of the board: An emerging market research. *Corporate Ownership and Control*, 15(2), 201–208. doi: 10.22495/cocv15i2c1p6

IMPACT OF VOLUNTARY DISCLOSURE LEVEL ON THE VALUE RELEVANCE OF ACCOUNTING INFORMATION; EVIDENCE FROM COLOMBO STOCK EXCHANGE, SRI LANKA

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ABSTRACT

Purpose: The paper aims to examine the influence of the Voluntary Disclosure Level (VDL) on the value relevance of accounting information. Earnings per share (EPS), book value per share (BVPS), and operating cash flow per (OCFPS) share were considered as the accounting variables relative to the market value per share (MVPS) for a period of 3 years following the financial year-end for Sri Lankan companies.

Methodology: Panel Regression was employed to examine the influence of VDL on the value relevance of three accounting variables. Market price per share was considered as the proxy for value relevance. Data were collected from 102 companies listed on the Colombo Stock Exchange for the period from 2019 to 2021. There were 306 firm-year observations.

Findings: According to the results of the study, BVPS significantly and positively influences the MVPS indicating that BVPS has value implications for investors. Further interaction effect of EPS and INDEX shows a significant positive impact on the MVPS, indicating VDL exhibits substantial influence on the value relevance of earnings which will ultimately help investors make better investment decisions.

Research implications: Regulatory bodies and standard setters may have implications in relation to the laws and regulations governing voluntary disclosures. More importantly, the study highlights implications for policymakers and practitioners on how investors make use of the accounting information and the voluntary information disclosed in annual reports in their decision-making.

Originality/value: This study has contributed to the existing literature on voluntary disclosure as it is examined whether voluntary disclosures improve or deteriorate the value relevance of accounting information.

Paper type: Research paper

Keywords: Value Relevance, Voluntary Disclosure Level, Colombo Stock Exchange, Accounting Information.

INTRODUCTION

Increasing stakeholder awareness and the complexity of the business environment drive organisations to be more transparent by providing more information to the relevant parties not only via Financial Statements but also via disclosure of more corporate reporting practices. Organisations are encouraging to increase the level of transparency more toward knowledge-based industries and expanded access to a globalised environment. One of the most important aspects of financial statement quality in making decisions is value relevance, which is the “ability of accounting numbers to summarise information underlying market prices” (Jianweiw and Chunjiao, 2007). Accordingly, if accounting data is associated with company's market worth, it is deemed value relevant. The role of accounting numbers in company valuation is of fundamental interest to analysts, investors, and researchers alike. When there is a high degree of information asymmetry between investors and the firm, disclosures are turned into a way for managers to show stakeholders the value of their company. According to existing literature conducted by researchers, it has been argued that the quality and scope of disclosure practice are essential for the value relevance of accounting information. Thus, as per Barako (2007), voluntary disclosure, also known as disclosure practices, is "the voluntary dissemination of financial and non-financial information through annual reports over and above the mandatory obligations."

The existing literature on voluntary disclosure offers numerous potential business motivations to encourage a larger number of voluntary disclosures. For instance, Lundholm and Myers (2002) investigated whether greater disclosure of the information is reflected in MVPS, and Hassan et al. (2009) empirically tested the association between voluntary disclosure of Egyptian listed companies and company value. Since previous researchers have looked at the impact of VDL on the value relevance of only EPS and BVPS, this study aims to expand on these findings.

However, empirical research on the value relevance of EPS, BVPS, and OCFPS is influenced by voluntary disclosure in Sri Lanka after the adoption of new accounting standards whose focus on fair value measuring was minimal. Thereby, this study aims to investigate this contextual gap, which is not well-researched previously, particularly in Sri Lanka. Thereby, the objective of this research is to determine the impact of accounting information demonstrated by EPS, BVPS, and OCFPS on MVPS which tells the value relevance and examines the impact of voluntary disclosures on the above relationship.

METHODOLOGY

This analysis used 102 publicly traded companies out of 296 CSE-listed companies for three years between 2019 and 2021. EPS, BVPS, and OCFPS were taken as independent variables to represent accounting information, and MVPS was taken as the dependent variable. VDL influences this relationship as moderating variable, which is evident in Figure 1. With the effect of voluntary disclosure acting as moderating function, this model expresses MVPS as a function of EPS, BVPS and OCFPS. Based on a review of the literature on voluntary disclosure practice and the value relevance of chosen companies, the study's model can be given

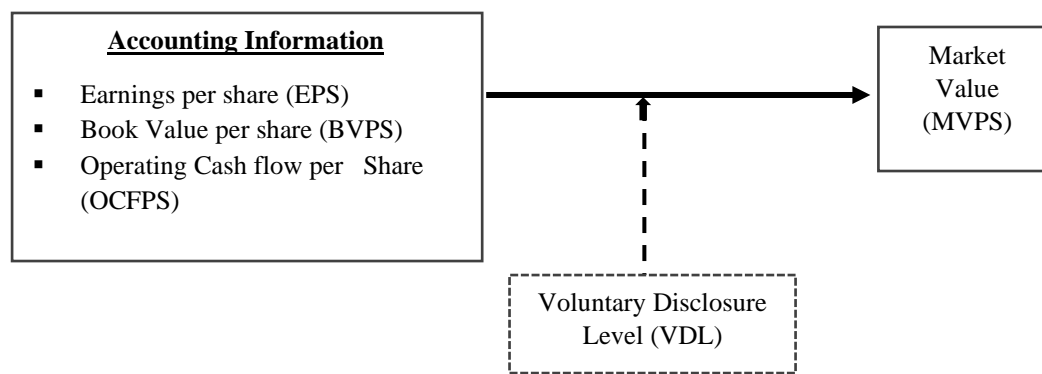


Figure 1: Conceptual Framework

Source: Author, 2022

The Voluntary Disclosure Index (VDI), created by the researcher, was utilised in this study to gauge the VDL. Mandatory disclosure requirements were established by evaluating the provisions of the Companies Act, No. 07 of 2007 and the listing regulations of the CSE. The initial voluntary disclosure index was amended to exclude required disclosures after taking mandatory disclosure rules into account. Then, to create a disclosure index suitable for Sri Lanka, this disclosure index was forwarded to numerous academics and recognised industry professionals. The measurement that was utilised to create the disclosure index is shown in Table 1.

Table 1: Weightings of Voluntary Disclosures Index

Term	Assigned Value
Not Disclosed	0
Disclosed	1

Source: Author

The following regression models can be developed in accordance with the conceptual framework:

$$\textbf{Model 01} : MVPS = \alpha + \beta_1 EPS + \beta_2 BVPS + \beta_3 OCFPS + \varepsilon$$

$$\textbf{Model 02} : MVPS = \alpha + \beta_1 EPS + \beta_2 BVPS + \beta_3 OCFPS + \beta_4 INDEX + \beta_5 INDEX * EPS \\ + \beta_6 INDEX * BVPS + \beta_7 INDEX * OCFPS + \varepsilon$$

The conceptual framework, models, and existing literature are used to construct the following hypotheses, which are consistent with the research objectives.

H₁: There is an impact of EPS on MVPS

H₂: There is an impact of BVPS on MVPS

H₃: There is an impact of OCFPS on MVPS

H₄: There is an impact of VDL on the relationship between EPS and MVPS

H₅: There is an impact of VDL on the relationship between BVPS and MVPS

H₆: There is an impact of VDL on the relationship between OCFPS and MVPS

This study concentrated on quantitative research methodologies and the study's research philosophy is positivism. Archival research was chosen as the best fit for this study because it allows for the collection of a large amount of data via the study of secondary data sources, mostly the annual reports, and as the study establishes causal links between variables, the nature of the research is deemed to be explanatory, while analyses are presented by using the descriptive approach.

Panel regression was used to analyse the data after performing the residual diagnostic tests such as normality, correlation, the VIF test, and autocorrelation.

RESULTS AND DISCUSSION

The mean value of VDL indicates that the average sample companies have disclosed 54.85% of voluntary disclosure requirements which is a moderate level of disclosure. The voluntary disclosure index ranges from the highest value of 89% to the lowest 21%, indicating that there is a greater variation among the disclosure levels of the company.

After performing Hausman Test, the fixed effect model was identified as the best model for data analysis (Table 1).

Table 2: Fixed Effect Model Statistics for Model 01

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	50.990	41.286	1.235	0.218
<i>BVPS</i>	0.617	0.197	3.119	0.002
<i>EPS</i>	-0.691	0.451	-1.530	0.127
<i>OCFPS</i>	0.020	0.179	0.111	0.911
R-squared	0.877	Adj: R ²		0.814

Source: EViews Output, 2022

Table 2 indicates that independent variables explain 87.7% of the variation of the market price and BVPS has a significant positive impact on the market price of the share. This will cause to accept H_2 by rejecting H_1 & H_3 to satisfy the first objective.

Table 3 – Fixed Effect Model Statistics for Model 02

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	-176.851	248.422	-0.711	0.477
<i>BVPS</i>	0.796	0.558	1.425	0.155
<i>EPS</i>	-6.381	2.131	-2.994	0.003
<i>INDEX_BVPS</i>	-0.466	0.973	-0.479	0.632
<i>INDEX_EPS</i>	12.240	4.530	2.701	0.007
<i>INDEX_OCFPS</i>	-6.005	3.582	-1.676	0.095
<i>INDEX</i>	412.805	442.536	0.932	0.352
<i>OCFPS</i>	4.223	2.524	1.672	0.095
R-squared	0.884	Adj R ²		0.820

Source: EViews Output, 2022

According to Table 3, *EPS* significantly impacts ($p < 0.01$) the market price of shares. However, the relationship is negative. The interaction effect of *EPS* and *INDEX* implied a significant positive influence of voluntary disclosures on the value relevance of *EPS* which represent the earnings of the company. The response to earnings increased in the presence of voluntary disclosures. This finding support achieving H_4 but rejects H_5 and H_6 by accomplishing the second objective.

$$MVPS = -176.851 - 6.381EPS + 0.796BVPS + 4.223OCFP + 412.805 INDEX + 12.240INDEX * EPS \\ - 0.466 INDEX * BVPS - 6.005 INDEX * OCFPS + \varepsilon$$

The objective of the study was to examine whether the value relevance of accounting information increase or deteriorates due to voluntary disclosures. Accordingly, *BVPS* is significant and positively influences on the *MVPS* indicating that *BVPS* has value implications for investors. Other researchers such as Barth et al. (2018) and Coory et al. (2020) also found that *BVPS* is a significant value-relevant variable that demonstrates investors' confidence in *BVPS* when making decisions. However, when the model is incorporated with *INDEX* and the interaction affects *EPS* show a significant negative impact on the *MVPS*. The same finding was discovered by Cooray et al. (2020) who concluded that the result was caused by macroeconomic factors such as political instability and significant depreciation of the rupee against major currencies within the Sri Lankan context. Further interaction effect of *EPS* and *INDEX* shows a significant positive impact on the *MVPS* indicating *VDL* exhibits substantial influence on the value relevance of earnings which will ultimately help investors make better investment decisions.

CONCLUSIONS AND IMPLICATIONS

This study offers factual proof of the market's indirect impact on *VDL*. To improve the complementary nature of the reporting process, it provides support for a future regulatory activity that tends to successfully monitor management. The study has implications for regulatory bodies in Sri Lanka in relation to the rules and regulations governing voluntary disclosures. It is advised to create a common structure for the voluntary disclosure of information in the annual reports of listed corporations. To provide information, all businesses should use a standard format like integrated reporting and also the level of investor awareness of their rights and obligations must be raised in Sri Lanka. Investors should be advised to file lawsuits if they believe someone has misled them by releasing false information or even by omitting crucial details. Investors should understand how to use the legal system to defend their interests. The study added to the body of knowledge about the value of disclosure studies in economic decision-making. This study put the improved disclosures' impact on the value of Sri Lankan listed companies to test empirically.

To ascertain how accounting statistics and the influence of voluntary disclosure impacted the share prices of listed firms in Sri Lanka from 2019 to 2021, the study, however, concentrates on this time frame. The analysis may only cover 102 companies that were listed on the CSE at the time the study was conducted. These factors influence the study's restrictions by reducing the study's potential scope. Also in this study, the value relevance method was used to assess the quality of the accounting information. However, additional methods and moderating variables may also be useful in finding the value relevance of the accounting information.

Several recommendations for upcoming researchers might be made based on the current research. A more accurate and trustworthy analysis could be obtained if the research study could be applied to all companies, or by choosing at least half of the companies listed on the CSE, and by choosing more companies from each sector rather than limiting the sample size to 102 companies. Additionally, this study was only carried out over three years, from 2019 to 2021, due to the practical challenges experienced throughout the data collection and due to the Covid outbreak. Further research can increase the scope of the impact of the moderating variable on the value relevance of accounting information over a significant period.

REFERENCES

- Barth, M. E., Li, K., & McClure, C. G. (2017). Evolution in value relevance of Accounting Information. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.2933197>
- Cooray, T., Senaratne, S., Gunarathne, A., Herath, R. & Samudrage, D. (2020). Does integrated reporting enhance the value relevance of information? evidence from Sri Lanka. *Sustainability*, 12(19), 8183.
- Hassan, O. A., & Romilly, P., Giorgioni, G., & Power, D. (2009). The value relevance of disclosure: Evidence from the emerging capital market of Egypt. *The International Journal of Accounting*, 44(1), 79–102. <https://doi.org/10.1016/j.intacc.2008.12.005>
- Jianwei, Liu, & Liu Chunjiao. (2007). Value relevance of Accounting Information in different stock market segments: the case of Chinese A-, B, and H-Shares. *Journal of International Accounting Research*, 6(1).
- Lundholm, R., & Myers, L. A. (2002). Bringing the future forward: the effect of disclosure on the returns-earnings relation. *Journal of Accounting Research*, 40(3), 809–839. <https://doi.org/10.1111/1475-679x.00072>



DOES THE THEORY OF PLANNED BEHAVIOUR PREDICT THE MANAGEMENT INTENTION TO ENGAGE IN SUSTAINABILITY REPORTING? EVIDENCE FROM SRI LANKA

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ABSTRACT

Purpose: Sustainability reporting (SR) is one of the voluntary disclosures that has grown in popularity in recent years. This study aimed to examine the management's intention to engage in SR using the Theory of Planned Behaviour (TPB) of Sri Lankan listed companies.

Design/methodology/approach: A quantitative research approach is used in the study. A structured online questionnaire was used to collect data, and the sample of the study included 189 top and middle-level managers from listed companies in Sri Lanka. Structural equation modelling was used to test the hypotheses.

Findings: The findings revealed that subjective norms and perceived behavioural control of managers had a significant and positive impact on the intention to engage in SR by managers. However, their attitudes had no significant influence on their intention to engage in SR.

Research implications: The insights gained through this study are expected to be useful for institutions, regulators, and policymakers.

Originality/value: This study has contributed to the existing behavioural accounting and other socio-psychological literature as it noted the TPB's ability to predict management behaviour in the context of voluntary reporting (i.e. SR).

Paper type: Research paper

Keywords: Attitude, Perceived Behavioural Control, Subjective Norms, Sustainability Reporting, Theory of Planned Behaviour.

INTRODUCTION

The corporate report of listed companies includes both voluntary and mandatory disclosures. Financial statements are one of the most common examples of mandatory disclosures. On the other hand, Sustainability Reporting (SR) is a voluntary disclosure that discloses information about the economic, social, and environmental impact of organisational operations [Global Report Initiative (GRI), 2021]. Although SR is a voluntary disclosure, similar to other countries, the number of Sri Lankan companies engaging in SR is growing rapidly. Sri Lankan companies have been reporting on sustainability according to the guidelines issued by the GRI (SheConsults, 2015).

The human behaviour of stakeholders is an important factor to consider when considering the motivation factors driving the organisation to report on sustainability, and among them, the behaviour of managers could be considered to be the most important. Managers manage the organisation on behalf of the owners and make operational decisions for the organisation. The Theory of Planned Behaviour (TPB) is a significant theory that explains human behaviour (Kumari et al., 2022). The TPB is a significant and well-known theory used in psychological research to predict and explain human behaviour (Ajzen, 1991). Further, although sustainability reporting (SR) is not a mandatory requirement, many countries now use SR. Accordingly, this study examines the motivation factors that drive the organisation to report on sustainability using TPB.

Some past studies had considered the relationship between TPB and the intention to engage in the SR. The study of Thoradeniya et al. (2015) found that managers' attitude toward SR, subjective norms and perceived behavioural control influence their intention to engage in SR. But Kwakye et al. (2018) argued that only subjective norms and perceived behavioural control significantly influence a company's intention to engage in Sustainability Accounting and Reporting (SAR). Furthermore, Kwakye et al. (2018) argued that the attitude of an accountant towards SAR does not affect the intention to engage in SAR. However, these studies have not made conclusive predictions about the intentions of SR.

Accordingly, the current study was based on TPB. The TPB has been validated to be useful in explaining the intention to engage in SR. Furthermore, despite the theory's wide applicability, little empirical research has been conducted using the TPB for a more comprehensive explanation of the intention to engage in SR.

Thus, based on contemporary importance, the lack of usage of TPB and the lack of current evidence in the Sri Lankan context are felt like a significant gap. Accordingly, this study aims to examine whether management intention could be used to better predict the intention to engage in SR using the TPB of listed companies in Sri Lanka. Next, the methodology of the paper is elaborated in achieving this aim.

METHODOLOGY

Quantitative methods were deployed in the study, which is deemed appropriate due to testing relationships. A structured survey questionnaire was used to collect data, which was developed using extant literature (Kwakye et al., 2018; Thoradeniya et al., 2015), and refined based on expert opinions and a pilot survey. The population of the study included top and middle-level managers of listed companies in Sri Lanka. In the absence of a sampling framework, the sample was selected using the convenience sampling technique while ensuring the representativeness of the population in terms of gender, age, position, experience, and education level. The questionnaire consisted of two sections; the first section was devoted to the demographic information of the respondents and the second section dealt with their determinants of engaging in SR. The questionnaire was sent to all potential survey participants via e-mail, which contained a URL. All respondents were encouraged to read the study description, and survey instructions and provide their consent before participating in the survey. Approximately 450 survey invitations were sent to respondents, and 189 usable responses were received for our study which is deemed adequate.

In terms of the development of hypotheses, theoretical and empirical evidence was used, which is explained next. Thoradeniya et al. (2015) found a positive link between the attitudes of managers and the intentions of SR. However, Kwakye et al. (2018) found that the attitude of accountants toward Sustainability Accounting and Reporting (SAR) does not affect the motivation to apply such accounting. Accordingly, the following hypothesis was constructed to be tested in this study.

H₁: There is an impact of managers' attitude (denoted as *ATT*) on their intention to engage in SR (denoted as *ISR*) of listed companies in Sri Lanka.

Some research had found a positive relationship between managers' subjective norms and their intent to engage in sustainable reporting (Thoradeniya et al., 2015). Moreover, past studies had also found the subjective norm significantly influences a firm's intention to engage in SAR (Kwakye et al., 2018). Thus, the following relationship was hypothesised:

H₂: There is an impact of managers' subjective norms (denoted as *SN*) on their intention to engage in SR (denoted as *ISR*) of listed companies in Sri Lanka.

Furthermore, extant studies also discovered an association between the managers' perceived behavioural control and their desire to engage in SR (Thoradeniya et al., 2015; Kwakye et al., 2018). According to several extant studies, perceived behavioural control has a positive and significant impact on students' positive intentions toward the environment (Lee et al., 2016). On the contrary, several studies also have found a negative association between perceived behavioural control and managers' environmental, and ethical decision-making (Flannery & May, 2000). Accordingly, the following relationship was hypothesised.

H₃: There is an impact of the managers' perceived behavioural control (denoted as *PBC*) on their intention to engage in SR (denoted as *ISR*) of listed companies in Sri Lanka.

After screening and cleaning the data obtained and descriptive statistics were estimated. Structural Equation Modelling (SEM) was used for testing the above hypotheses (i.e., PLS-SEM using SmartPLS). The results are reported next.

RESULTS AND DISCUSSION

As discussed above, following data collection, data screening and cleaning were performed before conducting statistical analyses and, as a result, outliers or missing values were treated. The majority of respondents (58.1%) were male, and 45.3% were between the ages of 31 and 40. Furthermore, 40.7% of respondents had completed up to their first-degree level as the highest academic qualification. Furthermore, the majority of respondents (75.6%) were middle-level managers.

The PLS-SEM confirmatory factor analysis was used to establish the scales' structural validity using SmartPLS. The results indicated that the composite reliability (CR) ratings for all scales exceeded 0.7, indicating internal consistency (Hair et al., 2018). Further, all AVE values were

noted to be higher than 0.5, showing convergent reliability (Hair et al., 2018). Moreover, all Rho A reliability coefficients were above 0.7, which is good (Hair et al., 2016). The measurement model also was noted to support the constructs' discriminant validity because it met the Fornell and Larcker criterion. Finally, the variance inflation factor (VIF) demonstrated the collinearity of formative indicators was within the threshold of 3 (Hair et al., 2018).

The Conceptual Model that has been proposed to assess the assumed associations between the variables of the study and the theoretical framework's ability to predict is shown in Figure 1. According to the findings of the study, the model satisfactorily complied with the required thresholds (SRMR = 0.078, NFI = 0.80), and the model demonstrated a considerable level of predictive power for managers' desire to engage in SR ($R^2 = 0.696$).

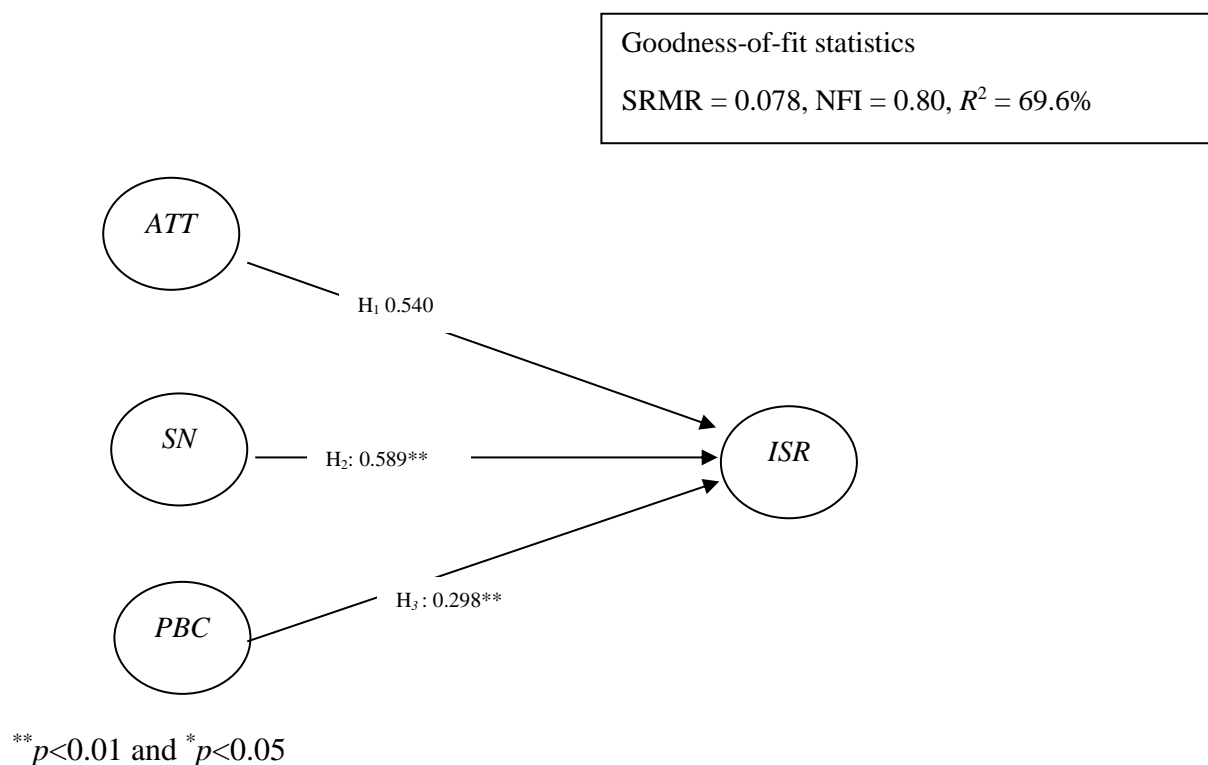


Figure 1: The proposed model based on the Theory of Planned Behaviour

According to Figure 1, the R^2 is 69.6%, which suggests that 69.6% of the variation in the intention to engage in SR of managers was predicted from the selected independent variables: attitudes, subjective norms, and perceived behavioural control of managers. In terms of the hypothesised relations, the results show an insignificant relationship between attitudes on the intention to engage in SR ($p > 0.10$), and therefore hypothesis H₁ is not supported. This finding

is consistent with Kwakye et al. (2018) who found that the attitude of accountants does not affect engagement in Sustainability Accounting & Reporting (SAR). On the other hand, the results show that there is a statistically significant and positive relationship between subjective norms and the intention to engage in SR ($p < 0.01$), which is in support of H₂. This finding is consistent with similar studies (Kwakye et al., 2018; Thoradeniya et al., 2015; Flannery & May 2000). Furthermore, in terms of perceived behavioural control, results show a significant and positive relationship between this variable and the intention to engage in SR ($p < 0.01$), and therefore, H₃ is supported and is consistent with Thoradeniya et al. (2015) and Kwakye et al. (2018). However, some extant research had reported a negative relationship between perceived behavioural control and managers' environmental and ethical decisions (Flannery & May, 2000), which contradicts our findings.

CONCLUSIONS AND IMPLICATIONS

This study aimed to examine whether management's intention could be used to predict intention to engage in SR by them using the TPB basis for listed companies in Sri Lanka. It was found that both subjective norms and perceived behavioural control of managers had statistically significant and positive relationships with their intention to engage in SR. However, the findings indicated that the attitudes of managers did not have an impact on their intention to engage in SR. Accordingly, policymakers could formulate plans to propagate norms that will encourage managers to engage in SR. Furthermore, other stakeholders too could require such norms to be established. Moreover, steps should be taken to provide more control and authority to managers in making appropriate reporting decisions such as SR, which again could be in the form of regulations and from stakeholder pressure. With these steps, companies and stakeholders can make better decisions and increase the stakeholders' trust using sustainability reports. While having these practical implications, using TPB, this paper contributes to filling the gap in the literature by empirically testing the management intentions to engage in SR of listed companies in Sri Lanka.

In terms of future research directions, other voluntary disclosures could be considered as this study only focused on sustainability reporting. Furthermore, by expanding the scope of this study that focused only on the Sri Lankan context, future studies could concentrate on other contexts and even perform comparative studies.

REFERENCES

- Ajzen, I. (1991). The theory of planned behaviour. *Organisational Behaviour and Human Decision Processes*, 50(2), 179-211. doi: 10.1016/0749-5978(91)90020-t.
- Flannery, B., & May, D. (2000). Environmental ethical decision making in the U.S. metal-finishing industry. *Academy of Management Journal*, 43(4), 642-662. doi: 10.2307/1556359
- Hair, J.F., Hult, G.T.M., Ringle, C., & Sarstedt, M. (2016), “*A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*”, Sage publications: New York, NY, USA.
- Hair, J.F., Risher, J.J., Sarstedt, M., & Ringle, C.M. (2018), When to use and how to report the results of PLS-SE", *European Business Review*, <https://doi.org/10.1108/EBR-11-2018-0203>.
- Kumari, J.S., Senani, K.G.P., & Ajward, R. (2022), Predicting investors' intention to invest in the stock market during COVID-19: can we use an extended theory of planned behaviour?", *Journal of Asia Business Studies*, Vol. ahead-of-print No. ahead-of-print, doi.org/10.1108/JABS-12-2021-0517..
- Kwakye, T., Welbeck, E., Owusu, G., & Anokye, F. (2018). Determinants of intention to engage in sustainability accounting & reporting (SAR): the perspective of professional accountants. *International Journal of Corporate Social Responsibility*, 3(1), 1-13, doi: 10.1186/s40991-018-0035-2.
- Lee, W., Birkey, R., & Patten, D. (2016). Exposing students to environmental sustainability in accounting: an analysis of its impacts in a US setting. *Social and Environmental Accountability Journal*, 37(2), 81-96. doi: 10.1080/0969160x.2016.1270225
- SheConsults. (2015). Sustainability reporting in Sri Lanka: the big picture. <http://sheconsults.com/insights/Sustainability-Reporting-in-Sri-Lanka>.
- Thoradeniya, P., Lee, J., Tan, R., & Ferreira, A. (2015). Sustainability reporting and the theory of planned behaviour. *Accounting, Auditing & Accountability Journal*, 28(7), 1099-1137, doi: 10.1108/AAAJ-08-2013-1449.

THE EFFECTS OF SELECTED CORPORATE GOVERNANCE PRACTICES AND FIRM CHARACTERISTICS ON FINANCIAL DISTRESS OF LISTED NON-FINANCIAL COMPANIES IN SRI LANKA

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ABSTRACT

Purpose: The purpose of the research is to examine the impact of selected corporate governance practices and firm characteristics on financial distress in listed non-financial firms in Sri Lanka.

Design/methodology/approach: The study was conducted using 120 firm-year observations in which data was gathered from 2018 to 2020, with half of them classified as distressed and the other half as non-distressed. The Altman Z-score was used as a proxy for the financial distress of the firms while the selected corporate governance variables included board independence, CEO-Chair duality, board size, and ownership structure, and the selected firm characteristics were firm size, leverage, and liquidity. The panel regression model was used in this study.

Findings: The findings indicated that there is no statistical significance of the selected corporate governance variables on financial distress, while firm characteristics, firm size, leverage, and liquidity had a significant impact.

Research implications: The outcomes would be relevant to scholars, professionals, and policymakers seeking to understand the impact of different variables on the financial distress of companies.

Originality/value: This study brings new evidence on the financial distress of companies amid the changes that were made to the contemporary corporate governance regulations and financial situation of the country.

Paper type: Research paper

Keywords: Altman Z-score, Corporate Governance, Firm Characteristics, Financial Distress

INTRODUCTION

Organisations are striving to combat financial distress in this dynamic corporate climate. In this regard, a variety of internal and external factors have an impact on the firm's capacity to discharge its debt obligations (Lu et al., 2020). Micro and macroeconomic indicators such as currency depreciation and inflation, particularly in Sri Lanka, emphasise turbulent economic and financial situations as external factors influencing companies' business continuity (Lu et al., 2020). However, a majority of these externalities are beyond the control of the organisation and are common factors that impact firms. Therefore, it is critical to address the internal factors in an attempt to mitigate the financial distressing circumstances of firms. The analysis of internal causes is largely centred on management practices within the firm, as financial solvency is dependent on the efficacy of decision-making. Accordingly, corporate governance could be viewed as a cornerstone of financial sustainability for organisations particularly when ownership and control are separated (Luqman et al., 2018). The conflict of interest between the managers and the owners could cause the principle-agent problem to occur. In this regard, excessive exposure to financial debt, as well as inefficiencies in operations management, may jeopardise an entity's stability. Firms should implement specific measures to preserve their responsibility, which would gradually minimise the agency problem (Luqman et al., 2018), thus, these policies safeguard businesses from financial distress.

Numerous business failures occurred in the Sri Lankan setting, as evidenced by Vanik Bank, Golden Key, and Ceylinco Group (Gunathilaka, 2012); nevertheless, the reasons for the failures pointed to weak corporate governance standards (Sameera & Senaratne 2015). However, these failures could not be identified in advance since a majority of stakeholders were primarily concerned about the financial success of their respective companies. Even if the achievements of the firms were inadequate, their management utilised a range of tactics to "window-dress" the financial statements, thereby, using the limitations of financial reporting to benefit themselves. Thus, the research on how governance characteristics influence financial distress is more essential than ever in controlling and decreasing similar negative consequences. However, limited research has been conducted in Sri Lanka to identify the relationship between corporate governance characteristics and the financial distress of firms. Moreover, such a dearth is also visible in terms of internal firm characteristics and such distress of firms. The limited extant studies were also observed to be done before certain vital changes were done to

the corporate governance regulations in Sri Lanka. For an instance, the Code of Best Practices for Corporate Governance (2013) of the Institute of Chartered Accountants of Sri Lanka, was updated in 2017 and other similar changes were effected in the Sri Lankan context. However, as noted above, we observe a pronounced dearth of studies after these changes were made. Accordingly, due to the contemporary importance given to the present economic situation of the country and the empirical dearth of studies observed on financial distress, particularly after the changes in governance regulations, this study aims to examine whether certain vital corporate governance practices and selected firm characteristics of listed non-financial companies impact on the financial distress of such companies.

METHODOLOGY

A quantitative research approach was adopted in this study, which is deemed appropriate due to the nature of the study. The population of the study is considered 196 non-financial companies (i.e., this study eliminated the listed banking, finance, and insurance companies due to being highly regulated and changes in the financial reporting structure) listed on the Colombo Stock Exchange from 2018 to 2020. The sample consisted of 20 distressed and 20 non-distressed firms (i.e., 120 firm-years together) of the listed non-financial companies with the financial reporting period ending 31st March. These distressed and non-distressed firms were identified using the Altman Z-score model (Sameera & Senaratne 2015; Ibrahim, 2019).

Based on a thorough review of the literature on financial distress, board independence, CEO-Chair duality, the board size, and ownership structure were selected as corporate governance-related practices, while firm size, liquidity, and leverage were secured as firm characteristics. The operationalisation of these variables and the financial distress are given in Table 1.

Table 1: Operationalization of Variables

Variable	Abbreviation	Definition/Measures	Reference/s
Board Independence	<i>OUTSIDE</i>	The proportion of independent directors on the board of directors	Ibrahim (2019), Sameera and Senaratne (2015)
CEO Duality	<i>DUALITY</i>	Separate roles of Chairman & CEO “1” if the Chairman also holds the position of CEO and “0” if otherwise.	Younas et al. (2020), De Silva et al. (2018)
Board Size	<i>B_SIZE</i>	Number of members of the Board	Younas et al. (2020), Sameera and Senaratne (2015)
Ownership Structure	<i>B_OWNERSHIP</i>	Percentage of share ownership by the Board members & institutions	Younas et al. (2020)
Firm Size	<i>F_SIZE</i>	Market Capitalisation (in Rs Billions)	Younas et al. (2020), Ibrahim (2019), Wang and Deng (2006),
Liquidity	<i>LIQ</i>	Current assets to current liabilities ratio	Elloumi and Gueyie (2001), Wang and Deng (2006)
Leverage	<i>LEV</i>	Long-term debt to total assets ratio	Younas et al. (2020), Ibrahim (2019)
Financial Distress	<i>FD</i>	Altman Z-Score	De Silva et al. (2018), Sameera and Senaratne (2015)

Source: Author, 2022

Based on the theoretical and empirical evidence, the following hypotheses were constructed.

H₁: There is a relationship between board independence and the financial distress of listed non-financial companies in Sri Lanka.

H₂: There is a relationship between CEO duality and the financial distress of listed non-financial companies in Sri Lanka.

H₃: There is a relationship between board size and the financial distress of listed non-financial companies in Sri Lanka.

H₄: There is a relationship between ownership structure and the financial distress of listed non-financial companies in Sri Lanka.

H₅: There is a relationship between the firm size and the financial distress of listed non-financial companies in Sri Lanka.

H₆: There is a relationship between liquidity and the financial distress of listed non-financial companies in Sri Lanka.

H₇: There is a relationship between the leverage and the financial distress of listed non-financial companies in Sri Lanka.

RESULTS AND DISCUSSION

Descriptive Statistics

Table 2 shows the descriptive statistics of financially healthy and financially distressed companies.

Table 2: Descriptive Statistics

Variable ^a	Distressed		Healthy	
	Mean	Standard Dev.	Mean	Standard Dev.
<i>OUTSIDE_DIR</i>	0.372	0.092	0.382	0.101
<i>DUALITY</i>	0.383	0.490	0.050	0.219
<i>B_SIZE</i>	8.316	2.574	6.966	1.401
<i>B_OWNERSHIP</i>	0.120	0.228	0.065	0.166
<i>F_SIZE</i>	5.480	8.93	7.952	15.681
<i>LIQ</i>	0.686	0.334	6.534	7.178
<i>LEV</i>	0.785	0.110	0.215	0.1732
<i>Altman Z-score</i>	1.763	0.210	3.553	0.521

^aNote: Outliers of variables were treated using winsorization at 1% and 5%.

As depicted in the table, financially distressed firms have a 37.2% outside director percentage while distressed firms have 38.2%, which therefore has no significant difference. By observing the mean value, CEO-Chair duality (i.e., the roles are combined) is observed more prevalent in distressed organisations than in healthy companies. The mean value of firm size for distressed companies is lower than the mean value for healthy firms. The approximate mean values of board size for distressed and healthy companies are 8 and 7, respectively. The mean value for board ownership in distressed firms is 12%, whereas the mean of this variable for healthy companies is 6.5%, which again has a large difference. The firm size of the distressed firms is on average Rs.5.48 billion, while the healthy firms have a mean value of Rs 7.952 billion. The average liquidity levels for distressed and healthy companies are 0.68 and 6.5, respectively, which has a pronounced difference. This indicates that distressed companies suffer from lower liquidity compared to healthy firms. While the mean value of leverage for distressed firms is 78.5%, it is only 21.5% for healthy firms. As a result, it suggests that financially distressed companies have larger debt levels in their capital structure than healthy firms. The mean value of the Altman Z-score of distress firms was 1.763 while a healthy firm was 3.553 and, the higher the Altman Score, the lesser the probability of financial distress as the threshold.

The results of the bivariate and multivariate analyses are presented next.

Correlation Analysis

As per the results in Pearson's bi-variate correlation analysis (not tabulated), there is a significant negative relationship between CEO-Chair duality, board size, leverage variables, and financial distress. On the other hand, it is noted that leverage has a significant positive relationship with financial distress. However, it is observed that outside directors, board ownership, and firm size do not show a significant relationship with financial distress in listed non-financial firms in Sri Lanka.

Panel Regression Analysis

The Hausman test was used in selecting the appropriate regression model and due to the insignificant result, a random effect model was considered in performing the panel regression analysis (Table 3).

Table 3: Results of Panel Regression

Variable	Coefficient	Std. Error	Pr(> z)
Intercept	7.268	1.483	0.006
<i>OUTSIDE_DIR</i>	-1.540	1.929	0.424
<i>DUALITY</i>	-0.109	0.715	0.878
<i>B_SIZE</i>	-0.018	0.110	0.870
<i>B_OWNERSHIP</i>	-0.316	1.302	0.807
<i>F_SIZE</i>	0.076*	0.036	0.037
<i>LIQ</i>	0.258**	0.077	0.000
<i>LEV</i>	-8.294**	1.103	0.000
<i>R</i> ²	0.62		
<i>F</i>	45.25**		

** $p < 0.01$ and * $p < 0.05$.

The R^2 value is 0.62 with a significant F-value, which is interpreted as having a higher explanatory power of the selected independent variables and having an overall valid model. In terms of selected corporate governance variables (i.e. board independence, CEO-Chair duality, the board size, and ownership structure), it is noted that non of these have a significant impact on financial distress, and therefore H_1 , H_2 , H_3 , and H_4 were not supported. The insignificant relationship between outside directors and financial distress is consistent with Ibrahim (2019), but, contradicts Ellumi and Gueyie (2001). Similarly, CEO-Chair duality and financial distress show an insignificant relationship, which contradicts Lakshan and Wijekon (2012) but is in line with the results of Wang and Deng (2006). Furthermore, the board size does not have a significant impact on financial distress, which is consistent with Wang and Deng (2006) and

contradicts Ibrahim (2019). Similarly, board share ownership also shows an insignificant relationship with financial distress. This suggests that the board share ownership has no effect on financial distress, which is in line with the findings of Lakshan and Wijekon (2012) and Wang and Dong (2006). Based on the results, it is observed that the selected cooperated governance variable does not have an impact on financial distress.

In terms of firm characteristics, all selected variables have a significant impact on financial distress. Accordingly, H₅, H₆, and H₇ were supported. The positive significant relationship between liquidity and financial distress is consistent with Oktasari (2020). The findings show that the size of a company has a positive and significant impact on financial distress (Oktasari, 2021). Leverage and financial distress show a negative significant relationship, which contradicts Oktasari (2020). This finding is in line with research conducted by Isayas (2021).

Having discussed the findings, the conclusions and implications are provided in the next section.

CONCLUSIONS AND IMPLICATIONS

The study aimed to examine whether selected corporate governance practices and certain firm characteristics of listed non-financial companies impact the financial distress of such companies. The findings of the study do not demonstrate a statistically significant relationship between the selected corporate governance variables (i.e. board independence, CEO-Chair duality, the board size, and ownership structure) on financial distress. However, the findings indicate that all of the selected firm characteristics such as company size, liquidity, and leverage have a statistically significant impact on financial distress.

These findings are expected to have practical and empirical implications. The findings indicate that leverage should be used cautiously by firms to avoid potential financial distress and having adequate liquidity protects against such distress. Accordingly, the practitioners and policymakers could make appropriate policies and take action to prevent the financial distress of firms and ensure future viability. In terms of empirical significance, although this study is considered a frequently debated issue, only a few research has been undertaken in the present Sri Lankan setting. As a result, this study seeks to fill this void by examining the impact of governance mechanisms on financial distress amid the adoption of corporate governance

regulations such as the Code of Best Practice on Corporate Governance in 2017. Thus, this study brings new evidence amid these changes and fills an empirical dearth observed.

There are a few limitations of this study and findings should be interpreted subject to these. The sample was restricted to non-financial firms listed on the Colombo Stock Exchange for practical concerns. Accordingly, future studies could consider non-listed entities and even public-sector businesses. Moreover, future studies could also consider firms in other countries as well and perform comparative analyses.

REFERENCES

- De Silva, A. D. P., Perera, G. K. S. A., Lakshika, J. P. R., Nanayakkara, M. K. I. H., & Fernando, M. N. (2018). The impact of corporate governance on financial distress of listed finance companies in Sri Lanka', 1-25.
- Elloumi, F., & Gueyié, J. (2001). Financial distress and corporate governance: an empirical analysis', *Corporate Governance: The International Journal of Business in Society*, 1(1), 15–23.
- Gunathilaka, A. G. C. (2012). Audit expectation gap in Sri Lanka: the role of policymakers, *International Journal of Multidisciplinary Management Studies*, 2(10,) 364-375.
- Ibrahim, R. (2019). Corporate governance effect on financial distress: Evidence from Indonesian public-listed companies', *Journal of Economics, Business & Accountancy Ventura*, 21(3), 415-422.
- Isayas Y. N. (2021) Financial distress and its determinants: Evidence from insurance companies in Ethiopia, *Cogent Business & Management*, 8(1), 1-16.
- Lakshan, A. M. I., & Wijekoon, W. M. H. N. (2012), Corporate Governance and corporate failure, *Procedia Economics and Finance*, 2(5), 191-198.
- Lu, Y., Li, Y., Zhang, H., & Kou, Y. (2020). Internal and external factors leading to corporate financial distress a case study of Huayi Brothers media group. *Saudi Journal of Economics and Finance*, 4(6), 281-286. doi: 10.36348/sjef.2020.v04i06.014.

- Luqman, R., Ul Hassan, M., Tabasum, S., Khakwani, MS., & Irshad, S. (2018). Probability of financial distress and proposed adoption of corporate governance structures: Evidence from Pakistan', *Cogent Business & Management*, 5(1), 2-14.
- Oktasari, D. (2020). The effect of liquidity, leverage, and firm size of financial distress. east African scholars multidisciplinary bulletin, 3(9), 293-297. doi: 10.36349/easmb.2020.v03i09.002.
- Sameera, T. K. G., & Senaratne, S. (2015). Impact of corporate governance practices on probability and resolution of financial distress of listed companies in Sri Lanka. *4th International Conference on Management Economics*, 1-10.
- Wang, ZJ., & Deng, XL. (2006). Corporate governance and financial distress: Evidence from Chinese listed companies, *The Chinese Economy*, 39(5), 5–27.
- Younas, N, Uddin, S, Awan, T. & Khan, M. Y. (2020). Corporate governance and financial distress: Asian emerging market perspective', *Corporate Governance: The International Journal of Business in Society*, 21(4), 702–715.

THE EFFECT OF AUDITOR CHARACTERISTICS ON TAX AVOIDANCE OF LISTED COMPANIES IN SRI LANKA

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ABSTRACT

Purpose: The purpose of this paper is to investigate the effects of auditor characteristics on tax avoidance of Sri Lankan listed companies.

Design/methodology/approach: In this regard, the impact of different audit characteristics such as audit rotation, auditor industry specialisation, type of audit opinion, and audit fees on tax avoidance were examined. The study sample consists of listed companies in the Colombo Stock Exchange (CSE). The period of the study was five years from 2016 to 2020. Also in this study, firm size and leverage were controlled.

Findings: The results of this study were determined by four hypotheses. The hypotheses which explore the effect of auditor industry specialisation and audit rotation on tax avoidance were not confirmed. But the results showed a significant impact of audit fees and audit opinion on tax avoidance.

Research implications: It is recommended that companies whose auditors are characterised can use them as a key factor to reduce their tax costs. According to this research, investors and stakeholders are able to determine the tax of companies whose auditors are characterised by emerging markets, especially in those countries suffering from economic crises such as Sri Lanka.

Originality/value: The current study investigates the auditor characteristics of tax avoidance in a developing country like Sri Lanka and the results may be helpful to the developing countries.

Paper type: Research Paper

Keywords: Audit Fee, Auditor Industry Specialisation, Audit Opinion, Audit Rotation, Tax Avoidance

INTRODUCTION

Tax is a kind of mandatory payment, or a financial charge imposed by the government on revenue generating business units to fulfil their spending and expenditures. Negligence or failure to pay tax is punishable by law because companies and legal entities are trying to maximise their profits while finding a solution to reduce their tax payments. Therefore, tax avoidance is the use of legal methods to minimise tax obligations. According to Hanlon and Heitzman (2010), if tax avoidance represents a continuum of tax planning strategies, at the lower end we have perfectly legal tax-reducing strategies, while terms such as ‘noncompliance’, ‘evasion’, and ‘sheltering’ would be closer to the other end of the continuum.

Even though Sri Lankan companies are engaged in tax avoidance, there are not enough studies carried out in the Sri Lankan context on evaluating the effect of auditor characteristics on tax avoidance. Moreover, many companies lack proper knowledge of tax avoidance and the impact of auditors and auditor characteristics on tax avoidance. Therefore, it is important to carry out studies in this area to educate companies on the importance of tax avoidance and the impact of auditor characteristics on tax avoidance. Further, companies can understand the importance of auditor characteristics on tax avoidance and identify the most effective ways and means of tax avoidance in a legal context to maximise their profits and the shareholders’ wealth.

The most important reason for carrying out research on the Sri Lankan market is the disastrous economic conditions it has faced. From an economic point of view, it can be identified that Sri Lankan companies have been faced with many financial problems since the latter part of 2019 due to the pandemic situation. Therefore, in such a disastrous economic situation, most companies try to minimise tax liability to reduce their expenses. Consequently, it is important to examine the structure and the characteristics of the Sri Lankan audit market to aid such behaviour of companies tending to avoid tax. If we take a thorough look at the Sri Lankan audit market, it can be noticed that strong price-based competition among auditors and the level of income of auditors is relatively low.

The main research problem is to investigate the effect of auditor characteristics on the tax avoidance of listed companies in Sri Lanka. Hence, based on the discussed problem statement above, the research questions of this study can be defined as follows:

In terms of listed companies in Sri Lanka,

1. Whether there is an effect of audit fees on tax avoidance;
2. Whether there is an effect of auditor industry specialisation on tax avoidance;
3. Whether there is an effect of the type of audit opinion on tax avoidance; and
4. Whether there is an effect of audit rotation on tax avoidance.

METHODOLOGY

From the perspective of the division of research in terms of objective, this is applied research. In determining the study sample, investment companies, leasing, credit and financial institutions, insurance companies, and banks are not included in the sample due to their inherent nature of being highly regulated, the different nature of operations of these companies, and the use of financial statements which are different from that of other companies. The total data required to test the hypotheses in this research was collected directly from the financial statements on the Colombo Stock Exchange (CSE) website. After collecting the required data from available resources, the data were analysed using EViews software. The study population consists of 279 observations and out of that 153 listed companies were taken as the final sample.

Research Hypotheses

Based on the conceptual framework (Figure 1), the following hypotheses were developed.

H₁: Audit fee has a positive effect on tax avoidance.

H₂: Auditor industry specialisation has a negative effect on tax avoidance.

H₃: Audit opinion has a negative effect on tax avoidance.

H₄: Audit rotation has a negative effect on tax avoidance.

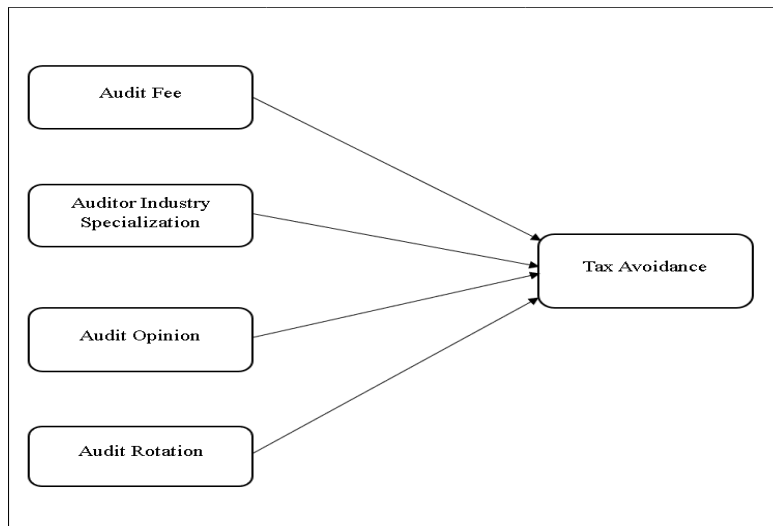


Figure 1: Conceptual Framework

RESULTS AND DISCUSSION

The four hypotheses were tested, which examined the effect of auditor characteristics on tax avoidance measured by ETR using balanced panel data regression. Here, the Effective Tax Rate (ETR) was calculated as a proportion of income tax paid to the profit before tax.

Testing H₁, Table 1 presents evidence of a positive and significant coefficient on audit fees. This means that the tax avoidance level will increase when there is an increase in audit fees. Therefore, it accepts the H₁, which states the positive effect of audit fees on tax avoidance that supports the idea of Omer et al. (2006) who found that higher fees paid by clients to their auditors are associated with lower future marginal and effective tax rates.

The results show an insignificant effect of auditor industry specialisation on tax avoidance. This study produced results which collaborate with the findings of a great deal of the previous work in this field. In fact, Kanagaretnam et al. (2016) observe that both measures of auditor industry specialisation are significantly associated with a lower likelihood of tax avoidance among firms audited by the Big N auditors.

Table 1 shows that there is a positive and significant relationship between audit opinion and tax avoidance. The results of Herbohn and Ragunathan (2008) show that management's propensity to manipulate earnings is positively associated with modified audit opinions reported by auditors.

Testing H₄, we did not witness a significant impact between audit rotation and tax avoidance. Thus, this result does not support previous studies where it shows a positive effect of audit rotation on tax avoidance. It was found by Saleh et al. (2018) that the long-term presence of auditors is a launchpad for firms that want to engage in fraudulent financial reporting.

The coefficients of the control variables are consistent with expectations. We find larger (*SIZE*) firms are less likely to be tax aggressive, possibly due to additional political scrutiny of such firms which is opposite to Lanis and Richardson (2012). We also find that firms with higher leverage (*LEV*) tend to be tax aggressive and consistent with greater opportunities to avoid taxes for firms with more debt.

Table 1: Regression Results

Variable	Coefficient	t-stat	Prob.
<i>AuditFEE</i>	7.9592	4.4362	0.0000
<i>AuditSPEC</i>	-1.0790	-0.7474	0.4550
<i>AuditOP</i>	10.7502	2.1306	0.0334
<i>AuditROT</i>	-0.5240	-0.2998	0.7644
<i>SIZE</i>	-3.1749	-2.8617	0.0043
<i>LEV</i>	-0.0021	-1.3546	0.1760
<i>C</i>	-13.6684	-1.4415	0.1499
R-squared	0.032186	Durbin-Watson Stat	1.513117
Adj R-squared	0.024525		
F-statistic	4.201398		
Prob(F-statistic)	0.000362		

Notes: AuditFEES - audit fees, *AuditSPEC* - audit specialization, *AuditOP* - audit opinion, *AuditROT* - audit rotation; *SIZE* is the natural logarithm of total assets; and *LEV* is the ratio of total debt to total equity.

CONCLUSIONS AND IMPLICATIONS

This study aimed to examine the effect of audit characteristics on the tax avoidance of listed companies in Sri Lanka. Using a large sample of firm-year observations from 153 Sri Lankan firms and estimation, the results indicate that audit characteristics influence tax avoidance. Two of them (specialisation and audit rotation) have a negative effect; the other ones (audit fees and audit opinion) gave a positive effect on tax avoidance.

This research paper has important implications for society and users of financial statements, as it has shown just how important an auditor is to the accuracy of these financial statements. It appears that this research will make investors and stakeholders aware of the fact that the

characteristics of auditors will be effective in the amount of tax avoidance behaviour of companies in emerging markets, especially those markets like Sri Lanka that suffer an economic crisis. By reading this research, investors can learn to better understand which companies have reliable financial information in times of financial crisis. With regard to the aforesaid key takeaways, this study finding has an important recommendation for multinational firms, auditors, policymakers, and financial report users. Future researchers can investigate the moderating effect of board gender diversity on the relationship between audit characteristics and tax avoidance and it is recommended and will help to explore new findings by reaching banking, finance, and insurance companies in the context of the effect of auditor characteristics on tax avoidance.

REFERENCES

- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50(2–3), 127–178. <https://doi.org/10.1016/j.jacceco.2010.09.002>
- Herbohn, K., & Ragunathan, V. (2008). Auditor reporting and earnings management: some additional evidence. *Accounting & Finance*, 080506173207474-
<https://doi.org/10.1111/j.1467-629x.2007.00256.x>
- Lanis, R., & Richardson, G. (2012). Corporate social responsibility and tax aggressiveness: An empirical analysis. *Journal of Accounting and Public Policy*, 31(1), 86–108.
<https://doi.org/10.1016/j.jaccpubpol.2011.10.006>
- Omer, T. C., Bedard, J. C., & Falsetta, D. (2006). Auditor-Provided Tax Services: The Effects of a Changing Regulatory Environment. *The Accounting Review*, 81(5), 1095–1117.
<https://doi.org/10.2308/accr.2006.81.5.1095>
- Salehi, M., Tarighi, H., & Rezanezhad, M. (2019). Empirical study on the effective factors of social responsibility disclosure of Iranian companies. *Journal of Asian Business and Economic Studies*, 26(1), 34–55. <https://doi.org/10.1108/jabes-06-2018-0028>

DETERMINANTS OF ACCOUNTING PRACTICE IN SMALL AND MEDIUM ENTERPRISES: EVIDENCE FROM SRI LANKA

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ABSTRACT

Purpose: Accounting practices are used for the performance of the accounting reports of Small and Medium Enterprises (SMEs), and they provide accurate and timely financial statements. Accounting practices usage for the SME sector is less likely to be used in a developing country like Sri Lanka. Hence, the research to identify the determinants which are affecting the accounting practices of SMEs in Sri Lanka.

Design/methodology/approach: The methodology adopted for the study was the deductive approach. The sampling technique used for the study is convenience sampling and to come up with the result, Structural Equation Modulation Analysis was performed through the SMART PLS software. The study used stakeholder theory.

Findings: The research finding indicates that the level of education and firm size is a materially significant determinant for the accounting practices of SMEs in Sri Lanka.

Research implications: Policymakers such as the CA Sri Lanka, Small Enterprise Development Division, and Universities use this to take policy decision as well as this study improve the education level of owners of SME enterprises in Sri Lanka.

Originality/value: This study contributes to stakeholder theory research as well as accounting practices and SMEs related studies. The study adds new knowledge to the body of knowledge on firm size and level of education determinant of accounting practices.

Paper type: Research Paper

Keywords: Determinants of accounting practices, Firm Size, Level of Education, Small and medium enterprises (SMEs), Stakeholder Theory

INTRODUCTION

In Sri Lanka, SME sectors play an important role in many ways. It provides jobs, contributes to the enhancements of GDP growth, introduces new goods and services, and further, it provides many economic activities. As a result, to enhance long-term development, many developing countries like Sri Lanka are using SMEs and the government needs to accelerate the expansion of the SME sector. Sri Lanka is seeing a sharp increase in the number of SMEs. When it comes to SMEs, accounting practices are essential since they help SME sector businesses to handle short-term issues such as costing for the period, spending for the year, and cash flow in the period. So, these accounting practices provide the information to aid and monitor SME management (Son et al., 2006; Maseko & Manyani 2011).

Accounting services are critical to business, and they have evolved into the company's lifeblood. In the industry, owners and managers use a variety of financial, human, and other resources. As a result, accounting services can be used to manage those resources. Accountants can provide organisations with dependable and competent accounting services, as well as provide advice to interested parties such as owners, managers, clients, banks, vendors, etc. Some particular laws and regulations can be used to generate financial statements and provide superior accounting services to a business (Adeyemi et al., 2015). Accounting services should be accurate, dependable, and of high quality in accordance with industry standards, allowing for comparisons and contrasts between previous years and competitors to make better judgments.

With globalisation, the maturity of businesses and industries, customer demand, technological advancements, and competition, today's business climate has become more complicated, unpredictable, and turbulent. Accounting services are critical to surviving in the corporate environment and achieving long-term business growth.

Edris and Fredu (2016) indicated that poor financial records significantly affect access to finance. As a result, the SME financial reporting system is required to ensure that the economic resources of the SME sector are employed efficiently to achieve the desired goals. Financial skills in the SME sector have high demand and they need to identify the correct person for the financial services since the SME sector provides the financial statements for the stakeholders to read and understand. As a result, the purpose of this research is to see how financial

procedures are utilised by SMEs in Sri Lanka and whether they impact SME performance. The researcher is encouraged to look at the accounting methods of Sri Lankan SMEs. Sri Lanka is a developing country. Therefore, it has a unique set of challenges. As a result, the SME sector requires accounting professionals' expertise and skills to manage firm profitability, reduce the threat of new entrants, and reduce uncertainties and challenges. The ramifications and theories of accounting services for Sri Lankan SMEs are investigated in this study.

Research Problem

SMEs can be primarily found in Sri Lankan rural areas, and they begin with little skills, capital, and expertise. Owners of SMEs, on the other hand, are more likely to take a risk and start their own firm, which, in the long run, opens up new prospects for business expansion and contributes to the Sri Lankan economy. SMEs are less likely to spend money on accounting services, so they typically hire one person to handle all of the accounting work, which includes recording transactions, preparing a balance sheet, financial reports, management accounts, and providing information to owners and other parties (Kipsang & Mwangi, 2016). SMEs' financial performance is being harmed as a result of this behaviour.

Qualified accountants and accounting services can help to minimise failures and challenges and attract new prospects. According to Athapaththu and Nishantha (2018), due to a lack of information on financial health and financial service misdirection, the majority of SMEs in Sri Lanka face challenges and miss out on opportunities in the market. Most SMEs believe that implementing proper accounting practices in accordance with accounting standards (i.e., IFRS) is costly, complex, and difficult to implement due to a lack of direction, competent people resources, and insufficient materials. As a result, there is a low level of adoption of proper accounting service providers in Sri Lanka (Jariya & Haleem, 2021).

Research Question

1. What are the determinants of accounting practices of small and medium enterprises in Sri Lanka?
2. Are there any significant differences among sectors in small and medium enterprises in Sri Lanka in terms of accounting practices?

Research Objective

1. To investigate the determinants of accounting practices of small and medium enterprises in Sri Lanka.
2. To identify whether there is a significant difference among sectors in small and medium enterprises in Sri Lanka in terms of accounting practices.

Significance of the Study

Keeping correct and timely accounting statistics to present a clear corporate image is critical to the success or failure of any small or medium firm (Zotorvie, 2017). Most small businesses do not keep proper books of account or follow basic accounting measures to oversee their SME resources, according to the research. Therefore, they are unable to disclose their enterprises' exact financial status or operational performance (Kahsay & Zeleke, 2019). The SME sector has high expenses for using trained accountants. They are having lack of accounting knowledge and a lack of awareness about accounting practices. As a result, they lead to poor performance of the company (Kipsang & Mwangi, 2017; Mersha & Ayenew, 2017). Therefore, this study provides a roadmap for SMEs to improve their accounting procedures by taking into account the elements that influence accounting practices.

Different types of stakeholders connected with the SME sector are suffering many issues due to the lack of a good accounting system. Occasionally, the owners or management of SMEs are unaware of their company's true financial situation. As a result, this study provides a roadmap for SMEs to learn how to overcome obstacles while implementing accounting methods.

This study will examine the amount to which Sri Lankan SME sectors have accepted accounting methods. Second, this study looks at the external factors which are influencing the acceptance of accounting methods by SME sector companies in Sri Lanka. The findings of this research are expected to aid SMEs, external accountants/auditors, policymakers, and academics by providing information on the progress and factors affecting the implementation of accounting procedures in the Sri Lankan SMEs sector. This study is intended to pave the way for future studies in the fields of management accounting, organisational design, and SME performance, particularly in developing nations like Sri Lanka.

Further, this research is also helpful for future researchers in conducting their research and in developing the literature review to identify the factors affecting accounting practices in SMEs and their relationships.

METHODOLOGY

This study employed a survey questionnaire to gather data concerning the research topic. A quantitative method was used. The sample of the study is consistent with SMEs from the manufacturing, trading, agricultural, and service sectors.

Justification

This study tries to look at whether accounting practices have an impact on SMEs' success. By using many approaches, the study identifies the relationship among the variable using the positivist approach. Positivism is an approach that considers the researcher to analyse a large amount of data by developing the hypothesis to be tested. This approach is highly structured and allows the replication of the same study conducted by a future researcher.

Determinants of Accounting Practice in SMEs: Evidence from Ethiopia; Determinants influencing the use of accounting services by investment groups in Kajiado county, Kenya; Determinants of demand and supply of accounting and audit services in SMEs. Sources from Nigeria and many other articles have followed the positivism approach to identify the relationship existing among each hypothesis.

So, the dominant strategy for this area of study could be identified as the positivist approach.

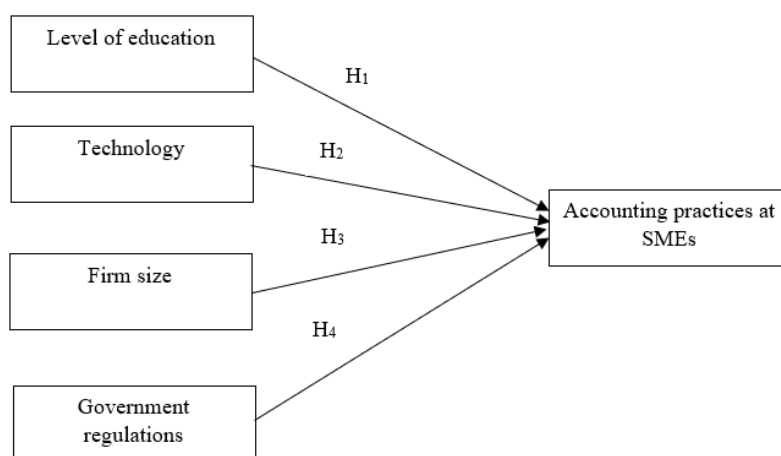


Figure 1: Conceptual Framework

Hypothesis Development

Based on the conceptual framework (Figure 1), the following hypotheses were developed.

This research's hypotheses have been arranged as follows:

H₁: Level of education impacts on accounting practices of SMEs
H₂: Technology is impact on accounting practices of SMEs

H₃: Firm size impacts on accounting practices of SMEs

H₄: Government regulations impact on accounting practices of SMEs

When conducting an empirical study with the intention of drawing conclusions about the population, the sample size is a crucial component. The researcher selects SMEs in the Southern and Western provinces to acquire the sample size. However, for the researcher's convenience, 100 samples were selected from all populations. Questionnaires were used as the primary research tools for this study, which were distributed to all owners and managers in the aforementioned industries. To make data analysis easier, the surveys were closed-ended. It comprised of a series of questions aimed at eliciting their thoughts on the impact of accounting methods on SMEs. All of the questions had options, and it was up to the responders to choose the one that was most suited for them. The choice of a questionnaire is based on the size of the population, its ease of administration, and the amount of time it takes to complete it.

As mentioned earlier, the main instrument utilised to gather data was a closed-ended questionnaire for managers and owners of SMEs. Negotiations took place between the researcher and the respondents to choose the best time to administer the questionnaire. The researcher, who also helped me with data collecting, aided in the delivery of the questionnaire. The entire exercise took place over the course of one month, and few of the responders were unable to participate because of their busy time schedules.

The questionnaire was developed using Google Drive to let the respondent fill it in at a convenient time and shared it through social media of SMEs' business-related groups (FB, LinkedIn, Etc.) as well as letting share among friends and colleagues to collect data from known business parties. Apart from that data was gathered through face-to-face interviews.

Data collected was analysed quantitatively using a statistical package of Social Science and Smart PLS 3.0. Before starting the analysis process, the researcher processes the data by editing, categorising, and coding it appropriately. After processing, the data is fed into the computer via the statistical package of the Social Science program after preparing a CSV file through SPSS feed data into Smart Pls 3.0 and did further analysis.

To analyse the abovementioned objectives the following test was used.

Table 1: Analysis Summary

Objectives	Test
1. To investigate the determinants of accounting practices of small and medium enterprises in Sri Lanka	Structural Equation Modulation Analysis - SMART PLS 3.0
2. To identify whether there is a significant difference among sectors in small and medium enterprises in Sri Lanka in terms of Accounting Practice	One Way ANOVA

RESULTS AND DISCUSSION

Before starting the analysis, a completed model of format was generated. After developing the model, we had to run PLS Algorithm and then had to check to construct reliability and validity as well as the discriminant validity test. After that, we ended up with an analysis by performing the bootstrapping test.

“Convergent validity is the degree to which multiple attempts to measure the same concepts are in agreement. The idea is that two or more measures of the same thing should covary highly if they are valid measures of the concept” (Bogazzi et al, 1991). A convergent validity test was performed at the start of the investigation. The item loadings, average variance extracted (AVE), and composite reliability (CR) were all evaluated in this study.

According to the results for reliability and validity, item loadings were greater than 0.6, which was in line with Hair et al. (2017) (as Cited in Thaker et al., 2020). The study used composite reliability and Cronbach's alpha to assess the reliability of the constructs (CR). All of the CRs

exceeded the suggested value of 0.700. (Wasko & Faraj, 2005). Each construct has a Cronbach's alpha that is greater than or equal to 0.700. The average variance extracted (AVE) was over 0.500, hence convergent validity was accepted.

Discriminant validity was assessed by the HTMT ratio of correlations (Henseler et al., 2015), with a value below the threshold of 0.90. According to Kiline (2011) threshold of the HTMT test if the HTMT value is greater than the HTMT 0.85 or the HTMT 0.90. The result of the HTMT test demonstrates that HTMT 0.85 and HTMT 0.90 requirements criteria were established. Therefore, it indicates that the measurement model has sufficient validity.

Structural Model Result

Table 2: Results of Structural Model

Hypothesis	R/Ship	Std. Beta	Std. Error	T Value	P Value
	Lvl of Edu > Acc				
H_1	Pra	0.397	0.066	6.109 **	Supported
H_2	Tech > Acc Pra	0.089	0.054	2.776	Not Supported
	Firm Size > Acc				
H_3	Pra	0.287	0.105	3.777**	Supported
H_4	Gov Reg > Acc Pra	0.227	0.117	0.635	Not Supported

** $p < 0.01$

Table 2 illustrates the outcomes of the structural model using PLS version 3.0. The sample size is 100, and the R-square value is 0.816. The result of the H_1 and H_3 is higher than 3.291 and also p-value is less than 0.001 hence both H_1 and H_3 results are significant. (p-value = 0.00).

On the other hand, can conclude that H_2 and H_4 Hypothesis which are technology and government regulation has no impact on the accounting practices of SMEs.

One-Way ANOVA Result

A quantitative analysis was carried out to find out whether there was any significant difference among sectors in SMEs in Sri Lanka between the group and within groups.

The Hypothesis Tested was,

H₀: There is no difference among sectors in small and medium enterprises in Sri Lanka in terms of accounting practices.

H₅: There is a difference among sectors in small and medium enterprises in Sri Lanka in terms of accounting practices.

Table 3: Difference in SME Sectors in Terms of Accounting Practices

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	2.548	3	0.849	1.877	0.139
Within Groups	43.439	96	0.452		
Total	45.988	99			

Source: Author

According to above Table 3, deficits there is no significant difference between groups and within-group sectors in SMEs in Sri Lanka in terms of accounting practices. Thus, the null hypothesis was accepted. Hence there is no difference between sectors of SMEs in terms of accounting practices.

Post-hoc Test Result

Post-hoc test was used to test the significant mean difference in the accounting practices of SME sectors.

Table 4: Multiple Comparisons Among Sectors in Small and Medium Enterprises in Sri Lanka in Terms of Accounting Practices

Business Sector	Business Sector	Mean Difference (I-J)	Sig
Agriculture	Manufacturing	0.414	0.668
	Trading	0.027	1.000
	Service	0.336	0.774
Manufacturing	Agriculture	-0.414	0.668
	Trading	-0.387	0.185
	Service	-0.078	0.968
Trading	Agriculture	-0.027	1.000
	Manufacturing	0.387	0.185
	Service	0.309	0.237
Service	Agriculture	-0.336	0.774
	Manufacturing	0.078	0.968
	Trading	-0.309	0.237

Table 4 represents that there was no significant difference between the accounting practices of the manufacturing, trading, and service sectors compared to the agricultural sector. And all other sectors represent the same result when compared to different sectors. Thus, the null hypothesis was accepted.

CONCLUSIONS AND IMPLICATIONS

Conclusion

H₁: Level of education impacts on accounting practices of SMEs

The current research represents that the level of education impacts accounting practices. As the owner or Managers gain more education, firm owners, managers, and staff develop their financial literacy. They seek financial information to clarify their business status whether it is profitable or incurring losses. This aids in the development of their capacity to obtain, read, interpret, and use accounting information for business decisions. These have also been proved by many researchers. According to Kisoang and Mwangi (2017), the degree of education has a substantial impact on the accounting practices of small and micro firms in Kenya. As Neneh (2018) points out, the amount of education has an impact on accounting methods and corporate performance.

According to Azudin and Mansor (2018), if the firm does not enhance the level of education in the SME, it will make adopting accounting methods more difficult. According to Yeboah (2015) and Omsa et al. (2018), the level of education has a significant impact on SME sector accounting methods. Ng and Kee (2018) also mentioned that experience and knowledge of accounting practices are equally important when it comes to the SME sector. Hence, it can be concluded that the findings of the research are valid and appropriate for the SME sector.

H₂: Technology impacts on accounting practices of SMEs

The study results show that there is no link between technology and SME accounting practices. Though technology provides a better solution to maintain reliable, accurate, and quality financial records timely within SMEs, the low level of technology investment prevents most SMEs from implementing accounting systems as they first need to invest in information technology infrastructure and hire a technological expert or train their current employees,

which increases their cost. The study of Amanamah et al. (2016) in Ghana revealed the same result, which is, technology has no significant effect on the decision to adopt financial reporting standards.

In Sri Lanka, the selected sample represents SMEs operating with a minimum number of employees and client base where they do not give priority that they are in need of accounting software or other technical services to ease their work and they might think it will be an additional cost for the organisation. Therefore, we ended up with the result as there is no relationship between accounting practices and technology.

In contrast, previous researchers have proved that there is a link between technology and SME accounting practices. According to studies by Amara and Benelifa (2017) and Pillay (2016), SMEs are increasingly adopting technology to activate or advertise their productions. Karadag (2015) mentioned that because the SME was unable to benefit from lower manufacturing costs owing to a lack of technological application and hence there is a relationship between the two variables.

H₃: Firm size impacts on accounting practices of SMEs

Ahmad (2012) also discovered that large corporations require more accounting practices than SMEs. According to Anertey (2014) and Padachi (2012), the size of the assets has an impact on the likelihood of formal accounting records being retained. According to Ahmad and Zabri (2015) and Wu and Boateng (2010), the size of a firm as measured by total capital has a significant impact on accounting practice.

The result of this study shows the same result that the firm size has an impact on the accounting practices of SMEs. Although it can be concluded that the findings of the research are valid and appropriate for the SME sector. When the organisation's transactions get expanded SME assets, the employee also gets increased. Ultimately there can occur fraud. Also, to prevent occurring fraud, owners and managers need to establish better accounting practices as well as audit services to monitor all transactions properly.

H₄: Government regulations impact accounting practices of SMEs

There is no impact of government regulations on accounting practices, according to current research practices. Previous studies have shown, however, that there is a link between government regulations and SME accounting practices. Governments in various countries assist

SMEs in a variety of ways. Tax benefits, credit facilities, social development support, and financial development are only a few examples (Storey & Tether, 1998). The government's financial assistance encourages SMEs to develop their businesses globally. As a result, they can improve their performance and contribute to significant economic growth, as demonstrated by Clement and Lee's research (2007). As Lee (2007) points out, a firm's capacity to achieve long-term success in these emerging economies is also influenced by political and governmental ties. SME sector managers may be able to expand in a durable competitive advantage market by utilising strong political and governmental contacts and hence Li et al. (2008) proved that there is an impact of government regulations on accounting practices.

In Sri Lanka, even though the government helped to grow the SME sector, they did not facilitate and motivate SMEs to adopt accounting practices even if there is a separate accounting policy.

Implications

The growth of the country's economy and the creation of new jobs have both been facilitated by SMEs. Therefore, it is crucial to look into the causes of the SMEs' failure. The justification for doing this investigation was the finding in earlier studies that one of the causes of the failure was the absence of a reliable accounting system.

The results have some implications. Making wise decisions is essential to the growth of SMEs. The utilisation of accurate accounting information for company choices is, sadly, still insufficient, according to earlier studies. The main influences on SME accounting practices were identified by this study. Therefore, to enhance their accounting practices, owners, managers, and employees of small and medium firms must concentrate on these factors. Firms must consider the main issues that impede their accounting reporting when establishing reporting and decision-making policies. To enhance accounting practice in small and medium firms, they are given the key issues by this research that require immediate attention.

The main factors affecting SMEs' accounting practices were identified by this study. Therefore, to enhance their accounting procedures, owners, managers, and employees of SMEs must concentrate on these factors. While setting reporting and decision-making policies, firms need to see the major factors that hinder their accounting reporting. This research provides them with the major factors that need immediate attention to improve accounting practice in SMEs.

When it comes to recording business transactions, SMEs can do better by following the below steps. First and foremost, owners and managers of SMEs should receive introductory training in accounting procedures as this will help them understand their assets, liabilities, and capital. Second, SMEs should hire support employees externally to assist their part-time staff in maintaining records of company transactions.

The findings of the research are significant for SME sector managers in identifying the best use of accounting practices. The findings also can be used by the management accountant and the other interested parties to get a thorough knowledge of accounting practices in developing countries like Sri Lanka. Further, the findings of the research can also serve as a foundation for the government decision-makers to encourage the SMEs to use accounting practices to help them in conducting their accounting practices as well as SME entrepreneurs can become more professional in managing their accounts by using better accounting practices.

REFERENCES

- Adeyemi, S. B., Udofia, I. E., & Obah, S. (2015). Determinants of demand and supply of accounting and audit services in SMEs: Evidence from Nigeria.
- Karadag, H. (2017). The impact of industry, firm age and education level on financial management performance in small and medium-sized enterprises (SMEs): Evidence from Turkey. *Journal of Entrepreneurship in Emerging Economies*.
- Kipsang, B., & Mwangi, M. (2016). Factors influencing the use of accounting services by small and medium enterprises in Kenya. *Journal of Accounting*, 1(1), 44-59.
- Maseko, N., & Manyani, O. (2011). Accounting practices of SMEs in Zimbabwe: An investigative study of record keeping for performance measurement (A case study of Bindura). *Journal of accounting and taxation*, 3(8), 158.
- Okoli, B. E. (2011). Evaluation of the accounting systems used by small scale enterprises in Nigeria: The case of Enugu-South East Nigeria. *Asian Journal of Business Management*, 3(4), 235-240.

THE FINANCIAL LITERACY OF DAILY WAGE WORKERS: A STUDY BASED ON DAILY WAGE WORKERS IN NUWARA-ELIYA DISTRICT OF SRI LANKA

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ABSTRACT

Purpose: The purpose of this research is to identify the financial literacy level of daily wage workers and its impact on their current economic situation.

Design/methodology/approach: A quantitative research approach is used in the study. A structured physical interview was conducted with daily wage workers to collect data and the sample of the study included 210 daily wage workers of Oliphant Tea Estate in Nuwara-Eliya district in Sri Lanka. Frequency analysis was used to analyse the data.

Findings: The findings revealed that the daily wage workers have a lack of knowledge about saving, loan policies, investment methods, and personal budgeting. The majority of participants are not getting enough wages to fulfil their needs and they have some difficulties in obtaining loans due to insufficient wages and lack of savings. The knowledge of investment methods and understanding of financial instruments are insufficient and because of that, they followed many types of loan solutions as their fulfilment of daily needs. Because of the above-mentioned findings, the ability to manage their daily wage is very poor and they faced massive financial difficulties.

Research implications: The insights gained through this study are expected to be useful for the administration of tea estates, financial institutions, welfare authorities of the region and policymakers.

Originality/value: Thus, this study has contributed to the social development of rural areas like estate communities and developed their socio-economic life. Empowering the workforce resource with good financial literacy is most important to the sustainable development of the country.

Paper type: Research paper

Keywords: Financial Literacy, Daily wage workers, Nuwara-Eliya

INTRODUCTION

Daily wage workers mean those who work in different categories such as contract workers and casual workers for complete jobs on an hourly, daily, weekly and quantity basis and the like. According to the Apprenticeship Act of 1961, "Any person who is employed for a salary in any kind of work and who receives payment directly from the employer but does not include an apprentice" (Bongini et al., 2021). Daily wage workers are involved in building construction, housework, dry cleaning, picking up rags, playing traditional instruments, cooking, hairdressing, cleaning pots at tea stalls and tailoring, plumbing, painting, brickwork, peddling, machine and other types of contract work are called daily wage workers. Daily wage workers do not know how to settle on enormous financial choices all alone due to a lack of knowledge of financial literacy. This problem has been coming from their generation. Financial literacy is likewise critical to all daily wage workers. Financial literacy is the capacity of people to settle on suitable choices in dealing with their daily wage (Ananat et al., 2022). As sound budgetary prosperity and a better lifestyle are gaining importance, the need among people and a progressively globalised capital market, offering a mixture of investment funds and financial products, is observed to be an enormous way in accomplishing such individual goals. Personal financial planning is progressively turning into a decent practice if not, a need. In fact, it is a sound individual to be aware of routes in which they manage financial issues and risks.

Financial literacy is the end, result of the financial education process. "When students are financially literate, they can make informed financial decisions that can aid in improving their well-being." (Paul, 2002) Financial literacy is giving financial tools to financially empower individuals so they can create a better financial life for themselves (Clark et al., 2016).

Financial literacy, to put it more simply, is the knowledge and skills that a person or family has in relation to earning incomes, managing expenses, borrowing, maintaining savings, formulating a formal retirement plan, and investing for a high standard of living. The primary goal is to shape people's basic attitudes and principles so that a change in financial behaviour can enable them to reach a future of financial freedom and security (Ibrahim et al., 2019). As per Standard & Poor's 2014 global financial literacy survey, Sri Lanka has a higher financial literacy rate compared to its South Asian peers. This is not a surprising factor since Sri Lanka has one of the highest adult print literacy rates in the region. However, it is noteworthy, the gap between print literacy and financial literacy is very wide. Sri Lanka has the highest gap between

print literacy and financial literacy in the region. This indicates that there is more scope to promote financial literacy among Sri Lankans.

As per the survey on average, 65% of adults in the major advanced economies are financially literate. South Asia records the lowest percentage of financial literacy. This implies that financial literacy among citizens could propel the nation's economic growth. (Karger, H. 2015). The effects of lower financial literacy are greatly magnified in the daily wage workers, rural public, and small-medium business community. When it comes to personal financing, some people poorly manage their credit cards. They take hefty discounts offered by financial institutions and expenses beyond their disposable income and eventually end up with penal interest. On the other side of the spectrum, there are people who would settle the credit card balance well before the due date, resulting in a loss of interest income on their savings. Credit cards should be consumed wisely to earn benefits from them.

When it comes to savings, people who are daily wage workers still prefer Government banks over private banks despite Sri Lanka having strong private banking and non-banking financial institutions. Lack of understanding about saving products and misconceptions keep people away from maximising returns on their surplus funds. One of the fundamentals of finance is the positive relationship between Risk and Return. There are opportunities where people could maximise their return by investing in assorted saving products of credible and reputed financial institutions (Karger, H. 2015). Poverty levels in districts vary significantly from a low of 3.5% in Colombo (the capital of Sri Lanka) to 44.2% in Nuwara-Eliya. Only 4.5% of Sri Lankans live in estate areas, but these areas account for 14.4% of those living in poverty, making this a crucially important group (Household income and expenditure survey, 2019). This was the main reason to select the Nuwara-Eliya district for this study. The research objective that is aimed to be fulfilled through this research is to identify the financial literacy level of daily wage workers

METHODOLOGY

This study was based on a quantitative methodology to identify the financial literacy level of daily wage workers. The data was collected by issuing questionnaires to daily wage workers of Oliphant Tea Estate in the Nuwara-Eliya district. The information assortment instrument was arranged into three extraordinary segments, specifically demographic variables, such as age gathering, sexual direction, and instructive capability. The structured questionnaires were shared with the participants during the period between the first weeks of April 2022 and

received 210 responses which were imported to SPSS software and determinate investigations were finished. In this study, the financial literacy level of daily wage workers was identified. To identify the financial literacy level a frequency analysis was used.

RESULTS AND DISCUSSION

The demographic characteristics of the respondents are given below in Table 1. This study has been carried out among 210 respondents. The majority of the participants were females (71.4%) and 28.6% of participants were males. The age range of most of them was between 18 - 30 (19%), 31 - 40 (33.3%), 41 - 50 (23.8%), and over 51 years was 23.8%. According to their marital status, a majority of them are married 52.4%. When they were asked about their educational background, they mentioned 4 types of qualifications as secondary education completed, primary education completed, diploma, and not attended school. However, the majority of the respondents had completed school education (47.6%). The occupation of majority participants was in the agriculture field 38.1% and others were in the construction field 19%, the transport field 19%, and the cleaning field 14.3%.

Table 1: Demographic Characteristics of Respondents

Variable	Frequency	Percentage
Gender		
Male	60	28.6
Female	150	71.4
Age		
18 – 30	40	19
31 – 40	70	33.3
41 – 50	50	23.8
51 – 60	50	23.8
Marital Status		
Married	110	52.4
Single	50	23.8
Divorced	40	19
Widow	10	4.8
Educational background?		
Secondary education completed	100	47.6
Primary education completed	90	42.9
Diploma	3	1.4
Not attended school	17	8.1
Occupation		
Agriculture field	80	38.1
Construction field	40	19
Transport field	40	19
Cleaning field	30	14.3
Other	20	9.5

Numbers of dependents		
1	20	9.5
2	40	19
3	30	14.3
4	70	33.3
5 and above	10	4.9
No dependents	40	19
How much you earn daily as wage? (LKR)		
Below 1000	6	3
1001 – 1500	30	14.3
1501 – 2000	120	57.1
2001 – 2500	50	23.8
Above 3000	4	1.8

Source: Author, 2022

The above table shows that and identifies the majority of participants (57.1%) were earning LKR 1501 -2000 level wage as their daily wage. When they were asked about their number of dependents, the majority of them mentioned four dependents as 33.3% depending on their daily wage.

Table 2: Income Level of Participants

What are your categories of expenses from your daily wage?	Frequency	Percentage
Food	210	100
Transport	180	85.7
Medicine	160	76.2
Loan settlement	120	57.1
Children's Education	110	52.4
Is enough your wage to full fill your needs?		
Yes	30	14.3
No	180	85.7
If not, how do you fulfil your basic needs?		
Extra job	189	90
Getting loan	80	38.1
Gold loan/pawns	80	38.1
Samurdhi fund	90	42.9
If you get a loan where from you get it		
Bank	90	42.9
Microfinance	189	90
Personal loan	160	76.2
If you getting loans, do you know the conditions of loan contact as well as interest rate?		
Yes	50	23.8
No	160	76.2
What is your repayment plan of your loan contract?		
From salary	191	91
From another loan	90	42.9
From charity	40	19

From Savings	10	4.8
From Agriculture / entrepreneur	150	71.4
Are you saving money?		
Yes	70	33.3
No	140	66.7
Do you have better understanding of how to invest my money?		
Yes	40	19
No	170	81
Do you have better understanding of how to manage my credits use?		
Yes	30	14.3
No	180	85.7
Do you have the ability to maintain financial records for my income and expenditure?		
Yes	40	19
No	170	81
Could you manage your money easily?		
Yes	50	23.8
No	160	76.2
Do you have better understanding of financial instruments (e.g., Bonds, stock, T-bill, time value of money, future contract)		
Yes	40	19
No	170	81
Do you have the ability to prepare my own budget weekly and monthly?		
Yes	140	66.7
No	70	33.3

Source: Author, 2022

The level of financial literacy of daily wage workers is an important part of this study. It is shown in Table 2. The majority of the workers mentioned that the expenses of Food (100%), Transport (85.7%), Medicine (76.2%) and Loan settlement (57.1%) are the major expenses of daily life. Most of them stated that (85.7%) of their wages to fulfil their key needs are insufficient. Then they depend on extra earning or fund opportunities as extra jobs, getting loans, gold loans/pawns, and Samurdhi funds. If they got a loan, the majority of them got it from Microfinance companies (90%) and personal loans (76.2%). But according to the above table, the majority (76.2%) of them do not know the conditions of loan contract as well as the interest rate and the majority of participants (66.7%) in this study do not have saving behaviour and a better understanding of how to invest their money. As a ratio, 81% of participants in this study do not have a better understanding of how to invest their money

and 85.7% of participants do not have a better understanding of how to manage their money. Most of the participants (81%) of this study do not have the ability to maintain the financial records of their income and expenditure.

CONCLUSIONS AND IMPLICATIONS

We carried out this study to identify the financial literacy level of daily wage workers in the Nuwara-Eliya district. Accordingly, it depicted that their wage is insufficient to meet their daily needs. To cover the insufficient amount, they tend to obtain loans and engage in part-time jobs. Here, they mostly obtain microfinance loans, but they do not have any knowledge regarding the conditions of the loan agreement such as the interest rate. To settle these loans, they engage in part-time jobs as well as obtain additional loans. They lack saving behaviour because they do not receive an additional amount to save. They have a poor knowledge of investment and the environment in which they live do not motivate them to invest as well. They do not possess any practice to record their financial records. Due to this, they do not have any idea about personal budgeting. According to the above findings, this study identified that there is a low level of financial literacy. Therefore, by improving their financial literacy-based knowledge, their human development can be improved.

REFERENCES

- Ananat, E. O., Gassman-Pines, A. (2022). The effects of the emeryville fair workweek ordinance on the daily lives of low-wage workers and their families. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 8(5), 45-66.
- Bongini, P., Zia, B. (2018). Introduction: the financial literacy collective. *Economic Notes*, 47(2-3), 235-244. <https://doi.org/10.1111/ecno.12123>
- Clark, R., Lusardi, A., Mitchell, O. S. (2016). Employee financial literacy and retirement plan behavior: a case study. *Economic Inquiry*, 55(1), 248-259. <https://doi.org/10.1111/ecin.12389>
- Ibrahim S.M., Musa S. (2019). The impact of financial literacy on the employee. *Journal of Department of Accountancy*.
- Karger, H. (2015). Curbing the financial exploitation of the poor: Financial literacy and social work education. *Journal of Social Work Education*, 51(3), 425-438.

THE DOWNFALL OF THE TOURIST HOTEL INDUSTRY DURING AN ECONOMIC CRISIS SITUATION IN SRI LANKA

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ABSTRACT

Purpose: One of the important income sources in modern developing countries is the tourist sector. The demand for foreign reserves in the country can be significantly increased by the industry. The tourist industry includes many service industries. One of them is the companies that provide lodging for tourists. The goal of this study is to investigate how Sri Lanka's economic crisis has impacted the country's lodging providers.

Design/methodology/approach: In this study, a quantitative research method is used. Data were gathered via a standardised online questionnaire, and 280 responses were formed as the sample of the study. The information gathered using the Google form was also subjected to a frequency analysis.

Findings: After analysing them, it seems that the hotel industry was impacted by the issues of fuel shortage, public transportation problems, sudden power cuts, and food price inflation in the face of this economic crisis.

Research implications: The insights gained through this study are expected to be helpful for the Tourist Board, hotel industry, and policymakers of Sri Lanka to develop the tourism industry.

Originality/value: The issues they face have been covered through this study, and it contains the knowledge required to grow the businesses of hospitality facility providers associated with the tourism industry by minimising them.

Paper type: Research paper

Keywords: Economic Crisis, Hotel Industry, Sri Lanka, Tourism

INTRODUCTION

For enjoyment or to satisfy their needs and wants, people prefer to move from one place to another, even for a brief period. Simply put, this human action is referred to as touring. Due to the quick growth of technology and the advancement of travel methods, tourism has emerged as one of the most popular pastimes worldwide (Hall et al., 2016). Travelling was much more difficult in the past. The only means of transportation to another nation divided by water were ships and yachts. Even then, it took years and months for them to reach their destination. However, travelling is much simpler now. (Anandasayanan, 2021)

When people deliberately leave their home environments to visit another place for relaxation, they are considered tourists. No matter how near or far this environment (destination) is, these people often participate in distinct activities (Jafari et al., 2002). Therefore, there is no doubt that tourism is essential to the modern world. One can benefit greatly from travel in many ways. Travelling can teach people about various cultures. Additionally, it calms the mind. When they travel, people expose themselves to a completely new environment. They get the chance to understand and respect others who are different from them. Travelling gives people the chance to explore and observe new things, which might help them think more freely. Sri Lanka is a popular destination for travellers from around the world since it is an island with substantial geographic value. Different countries send tourists to Sri Lanka (Karin et al., 2009).

At the southernmost part of India, in the Indian Ocean between 6° and 10° North and 80° to 82° East, sits the stunning tropical island of Sri Lanka. The Bay Strait, which is 32 km wide at its narrowest point, separates it from India. (Gossling, 2016). Therefore, it is evident that Sri Lanka is a popular tourist destination due to its distinctive geographic location. The natural beaches, historical sites, adventurous water sports, lush rainforests, and diverse cultural backgrounds have also drawn travellers. Around the world, tourism has developed into a hugely lucrative industry. Sri Lanka's economy has also been significantly impacted by tourism. It has also had a large impact on generating employment opportunities and foreign exchange, both of which have a direct impact on GDP (Vishva, 2020). To maximise the benefits of the tourism business in Sri Lanka, the Sri Lankan government has given it special attention. Sri Lanka is a popular destination for travellers from all around the world. The island's natural beauty, historical sites, different cultures to discover, better weather, and wildlife viewing are among the top reasons to travel. Sri Lanka is also a relatively affordable destination for many people. Anybody can book accommodations for a fair price.

Sri Lanka's most visited tourist locations include Nuwara-Eliya, Kandy, Galle, Mirissa, Hikkaduwa, Bentota, Negombo, and Trincomalee. Despite being one of the top travel destinations, Sri Lanka's tourism sector has suffered numerous difficulties recently. The Easter Sunday attack, the COVID-19 pandemic and the present economic crisis have all had a severe effect on Sri Lanka's travel and hospitality sector. All of Sri Lanka's sources of income, including tourism, have been shut down as a result of the current situation. The current situation in Sri Lanka is among the worst ever. The economic sector has been most negatively impacted by political corruption and the country's uncertain political environment. Daily necessities are getting more expensive every day. Sri Lanka has one of the highest inflation rates in the world as a result of this. Because of the economic crisis, life in Sri Lanka has gotten much worse. The political leaders' poor judgment and adherence to immoral rules have led the way for this serious economic disaster. There are many ways to define an economic crisis, but generally speaking, an economic crisis is when a country's economy has a sudden decline in strength, which is typically caused by a financial crisis (Zafiu et al., 2013).

The government has specifically failed to import fuel, which has had a severe impact on several fields. As a result, Sri Lankans have daily power outages, which make life more difficult. The youth is now on the streets demanding their fundamental requirements when they should be using their time effectively. Throughout the nation, there are protracted fuel lines. A person travels for days to buy fuel. Some people died while they were in line. Some people who couldn't buy food died of starvation. Therefore, the current scenario in Sri Lanka is tragic and disastrous. As previously indicated, the environment in Sri Lanka today is not at all favourable to encourage tourism (Anushan, 2017). Tourists want to visit and have fun. They do not wish to get here and endure suffering. The number of tourists visiting Sri Lanka has decreased significantly recently. Since tourism is one of the main gateways to foreign currency resources, this has made the economic situation worse.

Three of Sri Lanka's biggest source markets, namely, the United Kingdom, Canada, and New Zealand, have already issued travels advice to their nationals about Sri Lanka. Some European nations have included Sri Lanka on their "red list" for travellers (Gnanapala, 2021). As a result, Sri Lanka has been unable to satisfy tourists' desires for things like a tranquil environment and other necessities. It is obvious that we must first overcome this economic crisis to draw in the foreign tourists who bring riches from abroad to the nation. Being a nation with abundant natural resources, recovering from this crisis will not be difficult.

Therefore, if we desire to help Sri Lanka's tourism industry, creating a comfortable environment for tourists is crucial. Both large and small-scale hotel providers are essential to the growth of Sri Lanka's tourism sector. The affordable price range of the hotels is one of the main draws for foreign travellers to Sri Lanka. Accommodations in Sri Lanka are well-known for being hospitable throughout the world. Due to the current economic crisis, accommodation operators are having trouble offering travellers high-quality service.

RESEARCH PROBLEM

The problem of this research is listed below as:

- Has the economic crisis had an impact on providers of hotels for tourists?

RESEARCH OBJECTIVES

The aim of this study is to accomplish a number of distinct objectives as follows.

- Determining whether the Sri Lankan economic crisis presented challenges for the providers of tourist accommodations.
- To determine how they overcame challenges brought on by Sri Lanka's economic crisis.

METHODOLOGY

The impact of Sri Lanka's economic crisis on tourism in the Nuwara-Eliya district has been thoroughly researched in this study using the qualitative method. The data was gathered using random sampling stratified procedures. To conduct this study, interviews were conducted with residents in the Nuwara-Eliya District and those working in the tourism industry. Additionally, utilising the Google form, a special structured questionnaire regarding the effect of the economic crisis on tourism was created. It was addressed to specific personnel in the tourism sector via WhatsApp and email for a period of two weeks (starting July 9, 2022). These employees were given questionnaires to complete the research, and 280 replies were collected. Additionally, descriptive statistics were performed on the data obtained from the Google form using SPSS 27.0 Version. In addition, literature reviews based on several books, worldwide review reports, and research articles about the effect of the economy on tourism published in reputable journals and conferences were conducted.

RESULTS AND DISCUSSION

The details of the employees who responded to this study and the collected data are given below. Accordingly, out of those, 78.6% of the responses were received from males, and 21.4% of responses from females. This implies that males are more involved in the tourism industry than females.

Table 1. Demographic Characteristics of Respondents

Variable	Frequency	Percentage
Gender		
Male	220	78.6
Female	60	21.4
Age		
18 - 25	140	50
26 – 32	33	11.4
33- 40	39	14.1
41 – 47	28	10.1
50 – above	40	14.4
Duration Spent in the Tourism Industry		
Year 01	20	7.1
Year 02	26	9.2
Year 03	34	12.3
Year 04	80	28.6
Year 05	20	7.1
Year 05 and above	100	35.7
What type of accommodation service do you offer?		
Guest house	100	35.7
Resort	20	7.1
Homestay	20	7.1
Cottage	26	9.2
Boutique hotel	14	5
Apartment	80	28.6
Suite hotel	20	7.3
Services provided		
Accommodation	260	92.9
Food	220	78.6
Spa	36	13
Laundry	100	35.7
Bar	40	14.3
Travel equipment	80	28.6
Vehicle renting	140	50
Other	60	21.4
Numbers of Staff		
1	80	28.6
2	40	14.3

3	42	15
4	50	17.7
5	45	16.2
Above 5	23	8.2
<hr/>		
Regions of the most visited tourists		
Europe	55	19.6
Africa	9	3.2
America	38	13.7
Asia and the Pacific	88	31.5
Middle East	90	32
<hr/>		
Feedback of tourists who arrived during the economic crisis		
Faced fuel shortage problem	260	92.9
Public transport problem	180	64.3
Electricity power cuts	240	85.7
Expensive foods	160	57.1
Expensive travel guidance	120	42.9
Other	20	7.1
<hr/>		
Gross monthly income earned before the economic crisis		
50000 – 100000	20	7.1
100001 – 200000	120	42.9
200001 – 300000	60	21.4
300001 – 400000	60	21.4
400001 or above	20	7.2
<hr/>		
Gross monthly income earned after the economic crisis		
50000 – 100000	220	78.6
100001 – 200000	40	14.3
200001 – 300000	6	2.1
300001 – 400000	11	3.8
400001 or above	3	1.2
<hr/>		
If the income is less than before, how to cover the losses		
Funds provided from government	40	14.3
Decrease the number of staff	140	50
Apply for loan	160	57.1
Renting the place of service	140	50
Selling the place of service	0	0
Departing the industry and moving into other options	118	42.9
<hr/>		
Do you have any further idea to remain in the industry?		
Yes	140	50
No	40	14.3
Not yet decided	100	35.7
<hr/>		
What are the suggestions to uplift the tourism industry which is in a declining stage?		
Solving the problem regarding foreign reserves	140	50

Solving the problem regarding fuel crisis	200	71.4
Controlling the higher inflation	100	35.7
Controlling the price of food items	160	57.1
Solving the problem regarding public transportation	220	78.6
Promoting the Sri Lankan tourism industry	180	64.3
Providing additional facilities for the tourists	120	42.9
Standardising the tourism industry	180	64.3
Implementing interest free loans	120	42.9
Imposing tax reliefs for the tourism accommodation providers	140	50

Source: Author, 2022

Focusing on the age range of the respondents, 50% of them are between the age of 18-25 years, 11.4% are between the ages of 26-32, 14.1% of them are between the age of 33-40, and 10.1% are between the ages of 41-47. 14.4% are aged 50 years and above. Considering these data, people aged 20-23 have given the highest responses of 50%. Thus, it appears that the majority of the people involved in the tourism industry in the Nuwara Eliya district are young people.

When it comes to the duration spent in the tourism industry, according to the collected data, 7.1% of them have worked for one year, 9.2% for two years, 12.3% for three years, 28.6% for four years, and 46.4% of them have worked in the tourism industry for five years and more. While it can be confirmed in this data analysis that they stay in the industry for a long time, this implies that the tourism industry is the long-term source of income for the majority of them.

When asked about the services they provide, 92.9% of them provide accommodation while 79.6% provide food. Apart from these services, other services such as vehicle rental (50%), laundry (35.7%), travel equipment (28.6%), bar (14.7%), spa (13%) are also provided. Among these services, it is clear that the most provided service is accommodation. However, through the tourism industry, all the necessary services including accommodation, food and other essential services are provided properly and satisfactorily to local and foreign tourists.

Under this tourism industry, various accommodation facilities are provided to tourists coming to Nuwara Eliya. According to the data of the respondents, the types of accommodation they provide are guesthouse (35.7%), resort (7.1%), homestay (7.1%), cottage (9.2%), boutique hotel (5%), apartment (28.6%), and suite hotel (7.3%). Accordingly, the majority of them offer guesthouses and apartments as accommodation facility.

28.6% of them perform the relevant service by themselves. And 17.7% of such services have four staff members, 16.6% have five staff members, 15% have three staff members, 14.2% have two staff members and 8.2% of those services have five staff members and above.

According to the data given about the regions of the tourists who have visited Nuwara Eliya, they come from different regions of the world such as Europe (19.6%), Africa (3.2%), America (13.7%), Asia and the Pacific (31.5%), and the Middle East (32%). And it is clear from their data that among those regions, more tourists come to Nuwara Eliya from the Middle East and the Asian and Pacific countries than other regions.

In this study, after the economic crisis in Sri Lanka, the feedback of the tourists was investigated. From the feedback they gave, 92.9% have faced fuel shortage problems and 85.7% have mentioned that there were electricity power-cut problems. In addition to this, more negative feedback has been given such as the public transport problem (64.3%), expensive foods (57.1%), expensive travel guidance (42.9%) etc. And all the feedback expressed by tourists is directly related to the economic crisis in Sri Lanka. Looking at their responses, it is clear that foreign tourists faced many problems and inconveniences due to the current economic crisis in Sri Lanka.

In obtaining data for this study, respondents were asked about their gross monthly income before and after the economic crisis. The gross monthly income of those who worked in the tourism industry before and after the economic crisis ranges from 50,000 LKR to 400,000 LKR and above, but according to the collected data through the questionnaire, it was clear that there have been significant changes in their gross monthly income after the economic crisis.

Before the economic crisis, the percentage of those who earned a gross monthly income of 50,000 LKR was 7.1% and after the economic crisis, it increased to 78.6%. Before the economic crisis, those earning 100,001-200,000 LKR was 42.9% and after the economic crisis, the percentage decreased to 14.7%. Also, before the economic crisis, the percentage of earners between 200,001-300,000 LKR was 21.4%, but after the economic crisis, the percentage decreased to 2.1%. Before the economic crisis, 21.4% of them earned between 300,001-400,000 LKR and after the economic crisis, that percentage decreased to 3.8%. Also, the percentage of those who earned a gross monthly income of 400,001 and above was 7.1%, but after the current economic crisis in Sri Lanka, that percentage has decreased to 2.1%.

Accordingly, the percentage of those who earned income between 50,000-100,000 LKR before the economic crisis has increased by 71.5% after the economic crisis and the percentage of those with higher incomes decreased significantly after the economic crisis. By comparing these gross monthly incomes before and after, it was further confirmed that the current economic crisis in Sri Lanka has had a negative impact on the income of people working in the tourism industry in Nuwara Eliya.

Through the questionnaire, they were asked how they would cover the loss if their income was lower than before. For this, they follow various measures such as they reduce the number of staff (50%), and rent the workplace (50%). Receiving funding from the government (14.3%) and another group mentioned departing from the industry and moving to other options (42.9%).

However, it was questioned whether they would continue to stay in the industry in this situation and 50% of them responded that they would continue their work and 14.3% of them had no idea to remain in this industry. Further, 35.7 % of respondents were undecided about whether to stay in this industry or not. These data imply that a significant number of those who worked in the tourism industry have left their jobs, while others had no idea whether they would stay in the job.

Several suggestions have been made by the respondents to uplift the declining tourism industry. A majority have suggested that problems related to public transport (78.6%) and the fuel crisis (71.4%) should be resolved as soon as possible. In addition to these suggestions, they have presented many other important suggestions such as standardising the tourism industry (64.3%), promoting the Sri Lankan tourism industry (64.3%), controlling the price of food items (57.1%), solving the problem regarding foreign reserves (50%), imposing tax reliefs for the tourism accommodation providers (50%), providing additional facilities for the tourists (42.9%), implementing interest-free loans (42.9%), and controlling the higher inflation (35.7%).

Many of their suggestions are timely and important because they have a lot of experience in the tourism industry. And they are also trying to protect this industry without allowing it to be destroyed. Moreover, while providing data for this study, they mentioned that these suggestions should be brought to the attention of the relevant parties.

CONCLUSION

In conclusion, the majority of the people involved in the tourism industry in Nuwara Eliya district are young people and males are more involved in the tourism industry than females. Furthermore, the tourism industry is the long-term source of income for the majority. Through this industry, all the necessary services including accommodation, food, and other essential services are provided properly and satisfactorily to local and foreign tourists. This study further confirms that the majority of tourists come to Nuwara Eliya from the Middle East and the Asian and Pacific countries than other countries. However, after the economic crisis in Sri Lanka, tourists are facing many problems and inconveniences. And their feedbacks are directly related to the economic crisis in Sri Lanka. Not only that, but the current economic crisis in Sri Lanka also has a negative impact on the income of people working in the tourism industry in Nuwara Eliya. Moreover, a significant number of those who worked in the tourism industry have left their jobs, while others have no idea whether they should stay in the job. The employees working in the tourism industry put forward many important timely suggestions to uplift the tourism industry and further they suggest that the relevant officials should act on it. Through this study, we are emphasising to the relevant parties that the development of tourist places like Nuwara Eliya district, which shows the beauty of Sri Lanka to the world, and the related tourism industry will not only increase the income of the country but also strengthen the future of Sri Lanka.

REFERENCE

- Anushan, K. K. M. Y. (2017). An analysis of tourism profile of Sri Lanka towards sustainable tourism industry and policy making in the future. *Master's Thesis Presented to Ritsumeikan Asia Pacific University in Partial Fulfillment of the Requirements for the Degree of Master of Science in International Corporation Policy Major in Tourism and Hospitality*. 12–14.
- Arachchi, R. S. S. W., & Gnanapala, A. (2020). The COVID-19 pandemic has caused a serious crisis in global tourism. *Bharti Publications* 25-28
- Arachchi, R. S. S. W., & Gnanapala, A. (2021). Impact of COVID 19 and the future of tourism employments in Sri Lanka: A Route to Recovery and Resilience. *Journal of Management and Tourism Research*. Sabaragamuwa University.

- Gossling, S., Ring, A., Dwyer, L., Andersson, A. C., Hall, C. M. (2016). Optimizing or maximizing growth? a challenge for sustainable tourism. *Journal of Sustainable Tourism*, 24(4), 527–548. <https://doi.org/10.1080/09669582.2015.1085869>
- Mathuranthy, A., & Anandasayanan, S. (2021). Increasing the accommodation capacity towards sustainable tourism in Northern Province of Sri Lanka. *Proceedings of International Conference on Business Management*, 17. <https://doi.org/10.31357/icbm.v17.5163>
- Karin F, Arunika (2009). Recent changes in Sri Lankan tourist trends and implications for alleviation of poverty. *Poverty Network Project of ADB. Centre for Poverty Analysis (CEPA) 02–3*.
- Sri Lanka Tourism Development Authority. (2022). The Impact of the current Sri Lankan economic crisis on tourist arrivals. *A custom data analysis report*. [http://www.sltda.lk/monthly_statistics_14–18](http://www.sltda.lk/monthly_statistics_14-18).
- Vishva L. (2020). Tourism in Sri Lanka: the social impact. *Journal of Management and Tourism Research. Sabaragamuwa University*.

IMPACT OF CORPORATE GOVERNANCE MECHANISMS ON ADOPTION OF INTEGRATED REPORTING

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ABSTRACT

Purpose

The main objective of this study was to assess the relationship between corporate governance mechanisms and the adoption of Integrated Reporting (IR) related to Sri Lankan listed companies.

Design/ Methodology/ Approach

IR adoption was the dependent variable of the study. It was considered as a dichotomous variable if a company has adopted IIRF when they prepare annual reports assigns 1 and if not, assign 0. Corporate governance was considered as the independent variable. Board cultural diversity, board gender diversity, board independence, board ownership and CEO duality were the corporate governance mechanisms considered in this study. Firm size and firm age were the control variables of the study. All the required data has been collected from the annual reports of the selected listed companies in the Colombo Stock Exchange (CSE) for the period of three years (2019 – 2021). The sample was consisting of 35 companies which have adopted IR and 35 companies which have not adopted IR.

Findings

Results revealed that the board size has a statistically significant positive impact on the adoption of IR. Furthermore, firm size positively impacts the adoption of IR, while firm age negatively impacts the adoption of IR. It can be identified that the comparatively larger firms have a higher possibility to adhere to IR than smaller firms in terms of total assets, and the possibility of adhering IR framework by new firms is higher than the older firms.

Research Implications

This finding has contributed to the empirical literature in confirming the importance of the proper board size as a good corporate governance practice and in maintaining better corporate reporting practices.

Originality/ Value

This study has contributed to the existing literature on the adaptation of Integrated Reporting as it is examined whether corporate governance impacts the adoption of IR.

Paper Type - Research paper

Keywords – Colombo Stock Exchange, Corporate Governance, IR adoption

INTRODUCTION

The corporate annual report is the primary source of information that provides an overall picture of the organisation. However, the content and scope of annual reports have evolved over time in response to changing public expectations. The traditional annual reports have given much concern about the financial information through the main financial statements. However, it is not enough to understand the actual picture of the company. Thereby, from time-to-time people realised that the non-financial information of a company is as important as the financial information of the company. With that viewpoint, the demand for non-financial information related to companies has increased rapidly along with the increasing complexity of the financial markets. In many research studies, there are several reasons for a growing demand for non-financial reporting. One reason is the growing relevance of intangible assets, not properly captured by financial reporting, but constantly taking on the role of tangible assets in the total amount of a firm's invested capital (Lev, 2001). As there were no common rules or regulatory bodies for reporting non-financial information, it was based on voluntary disclosure. In such kind of a situation, the concept of "integrated report" came out by combining both financial and non-financial information into one report. With that, this integrated reporting was spread rapidly throughout the world. As a result, in 2010, International Integrated Reporting Council (IIRC) was founded. Therefore, the main responsibility of disclosing the firm's information to its stakeholders is with the managers/directors of the company. In the empirical literature, some researchers have evaluated the impact of corporate governance mechanisms on the adoption of IR and concluded that there is an impact of corporate governance on the adoption of IR (Fiori et al., 2016; Garcia-Sanchez et al., 2020; Girella et al., 2021). However, there are limited studies found in the Sri Lankan context. Cooray et al. (2020) examined how governance mechanisms affect the quality of integrated reporting (IR). However, the impact of corporate governance on the adoption of IR is not examined in the Sri Lankan context. Hence, the main objective of this study was to assess the impact of corporate governance mechanisms on the adoption of IR in Sri Lankan listed companies.

METHODOLOGY

This study has examined the impact of corporate governance mechanisms on the adoption of IR in Sri Lankan listed firms. IR adoption was the dependent variable of the study. It was considered as a dichotomous variable if a company has adopted IIRF when they prepare annual reports assigns 1 and if not, assign 0. Corporate governance was considered as the independent

variable. Board cultural diversity, board gender diversity, board independence, board ownership and CEO duality were the corporate governance mechanisms considered in this study. Firm size and firm age were the control variables of the study.

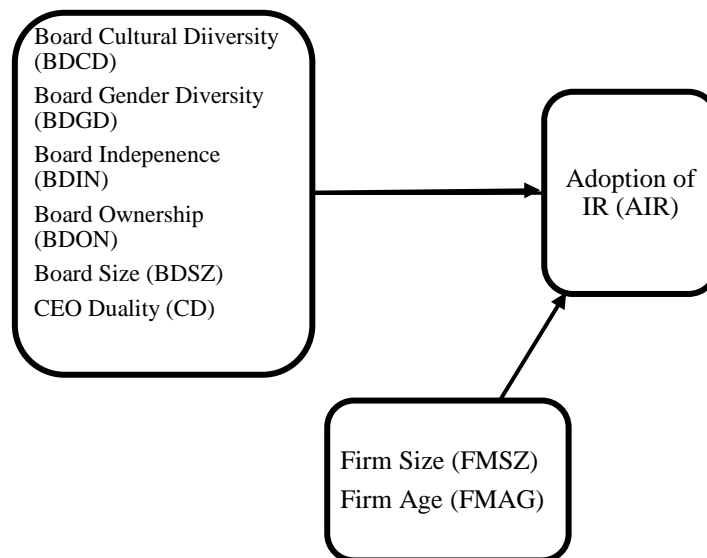


Figure 1: Conceptual Diagram

Hypotheses Development

Based on the previous studies in the existing literature (Fiori et al., 2016; Garcia-Sanchez et al., 2020; Leuz & Wysocki, 2008), the following hypotheses were developed relevant to the research question and objective.

H₁: There is a positive impact of board cultural diversity on the adoption of IR.

H₂: There is a positive impact of board gender diversity on the adoption of IR.

H₃: There is a positive impact of board independence on the adoption of IR.

H₄: There is a positive impact of board ownership on the adoption of IR.

H₅: There is a positive impact of board size on the adoption of IR.

H₆: There is a negative impact of CEO duality on the adoption of IR.

Research Model

$$AIR_{it} = \beta_0 \pm \beta_1 BDCD_{it} \pm \beta_2 BDGD_{it} \pm \beta_3 BDIN_{it} \pm \beta_4 BDON_{it} \pm \beta_5 BDSZ_{it} \pm \beta_6 CD_{it} \\ \pm \beta_7 FMSZ_{it} \pm \beta_8 FMAG_{it} \pm \varepsilon_{it}$$

AIR, *BDCD* and *CD* were considered as dummy variables and 1 and 0 were used to measure. *BDGD* has been measured as a proportion of women directors in the board. *BDIN* has been calculated as a proportion of independent non-executive directors in the board. *BDON* has been taken as a percentage of shareholding by Board of Directors out of total shares. Total number of members in the director board is considered as *BDSZ* (Fiori et al., 2016). Further, *FMSZ* and *FMAG* have been measured based on the natural logarithm of total assets (Fiori et al., 2016) and number of listing years (Deegan et al., 2002) respectively.

All the required data has been collected from the annual reports of the selected companies for the period of three years (2019 – 2021). The sample was consisting of 35 companies which have adopted IR and 35 companies which have not adopted IR. The sample has been selected using purposive sampling method. When selecting the sample under two categories, balanced between IR adopted companies and companies which had not adopted IR have been maintained since the logistic regression method was used to analyse data. The data was analysed using E-views software.

FINDINGS

Descriptive statistics and binary-logit regression analysis were used to analyse the data.

Table 1 – Descriptive Statistics

	Mean		Std. Dev	
	IR adopted	Non adopted	IR adopted	Non adopted
<i>BDCD</i>	0.761	0.676	0.427	0.470
<i>BDGD</i>	0.110	0.126	0.105	0.116
<i>BDIN</i>	0.452	0.422	0.182	0.095
<i>BDON</i>	6.42	11.54	12.47	19.75
<i>BDSZ</i>	9.6	7.69	2.22	0.23
<i>CD</i>	0.05	0.057	0.233	0.233
<i>FMSZ</i>	10.68	9.56	0.805	0.808
<i>FMAG</i>	25.77	33.34	18.05	19.4

Source: Author, 2022

According to descriptive statistics, the presence of women on the boards of IR-adopted companies is lower than that of companies that have not adopted IR. Independent directors are more prevalent in IR-adopted companies than in non-IR-adopted companies. The directors' ownership of IR-adopted companies is lower than that of non-IR-adopted companies. Aside from that, the firm size of IR-adopted companies is larger than that of non-IR-adopted companies. Furthermore, the firm age of IR-adopted companies is lower than the age of companies that have not adopted IR.

Table1- Logit Regression Results

Variable	Coefficient	e^β Value	Prob.
<i>BDCD</i>	0.5370	1.7109	0.2132
<i>BDGD</i>	-0.2717	0.7621	0.8969
<i>BDIN</i>	-1.2733	0.2799	0.3946
<i>BDON</i>	-0.0109	0.9891	0.3596
<i>BDSZ</i>	0.2782	1.3207	0.0017**
<i>CD</i>	1.4173	4.1259	0.202
<i>FMSZ</i>	1.7591	5.8075	0.000**
<i>FMAG</i>	-0.0260	0.9743	0.0109**

**Significant at 5% level

Source: Author, 2022

The regression has been run for the whole data set. As per the **regression** results, there is a statistically significant ($p < 0.05$) impact of Board Size (*BDSZ*) on *AIR*. The regression coefficient of *BDSZ* was +0.278. It means an increase in *BDSZ* by one member is associated with an increase of nearly 32% in the possibility of adopting IR (*AIR*). This positive impact is empirically proved by many researchers before related to foreign contexts (Fiori et al., 2016; Pearce & Zahra, 1992). However, other independent variables have no significant impact on adoption of IR.

However, both firm size and firm age which were control variables of the study have a statistically significant impact on *AIR*. Hence, Hypothesis H₅ is accepted while others are rejecting.

CONCLUSION

The objective of the study was to test whether there is any impact of corporate governance mechanisms on the adoption of IR practice in Sri Lankan listed companies. Accordingly, board size (*BDSZ*) has a statistically significant positive impact on the adoption of IR. Cooray et al. (2020) also found a positive impact of board size on the IR quality in the Sri Lankan listed firms. Thereby it is concluded that the board size influences the adoption of good corporate

reporting practices. This finding has contributed to the empirical literature in confirming the importance of the proper board size as a good corporate governance practice and in maintaining better corporate reporting practices. Furthermore, firm size positively impacts the adoption of IR, while firm age negatively impacts the adoption of IR. It can be identified as comparatively larger firms have a higher possibility to adhere to IR than smaller firms in terms of total assets, and the possibility of adhering IR framework by new firms is higher than the older firms. This study provides empirical proof to the professionals who are practising in the firms to understand the impact of corporate governance mechanisms on the adoption of IR. Apart from that, the result of this study provides useful insights for academics and practitioners who are willing to know the impact of corporate governance on corporate practices. However, there are limitations as well. The sample size selected for the study is small and considered only Sri Lankan-listed firms and considered only six corporate governance characteristics. This study considered only whether a firm has adopted IR or not and the quality of IR adoption is not considered. Therefore, future researchers may expand the sample size and consider other corporate governance characteristics.

REFERENCES

- Dalton, D., Johnson, J., & Ellstrand, A. (1999). Number of directors and financial performance: A meta-analysis. *Academy Of Management Journal*, 42(6), 674-686. Retrieved 20 July 2022, from.
- Deegan, C. (2014). *Financial accounting theory* (4th ed.).
- Fiori, G., di Donato, F., & Izzo, M. (2016). Exploring the effects of corporate governance on voluntary disclosure: an explanatory study on the adoption of integrated report. *Performance Measurement and Management Control: Contemporary Issues*, 83-108. <https://doi.org/10.1108/s1479-351220160000031003>
- Garcia-Sanchez, I., Raimo, N., & Vitolla, F. (2020). CEO power and integrated reporting. *Meditari Accountancy Research*, 29(4), 908-942. <https://doi.org/10.1108/medar-11-2019-0604>
- Girella, L., Zambon, S., & Rossi, P. (2021). Board characteristics and the choice between sustainability and integrated reporting: a European analysis. *Meditari Accountancy Research*, 30(3), 562-596. <https://doi.org/10.1108/medar-11-2020-1111>

- Leuz, C., & Wysocki, P. D. (2008). Economic consequences of financial reporting and disclosure regulation: a review and suggestions for future research. *SSRN Electronic Journal*. doi:10.2139/ssrn.1105398
- Lev, B. (2001). Intangibles Management, Measurement, and Reporting. *Washington DC Brookings Institution Press*. - *References - Scientific Research Publishing*. [Online]. Retrieved 10 September 2021, from <<https://www.scirp.org/reference/referencespapers.aspx?referenceid=2756152>>.
- Pearce, J., & Zahra, S. (1992). Board composition from a strategic contingency perspective. *Journal of Management Studies*, 29(4), 411-438. <https://doi.org/10.1111/j.1467-6486.1992.tb00672.x>

ARE INTEGRATED REPORTS IN LISTED COMPANIES DECISION-USEFUL? EMPIRICAL EVIDENCE FROM SRI LANKA

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ABSTRACT

Purpose: Integrated Reports (IRs) provide information on the organisations' ability to create value for capital providers to make decisions over the short, medium, and long term. Accordingly, there is a need to evaluate the decision usefulness of IRs in terms of qualitative characteristics (i.e., *Faithful representation, Relevance, Timeliness, Verifiability, Comparability* and *Understandability*). In this context, the study first aims to evaluate the degree of satisfaction of users concerning the decision-usefulness of IRs, and then examines whether there is a difference between users and preparers of IRs in terms of decision-usefulness.

Design/methodology/approach: The study followed a quantitative approach, with primary data collected using a self-administered questionnaire survey. The study used Mean ranking and One sample t-test to evaluate the decision-usefulness of IRs, and independent sample t-tests to examine the differences between the perception of users and preparers regarding the decision-usefulness of IRs.

Findings: The study found that stakeholders believe IRs help make economic decisions overall, with a mean value of 5.74 (out of 7), and the mean values of *Faithful representation, Relevance, Timeliness, Verifiability, Comparability* and *Understandability* were significantly above 4. Moreover, out of these qualitative characteristics, *Relevance* scored the highest mean value, which is 5.96 out of 7. Furthermore, there is no perceived difference between preparers and users on IRs with regard to overall decision-usefulness. However, preparers' perceived decision-usefulness is different from users' perceived decision-usefulness in terms of certain qualitative characteristics (i.e., *Comparability, Timeliness* and *Verifiability*).

Research implications: These findings suggest substantial policy implications for users, preparers, policymakers, and regulators on the decision-usefulness of IRs.

Originality/value: The study focused beyond prior studies on IRs as the concept decision-usefulness related to IR has not been adequately investigated by encompassing both preparers' and users' perspectives in Sri Lanka.

Paper type: *Research paper*

Keywords: Decision-usefulness, Integrated Reports, Preparers, Qualitative Characteristics, Users.

INTRODUCTION

Corporate reporting has become a primary source of information used by decision-makers. Corporate reporting generates various corporate reports such as financial reports, environmental reports, corporate social responsibility reports, sustainability reports, etc. Decades ago, business entities primarily focused on financial reporting, which provides information on the company's financial position and performance. Although decision-makers widely use traditional financial reporting, many scholars found problems associated with traditional reporting, such as a lack of transparency (Vorster & Marais, 2015) and a lack of disclosing forward-looking information and intellectuals (Adhariani & de Villiers, 2018). With time, two trends emerged in corporate reporting: the highlighting of shortcomings of traditional financial reporting and increased demand for non-financial information (Goicoechea et al., 2019). Thus, traditional accounting failed to satisfy the increasing stakeholders' demand for a broader range of information to make decisions (Adhariani & de Villiers, 2018). Consequently, International Integrated Reporting Council (IIRC) introduced the most recent development in the corporate reporting framework, i.e., the Integrated Reporting (IR), to communicate an organisation's ability to create value to its wide variety of stakeholders, including capital providers. IIRC defines Integrated Reporting (IR) as *“a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation, preservation or erosion of value over the short, medium and long term”* (2021, p.10).

IIRC (2015) assert that integrated reports provide more relevant information to financial capital providers to make decisions over a longer period. Interestingly, scholars found that the actual decision-usefulness of IRs is lower, specifically to fund managers and equity analysts (Slack & Tsalavoutas, 2018). Furthermore, Flower (2015) stated that IR refers to the concept of value to the investors as against the society. Though the primary purpose of IR is to communicate corporate value creation to financial capital providers, the report is also used by a wide variety of stakeholders. Many studies assessed the decision-usefulness of these reports from the financial capital provider's point of view (Slack & Tsalavoutas, 2018). Hence, there is a dearth of studies conducted to capture the decision-usefulness of IR evaluated by a wide variety of stakeholders.

Accordingly, this study attempts to evaluate the decision-usefulness of IRs of Sri Lankan companies listed on the Colombo Stocks Exchange. The decision-usefulness was evaluated in terms of qualitative characteristics: *Faithful representation*, *Relevance*, *Timeliness*, *Verifiability*, *Comparability* and *Understandability*. Furthermore, the study investigated whether there is a perception difference between users and preparers in terms of overall decision-usefulness and its qualitative characteristics. The study is empirically significant since it adds new and updated evidence to the existing literature on decision-usefulness in the Sri Lankan context. Moreover, the study is practically significant to corporate practitioners, professional bodies and researchers in identifying the perception of IRs and addressing any issues.

METHODOLOGY

The study assumed that the decision-usefulness of IRs can be objectively measured, and thus, the study followed a positivistic research paradigm and a quantitative approach. The population of the study was preparers and users of IRs of listed companies on the Colombo Stock Exchange. The study used a stratified convenience sampling technique due to the absence of a sampling frame while ensuring an adequate population representation.

Based on the Conceptual Framework of the International Accounting Standards Board (IASB, 2018), the study used fundamental qualitative characteristics (i.e., *Relevance* and *Faithful representation*) and enhancing characteristics (i.e., *Understandability*, *Comparability*, *Timeliness* and *Verifiability*) as dimensions for decision-usefulness. Chakroun and Hussainey (2013) stated that qualitative characteristics specified by IASB could be used in measuring the decision-usefulness of both financial and non-financial information. The study measured the decision-usefulness using 49 items representing the above qualitative characteristics with Likert scale questions which are scaled from “*Strongly disagree = 1*” to “*Strongly agree = 7*”. Primary data were collected using self-administrated questionnaires, and various statistical analyses such as Mean ranking, One-sample t-tests and independent sample t-tests were conducted to achieve the study's objectives.

RESULTS

The study first aimed to evaluate the decision-usefulness of IRs of Sri Lankan companies listed on the Colombo Stocks Exchange. Table 1 depicts the overall decision-usefulness of IRs and decision-usefulness in terms of each qualitative characteristic scored and interpreted based on a seven-point Likert scale.

Table 1: Mean ranking and One sample t-test of Decision-usefulness of IRs

Variable	N	Mean	SD	Mean difference ^a
Overall decision-usefulness of IRs	194	5.74	0.61	1.74***
<i>Relevance</i>	194	5.96	0.63	1.96***
<i>Understandability</i>	194	5.76	0.82	1.76***
<i>Comparability</i>	194	5.73	0.78	1.73***
<i>Verifiability</i>	194	5.72	0.79	1.72***
<i>Timeliness</i>	194	5.70	1.01	1.70***
<i>Faithful Representation</i>	194	5.56	0.83	1.56***

Source: Author

^a Based on the one-sample t-test performed, the significance of the difference between the test value of 4 (mid value) and the mean values are also indicated, where *** $p < 0.01$ and ** $p < 0.05$ and * $p < 0.10$.

The overall mean value of decision-usefulness is 5.74 (out of 7), with a standard deviation of 0.61, indicating that respondents agree that IRs are useful in making economic decisions. Further, the decision-usefulness is greater than the test value 4 (i.e., the mid-value) by 1.74, which is statistically significant at 1%. Accordingly, these statistical results indicate that respondents believe that, on an overall basis, IRs are helpful for making economic decisions. Table 1 also provided decision-usefulness concerning each qualitative characteristic. It is important to note that all the mean values of the decision-usefulness sub-criterion are greater than 5 (i.e., above agreement). The qualitative characteristic of *Relevance* holds the highest mean value of 5.96 among other qualitative characteristics with a standard deviation of 0.63. Accordingly, the respondents believe IRs can provide information in making a difference in their economic decisions, i.e., *Relevance*. Furthermore, the lower variability of the *Relevance* (SD=0.63) indicates a higher degree of agreement among the respondents. Besides, *Relevance* possesses a statistically significant (at 1%) positive mean difference of 1.96 compared to the mid-value of 4. The second most highlighted qualitative characteristic is *Understandability*, with a mean value of 5.76, which is greater than the mid-value (4) by 1.76, and the result is also statistically significant at 1%. The third most perceived qualitative

characteristic is *Comparability* (Mean=5.73), and there is statistically (at 1%) significant evidence to support that the mean value differs from the mid-value of 4 by 1.74. Fourthly emphasised qualitative characteristic is related to *Verifiability*. The mean value of *Verifiability* is 5.72, which is greater than the test value by 1.72 and statistically significant at 1%. The second to last qualitative characteristic is *Timeliness*. The mean value of the *Timeliness* is 5.70 with a statistically significant mean difference of 1.70. The respondents believe that the least achieved qualitative characteristic is the *Faithful representation* among other qualitative characteristics with a mean value of 5.56. Further, there is statistically sufficient evidence to support that the mean value of *Faithful representation* is greater than the test value by 1.56. Based on the above analysis, it can be concluded that IRs are useful in making economic decisions in terms of qualitative characteristics of *Relevance*, *Faithful Representation*, *Understandability*, *Comparability*, *Verifiability* and *Timeliness*.

Table 2: Independent Sample t-test results based on preparers and users

		Mean	Mean difference
Overall decision-usefulness of IRs	Preparer	5.741	0.005
	User	5.736	
Relevance	Preparer	5.903	-0.106
	User	6.009	
Faithful Representation	Preparer	5.511	-0.083
	User	5.594	
Comparability	Preparer	5.724	-0.019*
	User	5.743	
Understandability	Preparer	5.773	0.028
	User	5.745	
Timeliness	Preparer	5.723	0.041*
	User	5.682	
Verifiability	Preparer	5.814	0.169*
	User	5.645	

Source: Author

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

Secondly, the study investigated the perception difference between preparers and users on the decision-usefulness of IRs on an overall basis as well as in terms of each qualitative characteristic using independent sample t-tests. Table 2 presents the results of the Independent sample t-tests performed with preparers who directly and/or indirectly assist in the compilation of the data for, and the preparation of corporate reports and users who use corporate annual reports to make economic decisions.

The mean value of preparers' perceived overall decision-usefulness was 5.74, which was greater than the users by 0.005. However, there is no sufficient statistical evidence to support that preparers' perceived decision-usefulness is greater than the users. Thus, there is no difference existing between preparers and users in terms of the decision-usefulness of IRs on an overall basis. Further, the study investigated the difference in perceived decision-usefulness between preparers and users on each qualitative characteristic of IRs. The findings suggest that statistically significant perception differences exist in the qualitative characteristics of *Comparability*, *Timeliness*, and *Verifiability*. Surprisingly, preparers perceive that IRs provided within the time when it is needed or before it loses its capacity to influence decisions more than users (i.e., *Timeliness*). Moreover, preparers believe that the information presented in IRs are verifiable than users (i.e., *Verifiability*). Accordingly, it is significant to note that preparers' perceived decision-usefulness of IRs is different from users' perceived decision-usefulness based on certain qualitative characteristics.

DISCUSSION

Based on the findings of the first objective, the study concluded that IRs are perceived to be helpful in making economic decisions on an overall basis. This finding is consistent with Atkins and Maroun (2014) who stated that South African institutional investors agreed that IRs provide more decision-usefulness information to the investor community. Although IRs are used by a wide variety of stakeholders, Slack and Tsalavoutas (2018) stated that IRs specifically address the information needs of financial capital providers. In terms of individual qualitative characteristics, *Relevance* was the most ranked qualitative characteristic. That is because IRs are more focused on corporate strategy and there is greater connectivity of financial and non-financial information to increase its *Relevance* (Slack & Tsalavoutas, 2018). Further, our findings suggested that *Faithful representation* is the least ranked qualitative characteristic.

In terms of the second objective of the study, the findings highlighted that there are perception differences in terms of qualitative characteristics (i.e., *Comparability*, *Timeliness*, and *Verifiability*) of IRs. Alfraih and Almutawa (2014) emphasised that corporate reports need to be timely available to reduce unfavourable dealings. Consequently, regulatory bodies should strengthen the capital market regulations to ensure that the IRs are timely available.

CONCLUSIONS AND IMPLICATIONS

Initially, the study attempted to evaluate the degree of satisfaction of users with regard to the decision-usefulness of IRs using mean ranking and one-sample t-tests. It can be concluded that respondents believe that IRs are useful in making economic decisions with a mean value of 5.74 (out of 7). Moreover, the degree of decision-usefulness is evaluated in terms of each qualitative characteristic, and the findings indicated that respondents believe that IRs are relevant, faithfully represented, understandable, comparable, verifiable, and timely available. However, the perceived decision-usefulness in terms of each qualitative characteristic was found to be relatively different. When compared to other qualitative characteristics, *Faithful representation* is the least perceived qualitative characteristic with a mean value of 5.56. As it is a fundamental measurement of the quality of corporate disclosures, professional and regulatory bodies may take necessary actions to enhance the faithful representation of IRs.

Afterwards, the study investigated the perceived difference between preparers and users on IRs with regard to decision-usefulness, and the study concluded that there is no perception difference that exists between preparers and users on the decision-usefulness of IRs on an overall basis. However, more specifically, the findings indicated that perception differences exist in qualitative characteristics of *Comparability*, *Timeliness* and *Verifiability*. The relevant regulatory bodies and authorities should take active steps to reduce these gaps.

Overall, while the findings of this study fill an empirical dearth, as observed, they are also expected to be practically important to preparers, standard setters, and regulators to make policy decisions on the content of IRs and enhance the decision-usefulness of such disclosure. The study is limited to the IRs of Public Listed Companies whereas the scope of the study could be extended to the perceived decision-usefulness towards other modern corporate reporting practices such as Corporate Environmental Reports, Corporate Annual Reports, Corporate Sustainability Reports, etc. not only in listed companies but also in private companies.

REFERENCES

Adhariani, D., & de Villiers, C. (2019). Integrated reporting: perspectives of corporate report preparers and other stakeholders. *Sustainability Accounting, Management and Policy Journal*, 10(1), 126–156. <https://doi.org/10.1108/SAMPJ-02-2018-0043>.

- Alfraih, M. M., & Almutawa, A. M. (2014). An empirical investigation of users' views on corporate annual reports in developing countries: evidence from Kuwait. *Review of Contemporary Business Research*, 3(34), 51–83. <https://doi.org/10.15640/rcbr.v3n3-4a4>.
- Atkins, J., & Maroun, W. (2014). *South African institutional investors' perceptions of integrated reporting*. Association of Chartered Certified Accountants, London.
- Chakroun, R. & Matoussi, H. (2012). Determinants of the extent of voluntary disclosure in the annuals reports of the Tunisian firms. *Journal of Accounting and Management Information Systems*. 11(3). 335-370.
- Fowler Jr., F. J. (1993). *Survey Research Methods*, second edition. London, Sage Publications.
- Goicoechea, E., Gómez-Bezares, F., & Ugarte, J. V. (2019). Integrated reporting assurance: Perceptions of auditors and users in Spain. *Sustainability*, 11(3), 1–19. <https://doi.org/10.3390/su11030713>.
- IASB. (2018). *Conceptual Framework for Financial Reporting*.
- International Integrated Reporting Council (IIRC), (2021). *INTERNATIONAL <IR> FRAMEWORK*. International Integrated Reporting Council.
- International Integrated Reporting Council (IIRC). (2015). *Assurance on < IR > Overview of feedback and call to action*.
- Slack, R., & Tsalavoutas, I. (2018). Integrated reporting decision usefulness: mainstream equity market views. *Accounting Forum*, 42(2), 184–198. <https://doi.org/10.1016/j.accfor.2018.01.005>.
- Vorster, S., & Marais, C. (2015). Corporate governance, integrated reporting, and stakeholder management: a case study of Eskom. *African Journal of Business Ethics*, 8(2), 31–57. <https://doi.org/10.15249/8-2-84>.

DO SUSTAINABILITY LEARNING CAPABILITIES PLAY A MEDIATION ROLE WHEN SUSTAINABILITY CONTROL SYSTEMS MEET EMPLOYEES' GREEN CREATIVITY?

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ABSTRACT

Purpose: Locally and internationally, well-known business failures are reported in the manufacturing industry due to the lack of green creativity. Although previous research evidenced that Management Control Systems as one of the critical contextual factors, managers should consider when designing an appropriate workplace to encourage employees' creativity, and there is no sufficient evidence from prior studies examining the association between Sustainability Control Systems and employees' green creativity. Therefore, the current study investigates how Sustainability Control Systems affect employees' green creativity after incorporating sustainability dimensions to overcome this research vacuum.

Design/methodology/approach: The Levers of Controls framework developed by Simons served as the foundation for this study and was extended to include sustainability dimensions. The study was conducted in the Sri Lankan manufacturing sector as a cross-sectional study. A structured questionnaire was used to gather primary data from 239 manufacturing organisations involved with sustainability initiatives. The collected data were subject to preliminary analysis using SPSS, and then the researcher performed structural equation modelling using SmartPLS 3.0 and tested the hypotheses.

Findings: The results confirmed an insignificant relationship between Sustainability Control Systems and the employees' green creativity, and sustainability learning capabilities fully mediate the relationship between Sustainability Control Systems and employees' green creativity.

Research implications: The insignificant relationship between Sustainability Control Systems and employees' green creativity, as well as the full mediation role of sustainability learning capabilities, demonstrated the importance of strengthening employees' sustainability learning capabilities to improve employees' green creativity through the use of Sustainability Control Systems.

Originality/value: This study contributed to Simons' Levers of Controls framework by incorporating sustainability dimensions and showing how sustainability learning capabilities fully mediate the relationship between Sustainability Control Systems and employees' green creativity, through which the theory can be extended to provide a better insight to foster employees' green creativity.

Paper type: Research Paper

Keywords: Employees' Green Creativity, Sustainability Control Systems, Sustainability Learning Capabilities, Simons' Levers of Controls Framework

INTRODUCTION

The employees' green creativity has been identified as one of the most influential drivers for organisational success (Bhutto et al., 2021) while developing innovative and superior methods of doing tasks have been regarded as the essence of creativity (Bhutto et al., 2021). This is evident through the well-known business failures caused due to the lack of employees' green creativity in the global context, including Coca-Cola (BBC, 2005), Pepsi, and Nestle (BBC, 2020). Sri Lanka is no exception to the global context. This is proven by the inability of some well-known Sri Lankan manufacturing enterprises to implement green practices in recent years, notably Dipped Products PLC, a part of Hayley's Group (Daily Mirror, 2013), and Coco-Cola in the local context (Daily Mirror, 2017).

In this context, Management Control Systems (MCSs) are one of the primary contextual factors managers should consider when establishing an appropriate work environment to stimulate employees' creativity (Appuhami, 2017). Robert Simon is one of the pioneers who made the initial moves toward discussing the MCS. Hence, Simon's Levers of Control (LOC) framework (Simons, 1994; Simons, 2006) is incorporated into this study as it provides a theoretical basis for the association between MCS and creativity. However, many recent studies have emphasised the significance of revamping Simon's LOC framework (Crutzen, Zvezdov, & Schaltegger, 2017; Wijethilake & Upadhaya, 2020) and thus incorporating the sustainability dimensions into the development of MCS, including Performance Measurement Systems (Bititci et al., 2011).

Nevertheless, organisational learning has been emphasised as part of a supportive workplace (Appuhami, 2017), which could explain why MCS impacts employees' creativity. As a result, the purpose of this study is to investigate how SCS influences employees' green creativity through the mediating role of sustainability learning capabilities, using Simon's LOC framework and addressing the concerns of Parisi (2012), and Ogbeibu, et al. (2021).

METHODOLOGY

The Impact of Sustainability Control Systems on Employees' Green Creativity.

Simon's LOC framework provides the theoretical foundation for using Control Systems to stimulate the growth of creativity (Simons, 1994). Although it is suggested that Simons' LOC framework will enable creativity among employees (Simons, 1994), to the best of the researcher's knowledge, there is a minimal amount of empirical evidence to support this claim

(Appuhami, 2017; Lill, Wald, and Munck, 2020). However, Speklé and Widener (2016) concur with Simons' (1994) assertion that the four control levers operate in tandem. They revealed that a system with all four control levers is linked to greater creativity.

Moreover, many recent studies have highlighted the importance of redesigning Simons' Levers of Control (LOC) framework (Moulang, 2013; Wijethilake & Upadhaya, 2020) and thus incorporating the sustainability dimensions into the development of MCS (Bititci et al., 2011; Searcy, 2011; Parisi, 2012). Previous researchers have stressed the necessity for a shift in the conventional function of MCS to include the requirements of sustainability development (Bititci et al., 2011; Searcy, 2011; Parisi, 2012) as well as the demands of non-shareholder stakeholders (Gond et al., 2012), despite the fact that the traditional role of MCS is perceived as facilitating financial decision-making (Myint, 2019). Following the above argument, Crutzen, Zvezdov, and Schaltegger (2017) stressed the importance of integrating MCS with sustainability dimensions as an emerging requirement to address this gap.

SCS is described as "all devices and systems that managers build and utilise to guarantee that their workers' behaviours and choices are aligned with the organisation's sustainability goals and strategy" (Crutzen, Zvezdov, and Schaltegger, 2017, p.6). The notion of green creativity is derived from the concept of creativity (Amabile et al., 2005; Chen & Chang, 2013; Ogbeibu et al., 2021). It is simply described as "the generation of new ideas concerning green goods, services, processes, or behaviours that are regarded to be creative, innovative, and valuable." (Chen & Chang, 2013, p.113). The present study was noteworthy compared to previous research on MCS and creativity (Appuhami, 2017; Lill, Wald, & Munck, 2020). Much prior research examined the connection between control systems and employees' creativity (Speklé, van Elten, and Widener (2017), whereas the present study examines the relationship between SCS and employees' green creativity after incorporating sustainability dimensions. As a consequence, the current research proposes the following hypothesis based on the aforementioned theoretical and empirical evidence:

Hypothesis 1 (H₁): SCS is positively associated with employees' green creativity.

Mediating Role of Sustainability Learning Capabilities

Organisational theory and management research provides adequate evidence to demonstrate the mediation function of learning capabilities in the relationship between MCS and employee creativity (Simons, 1995; Henri, 2006; Widener, 2007). Organisational theorists claim that employees' work experience and training through the organisation's learning process are two

essential and useful tools that employees may use to promote their creative thinking and innovation (Tierney & Farmer, 2002; Appuhami, 2017). For employees to be creative in their work, it is conceivable that they will need to rely on the information incorporated in organisational learning (Appuhami, 2017). Several studies have shown that the information workers get through the use of the organisation's learning process over time helps them build confidence and familiarity, which are both necessary for creative thinking (Appuhami, 2017).

As Siebenhüner and Arnold (2007) pointed out, organisational learning is one of the most crucial components to consider when implementing sustainable initiatives in firms, such as green creativity. Furthermore, Appuhami (2017) and Grafton, Lillis and Widener (2010) emphasised the importance of organisational learning capabilities as a mediator in understanding the relationship between MCS and employee creativity. Despite the fact that most conceptions of sustainable management acknowledge the necessity of learning, only a few conceptual models have tried to handle the topic as a whole (Wijethilake & Upadhaya, 2020). For these reasons, the current study intended to investigate the mediating role of sustainability learning capabilities in explaining the relationship between SCS and employees' green creativity and developed the following hypotheses:

Hypothesis 2 (H₂): The sustainability learning capabilities mediate the relationship between SCS and employees' green creativity.

Hypothesis 1 (H₁): SCS are positively associated with employees' green creativity.

Hypothesis 2_a (H_{2a}): SCS have a positive impact on sustainability learning capabilities.

Hypothesis 2_b (H_{2b}): Sustainability learning capabilities have a positive impact on employees' green creativity.

The above hypotheses are graphically depicted in Figure 1.

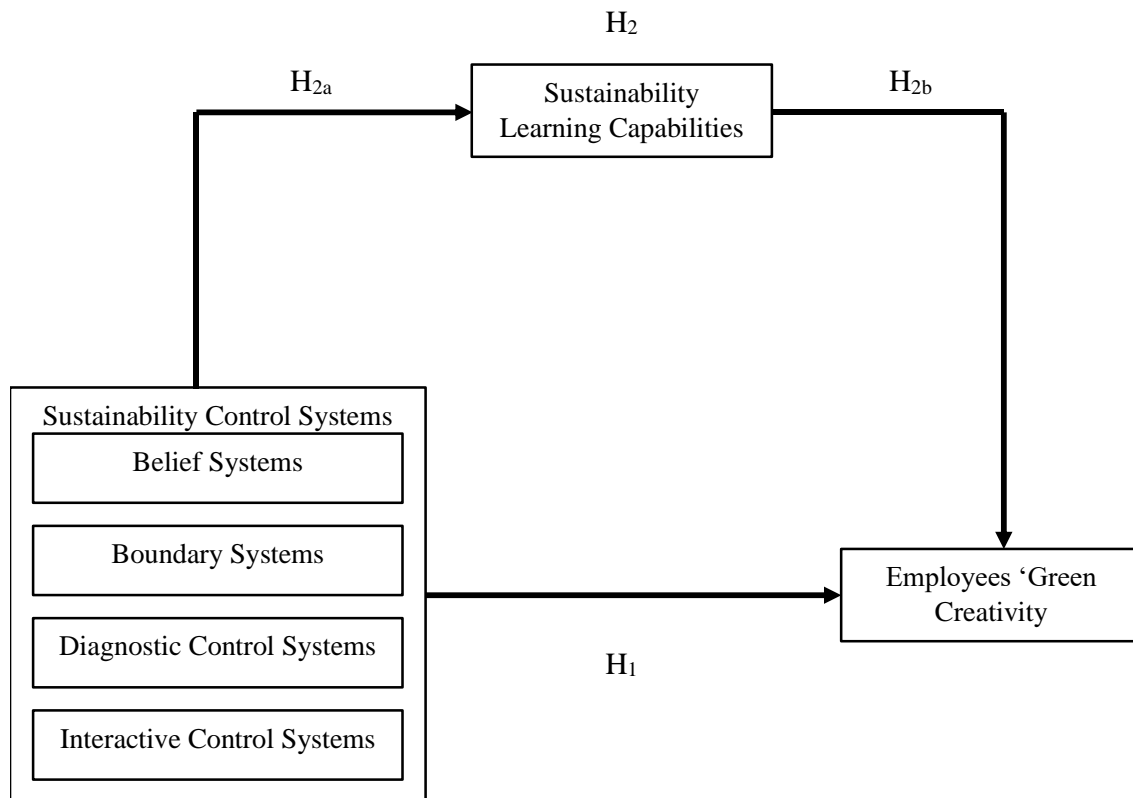


Figure 1: Conceptual Framework

Source: Author

RESULTS AND DISCUSSION

This study focused on Sri Lankan manufacturing organisations involved in sustainable practices. Sustainability managers and other senior-level and middle-level managers engaged in sustainability initiatives participated in the study. The manufacturing industry was chosen owing to the dearth of green creativity in the Sri Lankan manufacturing industry (Banerjee, Iyer, & Kashyap, 2003). Many researchers have employed the quantitative approach in various disciplines connected to management accounting research (Appuhami, 2017; Rupasinghe & Wijethilake, 2021). Thus to be consistent with these studies, the current study also adopted the quantitative approach. Moreover, purposive sampling was utilised in this study to assure the accuracy of the responses and conclusions as well as to choose a suitable sample for the study, consisting of manufacturing organisations practising sustainability initiatives.

The questionnaire was used to gather data which is made up of the 23-item scale developed by Wijethilake (2017) to assess SCS, 6-item scale developed by Chen and Chan (2012) to measure green creativity and the 6-item scale developed by Wijethilake and Upadhaya (2020) to assess sustainability learning capabilities. These constructs were measured using a five-point Likert

Scale ranging from “strongly disagree (1)” to “strongly agree (5).” The statistical social scientific package (SPSS) and smart-partial least-squares (PLS) 3 were the statistical programmes used for data analysis. 315 Google form links were produced and sent to 824 responders from 315 organisations, of which 505 were returned from 239 organisations, owing a 61 per cent response rate considered satisfactory. Respondents' demographic information was collected under two categories.

Firstly, the organisation's profile information was gathered regarding the nature of the organisation (Local 84.1% and Multinational Enterprises 15.9%), the number of employees (Below 100 - 5.4%, 100-1000 44.8%, 1001-10000 40.6% and Above 10000 9.2%), the category of the industry (Manufacturing - 100.0% Service - 0%), and the sub-category of the industry. Secondly, the respondents' profiles were obtained regarding the gender of responses (Do not want to reveal - 0.6%, Female - 14.9%, Male - 84.6%), their marital status (Do not want to reveal - 3.2%, Married - 64.8%, Single - 32.1%, age (18 years - 27 years - 15.0%, 28 years - 45 years - 69.1%, 46 years - 60 years - 15.8%), highest education level achieved (Bachelor degree and/or professional qualification - 56.8%, GCE A/L - 4.8%, Postgraduate degree and above - 38.4%), years of experience obtained (16 years - 24 years - 35.6%, 6 years - 15 years - 49.3% , Below 5 years - 15.0%), and current position held in the organisation (Middle-level manager - 66.1%, Senior-level manager - 33.9%).

SmartPLS was utilised to determine the structural validity of the scales using PLS-SEM confirmatory factor analysis. The results revealed that all scales' composite reliability (CR) values exceeded 0.7, demonstrating internal consistency (Hair et al., 2018). Furthermore, all AVE values were found to be greater than 0.5, indicating convergent reliability (Hair et al., 2018). The measurement model was also indicated to support the discriminant validity of the constructs since it satisfied the Fornell and Larcker criterion. Finally, the variance inflation factor (VIF) revealed that the collinearity of indicators was less than 3 (Hair et al., 2018).

Hypothesis Testing for Direct Relationships

Table 2 represents the findings related to the hypothesis testing for the direct relationships of the current study (based on 5000 subsamples). The results revealed that H₁, contrary to the researcher's expectation, and SCS have an insignificant impact on employees' green creativity ($\beta = -0.015$, $t = 0.361$, $p = 0.173$). Hence H₁ was rejected. Moreover, the unsupportive association of SCS with employees' green creativity points towards the fact that SCS may not

be the sole factor affecting employees' green creativity. Further results revealed that SCS has a significant association with sustainability learning capabilities ($\beta = 0.703$, $t = 16.451$, $p = 0.000$). Hence H_{2a} was accepted. On the other hand, it is revealed that sustainability learning capabilities ($\beta = 0.727$, $t = 10.610$, $p = 0.000$) have a significant positive association with employees' green creativity, where H_{2b} was supported.

Table 2 Hypothesis Testing of Direct Relationships

Hypothesis	Relationship	B	SD	T Statistics	P Values	2.50%	97.50%	Decision
H_1	SCS \rightarrow GC	-0.015	0.087	0.173	0.716	-0.239	0.182	Not Supported
H_{2a}	SCS \rightarrow SLC	0.703	0.043	16.451	0.000	0.581	0.738	Supported
H_{2b}	SLC \rightarrow GC	0.727	0.069	10.610	0.000	0.139	0.366	Supported

Source: Survey Data

Hypothesis Testing of Mediator Relationship

Hypothesis 2 in this study involves mediation. The researcher tested mediation using the Preacher and Hayes model (Hair et al., 2014). Hair et al. (2014) recommend Preacher and Hayes as the best-suited procedure for the PLS-SEM. Many scholars have argued that a sufficient 'total' relationship with the independent variable (SCS) must exist for the dependent variable (Green creativity) to be tested for mediation (Baron & Kenny, 1986; Judd & Kenny, 1981; Preacher & Hayes, 2004). Second, SCS must be statistically linked to the mediator (sustainability learning capabilities). Third, the mediator must be linked to the outcome (green creativity) after controlling for the predictor. Finally, if the relationship between the independent and dependent variables is no longer significant in the mediator's presence, the relationship is completely mediated.

Consistent with the first requirement of Baron & Kenny (1986), The results revealed that the total effect of SCS on employees' green creativity was significant (H_1 : $\beta = 0.496$, $t = 7.202$, $p = 0.000$). (Table 1). Then, the researcher tested the full mediation model. With the inclusion of the mediating variable of sustainability learning capabilities, the impact of SCS on green creativity became insignificant ($\beta = -0.015$, $t = 0.173$, $p = 0.862$), as shown in Table 1. The indirect effect of SCS on green creativity through mediating variable sustainability learning capabilities was significant ($\beta = 0.511$, $t = 7.733$, $p = 0.000$), as shown in Table 2. This shows that sustainability learning capabilities fully mediate the relationship between SCS and green creativity.

Table 3 Assessment of Total Effects, Direct Effects and Specific Indirect Effect

Effect	Relationship	Total Effect	T Statistics	Sig.
Total Effect	SCS→GC	0.496	7.202	0.000
Direct Effect	SCS→GC	-0.015	0.173	0.862
Specific Indirect Effect	SCS→SLC→GC	0.511	7.733	0.000

Source: Survey Data

CONCLUSIONS AND IMPLICATIONS

As specified, this study's objectives were to empirically test the relationship between SCS and employees' green creativity and the mediating effect of sustainability learning capabilities on that relationship. It was found that the relationship between SCS and employees' green creativity is not statistically significant. Thus, it contradicts the theory and previous empirical studies (Simons, 1995; Henri et al., 2004; Mundy, 2010; Speklé, van Elten & Widener, 2017; Appuhami, 2017). However, similar results were obtained by the previous researchers as well. For instance, the studies of Webster (2008) found contradictory findings to the Simons' LOC framework for a sample of middle-level managers. A study on middle-level managers revealed neither a direct nor a mediated association, despite prior empirical studies (Mundy, 2010; Speklé, van Elten, & Widener, 2017; Appuhami).

Moreover, these contradictory findings addressing the association between SCS and green creativity among employees may be a consequence of the research context because all prior studies that provide empirical evidence for the strong association between SCS and employees' green creativity were mostly undertaken in developed countries (Moulang, 2010; Appuhami, 2017). Previous studies have shown that affluent nations use more sophisticated SCS than underdeveloped nations (Lee & Herzig, 2010). Comparing the development of SCS in Sri Lankan manufacturing organisations to the broader setting of developing nations indicates no differences. According to Wijethilake (2017), most Sri Lankan large-scale local and multinational companies are transitioning from financially oriented traditional MCS to SCS. Moreover, Small and Medium-Scale Enterprises in Sri Lanka are more likely to use conventional MCS than SCS (Rupasinghe & Wijethilake, 2021). Therefore, this significant disparity between developed and developing nations on sustainability initiatives may explain these contradictory findings about the relationship between SCS and green creativity among employees.

As specified in hypotheses 2, 2a, and 2b, sustainability learning capabilities fully mediate the relationship between SCS and employees' green creativity, suggesting that sustainability learning capabilities may be the answer to why SCS makes employees more green creative. The previous researchers provide further evidence for this mediating role of sustainability learning capabilities (Webster, 2006; Appuhami, 2017; Henri et al., 2004).

This study contributes to the management accounting literature especially addressing the necessities raised by Widener (2007) and Moulang (2013) to remodel Simon's LOC framework and thereby incorporate the sustainability dimensions into the development of MCS (Tsai & Hung, 2009; Bititci et al., 2011). Hence, the current study suggests that this framework could improve by integrating sustainability dimensions following Wijethilake (2017). As managerial implications, organisations could foster a better environment for employees to reap the full benefits of Sustainability Control Systems to be more green creative by encouraging employees' sustainability learning capabilities to reduce business failures resulting from deficiency of green creativity. As a further research area, this research could be further extended by examining the relationship between Sustainability Control Systems and employees' green creativity in different industrial and geographical contexts. A significant limitation of this study is that the scope of the study is limited to the first-level causes, but incorporating sustainability dimensions could bring much value addition to the Simons' LOC framework.

REFERENCES

- Appuhami, R. (2017). Exploring the relationship between strategic performance measurement systems and managers' creativity: the mediating role of psychological empowerment and organisational learning. *Accounting & Finance*, 59(4), 2201–2233.
- Baron, R.M. & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Ogbeibu, S., Jabbour, C.J.C., Gaskin, J., Senadjki, A. & Hughes, M. (2021). Leveraging STARA competencies and green creativity to boost green organisational innovative evidence: A praxis for sustainable development. *Business Strategy and the Environment*, 28(6), 1–20.
- Rupasinghe, H.D. and Wijethilake, C. (2021). The impact of leanness on supply chain sustainability: examining the role of sustainability control systems. *Corporate Governance: The International Journal of Business in Society*, 21(3), 410–432.
- Simons, R. (1994). How managers use innovative control systems to drive strategic renewal. *Strategic Management Journal*, 15(3), 169–189.

PERCEIVED IMPORTANCE OF MOTIVATIONAL FACTORS TO ADOPT ECOPRENEURSHIP PRACTICES WITH SPECIAL REFERENCE TO ECOPRENEURS IN THE WESTERN PROVINCE OF SRI LANKA

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ABSTRACT

Purpose: The main purpose of the current study is to examine how ecopreneurs perceived the importance of motivational factors to adopt ecopreneurship practices.

Design/methodology/approach: Data were collected from ecopreneurs in the Western Province of Sri Lanka. As the research strategy, a survey strategy was used, and 73 respondents were selected under the purposive sampling technique. The data were analysed through descriptive statistics by using SPSS and Excel software.

Findings: According to the findings, “Make a Living” is the highest motivating factor for ecopreneurs to adopt ecopreneurship practices and “Being One’s Own Boss” has the lowest motivation to adopt ecopreneurship practices among ecopreneurs within the selected context. Furthermore, the results represented that, Green Values, Market Gap, and Passion also motivate ecopreneurs to adopt ecopreneurship practices but, according to the demographic factors, it gets varied.

Research implications: This study contributed to filling the existing contextual gap and this research confirmed the validity of previous research findings. By focusing on the ecopreneurship practices of the people, it will be possible to achieve environmental protection and economic prosperity, and this study helps to develop strategies related to ecopreneurship, formulate policies for the government and take corrective actions regarding ecopreneurship.

Originality/value: In the Sri Lankan context, motivational factors of ecopreneurship have not been tested, thus this is the first study in the Sri Lankan context to study the motivational factors of ecopreneurship.

Paper type: Research Paper

Keywords: Ecopreneurs, Ecopreneurship, Green Entrepreneurship

INTRODUCTION

Environmental degradation has increased and becomes the most prominent global issue of the 21st century. “Ecopreneurship is one of the powerful and important solutions to eradicate environmental degradation and it is a growing profession among entrepreneurs in almost every industry” (Turegun, 2020, p.1). Ecopreneurship is identified as a vital solution for environmental degradation and environmental effects on businesses and consumers’ strong demand for green products in developing countries.

For instance, “an ecopreneur is an individual whose intention is the transformation of a sector of the economy towards a sustainable future by establishing a business enterprise or company in a particular sector with the emphasis on green processes and green design and with the long-term goal of ensuring that everything that is done in his business venture is sustainable” (Isaak as cited in Turegun, 2020, p.11). Furthermore, entrepreneurs need to pay attention to solving environmental problems. Entrepreneurs could offer solutions to the environmental problem by making their businesses more environmentally friendly even before they start. Besides that, ecopreneurs are known as entrepreneurs who conduct their businesses based on sustainability principles (Kirkwood & Walton, 2010).

Turegun (2020), conducted a critical review of the literature and he compared the motivational factors of the entrepreneurs with motivational factors of ecopreneurs. Also, Gunawan et al. (2021), identified and reviewed the literature on gender-based drivers of ecopreneurship from three scientific domains: ecological innovation, ecopreneurship, and female entrepreneurship. Furthermore, Kirkwood and Walton (2010), Harte et al. (2020), and Tjitalaksana (2014) introduced factors that motivate ecopreneurs to start businesses.

When considering the limitations of the study, different motivational factors can be identified towards the adoption of ecopreneurship practices. However, the researchers have focused only on five variables as independent variables. Moreover, the researchers have considered the ecopreneurs in the Western Province of Sri Lanka. Thus, the results can only represent the ecopreneurship practices of a certain group. According to the literature, Jayasinghe and Liyanage (2018) claimed that “while the value of eco-entrepreneurship is increasingly recognised, there is still very little data available on the overall impact of these enterprises and their contribution to sustainable development in Sri Lanka” (p.556). Through this, the researchers confirmed that the knowledge available in the literature regarding the factors affecting ecopreneurship is insufficient and that further knowledge needs to be generated for

that. Furthermore, Bandara as cited in Jayasinghe and Liyanage (2018) identified that “one of the most problematic environmental issues in the country is the waste problem and also managing waste has become a serious environmental concern, particularly in the urbanised areas of Sri Lanka with high population densities and the unavailability of suitable lands for waste disposal sites” (557). So according to the Department of Census and Statistics, among the nine provinces, Western Province reported the largest share of the population in Sri Lanka and it shows 6,165,000 in 2020. As a percentage, it shows 28.7% (Department of Census and Statistics, 2020). And according to National Building Research Organisation (2015), Western Province was identified as the most polluted province in Sri Lanka and also major urban centres in Sri Lanka face this environmental problem due to the high urbanisation rate and increasing vehicle population, and all the district centres of Colombo, Gampaha, and Kalutara in Western Province are highly vulnerable to environmental pollution due to most administration, economical, capital, and industrial activities within the province. So as a solution for environmental issues in Western Province, most entrepreneurs encourage to adopt green businesses. Based on the above reasons, the researchers recognised that it is significant to do an ecopreneurship study in the Sri Lankan context. Then, it will result in gaining difficulties to generalise the research findings to all ecopreneurs in the Sri Lankan context. Furthermore, the usage of the data collection method and selection of the relevant sample based on the questionnaire and purposive sampling technique are also limitations which are called methodological limitations. Also, at the time of data collection, the situation in the country was affected by the Covid-19 virus and there were various health and safety conditions in the country.

There has been a long-standing connection between business and the environment since time immemorial. Thus, there seems to be a growing awareness and interest in environmental degradation and the impact of business on the local environment. Literature shows that “business and industry are often viewed as one of the largest contributors to environmental degradation” (Cohen & Winn as cited in Masjud, 2020, p.98). Hence “market pressures have forced companies to pay more attention to such environmental issues and this has made it challenging for industries to not only pay attention to their economic data but also environmental aspects” (Djajadiningrat & Melia as cited in Masjud, 2020, p. 98). Given the present environmental problems facing the world, it is clear that past strategies used to address these challenges have failed to prevent environmental degradation. It is therefore time to pay attention to the role that entrepreneurs can play in solving our environmental problems.

Scholars agreed that “entrepreneurs can help to preserve our ecosystems, counteract climate change, improve freshwater supply, maintain biodiversity, and reduce environmental degradation and deforestation” (Cohen & Winn, Dean & McMullen as cited in McEwen, T. 2013, p. 264). According to Chhabra (2018), it is indicated that the environment enforces continuous degradation and because of that, ecopreneurship should be implemented to protect the environment. And, research findings have found when dealing with environmental challenges or market failures, ecopreneurship is identified as the most dynamic alternative for that. Other than that, McEwen, T. (2013) stated “environmental degradation is a serious threat to the lives of people, plants, and animals. It has not only brought natural disasters, such as storms, heatwaves, droughts, etc., but it has also diminished the vitality and sustainability of the economy”. Furthermore “recent discourse on environmental issues has raised awareness of the environment and many people now choose to purchase with environmental sensitivity in mind” (Anderson as cited in Kirkwood & Walton, 2010, p.206). And today consumers are becoming more and more environmentally conscious (Laroche et al., as cited in Kirkwood & Walton, 2010). Other than that, “entrepreneurs can contribute to solving environmental problems by creating new, more environmentally sustainable products and services” (Cohen & Winn, Dean & McMullen, and York & Venkataraman as cited in McEwen, T. 2013, p. 266). According to Chhabra (2018), fortunately, there are signs of an emerging bottom push for green. In other words, consumers are increasingly demanding healthy products. Thus, businesses too embrace green because they see profit in it. According to the above-mentioned literature, the researchers identified that there is a huge problem regarding environmental degradation. Environmental issues affect businesses and consumers' strong demand for green products. So ecopreneurship can be introduced as a solution for the above-mentioned problems because “ecopreneurs are the new breed of eco-conscious change agents who are redefining the way business is conducted and are introducing eco-friendly ideas and innovations in the marketplace” (Chhabra, 2018). And also, most scholars and practitioners agreed that businesses are, and have been, a part of the environmental problem and that entrepreneurs should be a part of the solution. Today, more than ever before, there is a need to abandon the old human exceptional paradigm and embrace the new paradigm of creative destruction. Environmental ecopreneurs must destroy the old practices and create new ways to solve environmental problems (Grant as cited in McEwen, T. 2013, p. 282). And also, according to Gunawan et al. (2021), Knowledge of the drivers of adopting ecopreneurial behaviour is scarce and scattered (p.1). Furthermore, the researchers referred to previous literature to get a deep understanding

of the research area. When referring to the literature, the researchers recognised that there are several studies that had 5 been conducted to study ecopreneurship. Even though there are several studies about ecopreneurship, there is a limited number of research that has been done for examining the motivational factors to adopt ecopreneurship practices. Especially, there is no study in the Sri Lankan Context regarding motivational factors for adopting ecopreneurship practices. Gunawan et al. (2021) identified that developing countries in Southeast Asia, are still underrepresented in the research area of motivational factors' effect on ecopreneurship.

The findings of this research add new knowledge to the research world by filling the gap in identifying the motivational factors of adopting ecopreneurship practices. Since there are literature gaps and empirical gap in Sri Lanka, this study will be able to fill that gap to some extent. Research Findings help to enhance the knowledge of the academics and in the end, it will provide a clear road map for future research areas for academics. The findings can be used by potential ecopreneurs and can become aware of the ecopreneurship sector as well. The study developed research questions to identify the importance of motivational factors of ecopreneurs. To answer these research questions, research objectives were developed in the study. The researchers have formulated research objectives as follows,

1. To identify the motivational factors to adopt ecopreneurship practices by ecopreneurs in the Western Province of Sri Lanka.
2. To identify the extent of motivational factors to adopt ecopreneurship practices in the Western Province of Sri Lanka.

This study seeks to reveal reasons why people want to become ecopreneurs and what motivates them to walk down such a path. There existed many motivational factors to become ecopreneurs. According to previous findings, various factors are determined as motivational factors of ecopreneurs.

RESEARCH METHODOLOGY

According to the previous literature, some researchers had found different motivational factors of ecopreneurs to adopt ecopreneurship practices.

Table 1: Operationalisation of Motivational Factors

Factors	Indicators
1. Green Values	1. Spreading their green values to others 2. There must be a better way 3. Sustainability 4. Organic food / Organic products 5. Personal goals and preferences 6. Effects of role models and mentors
2. Market Gap	1. Market imperfections 2. Consumer attitudes 3. Working experience / past experience 4. See the need for a product or service (user-based) 5. Innovations / Creativity
3. Make a Living	1. Economic success 2. Earn a living or cover their costs 3. Achievement 4. Support and pay our employees
4. Passion	1. Passion for the environment 2. Passion for their product or service 3. Positive feelings 4. Commitment 5. Persistence 6. Creative problem-solving
5. Being Own Boss	1. Independence 2. Do something for self or as a couple 3. Family-related motivations 4. Job dissatisfaction 5. Unemployment 6. Pre-existing desire 7. Wanted a career shift

Source: Author, 2021

When researchers consider the literature, although there are many research articles regarding motivational factors of entrepreneurship, there is a limited number of research articles regarding motivational factors of ecopreneurship. However, the researchers found mainly five research articles regarding the motivational factors of ecopreneurs. Among those five articles, two of them are literature reviews and three of them are qualitative studies. Turegun (2020), conducted a critical review of the literature and he compared the motivational factors of the entrepreneurs with motivational factors of ecopreneurs. Also, Gunawan et al. (2021) identified and reviewed the literature on gender-based drivers of ecopreneurship from three scientific domains: ecological innovation, ecopreneurship, and female entrepreneurship. Furthermore, Kirkwood and Walton (2010), Harte et al. (2020), and Tjitalaksana (2014) introduced factors that motivate ecopreneurs to start businesses. Researchers found five motivational factors

regarding ecopreneurship practices by referring to the existing literature. And could able to find fifty indicators under five motivational factors. After eliminating the common factors, researchers found twenty-eight indicators (Table 1).

In this study, the researchers conducted a survey and used a self-administered questionnaire to collect the primary data. As a tool of data collection method, the researchers developed a questionnaire by referring to the literature. The present study analysed data mainly using statistical and descriptive statistics graphically. For that, the researchers used Microsoft Excel Tool, SPSS to analyse the collected data which comes from the respondents. Descriptive statistics are used to explain the basic features of the data and thus it present quantitative description in a convenient way.

Researchers selected 73 ecopreneurs under the purposive sampling technique. “Due to the absence of a nationally accepted definition for the SMEs and the unavailability of adequate information, it is difficult to identify an exact total population of the SMEs in Sri Lanka” (Wijetunge & Pushpakumari, 2014, p.57). Since the population is unknown, the researchers used the non-probability sampling method and to select the sample from the targeted population. And also, the researchers focused on the purposive sampling method because it is not easy to identify ecopreneurs in the context. So, researchers identified green entrepreneurs through the help of neighbours and friends in the Western Province. And researchers were able to contact them through direct calls and sometimes researchers contacted them through social media by using Messenger and WhatsApp. According to the identified green practices, researchers distributed 85 questionnaires among the ecopreneurs in Western Province. Dissanayake et al. (2019) introduced green practices as described in the table below, and based on those green practices, the researchers were able to identify the responses of a sample of 73 individuals by identifying ecopreneurs in the Western Province (Table 2).

Table 2: Green Practices of Ecopreneur

Green Practices	No of Ecopreneurs
1. Reducing energy consumption	18
2. Handling of waste	
3. Use of waste to generate power	
4. Efficient use of resources	
5. Selling organic Products	
1. Handling of pollution	8
2. Reduce packaging	
3. Eco-labelling	
4. Focus on recycling	
5. Efficient use of resources	

1. Handling of waste	
2. Selling green products	26
3. Use innovative green features	
1. Focus on recycling	
2. Using solar power	
3. Selling organic Products	2
4. Use innovative green features	
1. Use green roofs -Rainwater harvesting	
2. Conserve water	4
3. Rainwater harvesting	
1. Product life cycle management	
2. Using solar power	
3. Avoiding the use of plastic	6
4. Use innovative green features	
1. Reducing packaging	
2. Handling of waste	
3. Eco-labelling	1
4. Selling green products	
1. Using solar power	
2. Selling organic Products	4
1. Handling of pollution	
2. Focus on recycling	
3. Rainwater harvesting	4
4. Selling organic Products	

Source: Author, 2021

RESULTS AND DISCUSSION

In this study, the researchers conduct a survey and use a questionnaire to collect the primary data. As a tool of data collection method, the researchers developed a questionnaire by referring to the literature. The developed questionnaire was in two parts. The first part consisted of the ecopreneurs' general information (demographic information), such as age group, gender, marital status, and industry. And the second part is the indicators used to measure the variables (green values, market gap, making a living, passion, and being their own boss) of the study. The study was conducted to investigate whether ecopreneurs' motivation varies according to age, gender, marital status, income level, and their industry (demographic variables) with special reference to ecopreneurs in the Western Province of Sri Lanka (Table 3).

Table 3: Profiles of the Sample Respondents

Profile	Frequency	Percentage
Age Composition		
Below 25 years	9	12.33%
26 - 35 years	32	43.84%
36 - 45 years	18	24.66%

Above 45 years	14	19.18%
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Gender Composition		
Male	40	54.79%
Female	33	45.21%
Marital Status Composition		
Married	40	54.79%
Single	33	45.21%
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Income Level Composition		
Less than 30,000	6	8.22%
30,000 - 35,000	9	12.33%
36,000 - 40,000	25	34.25%
41,000 – 45,000	12	16.44%
46,000 – 50,000	8	10.96%
More than 50,000	13	17.81%
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Industry Composition		
Food	18	24.65%
Apparel	6	8.21%
Handy Craft	24	32.87%
Restaurants	2	2.73%
Agriculture	9	12.32%
Wood	6	8.21%
Retail	1	1.36%
Farming	3	4.10%
Footwear	1	1.36%
Pottery Items	2	2.73%
Medicines	1	1.36%

As a whole, ecopreneurs in the age category of 26-35 years have the highest motivation for ecopreneurship than the other age categories. On the whole sample, the majority are male ecopreneurs. In accordance with the findings, a greater amount of ecopreneurs were married from the whole gathered responses. Further considering income levels, the majority of the respondents were in Rs.36000-40000 income level. And respondents in the sample consist of eleven industries. And most of them select handicrafts as their industry and took 24 respondents. In accordance with the findings, the majority of times, making a living act as the major motivation, and being one's own boss, became the lowest affected motivational factor.

Descriptive statistics are used to get a better idea about how well respondents reacted to the indicators of the questionnaire and measures used by the researchers. The researchers used mean, median, mode, and standard deviations for all motivational factors to describe demographic differences influencing the motivational factors that motivate the adoption of ecopreneurship practices in the Western Province of Sri Lanka.

Table 4: Descriptive Statistics

Factors	N	Mean	Median	Mode	Std. Deviation
Green Values	73	4.23	4.17	4	0.38
Market Gap	73	4	4	4	0.441
Make a Living	73	4.36	4.5	5	0.375
Passion	73	4.31	4.33	4	0.297
Being Own Boss	73	3.93	3.86	4	0.389

Source: Author, 2021

According to the descriptive statistics, when compared with all the motivational factors “make a living” represents the highest mean, median and mode value as well as “being one’s own boss” shows the lowest mean, median and mode value. Also “market gap” takes a highest standard deviation value and “passion” takes the lowest value. Finally, the researchers identified that most ecopreneurs motivate to adopt ecopreneurship practices through making a living, green values, and passion respectively. And as a motivational factor being own boss gets the lowest attention from the respondents.

CONCLUSIONS AND IMPLICATIONS

Ecopreneurs have awareness of environmental issues and because of that, they develop environmentally friendly products and services that help to solve the problems regarding environmental and industrial. The aim of conducting this study was to identify how ecopreneurs perceived the importance of motivational factors to adopt ecopreneurship practices in the Western Province of Sri Lanka. Motivations of ecopreneurs can be identified as untouched and unidentified in academic phrases of the Sri Lankan context. Therefore, this study aimed to contribute to the existing body of knowledge. Due to the above considerations, this study was filled with the knowledge gap and empirical gap in the literature.

The study developed research questions to identify the importance of motivational factors of ecopreneurs. To answer these research questions research objectives were developed in the study. The first objective of the study is to identify what are the motivational factors that motivate to adopt ecopreneurship practices as ecopreneurs think in the Western Province of Sri Lanka and the second objective is to identify to what extent ecopreneurs used motivational factors to adopt ecopreneurship practices in the Western province of Sri Lanka.

By doing a thorough literature analysis, the researchers were able to reach the first objective of the study. According to the findings of various authors, the researchers were able to identify five motivational factors (Green Values, Market Gap, Making a Living, and Being One’s Own

Boss). And also, under those five motivational factors, researchers recognised twenty-eight indicators. Through the use of literature from 1998 to 2021, the researchers were able to identify various motivational factors. Also, the researchers tried to identify common motivational factors that fit the Sri Lankan context, as noted in most articles. So, through the literature analysis, the researchers were able to reach the first objective.

To reach the second objective, the researchers performed a descriptive analysis. Based on the five demographic factors (age, gender, marital status, income & industry) researchers identified the level of motivation for ecopreneurship practices of ecopreneurs in Western Province.

Theoretical Implications

According to previous research, the concept of ecopreneurship is still in the developing phase. The overall goal of this study was to identify how ecopreneurs perceived the importance of motivational factors to adopt ecopreneurship practices. The findings of the study concluded that ecopreneurs' motivations for adopting ecopreneurship practices vary according to the demographic variables (age, gender, marital status, income level, and industry) in the Western Province. In the Sri Lankan context, this has not been tested. Hence this study contributed to filling the existing contextual gap. Additionally, the researchers developed motivational factors based on a thorough literature review. Also, five identified motivational factors consist of twenty-eight indicators. By using those indicators researchers found the extent of practising motivational factors to adopt ecopreneurship practices. Therefore, this research confirmed the previous research findings are validating with the present research study findings.

Practical Implications

Ecopreneurship has been identified as an essential solution to environmental degradation, environmental issues affecting those businesses, and the strong demand of consumers. The final results of this study also provide practical implications for the ecopreneurs within the context. The findings show that ecopreneurs' motivational factors vary according to age, gender, marital status, income level, and industries, and they also vary with the indicators under the motivational factors of ecopreneurship in the Western Province of Sri Lanka.

By focusing on the ecopreneurship practices of the people, it will be possible to achieve environmental protection and economic prosperity, and this study helps to develop strategies related to ecopreneurship, formulate policies for the government, and take corrective actions regarding ecopreneurship.

REFERENCES

- Chhabra, M. (2018). Ecopreneurship as a solution to environmental issues and challenges: state-of-the-art and future perspective. <https://www.researchgate.net/publication/326718656>
- Department of Census and Statistics (2020). http://www.statistics.gov.lk/about_us
- Dissanayake, K., Premaratne, S. P., Ranwala, S., & Melegoda, N. (2019). Adoption of green practices in manufacturing SMEs: some lessons from Kochi, Kerala, India. *Journal of Business Studies*, 6(2), 1. <https://doi.org/10.4038/jbs.v6i2.45>
- Gunawan, A. A., van Riel, A. A., & Essers, C. (2021). What drives ecopreneurship in women and men? - A structured literature review. *Journal of Cleaner Production*, 280, 124336. <https://doi.org/10.1016/j.jclepro.2020.124336>
- Harte, P., Peisl, T., & Kammers, K. (2020). Motivations of Ecopreneurs: The New Entrepreneurial Paradigm. *SSRN Electronic Journal*. Published. <https://doi.org/10.2139/ssrn.3757957>
- Jayasinghe, R., & Liyanage, N. (2018). Sustainability through Eco-entrepreneurship: Analyzing the opportunities and challenges for micro and small-scale eco-enterprises in Sri Lanka.
- Kirkwood, J., & Walton, S. (2010). What motivates ecopreneurs to start businesses? *International Journal of Entrepreneurial Behavior & Research*, 16(3), 204–228. <https://doi.org/10.1108/13552551011042799>
- Masjud, Y. I. (2020). Ecopreneurship approach as a solution to environmental problem: implication for university entrepreneurship education. *Journal of Environmental Science and Sustainable Development*, 3(1). <https://doi.org/10.7454/jessd.v3i1.1041>
- McEwen, T. (2013). Ecopreneurship as a Solution to Environmental Problems: Implications for College Level Entrepreneurship Education. *International Journal of Academic Research in Business and Social Sciences*, 3, 5.
- National Building Research Organization (2015), https://www.nbro.gov.lk/images/content_image/pdf/symposia/2.pdf
- Tjitalaksana, S.M. (2014). Identification of five motivational factors of ecopreneurship for start-up business.
- Turegun, O. (2020). Motivational Factors of Ecopreneurs. 6(9), 10-19. <http://dergipark.gov.tr/yonbil>
- Wijetunge, W., & Pushpakumari, M. (2014). Entrepreneurial orientation and business performance of small and medium scale enterprises of Western Province in Sri Lanka. *Kelaniya Journal of Management*, 2(2), 51. <https://doi.org/10.4038/kjm.v2i2.6550>

USERS' PERCEIVED IMPORTANCE TOWARDS THE ELEMENTS OF CORPORATE INTERNET REPORTING (CIR) IN SRI LANKA

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ABSTRACT

Purpose: Corporate Internet Reporting (CIR) depicts an expression of Corporate Information via company websites that encourage to move forward with the Internet and web-based resources. In this context, the study initially aims to evaluate the level of users' perceived importance of the elements of CIR and to investigate the factors that impact the users' perceived importance of CIR.

Design/methodology/approach: A quantitative research approach is used in the study. Users of the Corporate Websites are taken as the population of the study. The study followed convenience sampling, and primary data were collected using a self-administered questionnaire based on the CIR Index developed by prior researchers. Mean ranking, One-sample t-tests, and Regression analysis was conducted to address the objectives of the study

Findings: The study found that internet-based corporate disclosures are perceived to be important by the respondents. Further, there are differences in the perceived importance of CIR based on demographic characteristics of Gender, Age, Highest academic qualification, Working sector, and Experience in using CIR.

Research implications: The insights gained through the study are expected to be important and useful for stakeholders, including companies, regulators, policymakers, marketers, competitive firms, and society.

Originality/value: The study is perceived to be practically important since it reinforces the adoption of CIR practices by expecting to place with the regulatory standard and legal requirements.

Paper type: Research paper

Keywords: Content Elements, Corporate Internet Reporting, Presentation Elements, Users

INTRODUCTION

The technology revolution has significantly impacted every business area, including Accounting and Finance practices and Communication. The realisation of the Internet's enormous benefits encourages corporations to move forward with the Internet and web-based resources. In this case, information plays a significant role in determining the future direction of corporations and making better decisions. The development of Financial Reporting, which cascaded contemporarily to Corporate Internet Reporting (CIR), aims to satisfy varying users' needs. Corporate Internet Reporting is the dissemination of corporate information via company websites (Poon et al., 2003).

Further, this is a new approach for outside decision-makers to access relevant and required accounting information. It is a technology that has the potential to exhibit distinctive and attractive information features, which makes it more efficient and cost-effective than traditional methods of print media (Verma & Garg, 2010).

Corporate Internet Reporting (CIR) depicts an embodiment of total disclosure that is aimed at reducing information asymmetry between shareholders and managers of the firm. (Ashbaugh et al., 1999; Debreceeny et al., 2002). CIR permits organisations to disseminate other company-specific information in real time at a relatively inexpensive cost. CIR is a helpful method to accelerate the delivery of information to be used as part of the decision-making process. Accordingly, with the presence of CIR practices, accounting information becomes more accessible to users of financial statements.

Since 1995, most studies on CIR have been conducted in developed countries, such as the United States of America, the United Kingdom, and Hong Kong (Poon et al., 2003). Few studies have been conducted in developing countries like Thailand (Davey & Homkajohn, 2004), Indonesia (Amila, 2009) etc. This study extends to the Sri Lankan context of CIR of the Companies Listed in the Colombo Stock Exchange, mainly focusing on perceived importance.

Accordingly, in this context, this study investigates to address two research objectives. First, to examine the Level of users' perceived importance towards the Content and Presentation elements of CIR, and Second, to Investigate the factors that impact the users' perceived importance of Corporate Internet Reporting.

This Study adds new dimensions to the CIR in the Sri Lankan context. Users are the ultimate parties who get information to make informed decisions. Companies disclose information on the Internet to fulfil the company's needs for investors, shareholders, customers, and other parties.

Moreover, the study is perceived to be practically important since the findings reinforce the adoption of CIR practices by expecting to place with the regulatory standard and legal requirements. Accordingly, the study is essential and valuable for stakeholders, including companies, regulators, policymakers, marketers, competitive firms, and society as the study's findings are related to the perceived importance of CIR's content and presentation elements.

METHODOLOGY

The study followed a positivistic research paradigm as the variables (i.e., perceived importance of CIR, demographic characteristics of users) of the study can be objectively measured and adopted as a quantitative approach. Corporate website users in Sri Lanka are considered the population of the study. The study followed convenient sampling where the data were collected through online surveys within Sri Lanka and ensured a better representation of the population. By adopting this sampling method, this study further ensured the respondents' willingness to participate in the survey. Hence the source of data is primary and they were collected using a self-administered questionnaire built with the aid of Google forms. The survey link was shared through social media sites to capture the attention of respondents in a convenient way. Based on the CIR Index developed by prior researchers (De Silva and Ajward, 2019; Ahmed et al., 2017), the study developed a questionnaire to assess the perceived importance of Internet-based corporate disclosures. Perceived importance towards the CIR is determined based on Content Elements (i.e., General Information, Financial Information, Environmental, Social and Governance (ESG) Information), and Presentation Elements. Further, the study used 59 items which were measured with Likert scale questions that are scaled from "*Not important = 1*" to "*Very important = 5*". On the other hand, the study accommodated demographic characteristics of Gender, Age, Highest academic qualification, Working sector, User status, and Experience in using CIR and measured in categories.

Collected primary data were analysed using various data analysis methods. Initially, the level of users' perceived importance towards the elements of CIR was assessed using Mean ranking and One-sample t-tests. Then a Regression analysis was conducted to investigate the factors that impact the users' perceived importance of CIR.

RESULTS

Firstly, the study assessed the level of users' perceived importance of the elements of CIR. Table 1 presents the analysis of the perceived importance of 238 users towards the content and presentation elements of CIR, which is measured based on a five-point Likert scale.

Table 1: One Sample t-test of Users' Perceived Importance Towards the Elements of CIR

Variable	Mean	SD	Mean difference ^a
Overall perceived importance of CIR	3.66	0.65	0.66***
Content Elements of CIR	3.73	0.72	0.73***
Financial Information	4.01	0.86	1.01***
General Information	3.72	0.83	0.72***
Environmental, Social and Governance (ESG) Information	3.45	0.71	0.45***
Presentation Elements of CIR	3.59	0.72	0.59***

Source: Author

^a Based on the one-sample t-test performed, the significance of the difference between the test value of 3 (mid value) and the mean values are also indicated, where *** $p < 0.01$ and ** $p < 0.05$ and * $p < 0.10$.

Table 1 indicates that the respondents believe that internet-based corporate disclosures are important since the overall mean value of perceived importance of CIR is 3.66 out of 5, with a standard deviation of 0.65. Accordingly, the mean value is above the test value of 3 by 0.66, which is statistically significant at 1%. Regarding the perceived importance, the Content Elements of CIR possess a mean value of 3.73 (out of 5), and there is a statistically significant (at 1%) positive mean difference of 0.73 compared to the mid-value of 3. The study further analysed the importance of the content element of Financial Information, General Information and Environmental and Social and Governance (ESG) Information. The findings highlight that the content element of Financial Information is more important than other content elements, with a mean value of 4.01 (out of 5), which is above the test value of 3 by 1.01. the result is also statistically significant at 1%. The second most perceived important content element of CIR is General information, and the content element retains a statistically significant (at 1%) positive mean difference of 0.79 compared to the mid-value of 3. ESG Information was perceived to be important with a mean of 3.45 and a standard deviation of 0.71. It is interesting

to note that these three content elements are important since there is statistically enough evidence to support that the mean values are above the test value of 3.

Presentation elements of CIR possess a mean value of 3.59 (out of 5) and there is statistically enough evidence to support that the mean value is above the test value of 3 by 0.59 ($p < 0.01$). Interestingly, the findings suggest that Content Elements and Presentation Elements are both important since the mean values are above the test value of 3. However, content elements are perceived to be more important than presentation elements by 0.14 (out of 5). Based on the above analysis, it can be concluded that CIR is important not only on an overall basis but also in terms of its content elements and presentation elements.

Secondly, the study investigated the factors that impact the users' perceived importance of CIR using multiple regression analysis. Table 2 shows the results of multiple regression performed with dummy variables since the study consists of categorical variables.

Table 2 displays a summary of the regression analysis. The results suggest that 52% of the variation in perceived importance towards CIR is explained by the regression model, which indicates the model adequacy. Then the adjusted R square is 27%, and the variation in perceived importance towards CIR is explained by the regression model, considering the sample size and number of independent variables. Further, the results suggest that the model generated an F-value of 2.7 with a P-value of 0.000, which is less than 0.01. Thus, the model is statistically significant at 1%.

In examining gender category impact on the perceived importance of CIR, females are treated as the reference group. Table 2 depicts the unstandardised coefficient for the female category as -0.23 with a p-value of 0.02. Interestingly, male users' perceived importance is less than female users by 0.23. Since the calculated p-value is 0.02 below 0.05, there is statistically enough evidence to support that there is a difference in the perceived importance of CIR based on gender.

Table 2: Regression Results Based on Demographic Characteristics of Users

	Coefficient	t	Sig.	Collinearity Statistics	
				Tolerance	VIF
Intercept	3.89***	31.63	0.00		
Male	-0.23**	-2.44	0.02	0.80	1.25
Age = 26 - 30	-0.27	-1.50	0.13	0.26	3.84
Age = 31 - 35	-0.41*	-1.93	0.06	0.32	3.11
Age = 36 - 40	-1.45***	-3.32	0.00	0.62	1.61
Age = 41 - 45	0.44	0.86	0.39	0.45	2.20
Age = 51 - 55	-0.34	-0.68	0.50	0.72	1.39
Age = 61 years or above	0.27	0.57	0.57	0.77	1.30
Academic Qualifications = GCE Advanced Level	0.15	1.39	0.17	0.68	1.47
Academic Qualifications = Certificate Level	0.45*	1.95	0.05	0.86	1.16
Academic Qualifications = Diploma Level	-0.28	-1.00	0.32	0.90	1.11
Academic Qualifications = PG Diploma	0.62*	1.80	0.07	0.76	1.32
Academic Qualifications = MBA/ MPhil / M.Sc	0.37**	2.27	0.02	0.68	1.47
Sector = Public sector	0.12	0.69	0.49	0.54	1.87
Sector = Private sector	0.23	1.40	0.16	0.28	3.60
Sector = Semi - Government sector	0.59***	2.74	0.00	0.43	2.34
User status = An Academic	-0.05	-0.41	0.68	0.68	1.46
User status = A Financial Analyst	0.04	0.14	0.89	0.73	1.37
User status = An Investor	0.13	0.55	0.59	0.73	1.37
User status = An Employee	0.02	0.10	0.92	0.46	2.20
User status = A Customer	-0.08	-0.49	0.62	0.71	1.41
User status = General Public	-0.15	-0.97	0.34	0.51	1.95
Experience = 1 - 5 years	-0.18	-1.46	0.15	0.43	2.33
Experience = 6 - 10 years	-0.43**	-2.62	0.01	0.39	2.56
Experience = 11 - 15 years	-0.46**	-2.51	0.01	0.47	2.12
Experience = 16 - 20 years	0.12	0.36	0.72	0.37	2.72
Experience = Above 20 years	-0.55*	-1.95	0.05	0.88	1.14
F-value	2.70***				
P-value	0.000				
R ²	0.52				
Adjusted R ²	0.27				
N	238				

Source: Author

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

Regarding age, the reference category is younger respondents (25 years and below). Table 2 above depicts that the unstandardised coefficient for the category of younger adults, i.e., 31 – 35 years and 36 – 40 years, are -0.41 (Significant at 10%) and -1.45 (Significant at 1%), respectively. These measures portray that the perceived importance of CIR for younger adults is lesser than for the younger generation. That means there is statistically sufficient evidence to support a difference in the perceived importance towards the elements of CIR based on age.

The reference category is GCE Ordinary Level qualified respondents when considering the highest academic qualification. Table 2 above depicts that the unstandardised coefficient for the category of Certificate Level is 0.45 with a p-value of 0.05. On average, respondents with Certificate Level qualification believe that CIR is more important than respondents with GCE Ordinary Level qualification by 0.45. The difference is substantial as the difference is out of 5 and is statistically significant at 10%. Similarly, respondents with PG Diploma and MBA/MPhil/M.Sc. Perceive that the CIR is more important than the reference group (i.e., GCE Ordinary Level) by 0.62 (significant at 10%) and 0.37 (significant at 5%), respectively. Other educational groups show negative differences with p-values which are above 0.05. Other academic groups are not significantly different statistically from a control group of GCE Ordinary Level qualified respondents. However, on an overall basis, the study can conclude that there is a difference in the perceived importance towards CIR based on the level of highest academic qualification.

Unemployed respondents were considered as the control group of the analysis. The unstandardised coefficient for the Semi-government sector is 0.59 with a p-value of 0.00. That means, on average, users from the semi-government sector perceive that the CIR is more important than unemployed respondents by 0.59. The difference is substantial as the difference is out of 5, and the result is statistically significant at 1%. As a result, the study can conclude that there is a difference in the perceived importance based on the type of entity that users work for.

The control group in investigating perceived importance based on the status of CIR users is undergraduates. The table above shows that the user group's unstandardised coefficients are statistically insignificant at 10%. Thus, it can be concluded that there is no difference in the perceived importance based on the user status.

The control group for the experience in using CIR is respondents with below one year of experience. Table 2 presents the unstandardised coefficient for the experience category from 6 years - up to 10 years is -0.43 with a p-value of 0.01. That means on average, respondents with 6 years - up to 10 years of experience perceive CIR as less important than the control group by 0.43. Since the calculated p-value is below 0.05, the difference is statistically significant at 5%. Similarly, respondents with 11 years - up to 15 years of experience perceive CIR is less

important than the control group by 0.46, and the result is statistically significant at 5%. Further, respondents with above 20 years of experience perceive that the CIR is less important than the group with below one year of experience by 0.55 and the result is statistically significant at 10%. As a result, the study can conclude that there is a difference in the perceived importance of CIR based on experience level.

DISCUSSION

Based on the findings of the first objective, the study concluded that CIR is important not only on the overall basis but also in terms of content element and presentation elements. This finding is consistent with Davey and Homkajohn (2004), who stated Thailand firms increasingly report financial data on the Internet with investigated categories in the study, although it is evidenced that users in Thailand companies significantly benefit from obtaining financial information more easily. In terms of content elements of CIR, Alam and Rashid (2016) stated that, on average, a significant portion of the financial information is on websites.

In terms of the study's second objective, the findings highlighted differences in the perceived importance of CIR, based on demographic characteristics of Gender, Age, Highest academic qualification, Working sector, and Experience in using CIR. Several insights were derived based on these results. For instance, the decreasing trend of perceived importance of CIR for the age group and experience level reveals a surprising detail that is, after adopting to the corporate business world, users start to get the ability to understand what is not published by the companies. Therefore, their perceived importance become deteriorating, while the younger generation and unemployed people always seek more and more information than others to ensure their betterment. Further, Al-Htaybat et al., (2011) identified users' perceptions regarding the usefulness of CIR in decision-making significantly differed by addressing the economic factors. Whereas Hossain et al., (2012), addressed other variables such as Firm size, Assets, and business complexity are significant in explaining CIR, whereas age, profitability, and liquidity are not significant.

CONCLUSION

Initially, the study attempted to evaluate the level of users' perceived importance of the elements of CIR and then investigated the factors that impact the users' perceived importance of CIR. And the study found that internet-based corporate disclosures are important with a mean value of 3.66 (out of 5), and the mean values of content elements and the presentation elements were significantly above 3. Moreover, out of these content elements, Financial Information scored the highest mean value. Further, there are differences in the perceived importance of CIR based on demographic characteristics. Therefore, though the average value perceived importance of CIR is greater, attention towards the different demographic characteristics should be shed because the segment within each characteristic shows critical behaviour towards the perceived importance of CIR. While the findings of this study fill an empirical dearth observed, the study is important and useful for stakeholders, including companies, regulators, policymakers, marketers, competitive firms, and society. That is mainly because the study's findings are related to the perceived importance of the content and presentation elements of CIR that are expected to formulate in a standardised system in regulatory methods.

REFERENCES

- Almilia, L. S. (2009). Determining factors of internet financial reporting in Indonesia. *Accounting & Taxation*, 1(1), 87-99.
- Ashbaugh, H., Johnstone, K. M., & Warfield, T. D. (1999). Corporate reporting on the Internet. *Accounting horizons*, 13(3), 241-257.
- Davey, H., & Homkajohn, K. (2004). Corporate internet reporting: an Asian example. *Problems and perspectives in management*, (2), 211-227.
- Debreceeny, R., Gray, G. L., & Rahman, A. (2002). The determinants of Internet financial reporting. *Journal of Accounting and Public policy*, 21(4-5), 371-394.
- Garg, M. C., & Gakhar, D. V. (2010). Web-based corporate reporting practices in India. *The IUP Journal of Accounting Research & Audit Practices*, 9(3), 7-19
- Poon, P. L., Li, D., & Yu, Y. T. (2003). Internet financial reporting. *Information Systems Control Journal*, 1, 42-46.

FACTORS INFLUENCING THE ADOPTION OF ACCOUNTING INFORMATION SYSTEMS IN MANUFACTURING ORGANISATIONS IN SRI LANKA: WITH SPECIAL REFERENCE TO THE KANDY DISTRICT

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ABSTRACT

Purpose: The purpose of this study was to identify the impact of AIS efficiency, AIS reliability, and data quality on the adoption of AIS in Sri Lankan manufacturing organizations.

Design/methodology/approach: The study used quantitative methodologies, and regression analysis was done with SPSS software (26 version) to examine the key aspects that firms consider when implementing an AIS from the end-user perspective. Three criteria, which are features of an AIS adopted such as efficiency, reliability, and data quality was chosen.

Findings: The study discovered that the efficiency and data quality of an AIS has an impact on the level of adaptability level of adoption or level of adaptability or adoption. It is clear that while adopting AIS, enterprises place a higher priority on data quality than system reliability.

Research implications: Based on the study's findings, decision-makers can conclude that, despite the common variables discovered in adopting AIS, greater attention should be paid to the efficiency of the AIS system, as well as the quality of data provided by the AIS system.

Originality/value: The author of the study focused on the positive traits of AIS when implementing AIS systems, and the study focused on the AIS perspective in determining the factors. Only a few studies have been done in Sri Lanka on this subject, thus this study will help Sri Lankan organizations discover and implement AIS in their operations. Most manufacturing enterprises are more concerned with the quality of the data that AIS provides than they are with the system's reliability and effectiveness.

Paper type: Research paper

Keywords: Accounting information systems (AIS), Efficiency, Reliability, Data Quality, Manufacturing Enterprises

INTRODUCTION

Today, accounting has become a significant activity in the business world and has a critical role in the operation of an organisation. For every business, it is important to keep financial information more reliable and up-to-date. Companies need to keep in touch with the constant changes in information technology to maintain highly accurate and up-to-date accounting, statutory records, and inventory (Igbaria & Tan, 1997). To satisfy the increasing demand for up-to-date and accurate information, accounting software and integration of accounting and information technology was introduced to the world.

The growth of the contemporary business environment and the competitive business environment occurred due to technological improvements and business developments where managers need to consider more advanced management techniques in the financial sector. Nowadays, the global competition in the marketplace is severe with a new set of accounting challenges, and the COVID-19 pandemic also affected accounting, making more changes to the accounting practice. Furthermore, there is an increasing trend of demand for new and well-developed accounting software packages that are capable of handling accounting issues (Ajay, 2004).

Sri Lanka is a country highly dependent on the export business and the tourism industry is considered the middle-income earning industry in the country. The export industry of Sri Lanka mainly depends on the manufacturing firms such as the apparel industry, ceramics, fabricated steel, tires, etc. (Central Bank Report, 2020). With the pandemic situation, all production ceased and the whole world was locked down making people think out of the box to identify alternative ways to survive. The manufacturing industry in Sri Lanka stood up steadily to these difficult situations where many firms continued the production process despite the difficulties. Technological advancement in the manufacturing industry helped in this regard and the professionals identified the importance of the use of technology in the industry.

The usefulness of AIS increased with the pandemic which helped to increase the firm's performance and employee performance (Lawal et al., 2022). With the pandemic, many organisations started adopting information systems, and organisations in Sri Lanka are also using AIS for their operations now as the information generated by the system has been successful during these difficult times. Several studies have been carried out to identify the factors influencing the adoption of AIS in some districts of Sri Lanka (Wickramasinghe et al., 2017). Most manufacturing companies in Sri Lanka began using AIS systems during the

pandemic as a result of the advantages they may get in a pandemic crisis. However, the researcher hopes to discover, using a typical situation in the country, what considerations will come into play when selecting whether or not to implement AIS in industrial businesses. There have been a few studies on AIS and its implementation in certain Sri Lankan areas, but none have focused on the Kandy district. As a result, the researcher will concentrate on manufacturing companies in the Kandy district.

The researcher intends to identify the factors that will influence the decision to adopt AIS by focusing on the positive features that can be identified in the AIS. When adopting an accounting information system, organisations should look at many factors. Many researchers identified contingent external qualitative factors such as social factors and organisational factors that are influencing the adoption of AIS decisions (Ismail & King, 2007) but very few identified the information system-wide factors in evaluating the adaptation decision. The likelihood of end-users adopting new technology is largely controlled by their behavioural intentions. Individual, technological, organisational, and institutional factors all have a role in influencing or moulding end-user behaviour to varying degrees, according to previous research (Lee & Strong, 2003).

The goal of this research is to uncover characteristics that influence AIS implementation decisions in manufacturing businesses in Sri Lanka's Kandy district. From an organisational standpoint, adoption choices are typically made by high management based on organisational criteria. However, employees who deal with AIS should be given the opportunity to identify the most practical or effective AIS because the information produced by the AIS is used by the middle managers who run the day-to-day operations. According to Wickramasinghe et al., (2017), there are some criteria that businesses should consider when using AIS. The factors that are mentioned include the efficiency of AIS, the reliability of data provided by AIS, the quality of data, and user-friendliness, all of which are considerably more relevant to the Sri Lankan setting. User-friendliness has the least impact on company performance and AIS adaptation of the four variables. Middle managers are more concerned with the AIS's efficiency, dependability, and quality of data. (Wickramasinghe et al., 2017, Ali & Oudat, 2021). As a result, the study's objectives are,

1. To determine the impact of the AIS system's efficiency on the adoption of AIS.
2. To determine the impact of the AIS system's reliability on the adoption of AIS.
3. To determine the impact of the AIS system's data quality on the adoption of AIS.

The research questions were formulated as follows,

- i. Does the efficiency of AIS impact the level of adaptability of AIS?
- ii. Does the reliability of AIS impact the level of adaptability of AIS?
- iii. Does the quality of data of AIS impact the level of adaptability of AIS? (How level of adoption comes? RO says the adoption of AIS)

METHODOLOGY

The independent variables that the researcher identified were the characteristics of a good system that are impacting the performance of the organisation. Identified independent variables are efficiency, reliability, and data quality where many researchers identified those variables as the most frequent characteristics to evaluate AIS (Almaliki et al,2019).

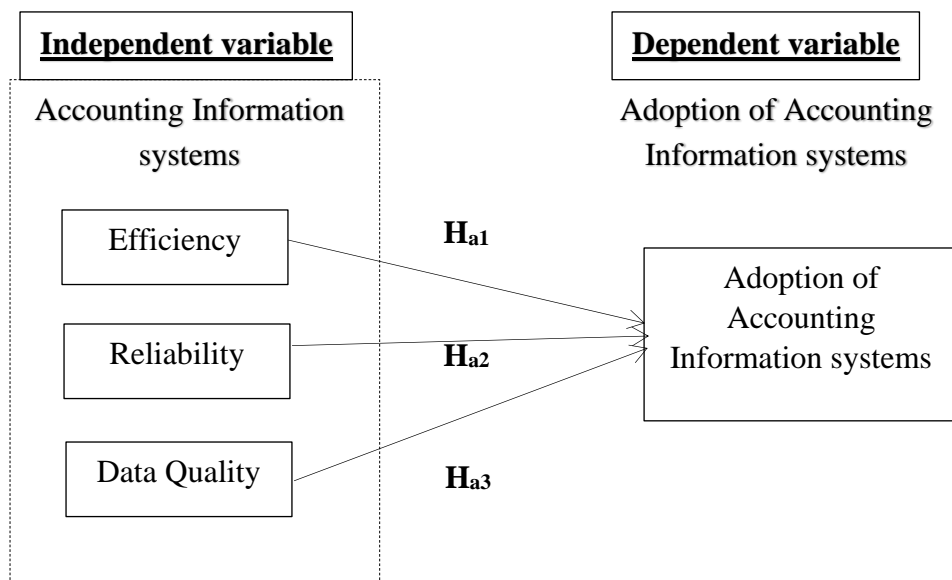


Figure 1: Conceptual Framework of the Research

The hypothesis developed based on the literature and conceptual framework (Figure 1) is as follows.

H_{a1}: The Efficiency of AIS does impact the level of adoption of AIS

H_{a2}: The Reliability of AIS does impact the level of adoption of AIS

H_{a3}: The Data quality of AIS does impact the level of adoption of AIS

The population of this study was employees working with accounting information systems of manufacturing organisations in the Kandy district, Sri Lanka. Six organisations operating in the Kandy district were selected based on their annual net profit levels and considering the size of the organisation when selecting organisations as the sample should be comprised of small businesses as well. The questionnaire was distributed to 100 employees who have sound knowledge and at least 2 years of experience with AIS, where 24 participants did not respond, 08 were rejected and only 68 were considered valid for the analysis (Table 1).

Table 1: Sample Size

Organisation	Questionnaires Distributed	Accepted	Failed to Respond	Rejected
MAS Active	25	18	07	-
Contourline, Palkekele				
Ceylon Chocolate Ltd, Kundasale	20	12	03	05
Emjay Penguin Pvt (Ltd)	20	16	04	-
Ruhunu Foods Pvt (Ltd)	20	13	07	-
Udaya Industries, Kandy	10	06	01	03
Kandy Spice industries Pvt (Ltd)	05	03	02	-
Total	100	68	24	08

For this analysis, data were collected using the convenience sampling technique. The researcher created the questionnaire which consisted of four sections. Efficiency, reliability, data quality, and level of adaptability of AIS were addressed in sequence by the questionnaire and it asks questions to measure variables using the 5 scaled Likert scale. The questionnaire was created by using a Google form and the link to the questionnaire was sent to respondents via social media channels. At the beginning of the questionnaire, members informed the participants regarding the purpose of the study, voluntary participation, and how the participant's confidentiality is ensured. Collected quantitative data were analysed using the statistical package for social sciences (SPSS 26.0 version) and statistical methods used in the study were correlation and regression analysis.

RESULTS AND DISCUSSION

According to Table 2 below, the P-value is 0.000 which is less than 0.05, and the researcher can identify that the independent variables can be used to explain the dependent variable. The Regression model does explain a significant portion of the variation in the level of adoptability. (Diagnostic test results for the data can also be presented)

Table 2: ANOVA Table

Model 1	Sum of Squares	Mean Square	Sig.
Regression	6.066	2.022	.000 ^b
Residual	7.752	.146	
Total	13.819		

a. Dependent Variable: Level of adoptability (How did you measure the level of adoptability)

b. Predictors: (Constant), Data Quality, Reliability, Efficiency

Table 3: Coefficients^a

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.040	.547		1.901	.063		
	Efficiency	.340	.152	.309	2.237	.029	.554	1.806
	Reliability	-.168	.129	-.175	1.303	.198	.585	1.709
	Data Quality	.571	.143	.535	3.986	.000	.588	1.702

a. Dependent Variable: Level of adoptability

The t-value for the efficiency variable is $t = 2.237$ and $p\text{-value} = 0.029$. Here the $p\text{-value}$ (0.000) is less than 0.05. Hence, can reject the null hypothesis. t-value for reliability variable is $t = 1.303$ and $p\text{-value} = 0.198$. Here the $p\text{-value}$ (0.000) is more than 0.05. Hence, accept the null hypothesis. t-value for the data quality variable is $t = 3.986$ and $p\text{-value} = 0.000$. Here the $p\text{-value}$ (0.000) is less than 0.05 therefore can reject the null hypothesis. Out of the three variables, only two variables significantly affect the level of adoption of AIS. So, the author,

- Accepted H_1 : Efficiency of AIS significantly impacts the level of adoption of AIS.
- Rejected H_2 : Reliability of AIS significantly impacts the level of adoption of AIS.
- Accepted H_3 : Data quality of AIS significantly impacts the level of adoption of AIS.

Based on the unstandardised coefficient it's important to understand the relative importance of three independent variables.

Level of adaptation of AIS = 1.040 + 0.340 (efficiency of AIS) + 0.571 (data quality of AIS)

When the other two variables are constant, the level of adaptation will change by 0.340 when there is a unit change in the efficiency of AIS and a similar level of adaptation will change by 0.541 when there is a unit change in the quality of data.

According to the coefficient table, data quality has a higher impact on the level of adaptation of AIS compared to reliability and efficiency. Simply the most significant factor affecting the level of adoption of AIS in manufacturing firms is the quality of data generated by AIS.

Table 4: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.663 ^a	.439	.407	.38246	1.627

a. Predictors: (Constant), Data Quality, Reliability, Efficiency

b. Dependent Variable: Level of adoptability

This model explains that 43.9% of the variation in the level of adoption of AIS is explained by this regression model, considering the sample size and independent variables.

The purpose of this study was to identify the impact of AIS efficiency, AIS reliability, and data quality on the adoption of AIS in Sri Lankan manufacturing organisations. The overall results show that there is a significant linear relationship between the degree of AIS adaptability and the efficiency and data quality of AIS and they are the most influential factors in AIS adoption. These results are in tandem with those of previous such as Wickramasinghe et al. (2017), Wilkinson et al. (2000). There are many other factors that can affect the efficiency of AIS. This is because it requires qualified personnel and the best software and hardware to be effective as an information system. The level of adoptability of AIS is unaffected by its reliability, indicating that managers are only concerned about the unbiasedness and relevance of the information provided by AIS. Managers are paying more attention to the data or information offered by the AIS, according to Emeka-Nwokeji (2012).

Data quality has the greatest impact on AIS adoption, demonstrating that managers require accurate, full, and secure data to assure the quality of information and to function effectively. The organisation's data management setting and data scope must be highlighted when it comes to the essence of data quality on AIS (Al Qudah & Shukeri, 2014). AIS adoption must consider the system's quality as well as the data quality used in the organisation's decision-making process (Wongsim & Gao, 2011). According to Wixom and Watson (2001), data quality is one of the most important factors in selecting whether to use AIS, and it is linked to a perceived reduction in decision-making time and effort. However, in the context of AIS, there have been limited attempts to determine the important data quality parameters. As a result, data quality in AIS is still mainly unknown and unexplored.

CONCLUSION AND IMPLICATIONS

This research looked into the factors that influence AIS adoption in terms of AIS efficiency, AIS reliability, and AIS data quality. The study found that AIS data quality and efficiency are important factors in AIS adoption. Based on the study's findings, decision-makers can conclude that, despite the common variables discovered in adopting AIS, greater attention should be paid to the efficiency of the AIS system, as well as the quality of data provided by the AIS system. Regardless of size, organisational functions strive for efficiency, which results in timely documentation, proper controls, and effective monitoring and control (Etim, 2011). The quality of information or data will be considerably impacted by the installation of AIS in organisations where users see it as a key AIS success criterion (Al-Okaily et al., 2020). Because management is involved in a variety of operations, they require high-quality information or data to make decisions, and high-quality data will provide firms with a competitive advantage (Zayed et.al., 2011). These findings suggest that while dealing with new AIS, managers will be more concerned with the system's efficiency and the quality of data provided by the AIS.

Though this study has some implications for AIS adoption decisions, it is not without limitations because the pattern is based on a small number of manufacturing enterprises in the Kandy area and hence does not reflect all manufacturing firms or all sectors in Sri Lanka. A future study might replicate the research in different sectors/industries across the country and use the important success elements to determine whether or not AIS should be adopted.

REFERENCES

- Emeka-Nwokeji, N. (2012). Repositioning accounting information system through effective data quality management: A framework for reducing costs and improving performance. *International Journal of Scientific Technology Research*.
- Ismail, N. A., & King, M. (2007). Factors influencing the alignment of accounting information systems in small and medium sized Malaysian manufacturing firms. *Journal of Information Systems and Small Business*, 1(1-2), 1-20.
- Wickramasinghe, D.M.J., Pamarathna, R.M.M.D., Cooray, N.H.K. and Dissanayake, T.D.S.H., (2017). Impact of accounting software for Business Performance. *Imperial Journal of Interdisciplinary Research*.
- Wongsim, M. (2016). Factors influencing the Adoption and implementation of accounting information systems in manufacturing firms: Thailand evidence. *Chulalongkorn Business Review*, 38(4), 1-32.
- Wongsim, M., & Gao, J. (2011). Exploring information quality in accounting information systems adoption. *Communications of the IBIMA*, 1–12. <https://doi.org/10.5171/2011.683574>

TELEWORK AND WORK-LIFE HARMONY: ROLE OF FAMILY MEMBER INTERACTIONS

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ABSTRACT

Purpose: To explore how teleworker's interactions with family members impact work-life harmony

Design/methodology/approach: The present study employs a Qualitative case study methodology. Semi-structured interviews were conducted for data collection and thematic analysis is used for data analysis. The study follows an inductive approach and the sample includes eight executive and above-level teleworking employees in Sri Lanka.

Findings: Teleworkers will experience work-life harmony when they achieve role expectations generated from interactions. Work-life disharmony will be experienced in instances where an unmet role is not backed by a buffer mechanism

Research implications: HR Professionals have to develop interventions to identify the level and nature of role expectations of teleworkers, thereby identifying the best suitable employees to be teleworked. Teleworkers with higher role expectations are more vulnerable to experiencing disharmony.

Originality/value: This study reveals a novel perspective on achieving harmony by presenting a unique analytical framework starting from interactions eliminating limitations in existing theoretical concepts.

Paper type: Research paper

Keywords: Harmony, Teleworking, Family, Interactions

INTRODUCTION

Many "work-life" concepts have been discussed throughout the literature. the negative aspect of the work-life concept is explained by work-life conflict. The positive aspect is discussed by a few constructs, including enrichment, enhancement, facilitation, and integration. Furthermore, previous researchers have presented work-life balance and work-life harmony concepts which include both positive and negative aspects. All these constructs, except for work-life harmony (WLH), reveal the cross-domain effects that exist in the relationship between work and life.

Exploring antecedents of better work-life outcomes, teleworking which means working from home while communicating with your workplace via phone, email, or the internet can be seen as a prominent flexible working arrangement to enhance work-life outcomes. Despite that telework, outcomes are not consistent in all situations.

Telework outcomes related to work-life are highly moderated by a variety of factors (Masterson et al., 2020). Among that, individual-level variables are prominent. Further, out of those individual-level moderators, many variables are directly or indirectly related to the existence of a family member. The variables studied include marital status (the existence of a spouse), parenthood (the existence of children), and the number of children (the existence of children), etc. which directly refers to the existence of a family member (Masterson et al., 2020). Accordingly, the existence (or non-existence) of family members causes moderate work-life outcomes, but how this happens is not answered in literature with a sound theoretical background. Accordingly, the interactions among family members have to be studied to have an in-depth understanding of the existence of different work-life outcomes based on family members' existence.

Work-life harmony is a relatively new concept with a lower number of studies. Having a balancing perspective makes work and home conflicting rivals since such ideology promotes compromising one to have a gain in the other. With that view, the study presented the concept of work-life harmony, which does not recognise life as a balancing act, but as an individually pleasing, congruent arrangement of work and life roles that is interwoven into a single narrative of life (McMillan et al., 2010).

Moreover, the WLH concept will be more suitable for teleworkers as harmony occurs when two or more things occur at the same time. In music, it is hearing two or more musical notes at the same time with a pleasing effect. As in the work-life scenario, a pleasing effect will be more appropriate

than a balancing effect because teleworkers experience blurred boundaries between work and home while teleworking at home (Troup & Rose, 2012).

Second, teleworkers do not perceive the stressors from work and stressors from family separately. But work-life conflict investigates separate stressors from each sphere of life. It is more of mixed stress from both spheres while teleworking. Same as that, on the other hand, it is difficult to identify from which sphere of life derived the enrichments specifically, it is more of an integrated enrichment experience for teleworkers due to working from home does not distinctly identify separate spheres. Technically, we can conclude that outcomes of work-life conflict and work-life enrichment have the possibility to be biased in a teleworking environment where work-life and family life are present at the same time. Therefore, this study will be focusing on achieving work-life harmony.

Further considering the context, Sri Lanka is lacking knowledge of the Work-life interface due to a very limited number of studies. Telework outcomes are highly context-dependent, and WLH is a suitable concept since cultures like Sri Lanka are less likely to view work and life as independent domains (Adikaram, 2018). Concluding all the above the research problem is presented as "How Teleworkers interact with family members to achieve work-life harmony".

METHODOLOGY

Resting on the interpretivism research philosophy, the present study explores family member roles in-depth to investigate "how" family member interactions impact work-life harmony without simplifying or quantifying the phenomenon. The phenomenon of family member interactions is diverse and vivid, which requires in-depth investigation to understand outcomes. The qualitative approach to work-life research explains phenomena in their complexity. Further, qualitative research would be suitable as such a methodology can highlight a socially constructed reality by capturing the process and meanings of the phenomenon in a natural setting. Further, this study will use symbolic interactionist role theory to explain the outcomes of interactions as the generated knowledge is socially constructed.

As the present study is qualitative, in-depth and semi-structured interviews were chosen as the data collection method. In doing so, the current researcher conducted interviews with teleworkers who operated in the Sri Lankan environment, and after eight interviews, since no new open codes appeared, the researcher determined data saturation, with all interviews lasting between 55-90 minutes. Further, the present researcher applied a thematic analysis for the generation of codes.

RESULTS AND DISCUSSION

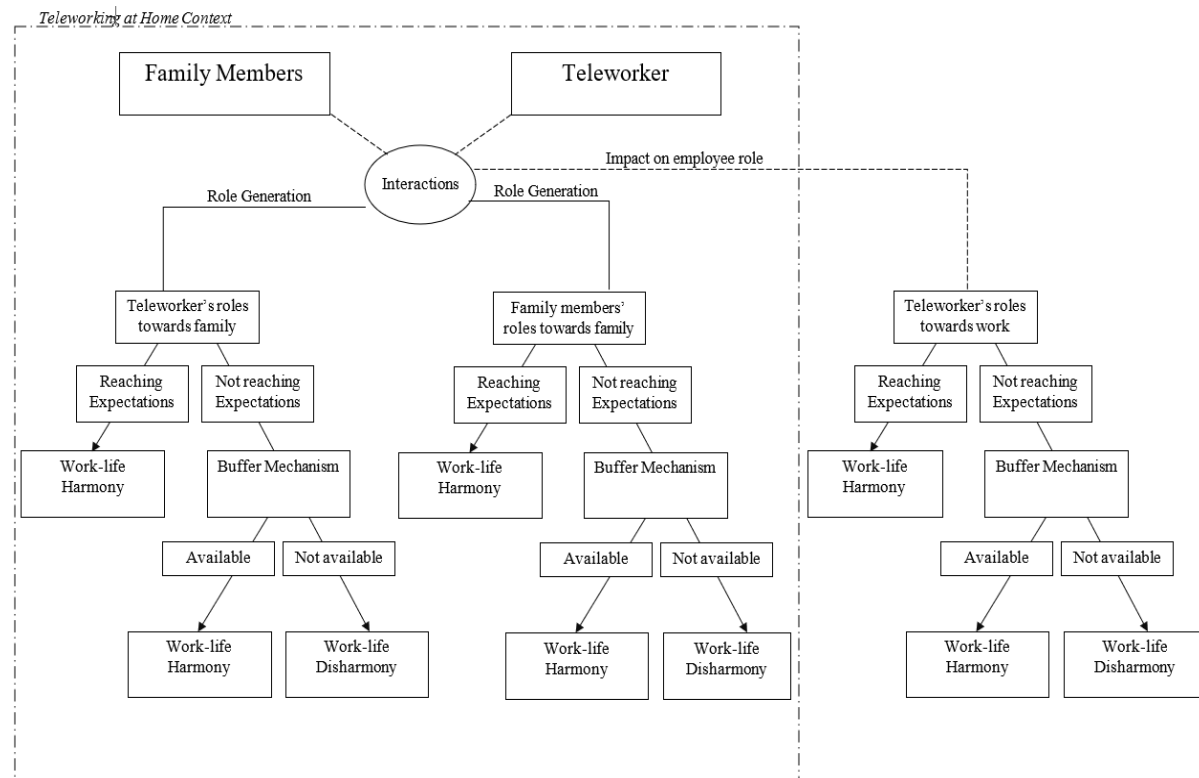


Figure 1: Analytical Framework

As shown in Figure 1, the study's findings are complex, exhibiting numerous patterns. First, grounded in symbolic interactionism theory when a teleworker is always present at home, she or he interacts with family members in various ways. As the same figure shows, interactions will generate roles toward family members. When compared with office work, frequency and intensity have become a reason to raise the level of family role expectations or instil new roles in teleworkers that were previously hidden while working in the office. On the other hand, same as expectations towards family, teleworkers expect role performance from family members while working from home. In addition, certain roles that existed in office work also functioned in the teleworking environment without any alteration.

After establishing these roles, the work-life harmony will be determined by achieving each role's expectations. Based on interactions with family members, the following roles were observed in Teleworkers.

Child care, Education Assist, and Protector were the roles that emerged on behalf of children. Child care entails daily activities such as feeding, bathing, and playing. Helping with homework, and arranging online and extra classes are all examples of educational assistance. Protector's role

includes attending to needs and ensuring the child's safety. Reaching role expectations in the above roles resulted in better work-life harmony. The majority of these roles were highly subjective and existed in the office working, and teleworking has only raised the role expectation level which made teleworkers vulnerable to experiencing disharmony due to difficulty in reaching expectations. According to Troup and Rose (2012), formal telework arrangements were less satisfying compared to informal arrangements as women increased perceived childcare responsibility (i.e., increased level of expectation) on the formal teleworking day resulting in less satisfaction.

Asian cultures place a high value on being a good mother, which generally entails being able to stay at home and raise their children themselves. Doing that “protector” activates highly when a child is present around them. Without a doubt, parental concern for their children is constant. However, it is more noticeable “protector” role activates when the child is near the parent, as in teleworking rather than working from an office.

When role expectations are met, participants report greater work-life harmony. When role expectations are not met, participants experience work-life disharmony if no other mechanism buffers the shock of not reaching role expectations. (Ex: child learning by himself even though education assistance is not performed by Teleworker, parent assisting childcare when teleworker cannot attend to children). Buffer mechanisms assisted teleworkers to feel harmonised. According to Canlas (2015), mothers who can leave their children with extended family members may feel their children are still safe and not abandoned, resulting in a better work-work life balance which can be viewed as a buffer mechanism to unmet role expectations.

Next, discussing the interactions with the spouse, the present study explored the roles these relationships are based on. Homemaker and intimate partner were the roles that emerged for the spouse. The researcher did not intend to present homemaking as a role for the spouse. However, the participants consistently explained homemaking activities as something that is done on behalf of the spouse. Homemaking activities included cleaning, cooking, laundry, and grocery shopping, further resolving day-to-day household issues, and managing household expenses. Regardless of gender, all participants have better work-life outcomes when they fulfil the role expectation of a homemaker. Another role mentioned by participants was intimate partner, and meeting role expectations resulted in better work-life outcomes. Comparing findings of the Canlas (2015), the positive relationship between these employed women's marital satisfaction and their perception of work-family harmony is congruent with the findings of the present study as the researcher suggests reaching expectations and satisfaction are concepts that go hand in hand. Further, there are instances teleworkers' family role expectations were interrupted by another family role

The study found that despite the inability or ability to perform role expectations towards parents, they do cause temporary stress or positive feelings. However, none of the five participants whose parents lived with them didn't report any impact on work-life harmony.

As shown in Figure 1, not only teleworkers instil a role in themselves, but expect a role to be performed by the family members. Teleworkers have observed children's behavior as "kid," which means they play and disrupt on a usual basis. Having such role expectation disturbances of Child did not cause teleworkers to experience dissonance unless Child's behavior affected the teleworker's workplace-oriented roles. Next, teleworkers expect their children to perform well in school; work-life harmony is positively impacted when children perform well in school; when children do not perform well in school, work-life harmony suffers. But that was not consistent among every teleworker. Some teleworkers experienced disharmony, some experienced temporary dissonance, and some did not experience any disharmony or dissonance. According to the findings, the reason for such variation is the child's subjectivity in role expectations and all teleworkers' expectations were relatively higher than office work.

Next, assisting with child care, being an intimate partner, and being a homemaker were the role expectations from the spouse. Teleworkers also had subjective interpretations of spouses' role expectations. Furthermore, when the teleworker is present in the home all day and the spouse is not, there are significant performance gaps. Furthermore, female employees had lower homemaking expectations, and experienced harmony when their husbands do not engage in work which increase their workload. They expected their husbands not to be involved in work which increased their homemaking workload. Irrespective of gender, all teleworkers had higher expectations when both were present in the home. Having third-party support when required acts as a buffer mechanism to avoid disharmony, and this worked in both ways in fulfilling certain role expectations towards family and certain role expectations from family members. Overall, teleworkers experienced better harmony when role expectations from partners were met and dissonance when expectations were not met.

When discussing parental role expectations, the only significant role expectation that had an impact on work-life harmony was "assisting child care and protection". The reason teleworkers did not expect grandparents to help their grandchildren with education was mostly due to the grandparents' educational levels and language differences. Following the same patterns, teleworkers experienced better harmony when role expectations were met and dissonance when expectations were not met.

Further, family interactions discussed above had an impact on roles beyond the family context as shown in Figure 1. These roles aren't directly generated based on interactions. Family member interactions had an impact on performing up to the expected level in workplace-oriented roles such as "exemplary employee", "performing employee" and "honest employee". Such impact on workplace-oriented roles affects harmony in both positive and negative ways based on the nature of the interaction. Company culture acted as a buffer mechanism when family interactions impact negatively to reaching workplace-oriented roles.

CONCLUSIONS AND IMPLICATIONS

People interact with family members in different ways. According to research backed by theory, these interactions derive meaning in teleworkers which instil a role. Accordingly, teleworkers will have expectations of themselves and their family members in terms of their roles. Teleworking will cause to inculcate new roles towards family or enhance level role expectations. Further, certain roles existed even without any contribution from teleworking, (i.e., the roles emerged from the social interactions beyond the teleworking context). Also, the level of role expectations from self and family members was very subjective based on the teleworker; some had higher expectations, and others had lower expectations. Only a few roles had a fairly common level of role expectations (Ex - child's protector). Despite the level of expectations, reaching them made teleworkers experience work-life harmony. Even if expectations are not met, if some kind of buffer mechanism reached role expectations, teleworkers experienced work-life harmony.

Not reaching role expectations and not having a buffer mechanism will cause to experience work-life disharmony. Further, there are interactions within families that affect the performance of the roles directed toward "work". Such interactions will affect the performance level of such roles. Eventually, achieving role expectations of work roles will have an impact positively on work-life harmony, and not reaching them will affect negatively work-life harmony. Furthermore, there were interactions within the family that did not have any significant impact on any roles. Accordingly, Human Resource Practitioners have to assess the level of role expectations to identify the most suitable employees for teleworking and teleworkers themselves can have more control over their expectations to experience enhanced harmony.

Further, as the findings of the current studies are not generalisable due to their qualitative nature, future studies could incorporate qualitative methodologies by developing the required instruments. The analytical framework employed in this study can be further developed to capture more roles outside the family context. Future researchers can further elaborate role expectations based on individual differences such as gender and gender role attitudes.

Finally, the concept of “work-life conflict” can be further enriched by further investigating novel ways of conflict such as “family-to-family” or “work-to-work” and the idea of “harmony” can be investigated in different philosophical ideologies to enrich the concept.

REFERENCES

- Adikaram, A. S. (2018). Being sensitive to the culture: challenges in researching sensitive topics in Asian culture. *Qualitative Research Journal*, 18(3), 287–299.
- Canlas, J. M. (2015). *The influence of family relationship satisfaction and perceived work-family harmony on mental health among Asian working mothers in Singapore* [Doctoral dissertation, Brigham Young University]. BYU Scholars Archive. <https://scholarsarchive.byu.edu/>.
- Masterson, C., Sugiyama, K., & Ladge, J. (2020). The value of 21st century work–family supports: review and cross-level path forward. *Journal of Organizational Behavior*, 42(2), 118–138. <https://doi.org/10.1002/job.2442>
- McMillan, H. S., Morris, M. L., & Atchley, E. K. (2010). Constructs of the work/ life interface: a synthesis of the literature and introduction of the concept of work/life harmony. *Human Resource Development Review*, 10(1), 6–25. <https://doi.org/10.1177/1534484310384958>
- Troup, C., & Rose, J. (2012). Working from home: do formal or informal telework arrangements provide better work–family outcomes? *Community, Work & Family*, 15(4), 471–486. <https://doi.org/10.1080/13668803.2012.724220>

CAN POOR HOUSEHOLDS BENEFIT FROM AGRICULTURAL PRODUCTIVITY GROWTH? A MULTI-COUNTRY STUDY FROM SOUTH ASIA

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ABSTRACT

Purpose: This paper investigates the relationships between agricultural productivity and poverty in South Asia to answer the research question, “*Can poor households benefit from agricultural productivity growth?*”

Design/methodology/approach: The model used annual time series data of four South Asian countries for the analysis; Bangladesh, India, Pakistan, and Sri Lanka over the period from 2000 to 2017. This study uses Two Stage Least Square Estimates and Instrumented Variables to explain the relationship between poverty and agricultural productivity in South Asia.

Findings: Findings suggest that agricultural productivity is a significant source of poverty alleviation, so that poor households can be benefited from agricultural productivity growth. This research has identified the predictor value of agricultural productivity as a key determinant of poverty in South Asia. Agricultural productivity is determined by its inputs; labour, animal usage, and fertilisers. Moreover, this study found that fertiliser usage has a significant negative relationship with farmland productivity. Hence, to increase the level of productivity, intensive use of fertiliser is not desirable in the South Asian context.

Research implications: The insights gained through this study are expected to be used for agriculture-related institutions, regulators, and policymakers. This research further recommended limiting fertiliser subsidisation to control the excessive utilisation of fertiliser which can create a decline in agricultural productivity.

Originality/value: Most countries focus on the necessity of developing the industrial sector and service sector to eradicate poverty to achieve economic development. However, this research paper reveals the capability of the agriculture sector in reducing poverty and establishes a concrete explanation for the relationship between agricultural productivity, especially paddy productivity, and poverty in South Asia.

Keywords: Agricultural productivity, Poverty, South Asia

INTRODUCTION

Most of the developing countries in the world suffer from poverty. Poverty is a multi-dimensional concept associated with economic, social, and cultural indicators. According to World Bank data, an estimated 2.6 billion people, approximately 40% of the world's population, live on less than \$2 income per day (The World Bank, 2017). On the other hand, food security has been a major concern in the entire world to eradicate hunger and poverty. Food security ensures adequate food supply to people, especially those who are deprived of basic nutrition (Feeding America West Michigan, 2022).

Eradication of poverty through uplifting food security is an important concern of South Asia too. Figure 1 exhibits the Poverty Headcount Ratios at the national poverty line (% of the population) of South Asian countries in 2017.

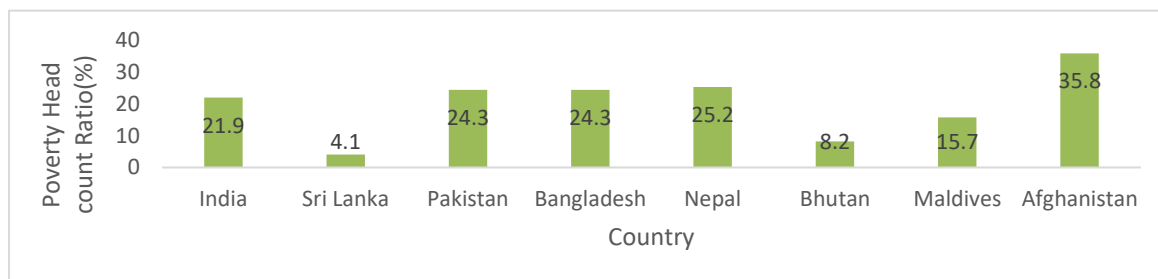


Figure 1: Poverty Headcount Ratio of South Asian Countries in 2017

Source: World Development Indicator, 2017, World Bank

Food security is determined based on several factors such as agricultural productivity, trade, food purchasing power, government policies, eco-system services etc. However, food security is largely dependent on the performance of the agricultural sector. Agriculture is a traditional industry in the South Asian region. Paddy can be identified as the main crop that is cultivated in South Asian countries as far as rice is the staple food of the majority of South Asia. According to International Rice Research Institute (IRRI) (2017) statistics, paddy production in India has increased by around 166% during the last 50 years. In Pakistan, agricultural growth during the last half century was around 242%. All the other South Asian countries also showed significant growth in paddy production. Figure 02 shows the paddy production in South Asia.



Figure 2: Paddy Production in South Asia, 2009 - 2018

Source: World Rice Statistics, 2009-2018, IRRI

Research Problem

South Asia is still largely an agrarian society, where a majority of the population depends on agriculture for their livelihoods. However, rural poverty is higher than urban poverty (Khan, 2001). Hence, the rural population is highly vulnerable to natural resources that are directly influenced by changes in weather and climate. However, given the economic predominance of agriculture, the increase in paddy production had a significant bearing on the economies in the South Asian regions. Rice is a staple which is consumed by the majority of the Agricultural sector (Bishwajit, et al., 2013). Therefore, this research study intends to investigate how the productivity of paddy production influences poverty in south Asian economies.

“Can Poor Households Benefit from Agricultural Productivity Growth?”

The above question has been subjected repeatedly to debates in development research over many decades. Haggard and Souar studied the relationship between productivity growth, poverty reduction, and income inequality: New empirical evidence proved that there’s an inverse relationship between Productivity and Poverty (Hamit-Haggard & Souare, 2016). As well as that, Bart Minten and Barrett also have proved the inverse link between agricultural performance and rural poverty in Madagascar (Minten & Barrett, 2008). But the above question has been the motion of debate. For example, Ahluwalia (1978) concluded that “there is evidence of some trickle-down associated with the growth of agriculture” (Ahluwalia, 1978). However, Saith (1981) showed that “there can be little doubt that current growth processes have served as generators of poverty” (Saith, 1981).

This shows that there isn't any established theory to explain the exact relationship between agricultural productivity and poverty. Moreover, existing literature has not developed research relevant to the whole South Asian region or set of countries in South Asia to study the relationship between agricultural productivity and poverty. This research paper is to establish a concrete explanation for the relationship between agricultural productivity, paddy productivity, and poverty in South Asia related to India, Sri Lanka, Pakistan, and Bangladesh.

Research Objective

The objective of the research is to examine the relationship between agricultural productivity and poverty in South Asian economies.

METHODOLOGY

This study employs the deductive approach to empirically validate the relationship between "Poverty" and "Agricultural Productivity". It uses a panel data model (longitudinal) of four countries i.e., India, Sri Lanka, Pakistan, and Bangladesh over a period of 17 years from 2000 to 2017. The indicators tested in this study are selected based on poverty theories, agricultural productivity theories, and previous empirical literature. This study uses Two Stage Least Square Estimates and instrumented variables to explain the relationship between poverty and agricultural productivity.

First Stage-Model 1

This stage involves building a relationship between poverty and its determinants. To capture poverty, a continuous time series measurement for four countries was not available. Hence, poverty is captured by income due to the strong inverse relationship between poverty and income. Touray (2016) had given priority to income when measuring poverty. In addition, Coudouel et al. have mentioned that the use of income as a poverty measurement may have its own advantages. Accordingly, GNI per capita is used as the proxy variable for poverty which is the dependent variable in this model.

Independent variables of model 01 are the determinants of income namely, agricultural productivity, educational level, and nutrition level.

The empirical investigation is based on the following regression equation:

$$GNI\ per\ capita = f\ (agricultural\ productivity,\ educational\ level,\ nutrition\ level)$$

GNI per capita is denoted by GNI per capita in current US dollars based on the Atlas method. Agricultural productivity is captured in model 01 by the predictors of agricultural productivity in model 02.

Education level is captured by primary school enrolment. Oxaal (1997) found that especially basic (primary and lower-secondary) education helps reduce poverty by increasing the productivity of the poor. Hence, educational level is denoted by School enrolment, primary (% gross). Finally, the nutritional level is captured by a percentage of the prevalence of undernourishment as undernourishment pays a big focus in South Asia. According to the case study for Rural South India article by Behrman and Deolalikar (1987), the World Bank and others maintain that the major mechanism for improving nutrition in poor communities is increasing income. Therefore, nutrition level can be cited as an important determinant of income. Hence, the level of nutrition is denoted by the percentage prevalence of undernourishment (% of the population).

Second Stage - Model 2

This stage focuses on the relationship between agricultural productivity and its determinants.

$$\text{Agricultural productivity} = f(\text{labour, draft animals used, fertilisers})$$

Agricultural productivity is measured by the land productivity of paddy. Paddy is the most dominant agricultural activity in the agricultural economies of South Asia. Datt and Ravallion have considered output per unit of land as agricultural productivity (Datt & Ravallion, 1998). They have stated land productivity as the most significant measurement of agricultural productivity. Timmer used the land to measure agricultural production productivity (Timmer, 1997). Paddy productivity of land is calculated by dividing paddy production by arable lands (1000 ha). Further, the predictor of agricultural productivity through the dependent variables of model 02 is taken as a key independent variable for model 01.

In line with the model expressed above, the study intends to test the following hypotheses of each stage. Those hypotheses are constructed based on the key behaviours of poverty based on GNI per capita, agricultural productivity, and agricultural inputs.

FIRST Stage - Hypothesis: Agricultural productivity growth can influence poverty reduction

SECOND Stage - Hypothesis: There's a significant relationship between agricultural productivity and its inputs.

RESULTS AND DISCUSSION

Initially, we established the relationship between Agriculture Productivity and the determinants of agriculture productivity. Agriculture productivity is captured by the paddy productivity of lands. Independent variables are labour captured by the labour force, animals used and fertiliser consumption. The stationarity of variables was checked using “Levin Lin & Chu” (LLC) test. Drafted animals were stationary at the level, whereas all other three variables were stationary at first difference. Hence, variables to the model were finalised. Multicollinearity was checked by the “Variance Inflation Factor” (VIF), and it suggested the model is free from that error.

The model was tested for both random effect and fixed effect. Table 1, Equation 01 shows OLS estimates, Equation 02 gives the Random Effect model, and Equation 03 gives the Fixed Effect model. The Hausman test recommended the suitability of the Random Effect model and hence, it was adjusted to heteroskedasticity. Equation 04 of Table 1 shows the Random Effect model adjusted to robust. As this is a two-stage model, the dependent variable of model 02, Agriculture Productivity was predicted to give values in independent variables. As far as this is a two-stage model, this predicted value is used in model 01.

Model 01 estimates the relationship between GNP per Capita Income and Agricultural Productivity. The dependent variable is GNP per Capita Income and the independent variables are Agriculture Productivity which is predicted by using Model 02, nutritional level and education level. Nutritional level and education level variables depicted a non-linear relationship to the dependent variable and hence, natural logarithmic values were captured.

Stationarity of the variables is checked using the Panel Unit Root test, “Im Pesaran and Shin” (IPS) test as the variables are not strongly balanced. The test revealed that all variables in model 01 are non-stationary at the level and the first differences of variables are stationary. “Variance Inflation Factor” (VIF) test is performed to identify the problem of multicollinearity of chosen variables in the model. All VIF values of the captured variables were less than 5 and hence, it suggested that the model is free from the multicollinearity problem.

Then, Panel data analysis is performed by using the OLS technique, fixed effect technique and random effect technique. Results are given in Table 2, Equation 01, Equation 02 and Equation 03 respectively. The Hausman test is performed to select the most appropriate technique. As per the probability value of the Hausman test, it rejects the suitability of the fixed effect model. Hence, the random effect model was used to interpret results which are adjusted to heteroskedasticity. It is given in equation 04.

Model 01 is significant at 1% where R2 between is 79% and R2 overall is 31%. Hence it implies that overall, 31% variation in GNI per capita is explained by the independent variables in the model. The F-Statistic of the model is significant at a 1% level of significance. Agriculture productivity which is measured by the predictor value of model 02 by using paddy productivity of land is significant at 5% and it represents a positive relationship. Education level represented by the secondary enrolment ratio is significant at 10% with a positive relationship. The nutritional level captured by the prevalence of undernourishment is significant at a 1% level of significance with a negative relationship.

Based on the hypothesis of stage 01, we fail to reject the hypothesis. Accordingly, agricultural productivity is a key determinant of poverty reduction in the South Asian region. Based on the results of model 02, the overall model is significant at a 1% level of significance. According to the significance of individual variables, only fertiliser consumption is significant with a 10% level of significance which is a negative relationship.

Table 1: Model 01

VARIABLES	(1) OLS	(2) Random Effect	(3) Fixed Effect	(4) Random Effect, Robust
<i>Predictor of Agricultural Productivity</i>	0.000108 (1.526)	0.000108 (1.526)	9.11e-05 (1.254)	0.000108** (2.482)
<i>Education level</i>	0.358* (1.769)	0.358* (1.769)	0.418* (1.971)	0.358* (1.788)
<i>Nutritional level</i>	-0.664*** (-3.838)	-0.664*** (-3.838)	-0.556*** (-2.851)	-0.664*** (-3.026)
<i>Constant</i>	0.0652*** (8.945)	0.0652*** (8.945)	0.0670*** (8.970)	0.0652*** (13.06)
<i>Observations</i>	46	46	46	46
<i>R-squared</i>	0.316		0.259	
<i>Number of Country ID</i>		4	4	4

Robust z-statistics in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 2: Model 02

VARIABLES	(1) OLS	(2) Random Effect	(3) Fixed Effect	(4) Random Effect, Robust
<i>Labor force</i>	3.78e-06 (0.349)	3.78e-06 (0.349)	-9.62e-08 (-0.00791)	3.78e-06 (0.567)
<i>Drafted animals</i>	-7.07e-07 (-0.786)	-7.07e-07 (-0.786)	3.48e-08 (0.00358)	-7.07e-07 (-0.874)
<i>Fertiliser consumption</i>	-3.235*** (-2.685)	-3.235*** (-2.685)	-3.561*** (-2.998)	-3.235* (-1.873)
<i>Constant</i>	68.54* (1.864)	68.54* (1.864)	54.04 (0.158)	68.54 (1.336)
<i>Observations</i>	60	60	60	60
<i>R-squared</i>	0.122		0.145	
<i>Number of Country ID</i>		4	4	4

Robust z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

According to the results, the increasing agricultural productivity of an economy can increase the level of income, so that poor households in South Asia can be benefitted from agricultural productivity growth. This result is followed by several empirical works such as Timmer (1997), Irz et al. (2001), Byerlee et al. (2009), Fan et al. (1999), Datt and Ravallion (1998), Christiaensen (2010), Devkotaa & Upadhyay (2013), Thirtle (2003), Davis & Nkonya, Kato et al. (2012). Further, results show that there is a positive significant relationship between educational level and income. Enhancing the educational level of an economy can increase the level of income and thereby it can reduce the poverty. This result is followed by Oxaal (1997). Moreover, there is a significant negative relationship between nutritional level and income according to the findings of Behrman and Deolalikar in 1987. As the nutritional level is captured to model by the prevalence of undernourishment, decreasing the percentage of prevalence of undernourishment can increase the income so that it can reduce the poverty.

This research has identified predictor value agricultural productivity as a key determinant of poverty in South Asia. This agricultural productivity is determined by its inputs; labour, animal usage, and fertilisers. Moreover, fertiliser usage has a significant negative relationship with paddy productivity. Hence, to increase the level of productivity, intensive use of fertiliser is not desirable in the South Asian context. A similar outcome was founded by Sri Lankan scholars with regard to vegetable

cultivation (Upekshani et al., 2018). Further, this can be due to the over-utilisation of fertilisers in South Asian countries which is more visible in Sri Lanka. In Sri Lanka, fertiliser is excessively used as it is subsidised by the government and is given to farmers at zero cost or a subsidised price. Hence, farmers tend to use fertilisers excessively without carefully identifying the real need for fertiliser usage. Accordingly, a negative relationship between agricultural productivity and fertiliser consumption can be expected.

CONCLUSIONS AND IMPLICATIONS

This study examined the relationship between agricultural productivity and poverty in the South Asian region and special attention is given to paddy productivity and income. The major finding of this study proved that poor households in South Asia can be benefitted from agricultural productivity growth. Therefore, paying more attention to enhancing agricultural productivity, which generally reduces poverty, is important. The analysis has identified education and health as poverty minimisers. Therefore, the government needs to allocate more budget to those two merit products.

Further, this study recommends using fertilisers at their optimum level rather than overconsumption, because it can enhance agricultural productivity to benefit poor households.

REFERENCES

- Behrman, J. R., & Deolalikar, A. B. (1987). Will developing country nutrition improve with income? a case study for rural South India. *Journal of political Economy*, 95(3), 492-507.
- Datt, G., & Ravallion, M. (1998). Farm productivity and rural poverty in India. *The Journal of Development Studies*, 34(4), 62-85.
- Devkota, S., & Upadhyay, M. (2013). Agricultural productivity and poverty reduction in Nepal. *Review of Development Economics*, 17(4), 732-746.
- Irz, X., Lin, L., Thirtle, C., & Wiggins, S. (2001). Agricultural productivity growth and poverty alleviation. *Development policy review*, 19(4), 449-466.
- Timmer, C. P. (1997). Farmers and markets: the political economy of new paradigms. *American journal of agricultural economics*, 79(2), 621-627.

FACTORS INFLUENCING THE ADOPTION OF MANAGEMENT ACCOUNTING PRACTICES IN SMALL AND MEDIUM ENTERPRISES: SPECIAL REFERENCE TO ANURADHAPURA DISTRICT

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ABSTRACT

Purpose: The management accounting concept is one integral component of small and medium-sized enterprises to utilise resources in an effective and efficient manner. The purpose of this study is to examine what factors are influencing the adoption of management accounting practices in small and medium-sized enterprises with special reference to the Anuradhapura district.

Design/methodology/approach: A quantitative research approach is used and data were collected through a structured questionnaire distributed via e-mail and handed over to the cost and management accountant, cost controller, accountant, and managers as respondents based on a convenient sampling method and 150 SMEs have been selected as sample. Descriptive Statistics, Pearson correlation analysis and multiple linear regression tools were adopted to test the hypotheses. The researchers have implemented the five-point Likert scale rating method (1= strongly disagree and 5 = strongly agree) for this study.

Findings: The study found that all the selected independent variables (Perceived Environmental Uncertainty, market competition, the Qualification of Internal Accounting Staff, and participation of owner and manager) significantly influenced in the management accounting practices of Small and Medium-sized enterprises which are located in Anuradhapura district.

Research implications: The findings of the study hold practical implications for Policymakers, Managers, investors, cost controllers and accountants.

Originality/value: This study recommended that qualified persons are needed who have experience with Management Accounting practices and Perceptions of owner and manager should be in an effective manner needed to maintain successful management accounting practices in small and medium enterprises in the Anuradhapura district.

Paper type: Research Paper

Keywords: Management Accounting, Small & Medium Sized Enterprises, Anuradhapura District

INTRODUCTION

Management Accounting Practice (MAP) is an integral part of making all the decisions in handling the resources in an organisation such as activities to be carried out, policies of management accounting, and procedures in handling the resources to maintain a good and healthy financial environment in the organisation.

Small and Medium Enterprises (SMEs) occupy a place of strategic importance in developing as well as developed countries owing to their considerable contribution to national income, employment, exports, and entrepreneurship development (Saxena, 2012). It is crucial to pay attention to the practice of managerial accounting which provides accounting information for these enterprises, where information, tools, and methods are a great contribution to the achievement of their objectives.

Much of the existing research on the adoption of MAPs in SMEs is undertaken in developed countries, and limited research is undertaken in developing countries, such as Indonesia (Armitage et al., 2016; McChlery et al., 2005; Sousa et al., 2006). Moreover, the successful implementation of MAPs will depend on its contingent factors, such as organisational factors and business environment characteristics (Miles & Snow, 1978, Tillema, 2005).

This research is anticipated to provide a number of contributions. First, this research denoted the extent of MAPs adoption by Sri Lankan SMEs. Second, this research studied contingent factors that affect the implementation of MAPs used by SMEs. The results of this study are expected to provide benefits to SMEs and external accountants/auditors, policymakers, and academics on the progress and factors which affect the application of MAPs to the SME sector. Moreover, it is anticipated that these findings will serve as a foundation for further study in the field of management accounting, organisational design, and performance of SMEs, particularly in developing countries like Sri Lanka.

Primary Objectives

To find out factors influencing the adoption of management accounting practices in SMEs in Anuradhapura District.

Secondary Objectives

- To examine the impact of perceived environmental uncertainty on the adoption of management accounting practices in SMEs.
- To identify the impact of market competition on the adoption of management accounting practices in SMEs.

- To assess the impact of the qualification of internal accounting staff on the adoption of management accounting practices in SMEs.
- To evaluate the impact of the participation of owner and manager on the adoption of management accounting practices in SMEs.

METHODOLOGY

Quantitative methods were deployed in the study and the data collected to test the hypotheses were obtained using survey techniques by directly visiting respondents and sending survey links via Google form. Respondents of this research are mainly owners or managers of SMEs' accounting/finance departments. The developed questionnaire consists of two parts. In the first part, respondents are asked to provide information about the SME profile. The second section contains questions about the factors that affect the adoption of MAPs. The population of this study is SMEs located in the Anuradhapura district. The researchers use data from the website to determine the location/region of the SME centre as a starting point. The researchers then visit the centre to obtain sample data. Finally, 150 samples are obtained under the convenience sampling method. The conceptual framework of the study could be presented in Figure 1.

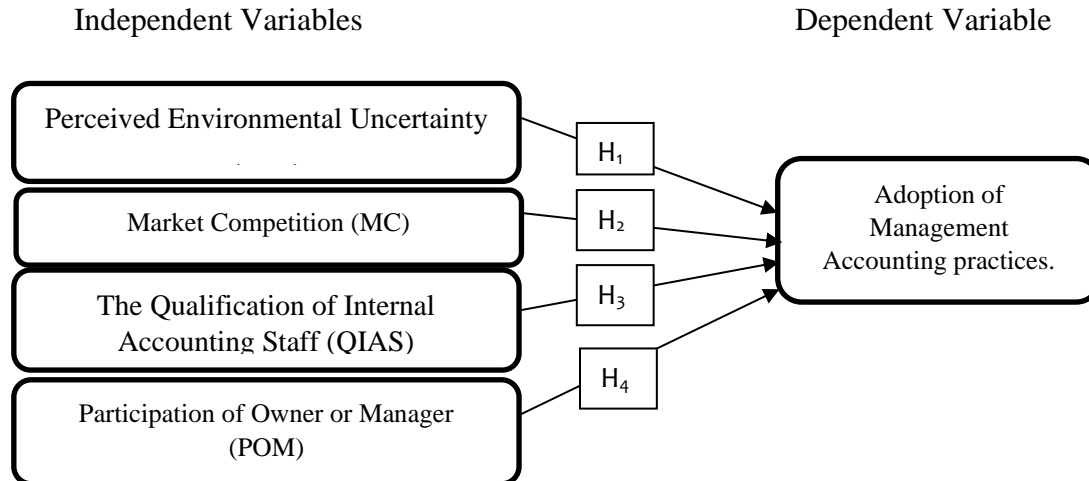


Figure 1: Conceptual Framework

Source: Author, 2022

Research Hypotheses

H₁: There is an impact of perceived environmental uncertainty (PEU) adoption of management accounting practices in SMEs. Prihastiwi & Mahfud (2018); Nguyen (2019)

H₂: There is an impact of market competition (MC) on the adoption of management accounting practices in SMEs. Prihastiwi & Mahfud (2018); Nguyen (2019)

H₃: There is an impact of the qualification of internal accounting staff (QIAS) on the adoption of management accounting practices in SMEs. Prihastiwi & Mahfud (2018); Nguyen (2019)

H₄: There is an impact of the participation of owner and manager (POM) on the adoption of management accounting practices in SMEs. Prihastiwi & Mahfud (2018); Nguyen (2019)

RESULTS AND DISCUSSION

Table 1 Descriptive Analysis of Dependent Variable and Independent Variables

	N	Min.	Max.	Mean	Standard deviation
Advanced Management Accounting Practice (AMAP)	150	1.43	4.29	3.7229	.43208
Perceived Environmental Uncertainty (PEU)	150	1.60	4.40	3.7680	.50750
Market Competition MC	150	1.75	4.50	3.7550	.49106
The Qualification of Internal Accounting Staff (QIAS)	150	1.38	4.31	3.7594	.47990
Participation of the Owner or Manager (POM)	150	1.20	4.40	3.7580	.52899

Source: Author, 2022

Table 1 shows the mean value of adoption of management accounting practices (AMAP) is 3.72 with standard deviation, minimum and maximum values of AMAP are 0.432, 1.43 and 4.29. However, the mean of the rest independent variables is PEU 3.76, MC 3.755 and QIAS 3.759. And also, the minimum values of those variables are 1.60, 1.75 and 1.38. The maximum value of PEU is 4.40, MC 4.50 and QIAS 4.31. In addition, the table shows the 3.75 mean value of Training according to the selected sample. The standard deviation of Training is 0.52. Further minimum and maximum values are 1.2 and 4.40.

Table 2: Reliability Analysis

Variable	N of Items	Cronbach's Alpha
PEU	5	0.779
MC	4	0.730
QIAS	4	0.749
POM	5	0.798
AMAP	7	0.771

Source: Author, 2022

Table 2 shows all constructs in this research are reliable to conduct the study with Cronbach's alpha figure above 0.70. According to the table *AMAP* reliability value is 0.77 and *PEU* reliability is 0.779. And, *MC* and *QIAS* reliability values are 0.730 and 0.749. Further *POM* reliability value is 0.798.

Table 3: Correlation Analysis

		AMAP	PEC	MC	QIAS	POM
<i>AMAP</i>	Person Correlation	1				
	Sig (2 tailed)					
<i>PEU</i>	Person Correlation	.798**	1			
	Sig (2 tailed)	.000				
<i>MC</i>	Person Correlation	.773**	.730**	1		
	Sig (2 tailed)	.000	.000			
<i>QIAS</i>	Person Correlation	.780**	.789**	.719**	1	
	Sig (2 tailed)	.000	.000	.000		
<i>POM</i>	Person Correlation	.824**	.770**	.759**	.764**	1
	Sig (2 tailed)	.000	.000	.000	.000	

Source: Author, 2022

According to Table 3, the value of the correlation of independent variables is between *POM* and *AMAP* 0.824. The correlation value of 0.798 of *AMAP* and *PEU* is positive. Therefore, there is a strong relationship between these two variables. The relationship between *MC* and *AMAP* is also strong because the correlation value is 0.773. *QIAS* and *AMAP* are also correlated strongly with the 0.780 correlation value. All correlations are significant at the 0.05 level and all significant value between variables is less than 0.05.

Table 4: Model Significance

	Sum of Squares	Df	Mean square	F	sig
Regression	14.326	4	3.582	81.859	.000 ^b
Residual	4.156	145	.044		
Total	18.482	149			

Source: Author, 2022

The ANOVA statistics are used to represent the regression model significance. The F ratio value is 81.859 with a significance level of 0.000. That value is less than 0.05; the regression results were significant at the 5% level. This represents that the regression model was significant at a 95% confidence level.

Table 5: Model Summary

Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	0.880	0.775	0.766	0.20917

Source: Author, 2022

Table 5 indicated that the multiple correlation R-value is 0.880. This implies that there is a strong relationship between Independent Variables and AMAP of SMEs. Further, the table denotes that this model is indicating that 77.5% of the variance AMAP of SMEs can be predicted by the independent variables of PEU, MC, QIAS and POM. Further, the estimated standard deviation of error is 0.209.

Table 6: Coefficient

	Unstandardized B	Std. Error	Standardized coefficient Beta	T	sig
(Constant)	.605	.178		3.396	.001
PEU	.203	.076	.239	2.663	.009
MC	.184	.072	.209	2.571	.012
QIAS	.160	.079	.177	2.013	.047
POM	.282	.073	.345	3.866	.000

Source: Author, 2022

The above Table 6 shows the results of hypothesis testing based on the significant value from regression analysis. In statistics, the correlation measures the strength and direction of a linear relationship between two variables. According to the table, all independent variables have a significant impact on the dependent variable with P values less than 0.05. PEU was a significant impact on AMAP of SMEs with a sig value of 0.009 and beta was 0.203. Further, this value supported Hypothesis 01. This finding is consistent with (Ahmad, 2012) who found that the Perceived Environmental Uncertainty effect on adoption of Management accounting practices (AMAP). And, MC has a significant impact on the AMAP of SMEs with 0.012 sig values and 0.184 beta values. These values accept hypothesis 2. This finding is consistent with similar studies (Omiri & Drury, 2007; Hansen & Stede, 2004). Moreover, the impact of QIAS and POM also has significance with sig values 0.047 and 0.000. Those variables' beta values were 0.160 and 0.282, and this means if increase the independent variable will be a reason to improve the dependent variable. It also is guided to accept Hypothesis 03 and 04. This finding is consistent with similar studies (Prihastiwi & Mahfud, 2018; Nguyen, 2019)

CONCLUSIONS AND IMPLICATIONS

The objective of this paper is to examine factors affecting the adoption of management accounting practices in Small and Medium-sized Enterprises in the Anuradhapura district. This study focused on the primary data and structured questionnaires to collect the required data. 150 Small and medium-sized enterprises in the Anuradhapura district are used as the sample of the study. Researchers used Descriptive Analysis, Correlation Analysis and Regression Analysis, as the analysis methods. In contrast to the findings in most prior studies on foreign countries, some of this study indicates that the Perceived Environmental Uncertainty, market competition, the Qualification of Internal Accounting Staff, and participation of owner and manager are affected by the management accounting practices in prior studies.

This study was conducted to achieve four research objectives. The first research objective understands whether Perceived Environmental Uncertainty influences the adoption of management accounting practices. According to regression, Perceived Environmental Uncertainty is significantly influenced by management practices. Hence, when Perceived Environmental Uncertainty goes up, adoption management accounting practices also go up. The second, third, and fourth research objectives mentioned whether market competition, the Qualification of Internal Accounting Staff, and the participation of owners and managers influence management accounting practices. According to the result, all the selected variables are influencing the adoption of management accounting practices in small and medium-sized enterprises.

To generalise the most reliable findings on the adoption of management accounting practices in small and medium-sized enterprises, it is better to take the whole SMEs or at least a significant area as the population of the study, but the limited availability of access to them is a major constraint. Therefore, the survey should have to limit to one geographical area (Anuradhapura). And, there is the impact of several factors on the adoption of management accounting practices, and this study only considered four factors. There are further demographic and other factors which impact the adoption of management accounting practices but were not considered in this study. Moreover, this study related to the cost accountant section of the small and medium-sized enterprises in the Anuradhapura district. Therefore, it is recommended that future research of this nature be done with large samples and a different methodology at other SMEs, particularly in the district and province area as well as a researcher who can use other factors affecting the adoption of management accounting practices.

REFERENCES

- Armitage, H. M., Webb, A., & Glynn, J. (2016). The use of management accounting techniques by small and medium-sized enterprises: a field study of Canadian and Australian practice. *Accounting Perspectives*, 15(1), 31-69. doi: doi:10.1111/1911-3838.12089
- McChlery, S., Godfrey, A. D., & Meechan, L. (2005). Barriers and catalysts to sound financial management systems in small sized enterprises. *Journal of Applied Accounting Research*, 7(3), 1-26. doi: doi:10.1108/96754260580001040
- Prihastiwi D. A., & Sholihin, M. (2018). Factors affecting the use of management accounting practices in small and medium enterprises: evidence from Indonesia. *Journal Dinamika Akuntansi*, 10(2), 158-176.
- Sousa, S. D., Aspinwall, E. M., & Rodrigues, A. G. (2006). Performance measures in English small and medium enterprises: survey results. *Benchmarking: An International Journal*, 13(1/2), 120-134. doi: doi:10.1108/14635770610644628
- Tillema, S. (2005). Towards an integrated contingency framework for MAS sophistication: case studies on the scope of accounting instruments in Dutch power and gas companies. *Management Accounting Research*, 16(1), 101-129. doi: <https://doi.org/10.1016/j.mar.2004.12.001>



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