

"Catalyzing Innovation: Pioneering Interdisciplinary Paradigms
and Solutions in Crisis Management"



SACFIRE 2024

10th Symposium of Accountancy and Finance Research
2nd International Undergraduate Symposium of Department of Accountancy

PROCEEDINGS



Department of Accountancy

Faculty of Business Studies and Finance
Wayamba University of Sri Lanka
Kuliyaipitiya



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of
SACFIRE 2024

10th Symposium of Accountancy and Finance Research
(2nd International Symposium of the Department of Accountancy)

Department of Accountancy
Faculty of Business Studies and Finance
Wayamba University of Sri Lanka

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Track 01

Accounting, Taxation, & Auditing

THE ACCEPTANCE OF CLOUD-BASED ACCOUNTING DEVELOPMENTS BY ACCOUNTING PROFESSIONALS: WITH SPECIAL REFERENCE TO APPROVED AUDIT FIRMS FOR STATUTORY AUDITS IN SRI LANKAN LISTED COMPANIES

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ABSTRACT

The objective of this study is to examine the factors impacting the acceptance of cloud-based accounting development by accounting professionals in Sri Lanka. The study employed a deductive, quantitative approach, rooted in a positivist research philosophy. Data from 269 professionals across 10 approved firms for statutory audits of public listed companies, were examined using multiple regression analysis. The findings indicate that the perceived benefits of cloud-based accounting positively influence its acceptance, with awareness, attitudes toward technology, and organizational support also playing significant roles. This paper offers a comprehensive review of empirical studies on cloud-based accounting and auditing practices in Sri Lanka.

Introduction

Cloud-based accounting applications are considered one of the most important technological breakthroughs incorporated into auditing practices by companies worldwide. This is due to advantages such as efficiency, cost savings, and real-time data access. This trend has strong implications for the current dynamics of the audit industry, transforming traditional audit processes (Xiao et al., 2021).

Despite these benefits, the acceptance of cloud-based accounting developments among Sri Lankan audit firms remains relatively low. This study examines the acceptance of cloud-based accounting developments by accounting professionals within approved audit firms for conducting stationary audits of listed companies in Sri Lanka. In particular, it examines the factors influencing their willingness to embrace these technologies and the extent of their implementation in auditing practices.

The research questions were developed to examine the factors affecting the acceptance of cloud-based accounting developments in established audit firms in Sri Lanka. The study aims to contribute towards understanding to what extent audit firms in Sri Lanka are ready to accept this cloud-based technology.

This research aims to identify the factors that influence the acceptance of cloud-based accounting systems among accounting professionals in the audit firm industry in Sri Lanka. By working on a unified cloud platform, accounting professionals can move beyond traditional accounting processes and assist clients more efficiently (Nurhajati, 2016) Cloud accounting allows for dynamic changes to be made in real-time to accounting information, as opposed to rigid systems that cannot adapt (Dimitriu & Matei, 2014). This shift underscores the increasing need for accounting professionals to embrace new technologies. While prior research has

largely focused on the factors driving or hindering adoption and viewed cloud computing as both an opportunity and a threat, there is a lack of literature specifically addressing cloud accounting developments. Therefore, this study aims to make a significant contribution to the advancement and sustainability of accounting practices.

Methodology

This study followed the positivist research philosophy emphasizes objectivity, empirical observation, and quantitative analysis. The research approach employed a deductive, quantitative method rooted in the positivist philosophy to systematically examine the factors influencing the adoption of cloud-based accounting developments by audit professionals in firms approved for statutory audits of listed companies. The study aimed to test hypotheses based on established theories such as the Technology Acceptance Model (TAM) and the Technology-Organization-Environment (TOE) framework (Venkatesh & Davis, 2000; Baker, 2012).

For this study, a sample of 269 out of a population of accountants from 10 approved audit firms in Sri Lanka was selected. Data was collected by distributing questionnaires prepared using demographic information and a 5-point Likert scale to gauge respondents' attitudes. The collected data was then analyzed using the Statistical Package for Social Science (IBM SPSS Statistics 26) software, which allowed for in-depth multiple regression analysis and interpretation of the findings.

Conceptual Framework

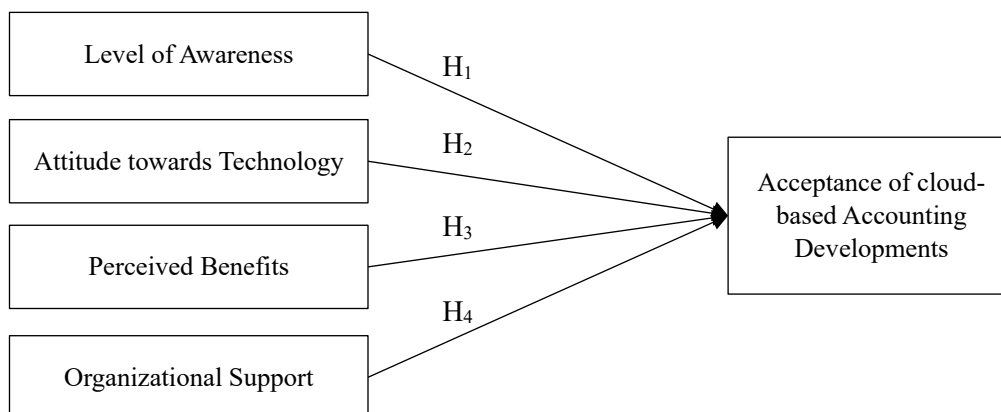


Figure 01: Conceptual Framework

Source: Constructed by the authors

Hypotheses Development

- H1: The level of awareness positively impacts the acceptance of cloud-based accounting developments.
- H2: Attitude toward Technology positively impacts the acceptance of cloud-based accounting developments.
- H3: Perceived Benefits positively impact the acceptance of cloud-based accounting developments.

H4: Organizational Support positively impacts the acceptance of cloud-based accounting developments.

Operationalization

Table 01: Operationalization

Construct Code	Construct	Question Numbers	Source
LA	Level of Awareness	Q11 – Q15	Livera, 2017
AT	Attitude towards Technology	Q16 – Q20	Khanom, 2017
PB	Perceived Benefits	Q21 – Q25	Khanom, 2017
OS	Organizational Support	Q25 – Q30	Bounfour et al., 2022 & Premarathne et al., 2021
ACAD	Acceptance of Cloud-Based Accounting Developments	Q31 – Q35	Venkatesh & Davis, 2000

Source: Constructed based on literature

Findings

Table 02: Regression Analysis Results

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta		
1 (Constant)	1.087	.240		4.531	.000
Level of Awareness	.118	.057	.135	2.059	.040
Attitude toward Tech	.185	.069	.190	2.675	.008
Perceived Benefit	.484	.056	.480	8.628	.000
Organizational Support	-.058	.067	-.061	-.872	.384

a. Dependent Variable: Acceptance of Cloud-Based Accounting Developments

Source: SPSS Output

Based on the findings, all respondents are involved in cloud-based accounting and auditing practices. Notably, 77.3% of participants actively stay updated on emerging technologies in cloud accounting. Furthermore, 67.3% show a strong awareness of cloud-based accounting solutions. These findings suggest that the current level of awareness related to cloud-based accounting among Sri Lankan accounting professionals is impressively high.

The research identified four key factors that influence the acceptance of cloud-based accounting developments: Level of Awareness, Attitude toward Technology, Perceived Benefits, and Organizational Support.

$$\hat{Y} = 1.087 + (0.118)X_1 + (0.185)X_2 + (0.484)X_3 - (0.058)X_4 \dots \dots \dots (1)$$

Where:

\hat{Y} = Predicted value for Acceptance of Cloud-based Accounting Developments

X1 = Level of Awareness

X2 = Attitude towards Technology

X3 = Perceived Benefits

X4 = Organizational Support

The results of the regression analysis indicate that Perceived Benefits have the most significant impact on the acceptance of cloud-based accounting, followed by Attitude toward Technology and Level of Awareness. However, Organizational Support has a negative effect on acceptance, although its influence is relatively minor.

The research revealed that there is a notable lack of organizational support for the acceptance of cloud-based accounting developments. This reluctance can be largely attributed to two key factors: the risk aversion exhibited by top management and the scarcity of resources allocated for cloud development and training initiatives. Management's hesitation stems from concerns about security, data privacy, and the potential disruptions associated with migrating to new technology. Additionally, the limited budget and resources available for investing in the necessary training programs further hinder the organization's ability to embrace these innovative developments in cloud accounting. Consequently, these barriers contribute to a sluggish acceptance of cloud-based solutions within the organization.

The overall analysis of the model shows it to be statistically significant and effectively explains the factors that may influence the acceptance of cloud accounting developments.

Conclusion

The research findings indicate that several factors play a significant role in influencing the acceptance of cloud-based accounting. These include the individual's level of awareness, attitudes towards technology, and the level of support provided by their organization. Moreover, the perceived benefits of cloud accounting strongly impact its adoption.

These insights underline the critical importance of these factors for the future sustainability of audit firms and the evolving role of accounting professionals (Premarathne et al., 2021). It is evident that embracing cloud-based accounting can enhance efficiency and effectiveness within the rapidly changing technological landscape.

Furthermore, the study suggests that integrating cloud-based accounting as a module within the accounting curriculum at Sri Lankan universities would be beneficial. This approach aims to equip future accounting graduates with the necessary knowledge, skills, and competencies required to excel in an increasingly technology-driven profession.

This study is limited to one industry, but future research could expand to include accounting professionals across various sectors in Sri Lanka, particularly manufacturing companies, as they are significant users of cloud accounting for their financial practices.

References

- Baker, J. (2012). The technology–organization–environment framework. *Information Systems Theory: Explaining and Predicting Our Digital Society, 1*, 231-245.
- Bounfour, A., Etienne, J. M., Cheng, X., & Nonnis, A. (2022). How do firms use cloud computing to transform their organization? Evidence from a global survey. *Digital Transformation and Society, 1*(1), 29-47.

- Dimitriu, O., & Matei, M. (2014). Cloud accounting: A new business model in a challenging context. *Accounting and Management Information Systems*, 13(4), 635-649.
- Premarathne, D. S., Rajeshwaran, N., & Umayangana, E. K. (2021). Determinants of adoption of cloud-based accounting: a paradigm shift in Sri Lanka, *Asian Journal of Management Studies I* (1), 103-127.
- Khanom, T. (2017). Cloud accounting: a theoretical overview. *IOSR Journal of Business and Management*, 19(6), 31-38.
- Livera, L. M. (2017). *Cloud based accounting: The perspective of accounting professionals of Sri Lanka* (Undergraduate Dissertation) <https://mgt.sjp.ac.lk/acc/wp-content/uploads/2019/01/L.M.-Livera.pdf>
- Nurhajati, Y., (2016). The impact of cloud computing technology on the audit process and the audit profession. *International Journal of Scientific & Technology Research*, 5(8), 1-9.
- Venkatesh, V. & Davis, F. D. (2000). A theoretical extension of the Technology Acceptance Model: *Four longitudinal field studies*, *Management Science*, 46(2), 186-204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- Xiao, H., Zhu, S., & Lee, Y. (2021). Cloud accounting and its impact on the audit industry: A global perspective, *Journal of International Accounting Research*, 20(3), 110-125.

THE IMPACT OF CORPORATE INCOME TAX RATE CHANGES ON FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES (SMES) IN SRI LANKA: SPECIAL REFERENCE IN PUTTALAM DISTRICT

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ABSTRACT

This study examined the impact of corporate income tax rate changes on financial performance of Small and Medium Enterprises (SMEs) in Sri Lanka. Using a qualitative research approach, data collected through interviews with 07 SMEs in Puttalam district have been used in the study. The findings show that increased corporate income tax liability has significantly reduced profitability, reduced retained earnings, reduced cash flow and raised liquidity problems, limited investment opportunities and limited long-term growth. As a result of raising corporate income tax rate, the financial performance of SMEs appears to have been negatively affected.

Introduction

Small and Medium Enterprises (SMEs) are important to every developed and developing economy, making significant contributions to job creation, innovation and economic development. In Sri Lanka, SMEs play a critical role in the economy, accounting for as high as 75% of all enterprises, 45% of employment and 52% of GDP. Currently, one of the most critical issues facing SMEs is the increase in corporate income tax to 30% in response to Sri Lanka's economic crisis (Kulasinghe et al., 2018).

Taxation has become a major cause of poor financial performance of small and medium enterprises in Sri Lanka. The primary function of a tax system is to generate revenue for the government to cover its public expenditure and meet public needs. Financial performance is the financial measure of how well a business utilizes resources to generate revenue from its day-to-day operations over a period of time. Financial performance indicates the monetary measurement of a company's policies and operations over a period of time. In the face of rising tax liability, many SMEs in Sri Lanka are struggling to generate sufficient revenue to maintain operational efficiency.

Therefore, this study examined the impact of corporate income tax rate hikes on the financial performance of small and medium enterprises in Sri Lanka with a particular focus on Puttalam district. The main objective of this study is to “identify the impact of corporate income tax rate changes on financial performance of SMEs in Sri Lanka”. This study tried to capture the deeper understanding of the experiences of SME owners and managers to provide insight into how critical financial aspects such as corporate revenues, profit margins, liquidity and investment strategies are affected in response to changes in tax rates.

Methodology

This research aims to explore how an increase in the corporate income tax rate affects the financial performance of SMEs in Sri Lanka. It used Interpretivism research philosophy based on inductive approach. This study followed a qualitative research strategy, aiming to understand the subjective experiences of SMEs and managers in Puttalam district. The population for this study consists of all the SMEs in Puttalam district. The Ministry of Industry of Sri Lanka defines SMEs as businesses with less than 300 employees and less than 750 million rupees in revenue (Kengatharan & Balaputhiran, 2021). According to this definition, SMEs were selected for this study on the basis of employees and annual turnover. The sample size consists of 07 SMEs selected through convenient sampling, and data were collected through interviews, allowing for an in-depth exploration of how tax rate changes affect profitability and growth and overall financial performance. This flexible, data-driven approach provides a comprehensive understanding of the complex, context-specific factors affecting SMEs.

Findings

A consequence of the increase in corporate income tax rates has significantly affected the financial performance of SMEs in the Puttalam district of Sri Lanka.

All companies experienced lower profits, resulting in lower retained earnings and limited reinvestment opportunities. The high tax liability has managed to disrupt cash flow, thereby disrupting payroll, supplier payment, staff salary payment and other essential expenses, which has led to strained relationships with suppliers. Many SMEs have stopped making new investments and have to focus on running day-to-day operations. To manage liquidity challenges, some businesses have turned to external financing, resulting in worsening long-term cash flow due to debt repayments and interest. As a result, SMEs have focused on sustainable operations rather than focusing on their organizational growth. Also, when a fixed price has not been set for their products, they have taken measures to reduce the impact on profits by increasing the price of their products relative to the income tax rate.

Overall, it appears that the tax hike has negatively impacted profitability, liquidity, investment capacity and pricing strategies across SMEs in Puttalam district. The increase in corporate income tax has negatively impacted the financial performance of SMEs in Sri Lanka.

Conclusion

The increase in corporate income tax rates has had a significant impact on the financial performance of small and medium enterprises in the Puttalam district in Sri Lanka. Heavy tax burdens have led to reduced retained earnings and limited investment opportunities by reducing business profits for all businesses. Cash flow and liquidity problems have worsened, threatening the ability to pay employee salaries, suppliers and essential expenses etc. As a result, business expansion and long-term growth are limited, and SMEs are focused on sustaining current operations rather than expansion. Overall, the increase in corporate income tax has negatively impacted the financial performance of SMEs in Puttalam district. Future research on tax changes could further explore their effects on financial efficiency and growth of SMEs.

From the findings and conclusion of this study, the following recommendations as follows,

1. The government should ensure that the income generated from the corporate income tax is used for the economic growth of the country and the improvement of the standard of living of the citizens.
2. In order to improve tax revenue generation for the government, necessary policies should be formulated to limit tax evasion by small and medium enterprises.
3. The Government of Sri Lanka should create favorable policies to encourage small and medium enterprises.
4. Various government agencies should encourage business activities through conducting workshops and training programs for small and medium business employees.
5. They should develop their infrastructure by reducing tax rates and providing tax incentives.

References

- Adejare, A. T. (2015). The Analysis of the Effect of Corporate Income. *American Journal of Economics, Finance and Management*, 1, 312-319.
- John Gartchie Gatsi, S. G. (2013). The Effect of Corporate Income Tax on Financial Performance of Listed Manufacturing Firms in Ghana . *Research Journal of Finance and Accounting* , 4, 118-124.
- Kengatharan, B. & Balaputhiran S(2021). Challenges Faced by SMEs During the Covid 19 Pandemic. *Sri Lankan Journal of Business Economics*, 10, 90-104.
- M. A. Zariyawati, K. S. (2010). Corporate Tax Changes and Performance of SMEs in Malaysia. *Interdisciplinary Journal of Contemporary Research in Business*, 2, 272-286.
- Marion Nekesa Otwani, G. S. (2017). Effect of corporate income tax on financial performance of companies listed on the Nairobi Securities Exchange in Kenya. *International Journal of Social Sciences and Information Technology*, 3, 2467-2477.
- Ogbonna G.N, O. T. (2020). Taxation and Financial Performance of Small and Medium Enterprise (SME) In Port Harcourt. *University of Port Harcourt Journal of Accounting and Business*, 7(1),1-27.
- OlanaAngesaDabi, A. B. (2019). The Impact of Business Income Tax on the Performance of Small Business Enterprises, *Srusti Management R Review*,12(2), 61-74.
- S. Kulasinghe, L. H. (2018, March). Catalyzing Small and Medium-Sized Enterprise Venture Capital in Sri Lanka. *ADB South Asia Working Paper Series*, 1-53.
- Usiomon, A. B. (2022). Impact on Corporate Income Tax on Corporate Profitability in Nigeria. *Indian Journal of Finance and Banking*,9(1), 104-114.
- Wadesango Ongayi1, D. T. (2021). The Impact of Taxation Policies on the Performance of Small to Medium Enterprises . *International Journal of Economics and Business Administration*,9(3),163-170.

DISTRIBUTION OF INDIRECT TAXATION ON CONSUMPTION: SPECIAL REFERENCE TO PUTTALAM DISTRICT

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ABSTRACT

The focus of this study is on how consumption reflects indirect taxation patterns in Sri Lanka's Puttalam District. The research seeks to investigate the effect of different income levels and characteristics of householders on their tax and consumption tendencies. Data from 388 households in Puttalam District was collected using an organized questionnaire. A positivist framework was chosen with a deductive strategy and a cross sectional time period by the study. Results highlight major variations in how indirect taxes influence different demographic categories. Households with lower income in farming and service jobs indicated greater adjustments in buying habits inspired by taxes. Country dwellers reacted more strongly to indirect tax changes than city inhabitants.

Introduction

The study is focused on taxes that impact consumption in Puttalam District, which includes Value Added Tax (VAT) excise duties and other consumption related taxes. It aims to investigate how these taxes affect groups, influence consumption behaviors and create distributional outcomes. This research is specifically centered on Puttalam District, in the North Western Province of Sri Lanka to delve into conditions and consumption trends that may not be captured in broader national studies. By examining trends in taxation and consumption patterns within a historical context the research covers areas such as tax policies, public finance, consumer habits and economic development. It explores how taxes with local economic dynamics, household incomes and spending decisions. Demographic factors within Puttalam District like income levels household sizes, urban, versus settings and types of occupations will be considered to understand how different segments of the population are impacted by taxes.

Methodology

In this study, described the research method used in examining consumption tax distribution in Puttalam District. A deductive strategy was followed with a positivist philosophy as research pursued quantitative data through surveys. A Convenient sample of 388 households occurred within Puttalam District. Data was acquired with the help of a structured questionnaire. Reliability analysis along with descriptive statistics and correlation analysis had been included in the plan for data analysis along with other tools like concentration curves that focused on tax incidence among various income groups.

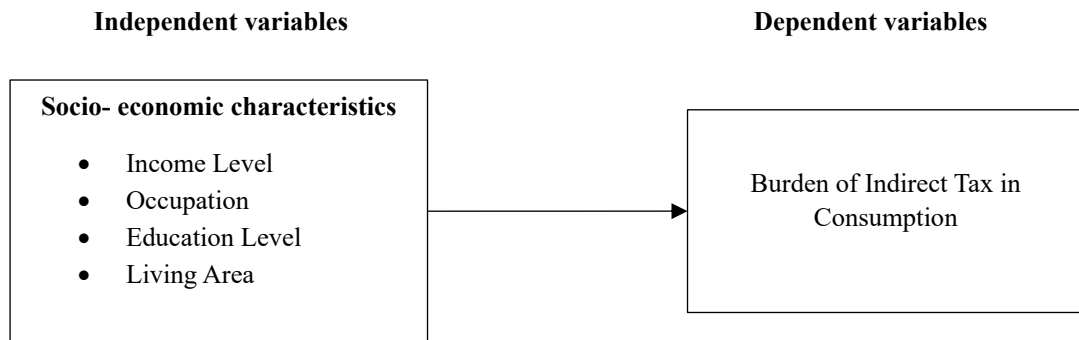


Figure 01: Conceptual Framework

Source: Constructed by the authors

This conceptual framework focused on delivering a strong and exhaustive investigation of how indirect taxes impact consumption behavior in Puttalam. Such analysis addresses the research questions and tests the developed hypotheses.

H1: There is a significant influence on income levels on the indirect tax burden of households in Puttalam District.

H2: Occupation significantly influences the indirect tax burden on households in Puttalam District.

H3: Higher education levels are associated with more effective management of indirect tax burdens in Puttalam District.

H4: There is a significant difference in the indirect tax burden between urban and rural households in Puttalam District.

The collected data was processed, coded, and analyzed using the Statistical Package for Social Sciences (SPSS) version 25.0.

Findings

Table 01: Hypothesis Testing

Hypotheses	P value (Sig value)	Decision
H1: There is a significant influence on income levels on the indirect tax burden of households in Puttalam District.	0.000	Supported
H2: Occupation significantly influences the indirect tax burden on households in Puttalam District.	0.000	Supported
H3: Higher education levels are associated with more effective management of indirect tax burdens in Puttalam District.	0.000	Supported
H4: There is a significant difference in the indirect tax burden between urban and rural households in Puttalam District	0.012	Supported

Source: Constructed by the authors

Hypothesis testing in support of all four stated hypothesis proved that income level, occupation, education level and urban/rural location plays a significant role in determining the burden of indirect taxes on households in Puttalam District.

Table 02: ANOVA Results for Demographic Variables and Consumption Behavior due to Tax Burden

		Sum of Squares	df	Mean Square	F	Sig.
What is your household's total monthly income?	Between Groups	62.198	29	2.145	3.525	.000
	Within Groups	217.812	358	.608		
	Total	280.010	387			
What is the primary occupation of the head of the household?	Between Groups	46.816	29	1.614	1.582	.031
	Within Groups	365.274	358	1.020		
	Total	412.090	387			
What is the highest level of education completed by the head of the household?	Between Groups	111.289	29	3.838	3.068	.000
	Within Groups	447.732	358	1.251		
	Total	559.021	387			
Is your household located in an urban or rural area?	Between Groups	9.284	29	.320	1.715	.014
	Within Groups	66.840	358	.187		
	Total	76.124	387			

Source: Constructed by the authors

The Analysis of Variance (ANOVA) results provide strong evidence of statistically significant differences in consumption behavior due to tax burden across all tested demographic variables in Puttalam District.

Income level emerged as a highly significant factor ($F = 3.525$, $p < 0.001$), indicating substantial variations in tax impact across different income groups. Occupation also showed a significant effect ($F = 1.582$, $p = 0.031$), suggesting that the nature of employment influences how households respond to indirect taxes. Education level demonstrated another highly significant difference ($F = 3.068$, $p < 0.001$), implying that varying levels of education are associated with distinct patterns of consumption behavior in response to tax burden. Finally, the urban/rural location factor also yielded significant results ($F = 1.715$, $p = 0.014$), highlighting geographical disparities in tax impact.

The observation made in this study echoes and builds up on prior research done on the impact of indirect taxation in terms of distribution. The fact that the observed impact of indirect taxes is higher in the lower income group that showed that lower income groups are negatively affected by indirect taxes more than their income. This implies that indirect taxation in Puttalam District may be regressive as is the case with other developing countries. This finding on the relationship between occupation and tax burden and consumption patterns especially with regards to agriculture and service sector conforms to the research done by Lustig et al. (2014), whereby workers in the informal sectors are characterized by high effective indirect tax rates due to their pattern of consumption, and restricted access to the formal retail market. Thus, this study has demonstrated the importance of the sectoral approach in working out the principles of taxation.

Conclusion

The analysis of indirect taxation patterns in Puttalam District reveals that tax burdens and consumption habits vary by income level and employment type. Lower income and rural

families face higher expenses due to indirect taxes, highlighting the need for a more progressive tax model tailored to local financial circumstances. Additionally, the study examines how demographic factors influence tax incidence in developing economies, providing valuable insights for policymakers and researchers to design fairer and more effective tax policies.

Recommendation

The study suggests that policymakers adopt progressive tax structures, such as tiered VAT rates or exemptions for essential goods, to alleviate the burden on lower income households. Additionally, they should develop support programs for rural and vulnerable sectors like agriculture, implement financial literacy initiatives for less educated populations, and invest in rural development to enhance economic opportunities and reduce tax burden disparities between urban and rural areas.

References

- Alavuotunki, K., Haapanen, M., & Pirttilä, J. (2019). The effects of the value-added tax on revenue and inequality. *The Journal of Development Studies*, 55(4), 490-508.
- Amirthalingam, K. (2010). Indirect taxes in Sri Lanka: Current status, issues and challenges. *Sri Lanka Economic Journal*, 11(1), 1-28.
- Atkinson, A. B., & Stiglitz, J. E. (1976). The design of tax structure: Direct versus indirect taxation. *Journal of Public Economics*, 6(1-2), 55-75.
- Central Bank of Sri Lanka. (2022). *Annual Report 2021*. Central Bank of Sri Lanka. <https://www.cbsl.gov.lk/en/publications/economic-and-financial-reports/annual-reports/annual-report-2021>.
- Diamond, P. A., & Mirrlees, J. A. (1971). Optimal taxation and public production I: Production efficiency. *The American Economic Review*, 61(1), 8-27.
- Engel, E. (1857). Die productions-und consumtionsverhältnisse des königreichs sachsen. *Zeitschrift des statistischen Bureaus des Königlich Sächsischen Ministeriums des Innern*, 8, 1-54.
- Fowler Jr, F. J. (2013). *Survey Research Methods*. Sage publications.
- Kaplanoglou, G., & Newbery, D. M. (2003). Indirect taxation in Greece: Evaluation and possible reform. *International Tax and Public Finance*, 10(5), 511-533.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.
- Lustig, N. (2014). *Taxes, transfers, inequality and poverty in Latin America: Assessing the imperfect proxy potential*. Working Paper Series, 24, Society for the Study of Economic Inequality.
- Prasad, B. C. (2008). Institutions, good governance and economic growth in the Pacific Island countries. *International Journal of Social Economics*, 35(12), 904-918.
- Ramsey, F. P. (1927). A contribution to the theory of taxation. *The Economic Journal*, 37(145), 47-61.

ROLE OF INTERNAL AUDIT IN EFFECTIVE MANAGEMENT OF ORGANIZATIONS: A STUDY OF THE MANUFACTURING INDUSTRY

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ABSTRACT

This study examines the role of internal audit in improving management effectiveness in Sri Lanka's manufacturing industry. Using a quantitative approach, it highlights internal audit's critical impact on managerial efficiency, risk management, and organizational improvement. The findings provide actionable insights for management to enhance practices, auditors to improve effectiveness through training, and policymakers to strengthen audit frameworks. Investors and employees benefit from greater transparency and operational efficiency. Future researchers are guided to address limitations and explore audit practices further. The study underscores internal audit's vital role in driving accountability and efficiency in the manufacturing sector.

Introduction

This study examines the Internal Audit role in the Sri Lankan Manufacturing sector and focuses on selected firms. It aims to identify gaps in management effectiveness and internal auditing which essential for organizational performance in order to improve financial management. The study seeks to improve internal audit functions and provide recommendations for effective management. An empirical gap exists in private manufacturing companies where limited resources and less oversight impact audit effectiveness (Manatunga, 2003). The study analyzes these gaps and provides insights for improved internal auditing practices across departments to enhance overall efficiency within the manufacturing industry in Sri Lanka. Typically, empirical gaps are generated in manufacturing industry in every country because organizations have to perform their business activities toward profitability so that they are not able to restrict this gap in internal auditing (Motubatse et al., 2024).

The study explores the relationship between Internal Audit Functions and management effectiveness in the manufacturing industry. It aims to assess how Internal Audit Processes, Personal, Independence, Reporting and Follow-up contribute to enhancing management practices. The research objectives include such as evaluating the impact of Internal Audit on management effectiveness, exploring the role of Audit Personal, examining how Internal Audit Independence on management effectiveness and understanding how Audit Reporting and Follow-up influence on overall outcomes by investigating these factors. So, the study seeks to provide valuable insights to improve Internal Audit Practices effectively and risk management in the manufacturing industry (Al-azzabi, 2023).

The study's scope is evaluating the role of internal audit functions in enhancing management effectiveness within the manufacturing industry. It examines key components such as Audit Process, Personal, Independence, Reporting and Follow-up and their impact on decision-making, risk management and operational efficiency. The study is geographically limited to Sri Lanka.

Proper internal control systems such as segregation of duties, fraud risk assessments, enhanced audit committees and fraud audit reporting programs are effective on internal audit functions that lead to enhancing management effectiveness (Eulerich, 2023). Internal auditors should perform with independent, unbiased, job experience and critical thinking abilities. Thus, they are able to perform their activities without any influence from outside factors as well as they can develop internal Audit Functions in the manufacturing sector (Dzikirullah, 2023). Internal auditors act as an agent of interest of stakeholders (Internal, 2022). Internal Audit effectiveness is essential for sustainable and cost-effective procurement of the manufacturing industry. Internal audit functions are able to significantly improve sustainability assurance reports (simoni, 2022).

Methodology

Research Strategy

The research strategy depends on a quantitative approach focuses on quantifying the relationship between variables. This method is used to analyze the numerical data statistically for testing hypotheses. So, the research Philosophy is positivism, which is measured quantifiably. Thus, it allows to test hypotheses regarding the relationship between Internal Audit functions and effective management. So the research approach is used as the deductive approach.

Conceptual Framework

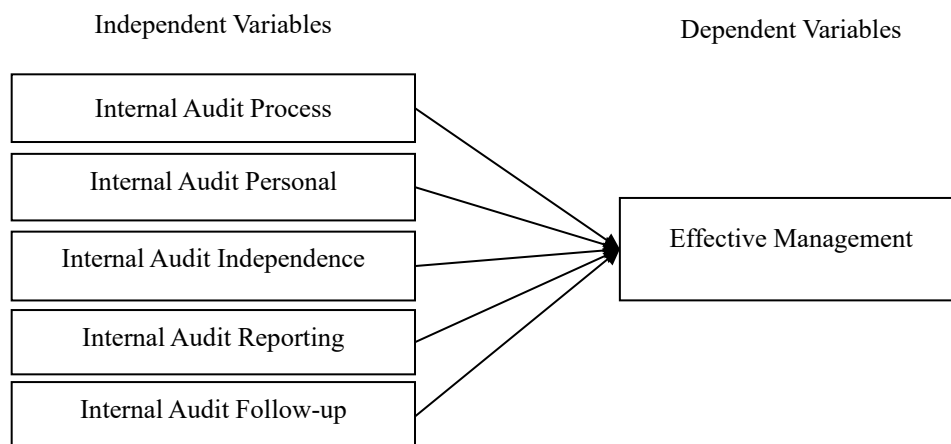


Figure 01: Conceptual Framework for the Research

Source: Constructed by the authors

Hypothesis

- H1: There is an impact of the Internal Audit Process on effective management practices in organizations.
- H2: There is an impact of Internal Audit Personnel on effective management practices in organizations.
- H3: There is an impact of Internal Audit Independence on effective management practices in organizations.

H4: There is an impact of Internal Audit Reporting on effective management practices in organizations.

H5: There is an impact of Internal Audit Follow-up on effective management practices in organizations.

H6: There is an impact of overall Internal Audit functions on Effective Management.

Population and Sample

The population includes 3,795 manufacturing companies registered up to 31 December 2023 within Sri Lanka (Ministry of Industries). Based on the selected criteria relevant to the study (i. Company established more than 15 years ago, ii. Companies have a large number of employees, iii. Company has a proper structure which has appropriate internal Audit systems, and iv. Company has higher revenue and is successful in industry), the Purposive sampling method was applied as the sampling technique. Accordingly, 194 manufacturing companies were selected as the sample.

Data Collection

A self-administrated questionnaire, which used Five-point Likert scale was employed for the purpose of data collection. The executive level employees who have required level of knowledge have responded. Through the survey, 194 questionnaires were collected, which are considered to be primary.

Findings

This finding highlights the significant impact of internal audit functions on decision-making, operational efficiency and risk management in the manufacturing industry.

Table 03: Correlation Table

Independent Variables				
IAP	IAPR	IAI	IARP	IAFU
0.823	0.854	0.850	0.870	0.882
Effective Management (EM)				
Overall Internal Audit Functions			0.897	

Source: Constructed by the authors

Table 01 presents the influence of internal audit functions on effective management in the manufacturing industry. The independent variables such as Internal Audit Process (IAP), Internal Audit Personnel (IAPR), Internal Audit Independence (IAI), Internal Audit Reporting (IARP), and Internal Audit Follow-up (IAFU) are strengths of their contribution to management effectiveness. The internal audit process has value of 0.823 indicating that it significantly enhances management effectiveness. The internal audit personnel with a value of 0.854 indicate that skilled and competent audit plays in improving management decisions. Internal audit independence has with value of 0.850 indicates that unbiased auditing practices contribute substantially to ensuring organizational performance. Internal audit reporting has a value of 0.870 indicating that it emphasizes the importance of accurate audit reports in supporting informed management decisions. Internal audit follow-up a has value of 0.882 indicating that implementing audit recommendations is essential for the improvement of

management of effectiveness. So overall, internal audit functions have value of 0.897 indicate that effective auditing significantly enhances operational efficiency in organizations.

Table 04: Regression Table

Regression Statistics				
Multiple R			.917	
R Square			.840	
Adjusted R Square			.836	
Standard Error			.72663	
Variables	Coefficients	Standard Error	T Stat	P-value
Constant	.077	.216	.356	.722
IAP	.336	.094	3.561	.000
IAPR	.140	.129	1.087	.279
IAI	.311	.113	2.747	.007
IARP	.315	.126	2.505	.013
IAFU	.553	.126	4.379	.000
Overall Role of Internal Audit Functions				
OIAF	.788	.145	6.278	.002

Source: Constructed by the authors

Table 02 shows the regression analysis results that evaluate the impact of internal audit functions on effective management in the manufacturing industry. The multiple R value of 0.917 indicates a strong correlation between internal audit functions and management effectiveness with an R Square of 0.840. the model explains 84% of the variability in management effectiveness. The adjusted R Square of 0.836 further confirms the model's accuracy.

Internal Audit Process. Internal Audit Follow-up and Overall Internal Audit functions have a significant impact on management effectiveness as their p-values are less than 0.05. Conversely, Internal Audit Personal, Internal Audit Independence and Internal Audit Reporting have less significant impact on them as their value are more than 0.05. so multiple regression model is shown

Equation

$$EM = 0.077 + 0.336 IAP + 0.553 IAFU \dots\dots\dots (1)$$

OR

$$EM = 0.077 + 0.788 OIAF \dots\dots\dots (2)$$

EM - Effective Management

IAP - Internal Audit Personal

IAFU - Internal Audit Follow-up

OIAF- Overall Internal Audit Functions.

Conclusion

Study highlights the importance of internal audit in enhancing management effectiveness within Sri Lanka's manufacturing industry. Key components, such as Internal Audit Follow-Up and Internal Audit Process (IAP), showed a significant positive impact, emphasizing the

need for structured and consistent audit practices. However, variables like Internal Audit Personnel (IAPR), Audit Independence (IAI) and Audit Reporting (IARP) demonstrated minimal significance, suggesting their influence may depend on contextual factors (Siregar, 2022).

The findings contribute to governance and risk management theories, especially in resource-limited environments. Practically, they highlight the need to strengthen follow-up mechanisms and optimize audit processes for better decision-making. Policymakers can develop standardized audit frameworks and organizations should invest in training to enhance auditor skills. Overall, internal audit functions are crucial for operational efficiency, risk mitigation and effective governance, providing actionable insights for organizational improvement and policy formulation.

Study identifies Internal Audit Follow-Up (IAFU) as the most significant predictor of management effectiveness, consistent with (Dehmer, 2021) which highlights follow-up as crucial for accountability and operational improvements. The Internal Audit Process (IAP) showed moderate impact, aligning with (Babatunde, 2021) who emphasized its role in compliance and governance when combined with follow-up mechanisms.

Conversely, Internal Audit Personnel (IAPR) and Independence (IAI) were insignificant in my study, differing from (Ofori-Boateng, 2021) which found auditor competency critical in financial institutions. This discrepancy may reflect the manufacturing sector's focus on technical processes over personnel. Lastly, Internal Audit Reporting (IARP) had a moderate impact, consistent with (Smith, 2018) emphasizing timely reporting for decision-making.

The study concludes that internal audit plays a critical role in effective management, particularly in enhancing operational efficiency, risk mitigation, and governance. However, greater emphasis should be placed on improving follow-up & processes to ensure the successful implementation of audit recommendations. Organizations are encouraged to invest in training programs and allocate resources to enhance the skills of internal audit personnel, reinforce their independence and reporting, which is essential for unbiased evaluations. Policymakers should establish standardized guidelines for internal audit practices and governance frameworks to ensure consistency and compliance across the manufacturing sector. Additionally, future research should delve deeper into understanding why certain variables, such as audit personnel and independence, exhibited limited statistical significance and explore their impact in diverse industrial settings. This could provide further clarity and expand the applicability of internal audit practices in different organizational contexts.

The study has several limitations. It focuses on a limited population within the manufacturing sector in Sri Lanka, which may not represent all sectors. The geographic scope restricts applicability, and the small sample size may affect statistical power and reliability. Additionally, other factors such as technological integration Changes in the economic, technological and regulatory environment, were not considered may also impact the relevance of the findings over time. These limitations should be noted when interpreting results, and future research is recommended to address these gaps and expand knowledge on internal audit practices.

References

- Al-azzabi, W. Y. (2023). Risk Management, Top Management Support, Internal Audit . *Journal of Financial Crime*, 30(2), 569-582.
- Ayedh, A. M. (2018). The Effectiveness of Internal Audit. *International Journal of Science and Research*, https://www.researchgate.net/publication/326675351_The_Effectiveness_of_Internal_Audit.
- Babatunde, S. M. (2021). Knowledge, Attitude and Practice of Adverse Pregnancy Outcomes Prevention among Women of Reproductive Age in Nasarawa Local Government Area, Kano State, Nigeria. *Open Journal of Epidemiology*, 11 (4) 501-516.
- Dehmer, F. E.-S. (2021). Understanding Statistical Hypothesis Testing. *Machine Learning Knowledge Extraction*, 1(3),945-961.
- Dzikirullah, A. D. (2023). Internal audit functions and audit outcomes: Evidence from Indonesia. *Cogent Business & Management*, 7:1750331, 1-21. <https://doi.org/10.1080/23311975.2020.1750331>.
- Eulerich, M. A. (2023). The Impact of audit technology on audit task outcomes: Evidence. *Contemporary Accounting Research*, 40(2), 981-1012.
- Internal, A. I. (2022). The Role of Internal Audit in Enterprise-Wide Risk Management. *The IIA's CIA Learning System Part 1 FL: Institute of Internal Auditors*.
- Manatunga, K. P. (2003). *User Knowledge and Audit Expectations*. Lincoln University https://www.academia.edu/83183791/User_knowledge_and_audit_expectations_gap_in_Sri_Lanka.
- Motubatse, K., Myambo, V., Ncongwane, F., & Molate, M. (2024). Standardisation of Audit Reporting for Performance Audit And Internal Audit in The Public Sector. *Journal of Public Administration and Development Alternatives*, 9(1), 59–79. <https://doi.org/10.55190/JPADA.2024.30>
- Mwangi, S. W. (2020). The Influence of Fraud Risk Management on Fraud Occurrence in Kenyan Listed companies. *International Journal of Finance & Banking Studies*, 9(4), 147-160. <https://doi.org/10.20525/ijfbs.v9i4.943> .
- Ofori-Boateng, K. O. (2021). The Impact of COVID-19 on Stock Returns of Listed Firms on the Stock Market: Ghana's Experience. *African Journal of Economics and Management Studies*, 13, 136-146.
- Simoni, L. B. (2022). Effects of social, environmental, and institutional factors on sustainability report assurance: Evidence from European countries. *Meditari Accountancy Research*, 28 (6)1059–1087 [10.1108/MEDAR-03-2019-0462](https://doi.org/10.1108/MEDAR-03-2019-0462).
- Siregar, R. A. (2022). Peranan Audit Internal Dalam Menunjang Efektivitas Pengendalian Internal Penjualan dan Penagihan Piutang pada. . *Accumulated Journal*, 96-107 <https://doi.org/10.61132/apke.v1i2.97>.
- Smith, J. Q. (2018). The Future of Work: Implications for Managerial Innovation and Resource Management. *Business Horizons*, 61, 1-12.

THE IMPACT OF FORENSIC ACCOUNTING SERVICES ON FRAUD DETECTION AND FRAUD PREVENTION AMONG LICENSED COMMERCIAL BANKS IN SRI LANKA

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ABSTRACT

This research examines the impact of forensic accounting services on detection and fraud prevention in licensed commercial banks in Sri Lanka. The study's scope covers the Expert Consultancy, Dispute Resolution, Business Advisory, Fraud Investigation, and Litigation Support functions of forensic accounting services. Using a descriptive survey design, data collection was done through a questionnaire after which data was subjected to analysis using SPSS, with the results presented in graphs and tables. The results highlight how important forensic accounting is in strengthening the banking sector's capacity to combat fraud.

Introduction

The dynamic financial landscape of Sri Lanka, heavily reliant on Licensed Commercial Banks, faces increasing threats from financial fraud, which jeopardizes their stability and integrity. As fraud becomes more complex, forensic accounting services have emerged as a critical mechanism for detecting and preventing fraudulent activities in these institutions. This study explores the impact of forensic accounting services on fraud detection and prevention in licensed commercial banks in Sri Lanka, addressing the pressing need to strengthen financial systems and maintain economic security.

Forensic accountants play a crucial role in various domains, including litigation support, fraud detection, dispute resolution, and regulatory compliance. Their responsibilities involve examining financial records, analyzing transactions, and providing expert opinions that can withstand legal scrutiny (Golden, Skalak, and Clayton, 2006). Despite the growing body of international literature on the role of forensic accounting in fraud prevention, the problem lies in the limited focus on the banking sector in Sri Lanka. The country's evolving financial crimes demand a more specialized approach, one that extends beyond traditional auditing practices.

Pertinent literature from Scholars such as Bell and Carcelle (2000) and Hogan et al. (2008) call the fraud triangle theory an important theory for detecting, controlling and preventing fraud. Many frauds are committed by the right people with the right abilities and the element of ability should be considered very important in explaining fraud (Kassem & Higson, 2012). The significance of forensic accounting on fraud detection and prevention is examined in many literatures. These scholars propose various theories in fraud detection, and some of these theories are summarized in Table 01.

Table 01: Fraud Detection Theories

Theory	Description
Fraud Triangle Theory	The fraud triangle theory is based on the assumption made by Cressy (1973), who stated that fiduciaries can breach trust once they believe that they have an indivisible problem that can be solved by breaching the condition of financial trust.
Fraud Diamond Theory	The fraud diamond theory extends the fraud triangle and uses four rather than three elements: incentive, opportunity, rationalization, and capability.
Fraud Scales Theory	This theory was developed by Albrecht (1984) from the fraud triangle theory. It emphasizes personal integrity over rationalization, and its main use is financial fraud where pressure is more observable.

Source: Developed based on the literature

This research seeks to understand the practical impact of forensic accounting services within these banks, examining how these services contribute to early detection and effective prevention of fraudulent activities. Therefore, by this study, researchers endeavor to fill the existing gap in knowledge by providing helpful advice on how the incapability of accounting professional to provide or launder money- services can help in minimizing the risk of fraud in the banking sector in the country of Sri Lanka.

Materials and methods

This study examines the role of forensic accounting services on the prevalence and management of fraud in the licensed commercial banks in the Island of Sri Lanka. The problem investigates the role of forensic accounting in banks in ensuring their security and integrity by expert consultancy, dispute resolution, business advisory services, and investigation of fraud and support in litigation. With the escalating level of sophistication of financial fraud, these services are of paramount importance for commercial banks as far as these subjects are concerned.

The main aim of this study therefore is to evaluate how effective these services are in helping to detect and prevent fraudulent activities at an early stage. Fraud Prevention and Detection reflects dependence on Expert Consultancy (ECs), Dispute Resolution (DRs), Business Advisory Service (BASs), Fraud Investigation (FIs), and Litigation support (LSs). In view of reaching this objective the study sampled twenty (N = 20) licensed commercial banks from where comprehensive data is expected through the distribution of research surveys and questionnaires on the issues of forensic accounting and internal control units. A descriptive survey research design is adopted in this research study as it allows for the description of the available fraud detection and prevention practices currently in the banking industry.

The significance of this research is connected to the increased reasons why banks are at risk and why their operational activities require intervention of forensic accountants. In addition, the aim of providing scope for future research in combating fraud will also be achieved in this study especially for the Sri Lankan financial sector. Data analysis is done with the help of statistical packages such as SPSS to ensure that there is a right understanding of the information gathered. In this respect, the research intends to present guidelines and strategies aimed at enhancing the practice of forensic accounting in the licensed commercial banks.

Considering the proposed relationship, the following conceptual framework is developed (Figure 01).

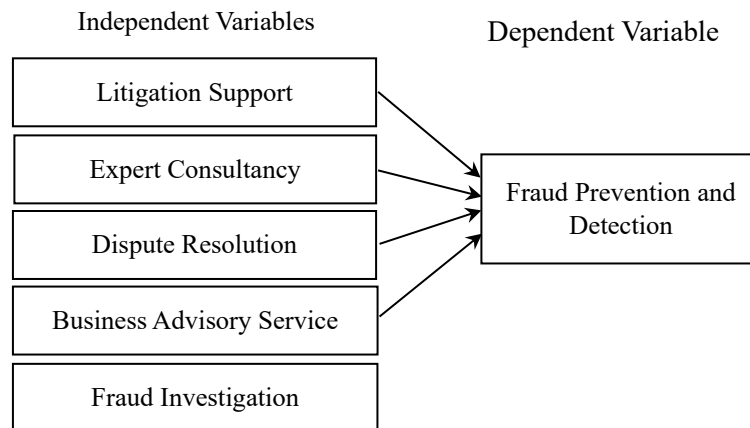


Figure 01: Conceptual Framework

Source: Omondi, 2013

Results and discussion

The main focus of the study is to assess how different types of forensic accounting services such as litigation support, investigation of fraud, provision of business advisory services, dispute resolution, and expert services help in fraud prevention and detection practices in the banks. In particular, the research intends to measure the effectiveness of these services in controlling chances of fraud and enhancing internal control systems.

Fraud of various forms poses a grave risk to licensed commercial banks in Sri Lanka as it damages financial stability and trust of people. Forgone the fact that forensic accounting has been found to play fundamental roles, there seems to be lack of well-rounded understanding on the effectiveness in regard to the banking sector and its challenges of fraud. This research confirms that the conclusion is not reached yet by exploring the means through which forensic accounting services may be utilized to enhance the existing strategies of prevention and detection of fraud.

The regression results of the study demonstrated that effective fraud detection and prevention practices vary with forensic services offered such as litigation support, business advisory services and dispute resolution which latently influence fraud deterrence – accounting for 30.1%.

Table 02: ANOVA Table

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1.139	5	.228	58.806	.000 ^b
Residual	.097	25	.004		
Total	1.236	30			

a. Dependent Variable FPSS

b. Predictors: (Constant), ECs, BASs, FIs, LSS, DRs

Source: Developed by authors

In this regard, the backlash coefficients of engagement revealed that the regression was also observed on litigation support ($\beta = 0.276$, $p = .009$), fraud investigation ($\beta = 0.305$, $p = .002$) and on dispute resolution ($\beta = 0.286$, $p = .002$). On the other hand, business advisory services ($p = .131$) and expert service ($p = .463$) were considered not very significant on fraud controls.

Table 03: Coefficients (a)

Business Ad. Service (BASs)	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.142	.264		.537	.596
Litigation support (LSs)	.276	.098	.273	2.814	.009
Business Ad. Service (BASs)	.085	.055	.117	1.562	.131
Fraud Investigation (FIs)	.305	.088	.297	3.455	.002
Dispute Resolution (DRs)	.286	.083	.370	3.439	.002
Expert Consultancy (ECs)	.042	.057	.053	.745	.463

a. Dependent Variable: FPSS

Source: Developed by authors

In terms of Suspense accounting fraud was the most pronounced risk with the second being fraudulent claims for expenses and improper journal vouchers. The results point out that some forensic accounting services are important in improving fraud detection frameworks whereas others like fraud audits, perhaps need to rethink their usefulness.

Conclusion

The findings indicate that forensic accounting services are vital for enhancing the fraud detection and prevention within the commercial banks in Sri Lanka. The study recommends that the banks place more emphasis on the services offered in relation to litigation support, fraud investigation and dispute resolution, but also seek to counter the more serious types of frauds within their fraud prevention strategies.

The findings reveal that a defensive – organized strategy is central to the fraud management process within the banks. The introduction of forensic accounting services should be integrated within the banks' organizational structure with clear definition of their role in other departments to enhance their effectiveness and avoid conflict. Furthermore, forensic accountants also need to be able to operate and execute their duties independently in order to enhance the mechanisms of detection of fraud.

The theoretical implications discussed in this study call attention to the research gap in how best forensic accounting practices can be employed in tackling financial fraud. In practice, this work indicates that management should be at the forefront of fighting fraud by encouraging transparency and accountability and establishing effective internal controls. Implementation of training programs for employees and managers, as well as strengthening the autonomy of the forensic accounting department, is paramount in curbing fraud.

To wrap up the study it proposes a number of ways in which detection and prevention of fraud can be enhanced across the banking sector. These include reorganization of the internal structure in order to integrate forensic accounting, upskilling and putting in place effective internal control mechanisms, and fostering a culture of understandability beginning with the board of directors. In this way, the licensed commercial banks in Sri Lanka will be able to

improve the capacities of their fraud detection systems, prevent the incidences of fraudulent criminal behavior and increase the quality of the represented financial statements. In addition, the harmonization of accounting and auditing bodies with practices in sustaining the international levels will further support the lucid and accurate financial reporting which will also make the banking system more resistant to financial fraud.

References

- Golden, T. W., Skalak, S. L., & Clayton, M. M. (2006). *A Guide to Forensic Accounting Investigation*. John Wiley & Sons.
- Bell, T. B., & Carcello, J. V. (2000). A decision aid for assessing the likelihood of fraudulent financial reporting. *Auditing a Journal of Practice & Theory*, 19(1), 169–184. <https://doi.org/10.2308/aud.2000.19.1.169>
- Hogan, C. E., Rezaee, Z., Riley, R. A., & Velury, U. K. (2008). Financial Statement Fraud: Insights from the Academic Literature. *Auditing a Journal of Practice & Theory*, 27(2), 231–252. <https://doi.org/10.2308/aud.2008.27.2.231>
- Kassem, R., & Higson, A. (2012). The new fraud triangle model. *Journal of Emerging Trends in Economics and Management Sciences*, 3(3), 191.
- Omondi, E. O. (2013). *The impact of forensic accounting services on fraud detection and prevention among Commercial Banks in Kenya*. <http://erepository.uonbi.ac.ke/handle/11295/59611>

FACTORS AFFECTING THE INTERNAL AUDIT EFFECTIVENESS IN LICENSED FINANCE COMPANIES IN SRI LANKA

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ABSTRACT

Internal audit effectiveness ensures a company's operations are efficient, risks are minimized, and compliance with regulations is maintained, ultimately enhancing overall organizational performance. Therefore, this study aims to identify and evaluate factors influencing internal audit effectiveness to strengthen its role in achieving company objectives. The study uses a quantitative research method. The population is 30 internal auditors in 30 licensed finance companies. The census sampling technique is used to select participants from the population. The findings indicate the size of the internal audit department and the relationship between internal and external auditors have a significant impact on the internal audit effectiveness. while the other three variables don't have a significant impact on internal audit effectiveness.

Introduction

Internal audit has a unique responsibility for the management of risks and particularly their influence on the financial stability of the finance companies. Internal auditors are useful in assessing the level of risk and its enhancement to aid the company (Goodwin & Kent, 2006). Sri Lankan Licensed finance companies are those Companies that are registered under the Finance Business Act number 42 of 2011 by the Sri Lankan central bank and allowed to do finance business (Central Bank Sri Lanka, 2024) In the context of the finance sector, internal audits concern regulatory compliance, effective risk management, and operational efficiency. Poor-quality internal audits have flung the Sri Lankan finance sector into chaos, making internal control mechanisms weak and thus making companies vulnerable to various operational risks. Non-robust internal audit practices have led to financial distress and failures among finance companies; such as ETI Finance Ltd., and Swarnamahar Financial Services PLC. The problem is to comprehend what are the factors that affect internal audit effectiveness and how their absence or weakness influences the overall performance in an organization.

Internal audit effectiveness has been a wide area of research globally, where studies identify relevant factors that relate to auditor independence and competency, management support, and others, which have a vital relation to effective audit practices (Alzeban & Gwilliam, 2014). On one hand, in developed markets, a strong internal audit function is found to be positively related to organizational overall performance by Arena and Azzone (2009). In Sri Lanka, there are published research articles only about internal audit effectiveness in the public sector. There is a lack of significant literature on finance companies in developing economies like Sri Lanka, where internal audit effectiveness may be influenced by unique regulatory and operational challenges. Therefore, this study tries to fill this gap by focusing on specific factors affecting internal audit effectiveness in Sri Lankan licensed finance companies' context where not much exploration has taken place. Understanding these factors will provide valuable insights to enhance audit quality and operational stability within Sri Lanka's finance sector.

The research gap lies in the limited studies focusing on the specific factors affecting internal audit effectiveness within Sri Lankan licensed finance companies, and the lack of comprehensive studies examining the specific factors influencing internal audit effectiveness within Sri Lankan licensed finance companies. Understanding these factors is essential to prevent future failures and to enhance the resilience of the financial sector. By addressing this gap, this research can provide valuable insights into improving internal audit functions. Therefore, this study aims to identify and evaluate factors influencing internal audit effectiveness to strengthen its role in achieving company objectives.

Materials and Methods

This research uses the Positivist research philosophy and deductive approach as a research approach. It was designed according to a survey technique (quantitative method). The approach entails a structured questionnaire with respect to important aspects such as the competence of audit staff, independence and management support. The quantitative approach also assists in testing theories by analyzing characteristics found in prior studies, studying research relations, and acquiring meaningful results (Kassie, 2021).

Conceptual framework discussed the interrelationship between dependent and independent variables. In other words, this conceptual framework gives the idea about relationships between dependent variable and independent variables in this study. Four main independent variables are identified in this study.

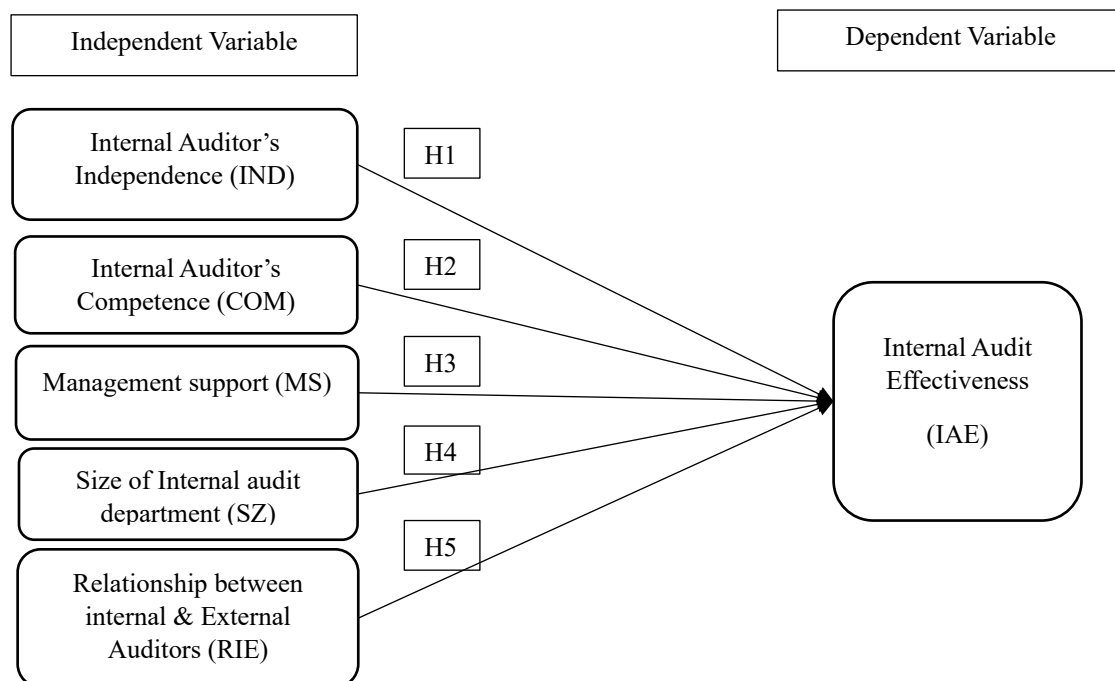


Figure 02: Conceptual Framework

Source: Developed by researchers, 2024

The population included heads of internal audit departments (Chief internal auditors/Senior audit managers) of licensed finance companies in Sri Lanka. The study adopted the census sampling technique to select the respondents. The questionnaires were distributed to all 30 licensed finance companies (excluding ETI Finance Ltd because it is in the winding up process

and Multi Finance PLC is in the process of a merger with LB Finance PLC. And other two companies that don't have an internal audit department are Senkadagala Finance & SMB Finance.) But only 25 responses were received. Internal auditor's independence, internal auditor's competency, management support, size of staff & relationship between internal & external auditors were taken as independent variables, and internal audit effectiveness was taken as dependent variables.

Regression Model

Descriptive statistics, correlation analysis, and multiple linear regression models were used to analyze the data with other preliminary tests. The linear regression analysis model can be shown as follows:

$$IAE = \beta_0 + \beta_1IND + \beta_2COM + \beta_3MS + \beta_4SZ + \beta_4RIE \varepsilon \dots\dots\dots(1)$$

Results and Discussion

As per the demographic analysis, 21 respondents are male and 4 female respondents of total participated in the survey. Greater parts of the respondent internal auditors had completed master's degrees & above, 6 of them qualified with post-graduate diplomas. and only 2 internal auditors were bachelor's degree holders. Most of the respondent internal auditors had more than 15 years of experience in the internal audit field. 8 out of 25 respondents had 11 to 15 years' experience and 7 respondents had 6 to 10 years' experience in the auditing field. Only 1 respondent had below 2 years' experience. All the independent variables showed excellent and good reliability under Cronbach's alpha standard. In this study according to the normality test, the p-value is greater than 0.05 which is 0.167, therefore researcher accept the null hypothesis and can conclude that the data is normally distributed.

According to correlation analysis, the value of the correlation between the management support relationship between internal & external auditors and internal audit effectiveness was 0.981**. The value of correlation among the Internal auditor's independence, internal auditor's competency, management support & size of the internal audit department with internal audit effectiveness were 0.769**, 0.831*, 0.915**, and 0.807** respectively. That showed a moderate positive relationship (correlation value lies between 0.3 - 0.699). Those relationships were significant. (Significance value < 0.05).

According to regression analysis, 97.3% of the variance in the internal audit effectiveness can be explained by the regression model and the model was significant (significance value was 0.000). According to coefficient values mathematical model can be developed as follows.

$$\text{Equation: } IAE = 0.141 + 0.006 IND + 0.267 COM + 0.176 MS + 0.274 SZ + 0.810 RIE + \varepsilon \dots(2)$$

Selected independent variables showed a positive impact on internal audit effectiveness. Significance values for the size of the department, and the relationship between internal & external auditors were 0.020 and 0.000 respectively. Therefore, on this basis, hypothesis H4 and H5 is accepted and the other three variables rejected.

Table 01: Regression results

Model	Unstandardized Coefficients		Standardized Coefficients	T	sig
	B	Std. Error	Beta		
(Constant)	.141	.274		.516	.612
IND	.006	.097	.008	.064	.950
COM	.267	.171	.245	1.561	.135
MS	.176	.119	.185	1.478	.156
SZ	.274	.108	.360	2.545	.020
RIE	.810	.105	.914	7.729	.000

Source: Developed by researchers, 2024

Conclusion

This research study identifies the factors that may impact the internal audit effectiveness of the licensed finance companies in Sri Lanka and according to the findings, the researcher concluded that the size of the internal audit department and the relationship between internal & external auditors created a significant impact on the internal audit effectiveness. The paper theoretically extends the existing literature by addressing the particular context of finance companies in Sri Lanka. These findings imply, practically, that finance companies in Sri Lanka need to invest in the management support of audit functions and enhancement of auditor competencies by continuous training.

The limitations of this research include it is restricted to only one Sri Lankan finance sector, and generalization to other sectors or nations may be limited. In other words, this research is restricted only to the licensed finance companies in Sri Lanka & only focuses on five factors. Directions for future research that take into consideration the current limitation includes investigating the application of similar factors in various financial environments or other variables, such by expanding the study to other industries and in qualitative methods.

References

- Alzeban, A., & Gwilliam, D. (2014). Factors affecting the internal audit effectiveness: A survey of the Saudi public sector. *Journal of International Accounting, Auditing and Taxation*, 23(2), 74–86. <https://doi.org/10.1016/j.intaccaudtax.2014.06.001>.
- Arena, M., & Azzone, G. (2009). Identifying Organizational Drivers of Internal Audit Effectiveness. *International Journal of Auditing*, 13(1), 43-60.
- Central Bank Sri Lanka (2024). Retrieved from Central Bank: <https://www.cbsl.gov.lk/>
- Goodwin, J., & Kent, P. (2006). The use of internal audit by Australian companies. *Managerial Auditing Journal*, 21(1), 81-101.
- Kassie, W. D. (2021). Bank Specific Determinants of Internal Audit Effectiveness: Evidence from Private Banks in Ethiopia. *European Journal of Business and Management*.
- Ta, T., & ThanhNgaDoan. (2022). Factors Affecting Internal Audit Effectiveness: Empirical Evidence from Vietnam. *International journal of financial studies*.



Track 02

Banking, Microfinance, and Entrepreneurship

THE IMPACT OF FINANCIAL REPORTING PRACTICES ON SUCCESSFULNESS OF THE SMALL AND MEDIUM SIZED ENTERPRISES: EVIDENCE FROM DAMBULLA AREA

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ABSTRACT

The purpose of this research study to investigate the impact of financial reporting practices on the successfulness of the Small and Medium Sized Enterprises (SMEs) in Sri Lanka, evidence from Dambulla area. By considering SMEs as a unit of analysis, researchers founded 409 registered SMEs. The target sample comprised of 198 SMEs and 188 SMEs have been responded. The finding shows that there is positive significant impact on the successfulness of the SMEs by financial reporting practices. This research study gives a comprehensive analysis by emphasizing the gathered data on significance of financial reporting practices on the success of SMEs.

Introduction

Small and Medium Sized Enterprises play a main role in economic development of developing countries. It contributed to the Today's economy as engines of growth, innovation and employment. Pandya (2012) also said that in developing countries, SMEs play a vital role contributing to improvement of income distribution, employment creation, and poverty reduction likewise. Entrepreneurial development, industrial growth and rural revitalization are also included it. agriculture, fishing, manufacturing, construction, wholesale and retail trade, repair service, transportation, communication, rental and business service, health care, education and various other service industries are sectors covered by SMEs (Jeewanthi & Bhavan, 2020). However, according to the Sandamali *et al.* (2021), these industry faces the many challenges due to the poor record keeping, improper accounting technique general lack of attention to the needs of SMEs and inefficient usage of financial data for make decision. These problems limit their capabilities to secure funding, effective decision making and there is an impact for their future survival because of that. To address these challenges SMEs can pay their attention to the financial reporting practices (Jagoda *et al.*, 2018.). There is not much researchers about the implementation of financial reporting practices especially in the developing countries like Sri Lanka. Therefore, this study aims to examine the impact of financial reporting practices on the successfulness of the SMEs to support these parties getting idea about that and provide valuable insights regarding financial reporting practices in SMEs, offering practical recommendation for businesses and policymakers. .

There is a research objective to examine the impact of financial reporting practices on the successfulness of the SMEs with a assessing the impact of financial reporting preparation and analysis and Accounting Information system on the successfulness of the SMEs. This study also aims to identify the relationship between financial reporting practices and the successfulness of the SMEs and identify the financial reporting practices dimensions can be found in Sri Lankan SMEs.

Methodology

The approach using in this study involves quantitative research method, aimed to evaluate how financial reporting practices impact on the success of the SMEs. This research study follows the positivism approach as research philosophy because it involves measuring objective impact of financial reporting practices on the successfulness of the SMEs using quantifiable data. This research study is based on the existing theory and under that they develop the research hypothesis to test the used empirical evidence to accept or reject. It says that in this study researchers follow the deductive approach to test the impact of financial reporting practices on the success of the SMEs. Data on the financial reporting practices and business performance was gathered from 188 SMEs in the Dambulla area through survey method by sharing questionnaire for the SMEs. This study is structured around the conceptual framework which integrates key dimension of financial reporting practices on the successfulness of the SMEs. Here include financial reporting preparation and analysis and Accounting Information System as the independent variable and successfulness of the SMEs as dependent variable.

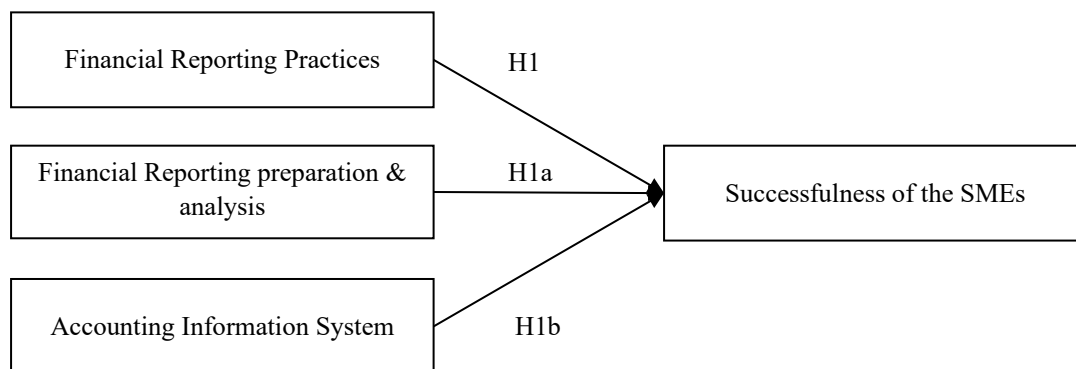


Figure 01: Conceptual Framework

Source: Compiled by authors

The researchers seek to answer the question which dimension of financial reporting practices can be found in Sri Lankan SMEs, the impact of financial reporting practices on the successfulness of the SMEs, relationship between financial reporting practices and the success of SMEs and impact of financial reporting preparation and analysis and Accounting Information System on the successfulness of the SMEs in Sri Lanka.

In this research study, researchers have used descriptive statistics, regression analysis and correlation analysis to examine the gathered data about the impact of financial reporting practices on the successfulness of the SMEs from Dambulla area answering for the research question mentioned above.

Findings

Under the demographic and business characteristics, it reflects the majority of SMEs have employees less than 10 presenting 81.9% of the sample. The small number of SMEs (12.8%) had between 11-50 employees and 5.3% employed more than 50 people. Based on the definition of the National policy framework for SME (2016) this reflects the majority of SMEs are micro SMEs in this research study.

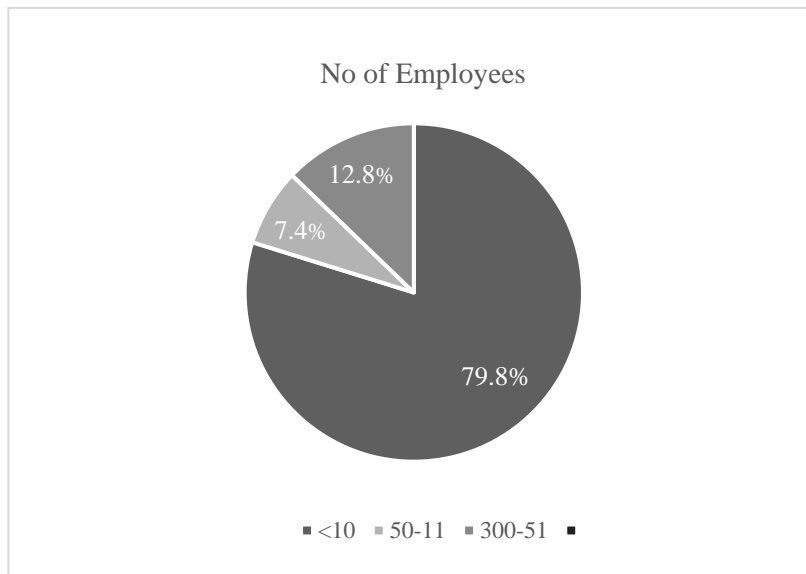


Figure 02: No of Employees

Source: Compiled by authors based on survey data

According to the regression result presented in Table 01 shows that there is statistically significant impact on the successfulness of the SMEs from both financial reporting preparation and analysis and accounting information system due to the significance values are less than the 0.05 level. As well as, coefficient value also gets positive values for each variable and it indicate that there is a positive relationship between financial reporting practices and the successfulness of the SMEs in the Dambulla area. The model summary reveals that R² value is 0.777 indicating 77.7% of the variation on the SMEs success can be attributed to financial reporting and Accounting Information System. It says that both independent variables are highly influential in deciding SMEs success. The ANOVA test shows the probability value of 0.000 which is less than 0.05 confirming that the overall regression model is statistically significant.

Table 01: Regression Analysis

		Successfulness of the SMEs			
		Coefficients	Std. Error	t	Sig.
(Constant)		1.51314	0.07456	20.2934	0.0000
FR		0.20173	0.09808	2.0568	0.0411
AIS		0.49528	0.10074	4.9165	0.0000
R ²	0.777				
Adjusted R ²	0.775				
F Value	322.3006				0.000

Source: Compiled by authors based on survey data

According to that, the results of research study show the positive and significant impact on the successfulness of the SMEs by financial reporting practices in Dambulla area. There are several dimensions to identify related to the financial reporting practices of the SMEs. It includes financial reporting preparation and analysis. The preparation of financial statements including income statement, balance sheet and cash flow statement and analysis of this financial statement are there. As well as use of Accounting Information System also affect to the success of SMEs as financial reporting practice. When researchers consider the financial reporting

preparation and analysis it enhances the success of SMEs by maintaining accurate financial report attracting investors and institution who provides fund facilities like banks. The finding of this study supports the hypothesis which says the significant impact of financial reporting practices on the successfulness of the SMEs. As well as the usage of accounting information system. Another important dimension is Accounting information system. It is playing major role in recording transaction and maintaining financial reports that useful to make effective decision. There is also highly significant impact on the successfulness of the SMEs. SMEs which use financial reporting preparation and analysis and Accounting Information System are in better position to monitor financial performance, handling cost of the business and achieve financial stability which directly affect to the success of the SMEs.

Conclusion

This study highlights financial reporting practices play a major role in determining the success of the SMEs. There is positive significant impact on the successfulness of the SMEs by financial reporting practices. By adopting financial reporting practices, it is most important to make effective decision and enhance operational efficiency of the SMEs.

There is some challenges face by SMEs in Sri Lanka like lack of financial ability to purchase accounting software, limited access to loans, lack of accounting knowledge when adopting for this. To face these challenges there some recommendation, suggest by the researchers in this study. When consider the limited financial resources of the SMEs government agencies should pay their attention regarding that issue and try to implement some programs considering grants, loans and tax exemption. It will reduce the financial burden of the SMEs and receiving opportunities to follow the financial reporting practices. By providing financial assistant for the SMEs, it will be most important to improve the long-term sustainability of the business as well as country. As well as when consider the financial knowledge of the SMEs was in low level and government should invest for provide business and accounting skills by conducting training and management support for the SME owners. When consider the most of the SMEs, there is a lack of knowledge to control the accounting system and make decision from that side to conduct the business operation. Therefore, by conducting the entrepreneurship skills development programs, it could be most important to improve their financial reporting skills and record keeping as well as decision making process. Therefore, by conducting the entrepreneurship skills development programs, it could be most important to improve their financial reporting skills and record keeping as well as decision making process. With that business owners and managers will be informed about the preparing and handling technical aspect of accounting ensuring the most accurate and timely financial information is available to decision making. It will be most supportive to businessmen to focus their target while maintaining effective control over the accounting activities.

When researchers consider the limitation of this research study geographically limited to the SMEs in Dambulla area, which may restrict the generalizability of the findings of this research to other regions with different socio economic and cultural context. By conducting comparative studies across different areas, financial reporting practices can vary based on regulatory, economic and cultural environment of an area. These cross regional comparisons could provide wider perspective on impact of location on financial reporting practices and business

performance. Finally, this study based on the survey method which has its limitation as it collected information at a single point in time. This may not fully represent the nature of the performance due to financial reporting practices. Future research could benefit from doing as qualitative research such as case studies or longitudinal studies to present deeper understanding about this.

References

- Jagoda, K. J. M. M., Madadeniya, A. G. M. N., Ravinath, K. A. P., Ranaweera, W. P. M., & Pushpakumara, H. P. I. P. (n.d.). Relationship between financial reporting and analysis practices and financial performance of small and medium enterprises (SMEs) in Sri Lanka.
- Jeewanthi, N. K. M., & Bhavan, T. (2020). The determinants of financial performance of small and medium scale enterprises in Badulla district. *Journal of Management*, 15(1).
- National Policy Framework for Small and Medium Enterprises (SMEs) Development, Action Plan, Ministry of Industry and Commerce in Sri Lanka, 2016.
- Pandya, V. M. (2012). Comparative analysis of development of SMEs in developed and developing countries. *500*(September), 426–433.
- Sandamali, E. S., Ranasinghe, H. G. S., Wikramanayake, S. D. R., Dilrukshi, T. N. D., Fernando, H. S. A. D., Guneratne, P. L. B. P. B., Fernando, D. T. M., Prathibha, D. H. S., Geethanjalee, G. G. H., & Abeywickrama, A. G. P. S. (2021). The challenges faced by selected sri lankan companies in the application of ifrss for small and medium enterprises (SMEs): A case study of Hirdaramani group.

THE IMPACT OF FINANCIAL REPORTING PRACTICES ON PERFORMANCE OF MICRO AND SMALL SECTOR ENTERPRISES (MSEs) IN COLOMBO DISTRICT, SRI LANKA

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ABSTRACT

This study explores the impact of financial reporting practices on the performance of Micro and Small Enterprises (MSEs) in the Colombo District, Sri Lanka. MSEs play a vital role in the local economy, yet many struggle with financial management, which can hinder their growth and sustainability. Using a quantitative approach, data were gathered from 377 MSE owners and managers through self-administered questionnaires. The research examines critical variables including the preparation of financial reports, adherence to financial reporting practices, the analysis of financial data, and the use of Accounting Information Systems (AIS). Descriptive statistics reveal a high level of compliance with financial reporting practices among MSEs, which positively correlates with business performance. Correlation analysis shows a strong, positive relationship between financial reporting and the success of MSEs. Regression analysis further confirms that the preparation and adherence to financial reporting significantly influence MSE performance. The findings suggest that enhancing financial reporting practices, including the use of AIS, could significantly improve the financial management and overall success of these businesses. Therefore, the study recommends increased training and education in financial reporting for MSE owners to strengthen their financial practices and ensure better performance outcomes.

Introduction

Micro and Small Enterprises (MSEs) are crucial to economic development globally. In Sri Lanka, particularly in the Colombo District, MSEs face several challenges, including inadequate financial reporting practices that affect their performance and sustainability. This study investigates how these reporting practices influence the overall performance of MSEs, focusing on how financial records are prepared, analyzed, and integrated with Accounting Information Systems (AIS). Specifically, the study seeks to,

1. To identifying the financial reporting practices that have an impact on the performance of MSEs in Sri Lanka's Colombo district.
2. To determine the relationship between financial reporting preparation and the performance of MSEs in the Colombo district.
3. To examine the impact of financial reporting analysis on the performance of micro and small businesses in the Colombo district.
4. To examine the relationship between the use of an Accounting Information System (AIS) and the performance of MSEs in the Colombo district.

Materials and methods

In this research, three main financial reporting practices were identified based on the previous literature. As a result, the independent variables which are effect on performance of MSEs have been taken into account in order to develop a conceptual framework for this study. Three dimensions under the financial reporting practices are identified as the independent variables of this study. There is financial reporting preparation, financial reporting analysis and Accounting Information System. The dependent variable is performance of MSEs.

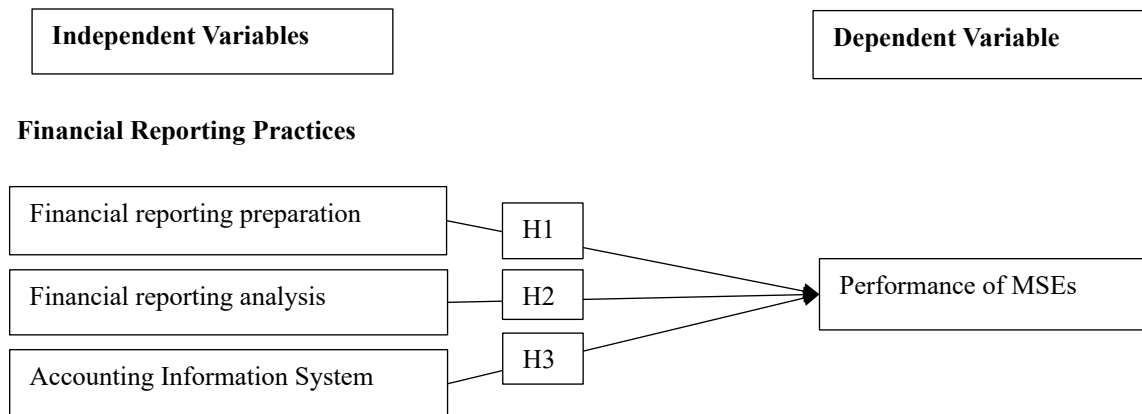


Figure 01: Conceptual Framework

Results and discussion

This study attempted to explore the financial reporting practices that impact the performance of micro and small enterprises operating in Colombo District, Sri Lanka. Demographic analysis, correlation analysis, and regression analysis provide insight into how various types of financial practices might affect business performance. This discussion will outline each objective separately and discuss how our findings relate to other studies that have been undertaken in the subject area.

Table 01: Correlation between MSEs' Performance and Financial Reporting Practices

		MSEs Performance	Financial Reporting Practices
MSEs Performance	Pearson Correlation	1	.885**
	Sig. (2-tailed)		.000
	N	377	377
Financial Reporting Practices	Pearson Correlation	.885**	1
	Sig. (2-tailed)	.000	
	N	377	377

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Constructed by Authors

The results indicate a statistically significant positive Pearson correlation between MSEs' performance and their financial reporting practices ($p = .000$, $N = 377$). The significance level of .000 ($p < 0.01$) confirms that the observed relationship is unlikely due to random chance, supporting the hypothesis that better financial reporting practices are associated with improved MSE performance. This strong positive correlation suggests that MSEs that adhere to rigorous

financial reporting standards may experience enhanced operational and financial outcomes, potentially due to improved transparency, accountability, and decision-making processes.

Table 02: Correlation between MSEs' Performance and Independent Variables

		BPF	AIS	FRA	FRP
MSEs	Pearson Correlation	1	.724**	.848**	.883**
Performance	Sig. (2-tailed)		.000	.000	.000
	N	377	377	377	377

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Constructed by Authors

Where: BPF = MSEs Performance, AIS = Accounting Information System, FRA = Financial Reporting Analysis, and FRP = Financial Reporting Preparation

The correlation coefficients reveal strong and statistically significant positive relationships between MSEs' performance and three financial practices: Accounting Information System ($r = .724^{**}$), Financial Reporting Analysis ($r = .848^{**}$), and Financial Reporting Preparation ($r = .883^{**}$), with a sample size of 377 ($p < 0.01$). The highest correlation is with Financial Reporting Preparation, indicating it has the strongest association with MSEs' performance, suggesting that thorough and accurate preparation of financial reports contributes significantly to better performance. Financial Reporting Analysis also demonstrates a robust relationship, highlighting the importance of analyzing financial data for strategic decision-making. Finally, the positive correlation with Accounting Information Systems underscores the critical role of adopting effective systems for managing and processing financial information to enhance MSE performance. These findings suggest that comprehensive financial practices are vital for MSE success.

Table 03: Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.595	.102		5.810	.000
Financial Reporting Practices	.473	.083	.497	5.723	.000
Financial Reporting Preparation	.439	.084	.455	5.243	.000
Financial Reporting Analysis	-.009	.092	-.009	-.103	.918
Accounting Information System	-.045	.048	-.046	-.942	.347

a. Dependent Variable: Performance of Micro and Small Enterprises

Source: Constructed by Authors

The model summary indicates a strong relationship between the predictors (Accounting Information System, Financial Reporting Preparation, Financial Reporting Practices, and Financial Reporting Analysis) and MSE performance, as evidenced by an R-value of 0.895. This suggests that the predictors collectively have a strong correlation with the dependent variable. The R Square value of 0.800 indicates that 80% of the variance in MSE performance can be explained by the model, showcasing its high explanatory power.

The regression analysis highlights the factors influencing MSE performance, with Financial Reporting Practices and Financial Reporting Preparation emerging as significant predictors.

Financial Reporting Practices ($B = 0.473$, $Beta = 0.497$, $p = 0.000$) have the strongest impact, emphasizing the importance of robust reporting standards in driving performance. Similarly, Financial Reporting Preparation ($B = 0.439$, $Beta = 0.455$, $p = 0.000$) positively and significantly contributes, underscoring the value of accurate and well-prepared financial reports. Conversely, Financial Reporting Analysis ($B = -0.009$, $p = 0.918$) and Accounting Information System ($B = -0.045$, $p = 0.347$) show non-significant relationships, suggesting minimal direct influence on MSE performance in this model. Overall, the findings demonstrate that effective financial reporting practices and preparation are critical drivers of MSE success.

Conclusion

The findings highlight the crucial role of financial practices in enhancing the performance of MSEs. A strong relationship exists between effective financial reporting and improved business outcomes, emphasizing the value of transparency, accountability, and informed decision-making. Among the financial practices, the preparation of financial reports stands out as the most influential, underscoring the importance of accuracy and thoroughness in reporting for driving organizational success. Financial analysis and the adoption of accounting information systems also contribute positively, showcasing their relevance in supporting strategic and operational efficiencies.

The analysis further identifies financial reporting practices and preparation as the most significant factors influencing MSE performance, while other aspects like financial analysis and accounting systems demonstrate less direct impact. The results confirm the importance of adopting robust financial management practices to enhance overall performance. Collectively, the evidence suggests that MSEs benefit greatly from implementing structured and reliable financial processes, which play a critical role in fostering sustainable growth and competitiveness in the marketplace.

References

- Couwenberg, O. (2015). *Financial Distress*. Wiley Encyclopedia of Management, 27(1990), 1–3. <https://doi.org/10.1002/9781118785317.weom040039>
- Department of Census and Statistics (2023). Impact of Economic Crisis on MSEMES. In *Ministry of Finance, Economic Stabilization & National Policies Sri Lanka, I*. <https://doi.org/10.21125/iceri.2022.0985>
- Hillary, O. K. (2018). Effects of Financial Distress on Financial Performance of Manufacturing. *IJARKE Business & Management Journal*. 1(1), 211–220.
- Ministry of Industry and Commerce. (2015). National Policy Framework for Small and Medium (SME) Development. *Ministry of Industry and Commerce*, 1–13. www.industry.gov.lk/web/images/pdf/framew_eng.pdf
- Muriuki, A., Abdullah, D., & Ali, I. (2018). Determinants of Financial Performance in Small and Medium Enterprises in Mombasa County Kenya. *International Journal of Management and Commerce Innovations*, 6(1), 82–90. www.researchpublish.com
- Rubab, S. T., Hanif, N., Bukhari, S. A. F., & Kamran, M. M. (2022). The Impact of Financial Distress on Financial Performance of Manufacturing firms listed at Pakistan Stock

Exchange. *Bulletin of Business and Economics*, 11(2), 382–391.

Shaukat, A., & Affandi, H. (2015). Impact of financial distress on financial performance -a study related to Pakistani corporate sector. *International Journal of Current Research*, 7(2012), 12991–12996.

Sporta, F. O. (2018). *Effect of financial distress factors on performance of commercial banks in Kenya* [University of Agriculture and Technology]. <http://ir.jkuat.ac.ke/handle/123456789/4617>

FINANCIAL LITERACY AS A MODERATOR IN THE RELATIONSHIP BETWEEN ACCESS TO FINANCE AND SME GROWTH

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ABSTRACT

The main objective of the research is to identify the relationship between access to finance and firm's productivity and growth of SMEs in Sri Lanka, financial literacy as a moderator. The study employs a structured questionnaire to obtain data. This study focused on small and medium enterprises in Kegalle District. According to Morgan Table, 370 enterprises are purposively selected to the sample and 120 enterprises were responded. The findings of the study indicates that there is a significant positive impact of Access to finance to Firm's Growth and Access to finance and Firm's productivity. Moreover, the R² values for both firm's growth and firm's productivity demonstrate that the model has substantial and moderate predictive accuracy, respectively.

Introduction

Small and Medium Enterprises (SMEs) play a vital role in the economy of Sri Lanka. Sri Lanka's economy is predominantly a Small and Medium Enterprise economy where over 50 % of GDP is produced by the SME sector. SMEs are present in all sub-sectors of the economy, with a large concentration in manufacturing, and a further concentration of the small ones with 5 – 10 workers (Fairoz, et al., 2010). Access to finance is a major concern for small and medium-scale enterprises. Many studies have identified that the small and medium enterprises have many constraints in access to finance more than the large-scale organizations. Size of the firm is a predominant factor in access to finance. But it is evident that despite the difficulties proper financing is essential to firm sustainability and growth.

For SMEs are constrained by a lack of bank and business support resources that should include the granting of direct and indirect financial credits. They can be competitive and promote start-ups by providing them with resources to strengthen their operational bases, such as subsidies and training programs (Amadasun, 2020). For that, management and consulting services related to various sectors of the enterprise should be provided. Moreover, reliance on informal sources of finance, lacking formal security and strong credit history, is prevalent among SMEs in Sri Lanka. High interest rates and aggressive recovery methods among such sources contribute to aggravating the debt burden. Many small and medium entrepreneurs, especially women, are trapped in a harmful cycle of debt. This is reflected in the pattern of financing; smaller firms have a low percentage from their investment and working capital with formal financial sources compared to larger well-established firms.

Despite these issues SMEs need to gain maximum productivity from the limited financing. Increasing productivity in a firm context means producing a large quantity of output from the same amount of input. This is an important concept, and many firms are trying to find ways to maximize their productivity and thus save input.

This research paper deals with relationship between access to finance and firm's productivity in small and medium enterprises in Sri Lanka over few years. Most of the researchers found out there is a positive relationship between the access to finance and the firm's productivity measured in terms of Total Factor Productivity. The firms that have access to finance are more likely to innovate than those who do not have access to finance. Firms who also invest in R & D are more likely to innovate. Using improved products or process have significant positive impact on firm's growth and similarly firms with better access to finance exhibit better growth. SME development has become more important throughout time as the primary source of revenue generation, employment creation, poverty reduction, and regional development. As a result, this research's main objective is to examine how the SME sector in Sri Lanka's Kegalle District has grown entrepreneurially. However, evidence has been found that there are many failures of SMEs in Sri Lanka and the Central Bank in Sri Lanka (1998) stated that there is inadequate capital, inadequate institutional credit facilities and inattentiveness of small businesses are the main problems that faced by the Sri Lankan SME sector. (Rathnasiri, 2014).

SME sector face some problems such as in accessing finance, innovations, technology training and markets. This sector has not only problems, but also opportunities that affect the firm's productivity and growth. The literature recognized that many SMEs face high constraints in accessing the needed finance, which as a result, contributes to the high failure rate of such enterprises. As well as literature search indicated that there has been less focus on the critical factors that constrain most SMEs' access to finance, and which are seen to influence their capacity to attain competitive growth (Amadasun & Mutezo, 2022). By examining several research articles, it can be observed that there were few articles about the relationship between access to finance and firm productivity and growth in SMEs. Most of such articles were written based on the multinational big corporations. Due to the lack of articles about the relationship between access to finance, especially in the Kegalle area, and the firm's productivity, this research has been done to detect the said relationship.

Methodology

The study used quantitative exploratory approaches in a descriptive survey methodology. The data were collected using a self-administered questionnaire developed from the standard measure which was validated by previous researchers and the measure. For this study data was collected within a particular period of time. Therefore, this is a cross-sectional study. Therefore, this study follows the deductive research approach, and the survey has been conducted among small and medium size enterprises in Kegalle District. According to Morgan Table, 370 enterprises are purposively selected to the sample and 120 enterprises were responded.

Research Questions

According to the study objectives, this will try to answer the following questions.

1. What is the impact of access to finance on a firm's productivity?
2. What is the impact of access to finance on a firm's growth?
3. What is the moderating effect of financial literacy on the relationship between access to finance and productivity of SMEs?

4. What is the moderating effect of financial literacy on the relationship between access to finance and growth of SMEs?

Conceptual Framework

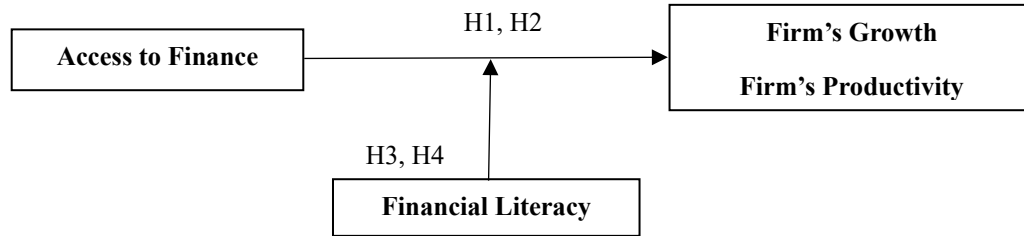


Figure 01: Conceptual Framework

Source: Constructed by Authors

Hypotheses Development

Based on the previous studies in the existing literature (Kalaipriya, 2018), the following hypotheses were developed relevant to the research question and objective.

H1: There is an impact of access to finance on growth of SMEs.

H2: There is an impact of access to finance on productivity of SMEs.

H3: Financial literacy moderates the relationship between accesses to finance on growth of SMEs.

H4: Financial literacy moderates the relationship between accesses to finance on productivity of SMEs.

Findings

Table 01: Path Coefficients Analysis

Path	Coefficient	T Statistics	P Values
AF -> FG	0.612	7.648	0.000
AF -> FP	0.704	5.432	0.001

Source: Constructed by Authors

According to Table 01, a strong positive relationship between both Access to finance and Firm's Growth and Access to finance and Firm's productivity.

According to R Squared value, firm's growth contributes to explaining the variance in the dependent variable by 84.2%. R² values higher than 0.75 are deemed more substantive which reflects the strength of these variable in the predictive model (Hair, et al., 2017).

The R² values for both firm's growth and firm's productivity demonstrate that the model has substantial and moderate predictive accuracy, respectively.

According to Table 02, financial literacy can be seen to positively influence relationship between access to finance and firm's growth (Kalaipriya, 2018). This influence can also be seen in this study. Similarly, financial literacy affects positively for relationship between access to finance and firm's productivity.

Table 02: Moderating Effect Analysis

Path	Coefficient	T Statistics	P Values
FL x AF -> FG	0.166	3.585	0.000
FL x AF -> FP	0.170	2.855	0.004

Source: Constructed by Authors

The study confirmed a strong positive relationship between access to finance and entrepreneurial growth (Kalaipriya, 2018) and productivity (Rahaman, 2011). Financial literacy significantly moderated these relationships, enhancing growth (Kalaipriya, 2018) and productivity (Adomako & Danso, 2014). SMEs with better financial access and literacy effectively leveraged resources for operational expansion and efficiency, aligning with prior research findings. These results underscore the critical role of financial literacy in optimizing access to finance for SME growth and productivity.

Conclusion

The main purpose of this research study is to examine the relationship between access to finance and the productivity and growth of SMEs in Sri Lanka, specifically focusing on financial literacy as a moderating factor. The findings of the study indicates that there is a significant positive impact of Access to finance to Firm’s Growth and Access to finance and Firm's productivity. Moreover, the R² values for both firm’s growth and firm’s productivity demonstrate that the model has substantial and moderate predictive accuracy, respectively. This study is critical for each stakeholder group attached to SMEs such as owners, management, customers, government and public at large. Because access to finance is a major factor for the firm’s productivity and eventually this will lead to greater profitability and long-term survival of the firm. By illustrating how financial access affects the performance of small and medium-sized firms, which are essential to the economic growth of the country, it helps in understanding the economic environment. Additionally, this type of study can provide insight into the challenges that SMEs face in obtaining financing and how solving these challenges could improve their growth and productivity. Policymakers, financial institutions, and business owners can use this information to help create strategies that will effectively support to SMEs.

References

- Amadasun, D. O. E., & Mutezo, A. T. (2022). Influence of access to finance on the competitive growth of SMEs in Lesotho. *Journal of Innovation and Entrepreneurship*, 11(1). <https://doi.org/10.1186/s13731-022-00244-1>
- Amadasun, S. (2020). Social work and COVID-19 pandemic: An action call. *International Social Work*, 63(6), 753–756. <https://doi.org/10.1177/0020872820959357>
- Fairoz, F. M., Hirobumi, T., & Tanaka, Y. (2010). Entrepreneurial orientation and business performance of small and medium scale enterprises of Hambantota District Sri Lanka. *Asian Social Science*, 6(3). <https://doi.org/10.5539/ass.v6n3p34>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on Partial Least squares Structural Equation Modeling (PLS-SEM)*. Sage.

- Hmdn, S., & C, P. (2020). The effect of financial management practices on performance of SMEs in Sri Lanka. *International Journal of Scientific Research and Management (IJSRM)*, 8(05), 1789–1803. <https://doi.org/10.18535/ijsrcm/v8i05.em05>
- Kalaieesan, N. K. (2021). The relationship between access to finance and growth of SMEs in the northern province of Sri Lanka: Financial Literacy as a moderator. *Management Studies*, 9(3). <https://doi.org/10.17265/2328-2185/2021.03.004>
- Rahaman, M. M. (2010). Access to financing and firm growth. *Journal of Banking & Finance*, 35(3), 709–723. <https://doi.org/10.1016/j.jbankfin.2010.09.005>
- U.A.H.A. Rathnasiri U.A.H.A. Rathnasiri. (2014). Financial reporting practices of small and medium enterprises (smes) in Sri Lanka, *South East Asia Journal of Contemporary Business, Economics and Law*, 4(1), 9.

FACTORS AFFECTING ACCESS TO FORMAL FINANCE BY SMALL AND MEDIUM ENTERPRISES: SPECIAL REFERENCE TO SMES IN NORTH WESTERN PROVINCE IN SRI LANKA

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ABSTRACT

The paper studies the factors determining access to formal finance by Small and Medium Enterprises (SMEs) in the North Western Province of Sri Lanka. The essential determinants are managerial experience, financial literacy, business plans, and financial management regulations, while external factors like economic conditions and financial institutions' policies are also considered. Data from 200 SMEs (168 valid responses) were collected through a questionnaire. Statistical tests like regression and correlation analysis illustrated significant relationships between internal variables and access to finance. The financing opportunities can be enhanced with well-articulated business plans and adherence to regulatory requirements and financial institution-driven measures like target SME lending schemes. The study contributes by filling a research gap specific to SME financing in Sri Lanka's North Western Province. It offers detailed actionable recommendations for stakeholders to foster SME development.

Introduction

SMEs are very important for the economic development of developing countries like Sri Lanka. Though SMEs highly contribute to job creation and innovation, and GDP growth, they face numerous challenges in access to formal finance, particularly in rural areas like North Western Province in Sri Lanka. In addition to high interest rates, stringent collateral requirements and procedural complexities, factors such as economic stability and lending criteria used by financial institutions also play a vital role. Despite perceived contribution to the economy, SMEs still face significant obstacles in meeting their financial needs arising from perceived risks by financial institutions, lack of proper financial records, and collateral (Cull, 2014). This study investigates those factors affecting access to formal finance by SMEs, focusing on conditions in Sri Lanka, especially those in the North Western Province. The current study attempts to address a gap that has long existed in the literature since research into SME finance has rarely ever focused on this particular region.

High interest rates, stringent collateral requirements, complicated procedures, lack of proper financial literacy, and poor credit reporting systems are some of the important reasons for low access to formal finance by SMEs in Sri Lanka's North-Western Province. The financial literacy of SME owners also very important factor which determines the performance (Dissanayake HMML, 2021). Formal and informal SMEs face high barriers, with many resorting to unregulated forms of informal financing, such as borrowing from family members or money lenders, due to limited access to formal financial facilities. These are problems that are in line with global trends but are particularly sharp in developing economies. Resolving these structural barriers is key to fostering SME growth and sustainability, hence the need for

inclusive financial policies to bridge SMEs with formal financial institutions and support sustainable business development. This, in turn, would enhance not only access to formal finance but also contribute to the growth of the SMEs and, subsequently, more significantly to the economy as a whole. This is in support of the multi-faceted approach where both internal factors, comprising management expertise and financial practices, together with support from outside via government and financial institution policies, play their role in enhancing the status of financial inclusion for SMEs in Sri Lanka.

A critical review of existing literature shows that these factors are significant in determining the SMEs' ability to access credit from formal institutions (Gamlath, 2020). However, very few empirical pieces of evidence report on Sri Lanka, particularly for the North Western Province, which this research tries to provide. The research gap focuses on SMEs in Sri Lanka's North-West Province, emphasizing internal factors for access to finance, unlike prior studies in other regions or external factors.

Methodology

According to the data of the dissemination unit of the Department of Census and Statistics (DCS), there are 2588 SMEs in the North Western Province (of which the total number of SMEs operating in two areas of Kurunegala and Puttalam). The authors conducted a survey of 200 SMEs (168 valid responses) in two districts in North Western Province based on convenience sampling. While convenience sampling might introduce bias, this approach was selected due to time and resource constraints. Potential biases are acknowledged as limitations, and further studies should address these. The Morgan's chart indicates that 335 is the suitable sample size. However, due to the limited time horizon & resources for this research, the researcher used 200 sample sizes (Pandula, 2011). However, the survey results of 168 respondents. Convenience sampling was used to select enterprises operating in various sectors. This falls within the sample size selected from Morgan's table for capturing as many experiences of SMEs as possible.

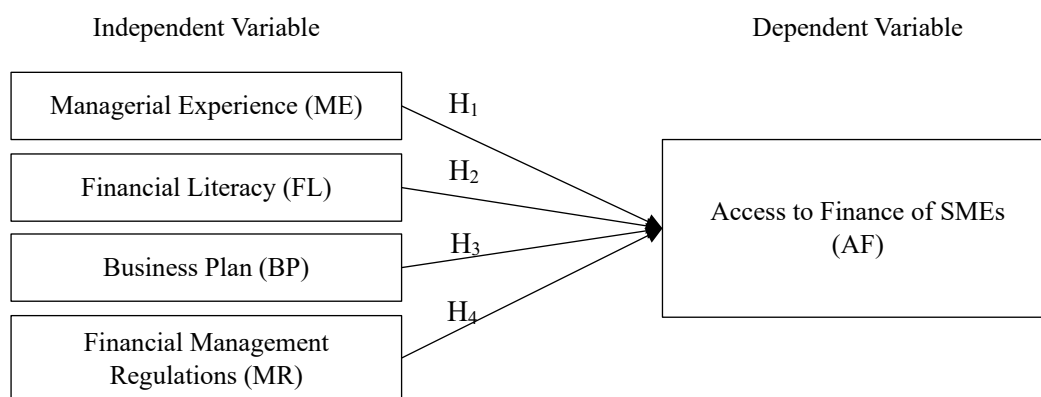


Figure 01: Conceptual Framework

Source: Constructed by Authors

The independent variables considered by the researcher were managerial experience, financial literacy, business planning, and observation of financial regulations. These variables were operationalized using a Likert scale to measure the extent to which they influence access to

formal finance. Using SPSS software, descriptive statistics, correlation analysis, and regression analysis were used in testing these relationships for data analysis.

Findings

The findings underscore a significant relationship between SME financial access and internal factors.

SMEs with experienced managers and higher financial literacy exhibit a greater likelihood of accessing formal finance. Additionally, regulatory compliance and external support measures, such as tailored financial literacy programs, emerged as critical enablers. The demographic analysis shows a balanced gender composition, with 55% male and 45% female respondents, and a significant number of participants falling in the age category of 21-40 years. Regarding educational qualifications, the majority of the respondents have completed G.C.E. A/L. Descriptive statistics show that the respondents agree on variables such as managerial experience and financial literacy, which show moderate dispersion in data. Reliability analysis reveals acceptable internal consistency, with Cronbach's alpha values ranging from 0.63 to 0.73. Correlation analysis indicates positive relationships between independent variables (e.g., managerial experience, business plans) and SMEs' access to formal finance.

These results were obtained from the survey, showing that SMEs having experienced managers and higher financial literacy have a greater probability of obtaining formal finance. Managerial experience, in particular, significantly raised the probability of obtaining loans since it enhanced perceived credibility by the financial institutions. Similarly, access to finance was strongly related to financial literacy: better understanding of financial products and management practices on the part of SMEs goes hand in glove with successes in loan applications. Business planning is an important determinant, too: well-structured business plans may raise the chances of getting finance. SMEs that clearly outlined their financial needs, market position, and growth potential were more attractive to lenders. Finally, adherence to financial management regulations was found to further enhance access to finance, since compliance with legal and regulatory frameworks reduces perceived risk for lenders.

Table 01: Hypothesis testing by Regression model coefficient

Variable	B	t -Value	Sig.
1 (Constant)	.072	3.369	.013
ME	.306	2.811	.006
FL	.358	3.104	.003
B	.132	1.347	.016
MR	.502	4.006	.000

a. Dependent Variable: FA

Source: Constructed by Authors

Independent variables of Managerial experience, financial literacy, business plan, management regulations show “t-test” value as 3.369,2.811,3.104,1.347,4.006 with a significance of 0.013,0.006,0.003,0.016 and 0.000, which means this variable is statistically significant at the 0.05 level (p value < 0.05). Coefficient value between Managerial experience, financial literacy, business plan, management regulations and Access to formal finance 0.292, 0.254, 0.116 and 0.398, which means a positive relationship between the two variables at a 5%

significant level. ($P = 0.000 > 0.05$). Hence, there is a positive and significant relationship between managerial experience, financial literacy, business plan, management regulations and Access to formal finance.

For this study, management regulations come out strongest, with the t-value of 4.006, and the p-value being below 0.001. This coincides with Bangladesh (Chowdhury, 2017) & Vietnam (Nguyen, 2019) findings, in Vietnam, where the managerial experience influences them the most, $\beta = 0.401$. The Vietnamese study contributes to these dimensions: education level and business size, in which higher education and larger firms enjoy better access, but were not explored in your scope. Both studies show the importance of structured financial practices, but the Vietnam study points more to external factors, such as regulatory support and collateral availability, than does your study. These suggestions emphasize common barriers but, simultaneously, point to regional specificity. This study uniquely highlights regional variations and suggests the need for broader comparative research within South Asia.

Conclusion

The regression analysis concludes that managerial experience, financial literacy, business planning, and compliance with financial regulations are the determining factors that bear upon the ability of SMEs within Sri Lanka's North Western Province to access formal finance. Managerial experience and financial literacy show strong positive correlations with improved access, emphasizing the importance of expertise and financial knowledge in meeting lenders' requirements. Comprehensive business plans and regulatory compliance further enhance credibility, making SMEs more attractive to financial institutions. Overall, the findings highlight the need for targeted support to address financial barriers and strengthen SMEs' capacity to access formal finance effectively. These findings have immediate implications for policymakers and financial institutions seeking to meet the challenge of SME financing in the region. Targeted support and addressing these barriers thus will constitute the development of SME growth and economic development in Sri Lanka. Further, there is a need for longitudinal studies in future research to explore exactly how these factors evolve over time and also further detailed information on the role of informal finance in supporting SMEs. Also, recommendations include developing financial literacy workshops, simplifying loan application processes, and implementing rural SME-targeted lending schemes. Financial institutions should create region-specific products to cater to SMEs' unique challenges. This would also extend the scope of research to other regions in Sri Lanka for a wider perspective of SME challenges in accessing formal finance. To improve the ability to access finance, SMEs need to ameliorate the factors affecting access to finance. The author recommends the following solutions.

References

- Atieno, R. (2009). *linkages, access to finance and the performance of small-scale enterprises in Kenya*.
- Chelimbo. (2021). A Study of the Factors Affecting Small and Medium Enterprises (SMEs) Access to Finance. A Case of Lusaka Based SMEs. *American Journal of Industrial and Business Management*.

- Chowdhury, M. (2017). Factor affecting access to finance of small and medium enterprises of Bangladesh.
- Dissanayake HMML, R. G. (2021). *The Impact of Financial Literacy on the Performance of Small and Medium Enterprises in Sri Lanka*. 8th Symposium of Accountancy & Finance Research, 177–180.
- Gamlath. (2020). The impact of finance reporting practices on performance. A study of small and medium enterprises in Rathnapura Distric Sri Lanka.
- Nguyen, H. T. (2019). Access to formal financing: Barriers for small and medium enterprises. *Journal of Small Business and Enterprise Development*, 26(3), 352-365.
- Pandula, G. (2011). An empirical investigation of . An empirical investigation of SMEs access to bank to finance.
- Tien, D. H. (2019). Factors affecting access to finance by SMEs in Vietnam.



Track 03

Behavioral Finance

THE IMPACT OF FINANCIAL LITERACY ON MONEY MANAGEMENT AMONG MANAGEMENT UNDERGRADUATES AT WAYAMBA UNIVERSITY OF SRI LANKA

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ABSTRACT

This study aims to examine, integrate, and critically discuss the impact of financial literacy on money management among management undergraduates at Wayamba University in Sri Lanka. The data was gathered using a structured questionnaire and evaluated using multiple regression analysis. Results showed moderate financial literacy among respondents, with a significant positive impact of financial behavior, financial knowledge, financial attitudes, and financial skills on money management. Financial attitude had the greatest impact on money management. Students with greater financial knowledge, financial attitude, financial skills, and financial behavior displayed more effective money management. This study helps to better understand the significance of financial literacy in molding money management abilities among Sri Lankan university students.

Introduction

In today's increasingly complex financial landscape, financial literacy is recognized as a vital skill for effective money management. According to Sarnovics et al. (2016), financial literacy encompasses learning how to handle income and expenses, as well as using conventional methods for money exchange and management. Financial Literacy plays a crucial role in managing personal finances and overall well-being. As a result, it has a considerable impact on people's ability to increase their wealth and income, as well as their lifestyle choices. Lack of financial understanding among university students can lead to excessive expenditure, financial issues, and poor academic performance.

According to Gudmunson et al. (2015), poor financial management can negatively impact academic achievement, mental health, and employment prospects. According to Rasoaisi and Kalebe (2015), tertiary education marks a significant transition for students from financial dependency to independence. Most students join this level without having obtained enough knowledge of money management. As a result of their poor financial decisions, they frequently experience a variety of problems, including emotional instability, which can contribute to poor academic performance. This study aims to explore the link between financial literacy and money management among university students.

Understanding this changing financial factor will be useful in designing policies and support programs to help people through the transition process. Thus, the study's findings will be valuable to a variety of stakeholders, including the government, financial institutions, and higher education institutions, in developing healthy money management habits among undergraduates.

Methodology

This study adopts a positivist philosophy, aligning with the quantitative research approach. The study follows a deductive approach. The survey of undergraduates at the Wayamba University of Sri Lanka enabled a comprehensive understanding of their financial literacy and money management. This study employs a mono method, focusing exclusively on quantitative data collection. As Saunders et al. (2019) pointed out; quantitative research often uses single data collection techniques, which in this case is a questionnaire.

Conceptual Framework

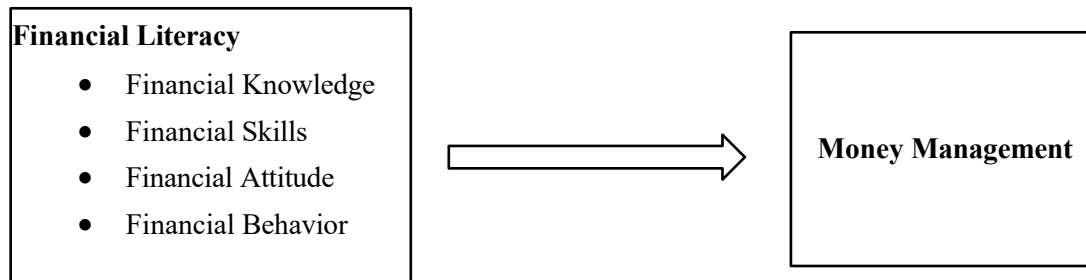


Figure 01: Conceptual Framework

Source: Constructed by Authors

Data Collection and Analysis

The population of this study consists of 2,335 management undergraduates from Wayamba University of Sri Lanka (2024). A sample size of 367 students was determined using Krejcie and Morgan's formula (1970) at a 95% confidence level. The researcher distributed structured questionnaires among management undergraduates to collect primary data from a randomly selected sample. Multiple regression analysis is used to assess the impact of the independent variables (financial knowledge, financial skills, financial attitudes, and financial behaviors) on the dependent variable (money management). The data was processed using SPSS, with descriptive statistics providing an initial understanding of the dataset, and regression analysis determining the significance of each factor's impact.

Findings

Demographic data analysis

As per the demographic data analysis, the majority of respondents were female (72.7%) and aged between 19 and 25 years. The majority were unmarried (97.9%), with a significant number (65.1%) coming from the Accounting & Finance department. The majority had a low monthly income, which reflected their student status, and 21.4% were in debt.

Descriptive analysis

This study on financial literacy shows that respondents generally rate themselves positively across all dimensions, with mean values ranging from 3.9021 to 4.1257. Financial Behavior has the highest mean (4.1257), followed by Financial Knowledge (3.9218) indicating higher self-assessments in behaviors and knowledge. Financial Skills, while having the lowest mean

also shows a higher mode (4.40), suggesting some respondents rate their skills very high. (3.9021).

Reliability and Validity Test

Cronbach's Alpha values were above 0.70, indicating reliable measures for all variables. Validity tests (KMO values) also confirmed that the instruments were acceptable, with significant Bartlett's test results across all variables. All variables were above 0.5 (ranging from 0.726 to 0.928), indicating adequate sampling adequacy.

Regression Analysis

According to the regression analysis, Financial Behavior, Financial Knowledge, Financial Attitudes, and Financial Skills together explain 64.2% of Money Management variability, according to the R-Square, an indicator of the model's overall fitness.

Table 01: Coefficient Table

Model	Unstandardized		Standardized	t	Sig.
	Coefficients				
	B	Std. Error			
(Constant)	.353	.160		2.208	.028
Financial Behavior	.245	.071	.212	3.461	.001
Financial Knowledge	.254	.060	.234	4.219	.000
Financial Attitudes	.300	.061	.307	4.924	.000
Financial Skills	.120	.048	.132	2.480	.014

Source: Constructed by Authors

The findings of the regression analysis indicate that the coefficient of financial behavior is 0.245 and the probability value is 0.001. It can be inferred that financial behavior has a statistically positive significant impact on money management. The coefficient of financial knowledge is 0.254 and the p value is 0.000 indicating the statistically positive significant impact on money management. These findings are supported by Mugo (2016). The coefficient of financial attitude is 0.300 and the p-value is 0.000 showing a statistically positive significant impact on money management. Further, the coefficient of financial skill is 0.120 and the p-value is 0.014 displaying a statistically positive significant impact on money management. These findings are supported by Kumari (2020). It can be inferred that financial behavior, financial knowledge, financial attitude, and financial skills all have a statistically positive significant impact on the money management of management undergraduates of the Wayamba University of Sri Lanka.

Conclusion

In conclusion, this study highlights the critical role of financial literacy in enhancing money management among management undergraduates at Wayamba University of Sri Lanka. The findings indicate a strong positive impact of the dimensions of financial literacy representing financial behavior, financial knowledge, financial attitudes, and financial skills, on effective money management. The regression analysis confirms that improvements in these financial literacy dimensions significantly impact money management outcomes, with financial attitudes demonstrating the strongest effect. This suggests that fostering positive financial attitudes,

along with enhancing financial knowledge, financial behavior, and financial skills, can lead to better financial management among management undergraduates of the Wayamba University of Sri Lanka. As a result, it is recommended that governments, financial organizations, and higher education institutions promote healthy money management among undergraduates by improving their financial knowledge, financial attitudes, financial abilities, and financial behavior.

This study is limited to the management undergraduates at Wayamba University of Sri Lanka. It is suggested to cover the nonmanagement undergraduates of Wayamba University in Sri Lanka and both management and nonmanagement undergraduates in state universities and private universities in Sri Lanka and worldwide in future studies. Given the current complexities of the financial landscape, these insights underscore the importance of integrating financial literacy education into academic curricula, ultimately contributing to the financial well-being of individuals and promoting economic stability.

References

- Gudmunson, C. G., Zuiker, V. S., Katras, M. J., & Sabri, M. F. (2015). Enhancing personal and family finance courses using case studies. *College Student Journal*, 49(3), 321-330.
- Krejcie, R.V., & Morgan, D.W., (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*.
- Kumari, D. A. T. (2020). The Impact of Financial Literacy on Investment Decisions: With Special Reference to Undergraduates in Western Province, Sri Lanka. *Asian Journal of Contemporary Education*, 4(2), 110-126.
- Mark NK Saunders, P. Lewis, & A. Thornhill. (2019). *Research methods for business students* (8th ed.). Pearson Education Limited.
- Mugo, E. (2016). Effect of financial literacy on investment decisions among savings and credit co-operative societies members in Nairobi (Doctoral dissertation, Kca University).
- Rasoaisi, L., & Kalebe, K. M. (2015). Determinants of financial literacy among the National University of Lesotho students. *Asian Economic and Financial Review*, 5(9), 1050.
- Sarnovics, A., Mavlutova, I., Peiseniece, L., & Berzina, S. (2016). Financial literacy enhancement as a task of financial education for Latvian population. In *Business Challenges in the Changing Economic Landscape-Vol. 2: Proceedings of the 14th Eurasia Business and Economics Society Conference* (pp. 365-389). Springer International Publishing.

FACTORS AFFECTING INVESTMENT DECISIONS ON ETF/EPF FUNDS AMONG RETIRED WORKERS: SPECIAL CASE OF SPECIFIC COMPANY LOCATED IN KANDY BOI PREMISES

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ABSTRACT

This study investigates factors influencing EPF and ETF investment decisions among retired MAS Apparel employees in BOI Kandy, Sri Lanka. With rising life expectancy and shifting demographics, financial literacy, pension knowledge, and risk tolerance are crucial for retirement planning. A quantitative survey of 171 retirees revealed a positive correlation between these factors and investment decisions, confirmed by factor analysis and reliability measures (Cronbach's Alpha > 0.70, KMO > 0.5). Findings suggest that pre-retirement financial education can improve investment confidence, addressing literature gaps on retirement planning among Sri Lankan BOI employees and supporting economic security in retirement.

Introduction

In particular, pension plans are very important at a time like this when the face of the world including Sri Lanka is changing demographically. With people living longer, worldwide, women as well as men are eyeing longer years in retirement. It is compulsory for employees to retire at the age of sixty and due to an absence of retirement awareness, knowledge, and fear Sri Lankans delay their financial planning towards retirement. (Washington, 2023) Since financial literacy about these aspects mainly provide education for financial and pension matters which go a long way in aiding in decisions as one invest for retirement. (Heenkenda, 2016)

This research proposed to identify how the financial literacy, pension knowledge and risk tolerance influences 'how' decision is made to invest ETF/EPF Funds among the retired workers from BOI workers in Kandy, Special case of MAS located in Kandy BOI Premise. This study basically concentrates only on the retired MAS apparel workers in BOI Kandy complex. Under this research, the researcher is expected to evaluate factors influencing investment on EPF and ETF funds.

The study only used quantitative research and designed structured questionnaire to conduct survey on sample. And also, time, financial and other resources are limited to the particular study.

Methodology

Researcher employed positivist research method philosophy and adopted the deductive approach to gather data to answer the research questions for this study. Positivism philosophy has been embraced because it relies on empirical data that may be quantified and repeated by other users. (Collis & Hussey, 2014) This is in alignment with the study aims to developing dependable and transferable data. The deductive approach used in the current study was

preferred to test hypotheses that were expanded from theories because of the following reasons. (Delone & McLean, 2003) Conducting an organized assessment of specific predictions derived from theories makes it easier to manage the analysis process.

A structured questionnaire is advocated to reach the research objectives and to gather primary data from large amount of data and a quantitative research design is adopted to present the research problem from a quantitative and specific perspective. (Aliaga & Gunderson, 2002). Cross-sectional time horizon is very useful in gathering data at a particular time in a study, can be useful in analysis of prevalence in conditions or phenomena without the need to track over time. Out of them 320 are currently residing in Kandy and are the retired employees of the MAS Apparel which is the focus of the study. This s called The Morgan Table and it is used to determine the sample size to 175 so that we can be sure that our sample is valid and reliable. To form a conclusion about the entire population which would be credible to make statistical inferences, the sample size is satisfactory. This is particularly the case when using primary data sources in an effort to eliminate friend intermediaries and to collect information directly from respondents for the study, then be more credible with current and relevant information. These standards fuse with each other in an enough and methodologically effective way, a scientific process that is rigorous and corresponds to the objectives that were outlined in this study, reliability and usefulness of the conclusions that will be drawn.

The SPSS (Statistical Package for Social Science) was used in this study for statistical analysis of data collected through the questionnaire. In this research, the researcher used several types of analysis to analyses the findings such as frequency distribution, Pearson correlation coefficient, and regression analysis to achieve the basic purpose of the study. Finally, through analysis results, the researcher tests hypotheses to take decisions relevant to research objectives.

Conceptual Framework

Conceptualization clarifies the relationships between variables, defining them while integrating insights from prior studies. It forms a foundational framework for research, guiding the development of operationalization, surveys, and hypotheses. This study aims to identify factors influencing investment decisions regarding ETF/EPF funds among retired BOI workers in Kandy, specifically those from MAS. The framework establishes independent variables, such as pension knowledge, risk tolerance and financial literacy, and their impact on the dependent variable: investment decisions.

The study proposes three hypotheses based on prior research. First There is positive impact of financial literacy on investment decisions (H1). Second There is positive impact of pension knowledge on investment decisions (H2). Finally, There is positive impact of risk tolerance on investment decisions (H3). These hypotheses explain how investment decisions are influenced by risk tolerance, pension knowledge and financial literacy.

Operationalization

The given operationalization schema explains how different factors influence investment decisions; it explains how each important concept is broken down into a variable that is measurable. It identifies three main dimensions: Financial Literacy, Pension Knowledge, and

Risk Tolerance, each linked to an indicator of its type. For example, Financial Literacy comprises basic knowledge of investment instruments and methods of managing risk, while Pension Knowledge refers to the awareness of retirement planning. Risk tolerance considers attitudes related to financial losses and the chasing of higher yields. Each dimension is supported by relevant sources, and for the purpose of measurement, a five-point Likert scale was provided, which would allow clear and structured research.

Findings

This study investigates the factors influencing investment decisions among retired MAS employees in the BOI Kandy premises, focusing on ETF and EPF funds. A sample of 171 respondents was analyzed, showing that most participants were male (59.1%), primarily held executive-level positions, and preferred short-term investment plans (below three months). Reliability analysis demonstrated satisfactory internal consistency for financial literacy ($\alpha = .805$), pension knowledge ($\alpha = .847$), risk tolerance ($\alpha = .848$), and investment decisions ($\alpha = .814$). Validity was confirmed with KMO values exceeding 0.5 for all variables. Descriptive statistics revealed high levels of financial literacy ($M = 4.05$), pension knowledge ($M = 4.15$), risk tolerance ($M = 4.20$), and investment decisions ($M = 4.05$). Pearson correlation analysis established positive relationships between financial literacy, pension knowledge, and risk tolerance with investment decisions.

Multiple regression analysis further identified the impact of these factors on investment decisions. The regression equation derived from the analysis is

$$Y = 0.695 + 0.925X_1 + 0.972X_2 + 1.055X_3 \dots \dots \dots (1)$$

where Y represents investment decisions, X1 financial literacy, X2 pension knowledge, X3 risk tolerance, and ϵ the error term. The beta coefficients for financial literacy ($\beta=0.925$), pension knowledge ($\beta=0.972$), and risk tolerance ($\beta=1.055$) indicate significant positive effects, with p-values below 0.05 for all variables. The study concludes that financial literacy, pension knowledge, and risk tolerance significantly influence investment decisions among retired MAS employees in the BOI Kandy premises. Hypothesis testing supported rejecting the null hypotheses (H1, H2, H3) in favor of the alternative hypotheses, confirming the positive impact of these factors.

Conclusion

This research focused on identifying the factors influencing investment decisions of retired MAS employees in the BOI Kandy premises, particularly regarding ETFs and EPF funds. By addressing a notable gap in the Sri Lankan context, the study highlighted the significant role of financial literacy, pension knowledge, and risk tolerance in shaping investment behaviors. The findings suggest that enhancing market knowledge and financial awareness can empower retirees to make informed decisions and reduce investment risks. Organizations are encouraged to provide structured training programs and detailed information about investment options to employees nearing retirement, ensuring they are prepared for financial planning post-retirement. Additionally, policymakers and financial institutions should strengthen support mechanisms, including clearer communication about investment schemes, tailored advice, and risk management strategies. Future research could build on these insights by incorporating a

wider range of variables, expanding the demographic and geographic scope, and allowing for more extended data collection to produce richer, more generalizable findings.

References

- Aliaga, M. & Gunderson, B., 2002. *Interactive Statistics.. Thousand Oaks ed. s.l.:Sage Publications..*
- Collis, J. & H. R., 2014. *A Practical Guide for Undergraduate and Postgraduate Students. London : Macmillan International Higher Education.. Business Research.*
- Delone, W. H. & McLean, E. R., 2003. The DeLone and McLean Model of Information Systems Success. *A Ten-year Update. Journal of Management Information Systems*, pp. 19(4), 9-30..
- Heenkenda, S., 2016. Readiness to retirement planning of estate sector employees in Sri Lanka. *International journal of current research*, pp. 36516 - 36523..
- Martinez, L. S. & Allen, M., 2018. *Variables, Operationalization. Thousand Oaks: SAGE Publications, Inc.*
- Washington, D. C., 2023. International Monetary Fund. *Publication Services..*

THE IMPORTANCE OF FINANCIAL LITERACY TOWARDS ENTREPRENEUR INTENTION AMONG UNDERGRADUATES: EVIDENCE FROM WAYAMBA UNIVERSITY OF SRI LANKA

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ABSTRACT

This study aims to explore the importance of financial literacy towards entrepreneur intention among undergraduates of Sri Lanka. The financial literacy influences on the entrepreneur intention among undergraduates in Sri Lanka. The study examines how financial literacy influences entrepreneurs' intention among undergraduates. Overall financial literacy provide recommendation to enhance the entrepreneur intention among undergraduates in Sri Lanka. Achieving the objective of the study is to be adopted quantitative research approach. Data was collected through a set of questionnaires from undergraduates of Wayamba university of Sri Lanka where I have categorized the university which is registered under university grand commission. Therefore, the results of the study showed the financial literacy impact on entrepreneur intention among undergraduates in Sri Lanka. The study also identified several areas where financial management and financial behavior can be enhanced entrepreneur intention among undergraduates. This study findings vital implication for undergraduates as well as concern women, youth and other department undergraduates. Furthermore, this research recommends that undergraduates of Sri Lanka should improve their financial literacy knowledge by providing greater resource, training and workshops. This study would be better source to guide future research which will consider some limitation of the study therefore, it would be highlight proper insights regarding financial literacy and entrepreneur intention.

Introduction

This study examines the relationship between financial literacy and entrepreneur intention and focus on selected university. It aims to identify relationships between financial literacy and entrepreneur intention among undergraduates. This study explains the importance of financial literacy, (Achchuthan.S &Nimalathan2, 2012) and (OECD, 2023)said for a broader and more overall perspective of financial literacy. Their definitions extend beyond thinking abilities to include financial management and behaviors as crucial components of financial literacy. The study analyzes these gaps and provide insights for improved financial literacy knowledge and entrepreneur intention among undergraduates in Sri Lanka.

The intention is fundamental when choosing whether to launch a new business (Mitre-Aranda, 2022)). Further, by cooperating with the government, business, and society, higher education institutions can foster entrepreneurial behavior by utilizing their diverse knowledge and skills (EmmaO'Brien, 2024) explains that financial literacy among undergraduates, still there are willing to literature that study links between financial literacy, financial knowledge and entrepreneurship. Thus, this paper investigates the issues regarding financial literacy and it's important to entrepreneurship intention among undergraduates in Sri Lanka. This problem is exacerbated by how financial literacy effect entrepreneur intention among undergraduates. In this study, the aim is to give justification for how financial literacy influences the entrepreneur's intention towards undergraduates. Knowledge of financial literacy and how to help

undergraduates to develop their entrepreneur intention. Here, the research problem is how does financial literacy influence entrepreneur intention among undergraduates in Sri Lanka.

By considering the above problem statement and research questions, the researcher established the following research objectives.

1. To determine the impact of Financial Management on entrepreneurial intention among university students
2. To determine the significant impact of financial behavior on entrepreneurial intention among university students
3. To determine the significant impact of Financial Literacy on entrepreneurial intention among university students

Presented a comprehensive view of financial literacy by emphasizing its practical application in everyday financial decision-making. They encourage more than just understanding the basics of financial concepts like budgeting or saving. Instead, they discuss the importance of using this knowledge efficiently to identify the complexities of financial environment confidently. Their perspective simply highlights the importance of giving people the skills to make informed choices in various financial situations.

According to Muhammad (2024) people try to perform a particular behavior when they evaluate that behavior positively and when they believe that other people think that he/she should perform it. Social Norms (SN) includes normative beliefs and motivation to be in accordance with these beliefs Children's entrepreneurial interests and career choices are influenced by family members having a business background. In a particular study conducted revealed if undergraduates' close family members owned a business that will impact the preference of that undergraduate being self-employment and the lower preference for choosing an employment opportunity

Methodology

Research strategy

It depends on quantitative approach which focusing on quantifying relationship between variables. This method used to analyze the numerical data statistically for testing hypotheses. So, research philosophy is positivism which is measured quantitative. Thus, it allows to test hypotheses regarding the relationship between financial literacy and entrepreneur intention. So that research approach is used as the deductive approach.

Hypothesis

H1: There is a statistically significant impact of Financial Literacy on entrepreneur intention among university students

H2: There is a statistically significant impact of financial behavior on entrepreneur intention among university students

H3: There is a statistically significant impact of Financial Management on entrepreneur intention among university students

Conceptual Framework

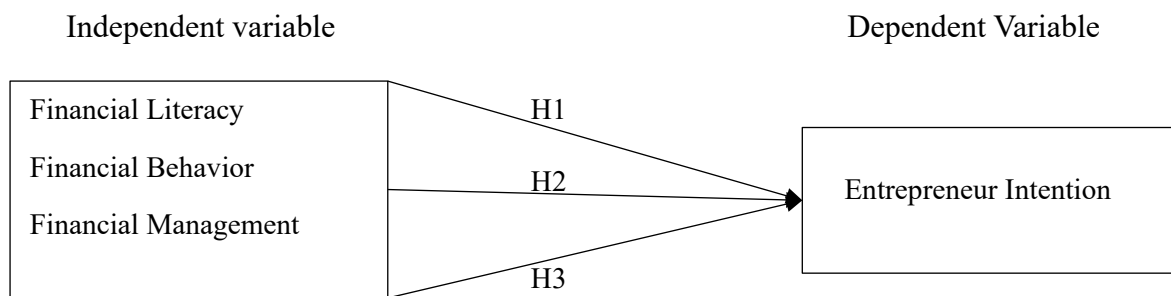


Figure 01: Conceptual Framework

Source: Constructed by Authors

Population and Sample

All undergraduates in Sri Lanka universities those are registered under university grant commission of Sri Lanka area make up the population of interest. This population is representative of a wide range of Management faculty, medical faculty, Applied studies faculty, Art faculty etc. The goal of including various faculty is to provide a comprehensive understanding of the financial literacy and entrepreneur intention relationship among undergraduates. Here the population and used when addressing the total population in the study is not possible. In Sri Lank 17 universities registered under university grand commission of Sri Lanka. According to University grand commission of Sri Lank., only Wayamba University of Sri Lanka has been selected using random sampling method among 17 universities.

Data collection

The questionnaire survey approach was used to obtain data for this study. Overall financial literacy, financial management, and financial behavior were the independent variables measured by the closed-ended survey questions. A five-point Likert scale, from strongly agree to strongly disagree, was used to assess the survey questions. Undergraduates of Wayamba university of Sri Lanka provided the data. A total of 337 replies have been gathered from participants. Both descriptive and inferential statistics, including regression analysis and correlation, were used to analyze the gathered data. The information gathered from this survey will be used to assess how financial literacy affects entrepreneurs' intention among undergraduates.

Findings

This finding highlights the significant impact of financial literacy on entrepreneur intention.

Table 01: Correlation Table

	Fl	Fb	Fm	Ei
Fl	1			
Fb	0.932**	1		
Fm	0.897**	0.905**	1	
Ei	0.829**	0.829**	0.882**	1

Source: Constructed by Authors

Table 01 displays the results of the Pearson correlation coefficient for each of the two variables. The results showed that financial behavior (FB) and financial management (FM) had a good connection ($r=0.905$). This implies that improving undergraduates' financial management regarding entrepreneurship goal will also improve their financial behavior, and vice versa. The findings demonstrated a strong correlation ($r=0.882$) between entrepreneur intention (EI) and financial management (FM). The correlation coefficient (r) falls within the range of 0.81 to 1.00 which supports the very strong positive correlation between EI and fm. It suggests that internal audit reporting is an important factor that can contribute significantly to the improvement of among undergraduates. All the independent variables (FL, FB, FM) have a substantial positive correlation with the dependent variable (EI), which stands for the importance of financial literacy towards entrepreneur intention among undergraduates, according to the study that was done. According to the R Square value of 0.785, the independent variable represents around 78.5% of the variation in the dependent variable's reach with an adjusted R square of 0.783 which the dependent variable's proportion variance is well explained by the independent factors

Table 02: Regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	0.961	0.777		12.453	0.000
1 FL	0.135	0.064	0.158	2.119	0.035
FB	0.056	0.066	0.066	0.845	0.399
FM	0.603	0.056	0.68	10.711	0.000

a. Dependent Variable: EI

Source: Constructed by Authors

According to hypothesis testing, the most powerful full predictor of (FM) ($\beta=0.603$) then, FL ($\beta=0.135$), FB ($\beta=0.056$) was the least powerful predictor of entrepreneur intention. Accordingly, H1 and H3 were accepted and H2 was rejected. this result complies with the prior scholarly findings So overall research model is found in terms of my variables. As a result, Hypotheses1(H1) and hypothesis 2 (H3) were approved, proving that financial management knowledge and financial literacy knowledge significantly and favorably affect Entrepreneur intention among undergraduates (EI). However, the following hypotheses were disproved: 2 (H2). This indicates that, in my analysis, there was no statistically significant relationship between Entrepreneur intention independence financial behavior.

$$E_i = c + \beta FL + \beta FB + \beta FM \dots\dots\dots(1)$$

Consequently, the research model derived from my study can be summarized in terms of multiple

$$EI = 0.961 + 0.135 FL + 0.603 FM \dots\dots\dots(2)$$

EI – entrepreneur intention

FL – financial literacy

FM – financial management.

Conclusion

Selected components such as financial literacy (FL), financial behavior (FB), financial management (FM) can be used in this research to identify the significant variables. The findings from this study revealed the significant insights into how financial literacy influence on entrepreneur intention among undergraduates of Wayamba university of Sri Lanka. Financial literacy and entrepreneur intention have a strong positive connection, according to the results of the correlation and regression studies. It is investigated how financial literacy influences improving entrepreneur intention among undergraduates. In research, financial management (FM) appeared as the most element of overall financial literacy to influence on entrepreneur intention among undergraduates. This finding is needed for undergraduates to address identified financial behavior to improve their entrepreneur's intention.

This study finds that financial literacy (FL), and financial behavior (FB) have less impact on entrepreneurs' intention among undergraduates. This indicates that undergraduates should focus on financial literacy and financial behavior to improve entrepreneurship. The findings suggest that ensuring that financial management knowledge can influence maintaining the entrepreneurship. Therefore, financial literacy can influence undergraduates to make investments and own business.

References

- Achchuthan, S., & Nimalathasan, B. (2012). Level of entrepreneurial intention of the management undergraduates in the university of jaffna, Sri Lanka: Scholars and undergraduates' perspective. *International Conference on Bioinformatics*, 2(10), 24–42.
<http://www.indianjournals.com/ijor.aspx?target=ijor:aca&volume=2&issue=10&article=002&type=pdf>
- Alshebami, A. S., & Marri, S. H. A. (2022). The impact of financial literacy on entrepreneurial intention: The mediating role of saving behavior. *Frontiers in Psychology*, 13.
<https://doi.org/10.3389/fpsyg.2022.911605>
- Assaf, A. (2024). Impact of Social Entrepreneurship on Women Empowerment through Financial Inclusion an Analytical Study from the Kingdom of Saudi Arabi. *Pakistan Journal of Life and Social Sciences (PJLSS)*, 22(1). <https://doi.org/10.57239/pjlss-2024-22.1.00368>
- Barba-Sánchez, V., Mitre-Aranda, M., & Del Brío-González, J. (2022). The entrepreneurial intention of university students: An environmental perspective. *European Research on Management and Business Economics*, 28(2), 100184.
<https://doi.org/10.1016/j.iedeen.2021.100184>
- O'Brien, E., & Cooney, T. M. (2024). Enhancing inclusive entrepreneurial activity through community engagement led by higher education institutions. *Journal of Enterprising Communities People and Places in the Global Economy*. <https://doi.org/10.1108/jec-10-2023-0189>

- OECD Digital Education Outlook 2023. (2023). In *Digital education outlook*.
<https://doi.org/10.1787/c74f03de-en>
- S Khatani, N. S. A., Iraqi, N. D. K. M., Hamid, N. D. S., & Iqbal, N. a. J. (2021). Investigating entrepreneurial intention among the youth of Karachi: evidence from partial least square-structural equation modelling. *International Journal of Management Research and Emerging Sciences*, *11*(4). <https://doi.org/10.56536/ijmres.v11i4.162>
- Wang, S., Cao, P., & Huang, S. (2022). Household financial literacy and relative poverty: An analysis of the psychology of poverty and market participation. *Frontiers in Psychology*, *13*. <https://doi.org/10.3389/fpsyg.2022.898486>

THE IMPACT OF FINANCIAL LITERACY ON THE PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES: A CASE STUDY OF THE KULIYAPITIYA DS DIVISION

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ABSTRACT

Financial literacy is a crucial factor influencing individuals and businesses alike. This study examines the impact of financial literacy focusing on financial knowledge, behavior, attitudes, and influence on micro, small and medium enterprises (MSMEs) in the Kuliypitiya DS Division. Using a quantitative approach, data were collected from 110 MSME owners through structured questionnaires. Five hypotheses were tested using SPSS version 26, employing descriptive statistics, correlation, and regression analyses. The findings reveal a positive relationship between financial literacy and firm performance. Among the independent variables, financial knowledge, attitudes, and influence showed significant impacts on performance, with financial attitude emerging as the most influential factor. However, financial behavior did not significantly affect performance. The study offers valuable insights for policymakers and MSME owners to enhance decision-making and drive business success.

Introduction

Sri Lanka's economy relies heavily on micro, small and medium-sized enterprises (MSMEs), which contribute significantly to economic growth, employment, regional development, poverty reduction, and innovation. The government of Sri Lanka recognizes SMEs as the backbone of the economy as it comprises more than 75% of the total number of enterprises, provides 45% of contribution to the employment and 52% of contribution to the gross domestic production (Ministry of Industry and Commerce, 2015). For micro, small, and medium-sized enterprises (MSMEs), the owner's or manager's financial understanding significantly determines success. As a key driver of Sri Lanka's economy, MSMEs face challenges that often impede growth and sustainability, with financial literacy being a critical determinant of their performance (CBSL, 2021).

Murangi (2021) observed that large number of individuals and SMEs show low levels of financial literacy, often lacking fundamental knowledge of essential financial concepts necessary for informed decision-making. In Sri Lankan context, financial attitudes, knowledge, influence and behavior has a positive influence while financial influence has the highest positive strong influence on entrepreneurial performance (Jayakody & Gunaratne, 2020). Adikari et al. (2017) revealed that financial literacy has a significant positive effect on growth in MSEs and indicates involvement of entrepreneurs in budgeting and book keeping is necessary. Financial knowledge, financial influence, and financial behavior had a positive influence while finance attitudes could not show any statistically significant impact on SMEs performance in Sri Lanka (Menike, 2019). Barte (2012) stated that financial literacy had no significant effect on the business performance of Pasil fish vendors, revealing low financial skills including unrecorded transactions, lack of income and expenditure evaluation and arrears management practices. Eniola and Entebang (2017) found that business owners-managers'

financial knowledge, awareness, and attitude significantly improve firm performance. A positive attitude, long-term thinking, and avoiding temptation are more effective in preventing financial problems. Murangi (2021) observed that large number of individuals and SMEs show low levels of financial literacy, often lacking fundamental knowledge of essential financial concepts necessary for informed decision-making.

Based on the previous studies, researchers indicated that lack of financial literacy can lead to inadequate financial knowledge within firms and possible failures. Hence, the research problem is “Examine how the financial literacy influence on the performance of MSMEs in Kuliypitiya DS division”. Accordingly, the main objective of this study is to investigate the impact of financial literacy on the firm performance among the MSMEs in Kuliypitiya division. The scope of the study is 110 MSMEs in Kuliypitiya DS division.

Methodology

This study uses positivism philosophy by using deductive approach to test existing theories such as resource-based theory, contingency theory and financial literacy theory. Researchers used the deductive approach because this study is concerned with developing hypotheses based on existing theory, and then designing a research strategy to test the hypothesis. It adopts a quantitative method to test hypotheses and draw generalizable conclusions. Researchers incorporates the systematic collection and analysis of numerical data. The unit of analysis is the individual MSME, and data was collected cross- sectionally at a single point in time.

The primary data was collected through structured questionnaires from 110 MSMEs, which are operating in the Kuliypitiya DS division. Respondent’s views on financial literacy and business performance were measured using 5- Point Likert Scale questions. A total of 130 questionnaires were distributed among the selected sample, and 110 completed questionnaires were returned, indicating an 85% respondent rate. The collected data were analyzed by using the SPSS software package. The reliability of the questionnaire was measured using Cronbach’s alpha test and the validity of the questionnaire was measured by factor analysis.

Conceptual Framework

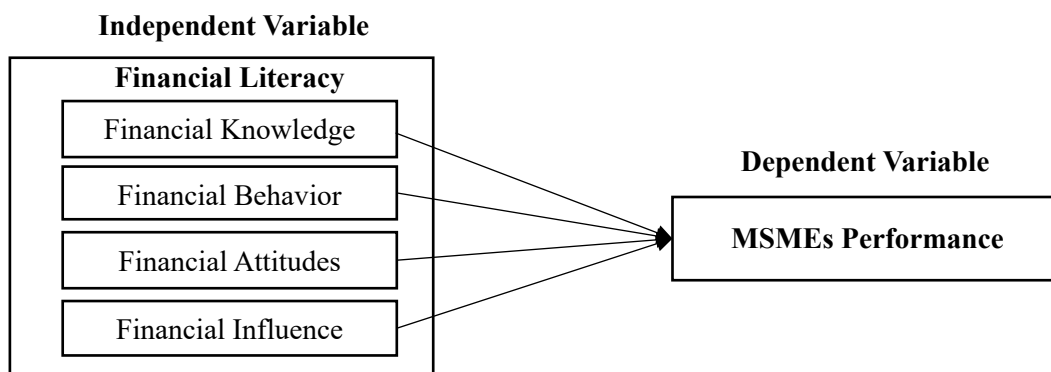


Figure 01: Conceptual Framework

Source: Menike, 2019; Sabana, 2014

Based on the previous literatures, researchers have identified financial literacy as the independent variable and the MSME performance as the dependent variable. Financial literacy was quantified in terms of financial knowledge, financial behavior, financial attitudes and

financial influence. Whereas, MSMEs’ performance was calculated using growth in sales, growth in profit and growth in employment. In view of the fact, the conceptual framework is developed (Figure 01).

Previous researchers have demonstrated a significant impact between financial literacy and firm performance. To guide this study on the connection between various dimensions of financial literacy and MSMEs performance, the following hypotheses were formulated.

H₁: Financial literacy has a statistically significant positive impact on the performance of MSMEs in Kuliyaipitiya DS division.

H_{1a}: Financial Knowledge has a statistically significant positive impact on the performance of MSMEs in Kuliyaipitiya DS division.

H_{1b}: Financial behavior has a statistically significant positive impact on the performance of MSMEs in Kuliyaipitiya DS division.

H_{1c}: Financial attitude has a statistically significant positive impact on the performance of MSMEs in Kuliyaipitiya DS division.

H_{1d}: Financial influence has a statistically significant positive impact on the performance of MSMEs in Kuliyaipitiya DS division.

Findings

Table 01 presented the results of descriptive analysis of the dependent and independent variables. The mean value (\bar{x}) of financial knowledge ($\bar{x} = 3.99$; SD = 0.726) and financial behavior ($\bar{x} = 3.82$; SD = 0.730) indicating the highest level of agreement. Similarly, financial attitudes and financial influence also demonstrated relatively high level of agreement. The mean value of the firm performance is 3.53 (SD=0.755).

Table 01: Descriptive Analysis

	Minimum	Maximum	Mean	Std. Deviation
Financial Knowledge	1.13	5.00	3.9852	0.72546
Financial Behavior	1.00	5.00	3.8234	0.72995
Financial Attitudes	1.22	5.00	3.6545	0.82852
Financial Influence	1.33	5.00	3.4348	0.71253
Firm Performance	1.00	5.00	3.5288	0.75482

Source: Constructed by the authors

Researchers run a correlation analysis (Table 02) to identify the relationship between the indicators of financial literacy and the firm performance of MSMEs. The results of correlation analysis reveal that all independent variables are positively and significantly correlated with firm performance of MSMEs in Kuliyaipitiya DS division. The correlation between the firm performance and financial attitude ($r = 0.725$, $p < 0.05$), financial knowledge ($r = 0.682$, $p < 0.05$), financial behavior ($r = 0.669$, $p < 0.05$), and financial influence ($r = 0.60$), $p < 0.05$) confirm that the MSMEs with high financial literature perform better. Therefore, it can be concluded that, there is a positive relationship between financial literacy and firm performance of MSMEs in Kuliyaipitiya DS division.

Table 02: Correlation Analysis

	Financial Knowledge	Financial Behavior	Financial Attitudes	Financial Influence	Firm Performance
Financial Knowledge	1				
Financial Behavior	.754**	1			
Financial Attitudes	.804**	.786**	1		
Financial Influence	.528**	.700**	.578**	1	
Firm Performance	.682**	.669**	.725**	.601**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Constructed by the authors

Multiple Regression Analysis

Table 03: Model Summary and ANOVA

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.771^a	0.595	0.579	0.48971	1.716

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	36.922	4	9.231	38.490	.000 ^b
Residual	25.181	105	0.24		
Total	62.103	109			

a. Dependent Variable: FP

b. Predictors: (Constant), FI, FK, FA, FB

Source: Constructed by the authors

From the results in Table 03, the R squared value ($R^2 = 0.595$) indicated that, the dimensions of financial literacy (financial knowledge, financial behavior, financial attitudes and financial influence) explained 60% of variation in firm performance of micro, small and medium enterprises. The Durbin Watson value is 1.716, which tests the autocorrelation in the residuals from the regression analysis and indicates that there is no autocorrelation in the residuals. According to the ANOVA, the significance value is less than 0.05 ($P = 0.000 < 0.05$) indicating that the regression model is statistically significant. The F-value of 38.490 further supports this, demonstrating that the overall regression model fits the data well and the predictors (financial knowledge, financial behavior, financial attitudes and financial influence) have significant impact on the firm performance of MSMEs in Kuliyaipitiya DS division.

According to the results of regression analysis, financial knowledge makes a significant impact on firm performance with beta (β) value of 0.235 and p value of 0.044. The findings supported the H_{1a} and hence it can be concluded that financial knowledge has a significant positive impact on the performance of MSMEs in Kuliyaipitiya DS division. Financial attitudes ($\beta = 0.378$, $p < 0.05$) and financial influence ($\beta = 0.240$, $p < 0.05$) also show a significant impact on firm performance. These findings supported both H_{1c} and H_{1d} . Accordingly, researchers conclude that financial attitude and financial influence have a significant positive impact on the performance of MSMEs in Kuliyaipitiya DS division. However, findings reveal that the financial behavior does not have a statistically significant impact on the performance ($\beta = 0.33$,

p = 0.786 > 0.05). This suggests that financial behavior has not statistically significant impact on the performance of MSMEs in Kuliyaipitiya DS division. Therefore, H_{1b} is not supported.

Table 04: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.328	0.287		1.140	0.257		
Financial Knowledge	0.235	0.115	0.226	2.041	0.044	0.314	3.184
Financial Behavior	0.034	0.125	0.033	0.273	0.786	0.264	3.790
Financial Attitudes	0.344	0.108	0.378	3.202	0.002	0.277	3.606
Financial Influence	0.254	0.092	0.240	2.755	0.007	0.508	1.969

a. Dependent Variable: FP

Source: Constructed by the authors

Conclusion

This study concluded that financial literacy is positively related to the performance of MSMEs in Kuliyaipitiya DS division. Also, three independent variables (financial knowledge, financial attitude and financial influence) have significant impact on firm performance. Financial attitude practice among entrepreneurs including saving, investment, insurance is the most influential variable. However financial behavior has not significant impact on the firm performance. Along with the time limitation, the size of the sample is small which a limitation of this study. Self – reported data from respondents may be biased and these limitations affect the results of the study. Further, it can be recommended that government, policy makers and all financial organizations should implement financial education and learning programs to improve financial knowledge of entrepreneurs. Future researchers can include digital financial literacy variable on their studies.

References

- Adikari, A. M. ., Lalani, J. M. ., & Herath, H. M. S. . (2017). Financial Literacy and Firm performance: A Case of Micro and Macro SMEs in North Central Province in Sri Lanka. *Sri Lanka Economic Research Conference*, 141–145. <http://repository.rjt.ac.lk/handle/123456789/1832>
- Barte, R. (2012). Financial Literacy in Micro-Enterprises: The Case of Cebu Fish Vendors. In *Philippine Management Review* 19, 91-99.
- Central Bank Annual Report. (2021).
- Eniola, A. A., & Entebang, H. (2017). SME Managers and Financial Literacy. *Global Business Review*, 18(3), 559–576. <https://doi.org/10.1177/0972150917692063>
- Jayakody, D. S. K. M., & Gunaratne, A. G. D. L. K. (2020). The effect of financial literacy on entrepreneurial performance with reference to smes in gampaha district. <http://bsf.wyb.ac.lk>
- Menike, L. M. C. S. (2019). Effect of Financial Literacy on Firm Performance of Small and Medium Enterprises in Sri Lanka. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3306719>

- Ministry of Industry and Commerce. (2015). National Policy Framework for Small and Medium (SME) Development. *Ministry of Industry and Commerce*, 1–13.
- Murangi, A. K. (2021). Assessing the effects of financial literacy on the performance of small and medium enterprises in windhoek. <http://hdl.handle.net/11070/3189>
- Sabana, B. M. (2014). Entrepreneur financial literacy, financial access, transaction costs and performance of micro enterprises in nairobi city county, Kenya.

EXPLORING THE INFLUENCE OF FINANCIAL LITERACY ON CREDIT CARD UTILIZATION AMONG SRI LANKAN CONSUMERS

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ABSTRACT

This study investigates the influence of financial literacy levels on credit card usage among Sri Lankan individuals. Utilizing a positivist research philosophy and a deductive approach, the research employs a survey strategy to collect quantitative data from a sample of 400 respondents. The data gathered through structured questionnaires, is analyzed using the independent sample t-test. The findings reveal significant differences in credit card usage between individuals with varying levels of basic financial literacy. This study contributes original insights into the impact of financial literacy on credit card behaviors, informing targeted financial education programs and policies.

Introduction

Financial literacy, encompassing essential skills such as investing, budgeting, and personal financial management, is pivotal for making informed financial decisions in today's intricate global landscape. This study aims to evaluate the financial literacy levels of survey participants and investigate whether these levels vary in their credit card usage behaviors. Research reveals significant demographic disparities in financial literacy, with older individuals and women generally being less informed (Banthia & KumarDey, 2022). Recognizing its critical role in preventing financial fraud and fostering sound decision-making, governments worldwide are actively implementing strategies to enhance financial literacy. This is exemplified in Sri Lanka, where financial literacy has notably increased from 35% to 57.9% of adults (Central Bank of Sri Lanka, 2022).

Financial literacy is often assessed using an index to highlight the population's vulnerability to financial illiteracy, with studies indicating that many individuals lack proper financial planning and retirement provisions (Lusardi & Mitchell, 2011). There are two stages of financial literacy: basic and advanced, covering topics such as compound interest, inflation, and risk diversification (Kimiyağhalam & Yap, 2017). Socio-demographic factors show that financial literacy is lower among those who did not complete high school, underscoring the need for equitable learning opportunities. Data also reveals that economic and financial education significantly influence financial literacy levels, emphasizing the importance of government attention to the education system.

Credit cards, which originated in the United States in the 20th century, provide short-term cash credit and installment payments, enabling consumers to purchase goods and services up to a pre-approved limit. The Technology Acceptance Model (TAM) elucidates how perceived usefulness and ease of use influence the adoption of credit cards, despite their current low adoption rates. While mobile wallets are gaining popularity globally, credit card usage varies significantly across countries, with Sri Lanka experiencing a decline in active credit cards due to high interest rates and economic challenges.

This study will employ a comprehensive questionnaire to assess participants' financial knowledge, understanding, and literacy across various domains. The research seeks to determine whether there is a significant correlation between individuals' level of financial literacy and their propensity to utilize credit cards, providing valuable insights into the relationship between financial literacy and credit card usage behaviors. This research is of paramount significance as it seeks to elucidate the intricate relationship between financial literacy and credit card usage behaviors, thereby providing critical insights that could inform the development of policies and educational programs aimed at enhancing financial literacy. Understanding this correlation is essential for devising strategies that promote responsible credit card use and ultimately improve the financial well-being of individuals. This study is limited by its focus on financial knowledge within financial literacy, the application of the Technology Acceptance Model (TAM) to understand credit card usage and the specific context of credit card usage for grocery shopping.

Empirical reviews from developed and developing countries reveal significant insights into the relationship between financial literacy and credit card usage. Studies indicate that financial literacy, influenced by factors such as education, age, gender, and socio-economic status, plays a crucial role in credit card usage behaviors (Banthia & Kumar, 2022; Disney & Gathergood, 2013; Hernández-Mejía et. al., 2021; Kimiyaghalam & Yap, 2017; Lasantha & Pathirawasam, 2015; Robb & Sharpe, 2009; Uddin, 2020; Xiao et. al., 2011). However, there is a notable research gap in understanding the specific impact of financial literacy on credit card usage in different socio-economic contexts, particularly in developing countries like Sri Lanka. This gap underscores the need for further research to explore how financial literacy influences credit card usage behaviors across diverse populations, thereby informing targeted financial education programs and policies.

Methodology

This study adopts a positivist research philosophy to elucidate the correlation of data obtained, employing a deductive approach to systematically test hypotheses. The primary objective is to identify the relationship between financial literacy levels and credit card usage among Sri Lankan individuals. To achieve this, a survey strategy is utilized to efficiently collect quantitative data from a large population, with structured questionnaires serving as the primary data collection tool. The study targets a population of 2,012,497 individual credit card users in Sri Lanka, with a sample size of 400 respondents selected using a convenience sampling technique. The collected data, encompassing socio-demographic, financial literacy, and credit card usage sections, is analyzed using the independent sample t-test to derive meaningful insights. This quantitative/deductive approach ensures a structured and objective analysis of the research questions, providing a comprehensive understanding of the relationship between financial literacy and credit card usage.

Conceptualization:

In this study, the independent variable, financial literacy level, is measured using three questions introduced by Lusardi & Mitchell (2011), which assess basic high and low financial literacy through a scoring system. To conceptualize credit card usage, the study employs the Technology Acceptance Model (TAM), focusing on perceived usefulness and perceived ease

of use. To account for the multiple criteria involved in assessing credit card usage, the Weighted Sum Model (WSM) is utilized. This approach ensures a comprehensive evaluation of how financial literacy influences credit card usage behaviors, providing a robust framework for understanding the relationship between these variables.

Hypothesis:

H₁: There exists a significant disparity in credit card usage between individuals with low basic financial literacy and those with high basic financial literacy among Sri Lankan credit card users.

Findings

This study employs rigorous reliability and validity testing to ensure the accuracy and consistency of the data. Reliability is assessed using Cronbach's alpha, with values above 0.7 indicating acceptable internal consistency, and all variables in this study exceed this benchmark, demonstrating strong internal consistency. Additionally, composite reliability values for all constructs are above 0.9, indicating a strong level of internal consistency and measurement reliability.

Table 01: Independent Sample T-Test

	F	Sig	t	df	Sig (2-tail)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	9.870	0.002	3.441	398.000	0.001	0.461	0.134	0.198	0.724
Equal variances not assumed			2.253	18.740	0.036	0.461	0.204	0.032	0.889

Source: Constructed by the authors

An independent sample t-test was employed to compare the means of two independent groups, with Levene's test assessing the null hypothesis of equal variances. The results reveal significant differences between groups, with an F-value of 9.870 and a significance level of 0.002, indicating unequal variances. The t-test results show a t-value of 3.441 and a significance level of 0.001, suggesting a statistically significant difference in mean financial literacy scores between the groups. The mean difference of 0.461, with a standard error of 0.134, falls within the 95% confidence interval range of 0.198 to 0.724, further confirming the reliability of these findings. Consequently, the null hypothesis, which posited no significant difference in credit card usage between basic financial literacy levels, was rejected. The results confirm a statistically significant difference in credit card usage between individuals with varying levels of basic financial literacy in Sri Lanka.

Conclusion

In conclusion, this study has successfully identified significant differences in credit card usage between individuals with varying levels of basic financial literacy in Sri Lanka. The findings underscore the critical importance of financial literacy in influencing credit card usage

behaviors, highlighting the necessity for targeted financial education programs. The study's implications extend to financial institutions, policymakers, and future researchers, providing valuable insights for customizing credit card facilities, designing effective financial policies, and exploring further research in this area. By addressing the disparities in financial literacy, this research contributes to promoting responsible credit card use and enhancing the financial well-being of individuals. Future research could explore the impact of the level of digital financial literacy on credit card usage, investigate the role of financial education in schools, and examine the long-term effects of financial literacy programs on consumer behavior.

References

- Banthia, D., & Kumar Dey, S. (2022). Impact of Financial Knowledge, Financial Attitude and Financial Behaviour on Financial Literacy Structural Equation Modeling Approach. *Universal Journal of Accounting and Finance*, 10(1), 328-337. <https://doi.org/DOI:10.13189/ujaf.2022.100133>.
- Central Bank of Sri Lanka. (2022). Annual Report 2021. Central Bank of Sri Lanka. <https://www.cbsl.gov.lk/en/publications/economic-and-financial-reports/annual-reports/annual-report-2021>.
- Disney, R., & Gathergood, J. (2013). *Financial Literacy and Consumer Credit Portfolios*. *Journal of Banking and Finance*, 37(7), 2246-2254. <http://dx.doi.org/10.1016/j.jbankfin.2013.01.013>.
- Hernández-Mejía, S., García-Santillán, A., & Moreno-García, E. (2021). Financial literacy and the use of credit cards in Mexico. *Journal of International Studies*, 14(4), 97-112. doi:10.14254/2071-8330.2021/14-4/7.
- Kimiyaalam, F., & Yap, S. P.L. (2017). Level of Financial Literacy in Malaysia. *International Journal of Research*, 4(7), 1065-1074.
- Lasantha, R., & Pathirawasam, C. (2015). *Financial Literacy and Credit Choice of Consumer Credit Users in Sri Lanka*. Conference. 6th International Conference on Business & Information- ICBI – 2015, University of Kelaniya, Kelaniya, Sri Lanka.
- Lusardi, A., & Mitchell, O.S. (2011). Financial literacy around the world :An overview. *Financial literacy around the world*, 10(4), 497-508. doi:10.1017/S1474747211000448.
- Robb, C. A. & Sharpe, D. L. (2009). Effect of Personal Financial Knowledge on College Students' Credit Card Behavior. *Journal of Financial Counseling and Planning*, 20(1), 25-43. SSRN: <https://ssrn.com/abstract=2224225>
- Uddin, M.A. (2020). Impact of Financial Literacy on Individual Saving: A Study in the Omani Context. *Research in World Economy*, 2(5), 123-128. <https://doi.org/10.5430/rwe.v11n5p123>.
- Xiao, J. J., Tang, C., Serido, J., & Shim, S. (2011). Antecedents and Consequences of Risky Credit Behavior Among College Students: Application and Extension of the Theory of Planned Behavior. *Journal of Public Policy & Marketing*, 30(2), 239-245. <http://dx.doi.org/10.2307/23209278>.

A STUDY ON CUSTOMER PERCEPTION TOWARDS DIGITAL BANKING IN SRI LANKA: WITH SPECIAL REFERENCE TO PRIVATE COMMERCIAL BANKS OF SRI LANKA

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ABSTRACT

Digital banking has transformed the way business and services are provided by companies and businesses all over the world. Digital banking takes on a holistic view where online banking is just one part of it. Online banking is where transactions are done via the internet, but digital banking consists of that plus the digitization of all other aspects which were once done by visiting the bank and spending hours at the bank counter. With the first step of digitalization taken by introducing ATMs, Sri Lanka has taken a few more steps by adding more innovative digital banking products and services in the form of internet banking, mobile banking, electronic clearing services, and electronic fund transfers. But according to past research Sri Lankans still resist when adopting some aspect of digital banking services such as internet banking and this has constantly been a huge problem due to majority of Sri Lankans are not technology savvy. The long-term goal of this research is to identify what aspects drives the customer to use or not use digital banking services and give recommendations to increase the level of usage of digital banking services. The study's analysis is based on the positivist philosophy using a mixed to investigate the research objectives. According to the present study, the significant factors that affect the intention to adopt digital banking services of both male and female users are their efficiency, awareness, feelings towards technology and social influence.

Introduction

Internet and Fintech are rapidly changing the design and catering of various financial services. The evolution of digital banking did not happen overnight. With the first step of digitalization taken by introducing ATMs, Sri Lanka has taken a few more steps by adding more innovative digital banking products and services in the form of internet banking, mobile banking, electronic clearing services, and electronic fund transfers. The importance of digital banking for an economy is rather mementos because the usage of digital banking acts as an indicator of a country's economic development. Research done by Jayasiri and Weerathunga (2008) reveals that only 64% of the customers use digital banking services in Sri Lanka even though they are aware of it. Suraweera et al. (2011) found that while digital banking is expanding, Sri Lankans still resist adopting internet banking due to lack of technology savvy, with only 29% of the population using mobile internet. Many banks offer digital banking services, but many users are unaware of the rules and regulations governing digital transactions. Trust in banks is built on mutual understanding, and while traditional banking involves knowledge of account balances and transactions, digital banking lacks this trust, making it like a drop of water on a grass blade. In Sri Lanka, as a developing country, the advancement of internet-based banking services is crucial for enhancing financial inclusion and operational efficiency. However, limited research has been conducted to understand customer perceptions of internet banking within the Sri Lankan context. Furthermore, policymakers have paid insufficient attention to

the development and adoption of internet banking services. Identifying the factors that influence customer perceptions is vital to support the expansion of digital banking services. This understanding can enable banks to design and implement more effective internet-based customer service solutions, addressing both user expectations and technological gaps.

Objective

Taking into consideration the above factors, the problem statement of this research can be narrowed down to this study is to evaluate the perspectives of banking customers about digital banking business models and how they integrate with the needs of actual customers.

- To identify the variables that cause clients to prefer digital banking services over traditional banking services.
- To explore the fintech literacy the customers should have in acceptance of digital banking.
- To identify what can be done to improve the customers touch with digital banking.

Methodology

The main aim of this research is to identify the variables that cause clients to prefer digital banking services over traditional banking services. The unit of analysis of this study is bankers who use digital banking in Colombo district. The study's analysis is based on the positivist philosophy. The study will use a mixed-methods research design, with both qualitative and quantitative methodologies used to collect and analyze data. The data gathering strategy will entail sending a questionnaire, indicating a primarily quantitative approach. To establish a thorough knowledge of the study problem and to capture detailed insights, qualitative data will be gathered, through interviews.

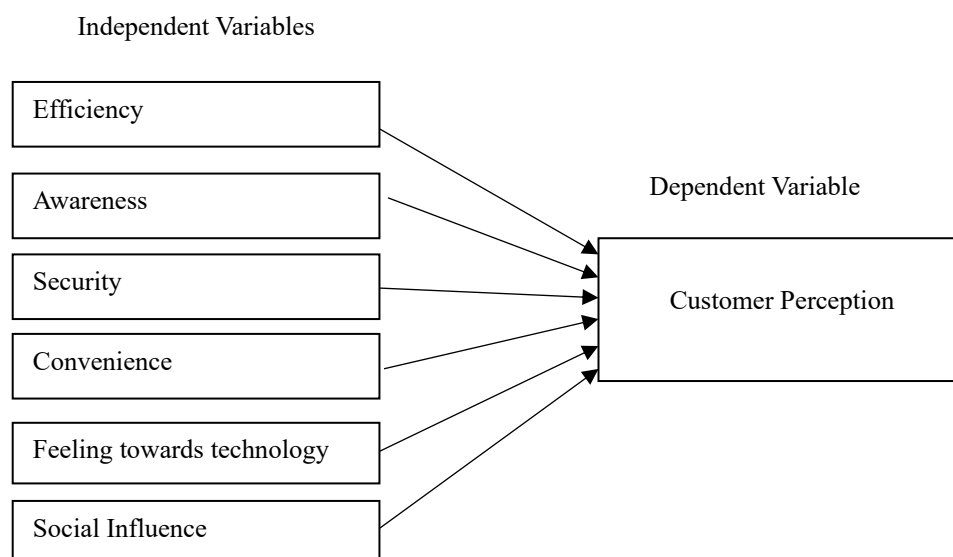


Figure 01: Conceptual Framework

Source: Constructed by the authors

The first phase of this research sought to determine how Sri Lankan customers' views of core drivers of digital banking service. Based on a qualitative study, researcher has changed the

initial research model, adding a new construct, "feeling towards technology," and changing the measuring items for the latent variables. The conceptual framework is the representation of the relationship between independent and dependent variables. The factors were identified based on the earlier chapter's comprehensive review of literature. Based on the literature it was identified that among many constructs, efficiency, awareness, security, convenience, and social influence have been identified as much important variables to study. Also added feeling towards technology as variable derived from qualitative study.

The goal of this study is to find the relationship between the factors that influence people's decisions to choose Digital banking apps for their everyday banking requirements in Colombo district. Thus, the following hypothesis have been developed:

H1: Efficiency factor positively influences on customer perception.

H2: Awareness factor positively influences on customer perception.

H3: Security factor positively influences on customer perception.

H4: Convenience factor positively influences on customer perception.

H5: Feeling towards technology factor positively influences on customer perception.

H6: Social influence factor positively influences on customer perception.

Findings

Table 01: Hypotheses Testing

Independent variable	Hypothesis	P-Value	Statistical decision
Efficiency	<i>H1</i> : Efficiency factor positively influences on customer perception.	0.004	Accepted
Awareness	<i>H2</i> : Awareness factor positively influences on customer perception.	0.031	Accepted
Convenience	<i>H4</i> : Convenience factor positively influences on customer perception	0.001	Accepted
Social Influence	<i>H6</i> : Social influence factor positively influences on customer perception.	0.03	Accepted

Source: Constructed by Authors

Data analysis was done using Statistical Package for Social Sciences (SPSS). Total of 302 questionnaires were collected but after data cleaning only 252 surveys were taken for the analysis. Bartlett's test P-value of 0.000, indicating that this factor analysis is good and statistically significant, and statistics 0.859, which is an extremely good number, confirm this (Saunders, Lewis, & Thornhill, 2009). Validity and reliability are used to assess the quality of this research. The AVE values variables are above 0.50. Thus, there is sufficient convergent validity. Cronbach's alpha value and composite reliability values obtained from this study have been greater than 0.7 confirming internal consistency reliability. From the findings obtained from stepwise multiple regression, following hypotheses were accepted as shown in Table 01.

Discussion and conclusion

According to the present study, the significant factors that affect the intention to adopt digital banking services of both male and female users are their efficiency, awareness, convenience and social influence. Although awareness and social influence have not been significant in past research this study has shown that there is a positive impact from those two variables for the adoption of internet banking (Shantha, 2019; Chen, 2023). This study highlights that while E-banking users are familiar with the service, a significant portion of non-users lack awareness, with some even unaware of its existence. According to Shantha (2019), awareness factor was not a significant for the adoption of digital banking but in this study this factor was identified as a significant factor. Past research has identified that young generation is more likely to use digital banking solutions as they are more tech-savvy and due to their fintech literacy as they are closely using the smart devices for their daily activities. This point is also proven in the quantitative and qualitative analysis. Most of the young people expressed positive feedback on digital banking services during the focus group interview. In this research, security, convenience, and feeling towards technology did not show any significance, although these factors have been significant in past research. It can be said that since the majority of respondents in this study have been using digital banking services for more than one year, they could perceive digital banking as a reliable and convenient mode of doing transactions.

The results of the current study have demonstrated that both male and female consumers' decisions to use digital banking services are significantly influenced by its efficiency. As a result, the study found that by enhancing the workability and responsiveness of digital technology and making the features of mobile applications more user-friendly, Sri Lankan digital banking services could raise the intention to use online banking service and improve consumer satisfaction. The findings of the current study contribute to a thorough understanding about the links of awareness and social influence of digital banking platforms and intention to embrace app-based banking services by female and male users in Sri Lanka. So, this new knowledge theoretically important and useful. This research framework represents the significant relationships between efficiency, awareness and social influence and intention to adopt leading to theoretical contribution to analyze the user perception from economic and service-oriented factors.

References

- Jayasiri, N.K. and Weerathunga, W.A.S.P. (2008) The journal of popularity of e-banking in Sri Lanka.
<http://archive.cmb.ac.lk:8080/research/bitstream/70130/5714/1/Popularity%20of%20e-banking-Jayasiri%20%26%20Weeratunga%202008.pdf>
- Tran , H. T., & Corner, J. (2016). The impact of communication channels on mobile banking adoption. *International Journal of Bank Marketing*, 34(1), 78-109.
<https://doi.org/10.1108/IJBM-06-2014-0073>.
- Bashir, I., & Madhavaiah, C. (2015). Consumer attitude and behavioural intention towards Internet banking adoption in India. *Journal of Indian Business Research*, 7(1), 67–102.
<https://doi.org/10.1108/JIBR-02-2014-0013/FULL/XML>.

- Chen, L. (2016). From Fintech to Finlife: the case of Fintech Development in China. *China Economic Journal*, 9(3), 225–239. <https://doi.org/10.1080/17538963.2016.1215057>
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*. London: Pearson Education Limited.
- Shantha, A. (2019). Customer Perception on Internet Banking: With Special Reference to Bank of Ceylon in Sri Lanka. *International Journal of Research in Engineering, IT and Social Sciences*,9(5) 269-280.
- Tavakol, M., & Wetzel, A. (2020). Factor Analysis: a means for theory and instrument development in support of construct validity. *International journal of medical education*, 11, 245-247. Retrieved from <https://doi.org/10.5116/ijme.5f96.0f4a>

FACTORS SHAPING INDIVIDUAL INVESTORS' INVESTMENT DECISION OF INVESTING IN THE COLOMBO STOCK EXCHANGE: A STUDY FOCUSED ON GAMPAHA DISTRICT, SRI LANKA

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ABSTRACT

In this study, the aim is to examine the factors that influence on the investment decision of investors for investing in Colombo Stock Exchange (CSE). The study used analytical tools to analyze data on the impact on investment decision of individual investors for investing CSE. According the result of the study, it was revealed that the socioeconomic (SE) and saving (SI) has significant impact and awareness (AN) has insignificant impact on investment decision of individual investors investing in CSE. By showing the factors that influenced investors and financial analysts' investment decision, the results are intended to inspire them to invest in CSE.

Introduction

When making stock market investments, investors' investment decisions which are essentially their attitudes or opinions play a significant influence. An investor's perception on an investment decision is influenced by a variety of elements, including income, occupation, knowledge, habits, expectations, interest, and more. As a country Sri Lanka has only one stock market called CSE. Investing is a strategy used to save money from multiple sources of income for the future in order to get the full benefits of their efforts in the future. Individuals view investing as a way to achieve a better outcome (Mathew, 2022). To make wise investment decisions in Sri Lanka, individual investors must ascertain the elements impacting their choices. Nevertheless, the majority of them struggle to do so. When making stock market investment decisions, individual investors typically depend on both technical and psychological aspects. Individual investors typically base their selections on personal characteristics including age, income, education, and investment portfolio (Ponnamperuma, 2013). And also, when an investor is going to invest in stock market, they follow their peers and financial advisors, stock brokers. According to the (Ponnamperuma, 2013), he revealed that investors consider encouragement of friends to invest and opinion of stock brokers when investing. Investment and savings are very important to all countries for their economy. To person to person, investment and savings patterns are vary. The work on behavioral finance has primarily focused on the effects of education and gender on investment preferences (Ganga Bhavani, 2017). In particular, to the best of researcher's knowledge have in Sri Lanka to determine the variables affecting investment studies' efficacy. In order to close this gap, the current study identifies the variables influencing the perception of individual investors' investment decision-making in CSE Sri Lanka, with a focus on the Gampaha district. The research question that follows is developed in relation to the issue. There are many motives for savings and investment. To investigate the factors influencing on the investment decision of investors for investing in CSE, three objectives can identify. There are, to investigate the impact

of saving behavior, socioeconomic factors, and awareness of the investors on investment decision of investors for investing in CSE (Wijekumara, 2019).

Methodology

Conceptual Framework

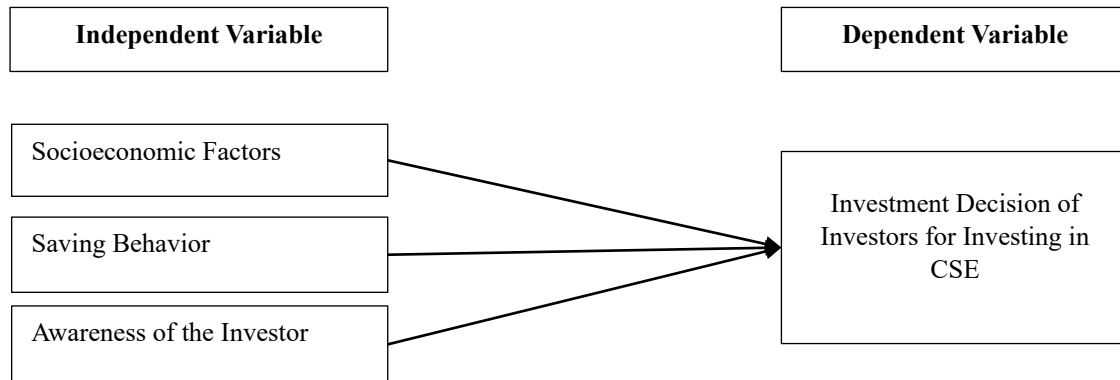


Figure 03: Conceptual Framework

Source: Constructed by Authors Based on the Literature

Population and Sample

The Gampaha District's individual investors represent the study's population. A variety of individuals, including male and female, of various ages, income and educational backgrounds, and occupations, are becoming individual investors in CSE. In 2023, 2879 investors have been registered, out of which 1303 are inactive investors. So, active number of investors are 1576 (Source: CSE Negombo branch).

The sample size of this research is people who are living in the Gampaha District. This study is quantitative in nature, so we can apply the probability sampling technique. According to sample size calculator, in this study 120 numbers of individual investors were selected as ten of the twelve provincial council of Gampaha district.

Method of Data Collection

The study used primary data collection method to achieve the objective of this research. In order to meet its goals, the study used the survey method to gather data, with the major source being structured questionnaires sent to individual investors. That study claims that common questions were used in several studies, along with some that the researcher developed specifically for the questionnaire.

Methods of Data Analysis

Reliability tests, descriptive statistical tests, frequency analyses, regression analyses, correlation analyses, and hypothesis testing are all used in this study data processing approach. According to the primary data analysis, this study is analyzed using the SPSS software package. The computerized SPSS statistical package is a very useful and fast tool for data analysis. In this study, the questionnaire's reliability was assessed using Cronbach's Alpha method. The rules implies that a reliability of greater than or equal to 0.7 can be interpreted as a positive (good) indication (Gunjan Sharma, 2017). According to the SPSS data analysis, this study's

Cronbach's Alpha was 0.930. So, it demonstrates the strong internal reliability of the questionnaire.

Findings

In several types of data analysis, determining whether the data are normal is a crucial first step, particularly in the case of statistical tests that assume a normal distribution. The independent variables of SE, AN, and SI outcome data are close to the histogram, based on the histogram's result. The investor investment decision of the CSE outcome data is a dependent variable that is close to the histogram. That means that the data for these variables point to a normal distribution.

According to the demographic analysis mostly females have responded to this survey, and they are in the age range of 21 to 30 years. The characterization of occupation 99 (82.5%) of respondents fall into employed category. According to survey data, when investors' annual income was increased, their annual saving also increased.

Table 01: Regression Results

Model 1	R	R Square	Adjusted Square	R Std. Error of the Estimate	Significance
1	0.689 ^a	0.474	0.461	0.334	0.000

a. Predictors: (Constant), AN, SE, SI

Source: Constructed by the authors

The regression study aims to explore the factors influencing individual investors' investment decision on investing in the CSE. Three predictors are used in the analysis: SE, AN, and SI. The dependent variable is the investment decision of individual investors (PI). According to Table 01, it shows that R value is 0.689 and it mean the predictors and individual investors' perceptions have a substantial positive association. Based on the R square value, the model's predictors can explain approximately 47.4% of the variation in investor perception. After adjusting for the number of predictors in the model, the adjusted R square value of 0.461 shows that the predictors are a reasonable fit for the variation in PI. The estimate's standard error, which is 0.334, implies a moderate degree of forecast accuracy. It displays the typical difference between the observed values and the regression line. The model's significant value, which is 0.000, indicates that the regression model as a whole is statistically significant and that the model significantly predicts investor investment decision.

Table 02: Coefficients Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	1.137	0.403		2.819	0.006
SE	0.528	0.110	0.557	4.786	0.000
AN	0.028	0.137	0.023	0.207	0.836
SI	0.185	0.128	0.157	1.444	0.001

a. Dependent Variable: PI

Source: Constructed by the authors

The most widely used analytical method is correlation analysis, which is a statistical measurement. The relationship or association between two variables can be examined using correlation analysis. The range of Pearson correlation coefficients (r) is -1 to +1. +1 value represents the positive correlation which means one variable increase as a result of increasing other one. A negative correlation, represented by a value of -1, indicates that one variable is increasing while the other is decreasing. Table 02 shows the coefficients of independent variables in respect of dependent variable. Beta coefficients in the table explain the relationship which is negative or positive. According to the table there are positive relationship between SE status ($\beta = 0.557$), AN ($\beta = 0.023$), and SI ($\beta = 0.157$) based on 120 investors' investment decision for investing in CSE. According to the table, two variables have significant relationship and one variable has insignificant relationship. As a result, there is a strong positive correlation between investors' investment decision of investing in CSE and SE, with a significant value at the 0.01 level with 0.000 ($p < 0.01$). And also, there is a substantial positive link that is significant at the 0.01 level with 0.001 between investors' investment decision of SI and investing in CSE. According to (JMN Wijekumara, 2019), also found that SE and SI was significant and AN was insignificant impact on investment decision of investors for investing in CSE.

Conclusion

This study investigated the factors influencing on the investment decision of investors for investing in CSE. On behalf of the research questions, three objectives were established and three hypotheses were formulated to achieve those research objectives. Socioeconomic status, awareness and savings were identified as independent variables and investment decision of investors for investing in CSE was identified as dependent variable. And also, this research limited to the Gampaha District individual investors. According to Cronbach's Alpha test, the questionnaire should have at least 0.7 for reliability. So, in this study, the reliability is more than 0.7, so the questionnaire is reliable (0.930). Regression analysis was performed to find out how socioeconomic factors, awareness of the investor, and saving behavior affected investors' investment decision of investing in CSE. Regression study results showed that investors' investment decision of investing in CSE were highly influenced by their savings and socioeconomic level. Regression analysis has been used to examine the hypothesis. The hypothesis testing revealed that H1 (SE) and H3 (SI) were accepted and H2 (AN) was rejected. Since investors' investment decision of investing in CSE are influenced by awareness, however somewhat, this effect is insignificant. Therefore, H2 was rejected.

This study only focusses on individual investors. And also, its limits to the Gampaha district and three variables. So, future researcher can focus institutional investors also and they can conduct same study at a different geographical area to get wide understanding regarding the investment decision of investors for investing in CSE. This study focused 120 investors as target group. Future researchers can attempt to more than 120 individual investors to get better understanding. Researcher recommends to final advisor to provide better advisory service for their clients to make suitable investment decisions for stability of the CSE. Because a wrong decision makes huge loses. And also, researcher recommends to investors to improve capability of investing in CSE. Because investors can get higher return by investing in CSE than other

investment avenues. The researcher also recommends for the government to develop programmers to improve the awareness of CSE and government can provide incentives for investing in CSE more and more.

References

- Ganga Bhavani, K. S. (2017). Impact of Demographics and Perceptions of Investors on Investment Avenues. *Accounting and Finance Research*, 6(2), 198 - 205. <https://doi.org/10.5430/afr.v6n2p198>
- Gunjan Sharma, T. S. (2017). Determinants of Investment Decision Making: An Empirical Study. *International Journal of Financial Management*, 12(6), 23 - 33.
- JMN Wijekumara, D. M. (2019). Factors affecting to the cse investor's perception: a case of north central province. *Proceedings of the Vavuniya Campus International Research Symposium 2019*, 28 - 31.
- Kengatharan, L. (2019). Factors influencing investment decisions in stock market: evidence from individual investors in the northern province of sri lanka. *APSAR*, 1 - 17.
- Mathew, R. L. (2022). Factors Influencing Investment Decisions: A Study of Individual Investors in the Indian Stock Market. *International Journal of Accounting & Business Finance*, 25-44.
- N. Geetha, M. R. (2011). A Study on People's Preferences in Investment Behaviour.
- Ponnamperuma, C. J. (2013). Factors Influencing Investor Behaviour: The Case of Colombo Stock Exchange.
- R.M.K.T. Rathnayaka, D. S. (2014). Empirical Investigation of Stock Market Behaviour in the Colombo Stock Exchange. *Reshaping Management and Economic Thinking through Integrating Eco-Friendly and Ethical Practices Proceedings of the 3rd International Conference on Management and Economics*, 209-216.
- Sandip Chattopadhyay, R. D. (2015). Demographic and socioeconomic impact on risk attitudes of the indian investors – an empirical study. *Asian Economic and Financial Review*, 601 - 623.
- Somathilake, H. (2020). Factors Influencing Individual Investment Decisions In Colombo Stock Exchange. *International Journal of Scientific and Research Publications*, 579-585.

IMPACT OF FINANCIAL LITERACY, SOCIAL FACTORS AND PERSONAL EXPERIENCES ON THE FINANCIAL BEHAVIOR OF FIXED INCOME EARNERS IN GAMPAHA DISTRICT

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ABSTRACT

This research focuses on how financial literacy, social factors, and personal experiences affect the financial behavior of fixed income earners in Gampaha District, during the prevailing economic crisis. The quantitative and qualitative research methods used in this study have resulted in a significant relationship between financial literacy, personal experiences, and financial behavior. On the other hand, social factors did not lead to significant results. While previous literature indeed looked into financial behavior across different demographics, the present study targets fixed-income earners in particular during times of crisis, hence addressing the gap in understanding financial decisions under such adverse conditions.

Introduction

Financial literacy involves understanding various financial skills, such as investing, budgeting, and managing personal finances (Fernando, 2024). It is crucial for a lifelong learning relationship with money and involves skills like budgeting, money management, financial products, and decision-making. Financial behavior is influenced by factors such as financial literacy, personal experiences, social factors, and income level (Balagobei & Prashanthan, 2021). The economic crisis significantly changed the financial behavior of fixed income earners in Sri Lanka. This research study aims to understand how people with regular income sources manage their money, make decisions, and achieve financial goals. The study focuses on the impact of financial literacy, demographic factors, and experiences on the financial behavior of fixed income earners during the economic crisis. The study aims to establish the relationship between various factors and financial behavior, focusing on how personal financial knowledge and family financial socialization help individuals make informed decisions that positively impact themselves and their loved ones. The scope on financial behavior of fixed income earners in Gampaha district is a specific focused area within the broader field of research, due to its diversity, socioeconomic mix, proximity to urban centers, and the heavy impact of the economic crisis, it is appropriate and strategic for this research. Some of the key areas within the scope of this research are financial literacy and knowledge, savings and spending habits, investment decisions, retirement planning, impact of socioeconomic factors etc.

The fuel and petroleum crisis results in the loss of jobs, reduced household incomes, decreased consumption, shrinking economy, increased unemployment, poverty, underutilized skills, and challenges in re-employment and economic recovery-all combining to create a vicious cycle of job insecurity and stagnation (Balagobei & Prashanthan, 2021). For this reason, people are cutting down expenditure, using their emergency funds, and borrowing from friends, relatives,

mortgages, and credit. The study will try to understand the influence of financial literacy on the financial behavior of fixed income earners in Gampaha District during the economic crisis in Sri Lanka.

Financial literacy is regarded as one of the best opportunities for accomplishing self-helpful financial behavior, and it has a positive correlation with retirement income planning and greater strategies (Lusardi & Mitchell, 2007). A financially literate individual will focus on paying bills on time, saving money through investments, and responsible usage of credit cards. Social factors also define financial behaviors (Balagobei & Prashanthan, 2021). Higher social and economic status leads to higher levels of behavior attitude and knowledge. Studies show that there indeed exists a financial literacy gap between males and females (Gutter et al., 2009). According to Remund (2010) females proved to be more financially illiterate. However, improvements with education attained, earnings, as well as relationship status can reduce this gap. Financial experience is positively correlated to orthodox loan borrowing, non-orthodox borrowing, and venture capital investments. Smart investors learn how to handle hazardous conditions and thus, therefore, be able to take higher risks. Financial literacy provides both knowledge and experience factors, but the performance of Micro, Small and Medium Enterprises improves in dynamic use of financial instruments (Awais et al., 2016). According to Purwidiyanti et al. (2022) the provision of financial experience increases productivity by teaching the owners how to participate in the various available financial markets.

Methodology

Under the quantitative methodology, the relationship between the social factors, personal experiences, financial literacy, and financial behavior of fixed-income earners in the District of Gampaha is investigated. Based on a convenient sampling approach, a sample size of 120 fixed-income earners is selected. Data collection was done through a questionnaire capturing financial literacy, social factors, personal experiences, and financial behavior. The research had analyzed the relation among the variables, using SPSS software, verified by regression, reliability, descriptive analysis, normality tests, and correlation analysis. A multiple regression model has been developed to show the relevance of the variables.

The qualitative research design therefore investigates how financial literacy and social influence, along with personal experiences, affected fixed-income earners' financial behavior in Gampaha District. The sample size used was 120 participants aged 18-50 years earning a fixed income drawn from both public and private organizations. Data collection was done using semi-structured questionnaires touching on key areas: financial literacy, personal experiences, and social influence. In this present study, data are gathered from the residents of Gampaha District, categorized into groups of similarities, and analyzed manually. Ethical approval was obtained, and informed consent was secured. Confidentiality was ensured through anonymization and safe storage. The study received ethical clearance and informed consent from participants. However, the findings might not generalize to all fixed-income earners. Instead, the findings become meaningful in their own context of Gampaha District.

Findings

Findings from Quantitative Research

Correlation Analysis

Correlation analysis is an inferential statistical analysis which represents the direction and strength of the relationship between the variables (Balagobei & Prashanthan, 2021). The results of the correlation matrix as depicted from Table 01 shows that the correlation coefficient between financial literacy and financial behaviors is 0.538, ($P < 0.05$) which represents a significant relationship. Therefore, financial literacy is strongly positively correlated with financial behavior. As Table 01 represents the correlation matrix, the social factors ($r = 0.580^{**}$, $P < 0.05$), experiences ($r = 0.653^{**}$, $P < 0.05$) have a significant relationship with financial behavior at 95% confidence level. Hence financial literacy, social factors and experiences are positively correlated with financial behavior of fixed income earners in Gampaha District (Table 01).

Table 01: Correlations

		FB	FL	SF	EX
FB	Pearson Correlation	1			
	Sig. (2-tailed)	0.000			
FL	Pearson Correlation	.538**	1		
	Sig. (2-tailed)	0.000	0.000		
SF	Pearson Correlation	.580**	.582**	1	
	Sig. (2-tailed)	0.000	0.000	0.000	
EX	Pearson Correlation	.653**	.429**	.660**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000

Source: Jayawardhane, 2024 (SPSS analysis output)

Multiple Regression Analysis

The study examines the impact of financial literacy, social factors, and experiences on financial behavior in fixed income earners in Gampaha District. The model uses multiple linear regression, with a positive correlation between these variables. The R multiple correlation value of 0.717 indicates a positive correlation. The R square value of 0.514 indicates that 51.4% of the variance in the dependent variable can be explained by the independent variable (Table 02).

Table 02: Multiple Regression Analysis

	R	R square		Beta	Significance
Multiple regression	0.717 ^a	0.514	Financial Literacy	0.272	0.001
			Social Factors	0.120	0.214
			Experiences	0.457	0.000

Source: Jayawardhane, 2024 (SPSS analysis output)

Equation:

$$YFB = \beta_0 + \beta_1 XFL + \beta_2 XEX + et \dots\dots\dots (01)$$

$$YFB = 0.889 + 0.272X + 0.457X + et \dots\dots\dots (02)$$

FB = Financial Behavior

FL = Financial Literacy

EX = Experiences

ANOVA Testing

The results of the ANOVA analysis were used to identify the significance of the overall model of Financial Behavior. Here F value is equal to 40.909 and P value equal to 0.000, which is significant at 0.05 level of significance. Therefore, the validity of the model was confirmed.

Findings from Quantitative Research

Financial literacy is the second most influential in shaping financial behavior, behind personal experiences, according to a quantitative study of fixed-income earners in the Gampaha District. Despite being considered, social influences were not shown to be statistically significant in this investigation. These results provide credence to the idea that developing knowledge, abilities, and experiences through financial literacy programs is essential to changing financial behavior in this demographic.

Findings from Qualitative Research

The qualitative investigation yielded more profound understandings of the variables affecting financial behavior. It reaffirmed the value of firsthand knowledge, especially when it comes to debt and unanticipated costs. Participants emphasized the difficulties in managing finances in the absence of sufficient financial literacy and the necessity of helpful advice and assistance. In this analysis, the research has found that Financial Literacy, Social factors and personal experiences are influencing on Financial Behavior of the Fixed income earners in Gampaha District, Sri Lanka.

The study proposes a four-step approach to financial education among fixed-income earners in the Gampaha District. First, base financial education on personal experience, advising on how to manage debt, budget, and save money. Second, develop financial literacy programs that address some of the everyday issues relating to debt management, unplanned expenditure, and insufficient savings strategies. Third, promote financial literacy through neighborhood-based projects by capitalizing on existing networks and resources. Fourthly, advocate for legislation and programs that guarantee access to affordable and inclusive financial services. Advocating for systemic changes that accommodate financial inclusion and literacy, for example, encouraging prudent lending behavior or the introduction of financial literacy as a compulsory subject in schools. Finally, conduct further research into the long-term impact of financial literacy programs on fixed-income earners' financial behaviors in not only Gampaha district, but also other districts too. The longitudinal design studies are required to assess the efficacy of such interventions overtime in changing saving, investment, and budgeting behaviors.

Conclusion

The study reveals that fixed-income earners in the Gampaha District, Sri Lanka, are influenced by financial literacy, and personal experiences. It highlights the need for financial education and planning tools to manage living costs and establish long-term financial security. The quantitative analysis shows that better financial literacy leads to positive financial behaviors like budgeting and saving. Social factors have less influence, but positive experiences build confidence and negative ones result in risk avoidance. The findings suggest that improving

financial literacy and exposure to positive experiences can enhance financial well-being. The study calls for the development of financial literacy initiatives to improve financial control, respond to uncertain economic conditions, and establish a successful financial future.

References

- Awais, M., Laber, M. F., Rasheed, N., & Khursheed, A. (2016). Impact of Financial Literacy and Investment Experience on Risk Tolerance and Investment Decisions: Empirical Evidence from Pakistan. *International Journal of Economics and Financial Issues*, 6(1), 73–79. <https://www.econjournals.com/index.php/ijefi/article/view/1414>
- Balagobei, S., & Prashanthan, V. (2021). Impact of Financial Literacy on Investment Decisions: Evidence from Individual Investors in Jaffna District. *International Journal of Accounting and Business Finance*, 7, 155. <https://doi.org/10.4038/ijabf.v7i0.113>
- Fernando, J. (2024). *Financial literacy: What it is, and why it is so important to teach teens*. Investopedia. <https://www.investopedia.com/terms/f/financial-literacy.asp>
- Gutter, M., Copur, Z., & Garrison, S. T. (2009). Which Students are More Likely to Experience Financial Socialization Opportunities? Exploring the Relationship Between Financial Behaviors and Financial Well-Being of College Students. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1432523>
- Lusardi, A., & Mitchell, O. S. (2007). Financial Literacy and Retirement Preparedness: Evidence and implications for financial education. *Business Economics*, 42(1), 35–44. <https://doi.org/10.2145/20070104>
- Purwidiyanti, W., Tubastuvi, N., Darmawan, A., & Rahmawati, I. Y. (2022). Does financial behavior mediate the relationship between financial literacy and financial experience towards financial performance of small businesses? *Advances in Economics, Business and Management Research/Advances in Economics, Business and Management Research*. <https://doi.org/10.2991/aebmr.k.211225.033>
- Remund, D. L. (2010). Financial literacy explicated: the case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs*, 44(2), 276–295. <https://doi.org/10.1111/j.1745-6606.2010.01169.x>
- Tharanga, B., & Gamage, S. (2021). Impact of financial literacy on financial behavior of management undergraduates in sri lanka - evidence from a state university of Sri Lanka. *International Journal of Economics*, (9), 126–128 . <https://ijecm.co.uk/wp-content/uploads/2021/09/999.pdf>

IMPACT OF FINANCIAL LITERACY ON LEASE FINANCING DECISIONS: BASED ON THE EVIDENCE FROM PERSONAL VEHICLE LESSEES

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ABSTRACT

Lack of financial literacy may influence the decisions of lessees when it comes to leasing. Hence, this study aims to investigate the impact of financial literacy on lease financing decisions. The study was conducted in the Kandy district employing a cross-sectional survey. The quantitative research method under the deductive approach was followed. The findings demonstrate positive effects of financial literacy, with financial knowledge, awareness, and attitude as significant predictors, while financial skill and behavior are not. This study offers a comprehensive review of empirical studies on financial literacy and expands the discussion regarding its impact on the leasing decisions of personal vehicle lessees.

Introduction

The automotive industry has witnessed a significant shift in consumer preferences, with an increasing number of individuals opting for lease financing to acquire personal vehicles (Ashok et al., 2018). Lease financing offers an attractive alternative to traditional ownership, providing flexibility, lower monthly payments, and the opportunity to drive a new vehicle more frequently (Thavaseelan et al., 2021). Hence, vehicle financing is a crucial aspect of the automotive industry, enabling consumers to purchase vehicles without upfront payment (Ashok et al., 2018).

Financial literacy refers to the knowledge and understanding of financial concepts, skills, motivation, and confidence to make effective decisions in various financial contexts. It helps individuals manage their wealth effectively and make sound financial decisions (Balagobei & Prashanthan, 2021). According to Miller et al., (2009) as cited in Nkundabanyanga et al., (2014) lack of financial literacy is often tied to lack of access to financial products including credit, or failure to use them even when they are available. Muthukrishnan et al., (2023) suggested that it is a must to increase awareness and education about vehicle financing, and most of the respondents have no knowledge about vehicle loans. If individuals lack financial knowledge, skills, or a financial attitude, they will face various challenges. Also, this may influence the decisions of lessees when it comes to leasing.

This study investigates the influence of financial literacy on the personal vehicle leasing decisions of individuals in the Kandy District. The study aims to examine the impact of financial knowledge, skill, awareness, behavior, and attitude on lease financing decisions.

Kumari (2020) studied financial literacy among potential customers in the financial service industry and found that financial awareness, attitude, behaviour, knowledge, and skill are the main determinants. The results revealed that financial knowledge is the most significant determinant, suggesting policy decision-makers should consider awareness programs.

Thavaseelan et al.(2021) conducted a study on the impact of leasing on lessees' income, family expenditure, and default rate in the Jaffna District, and the results showed higher debt increases in family expenses due to longer repayment periods. Ashok et al.(2018) found that vehicle finance customers prioritize product attributes, lender attributes, flexibility, and relationship quality. They disclosed that buyers value lender attributes like transparency, speedy processing, and superior service quality. Jima & Andualem (2018) found that price, brand, and social factors significantly influence vehicle buying decisions. Karunanayake & Wanninayake (2015) focused on environmental attitudes, subjective norms, price perception, preferences, knowledge, perceived risk, and expectations for buying a hybrid vehicle in Sri Lanka. The results of this study show that price perception, social influence, and perceived risk significantly impact on buying intention of vehicles.

Methodology

This section explains the methodology of the present study. It was designed as a quantitative study following the deductive approach within the positivist philosophical stance. The study employed a cross-sectional survey in order to collect the primary data required for the analysis. The conceptual framework was developed based on the theoretical and empirical literature (Jima & Andualem, 2018; Karunanayake & Wanninayake, 2015; Kumari, 2020). Accordingly, Financial Knowledge (FK), Financial Skill (FS), Financial Awareness (FA), Financial Behaviour (FB), and Financial Attitude (FT) served as the independent variables and Intention to Obtain Lease Financing (IOLF) served as dependent variable of the study. The potential relationship among the independent and dependent variables are illustrated in the figure 01.

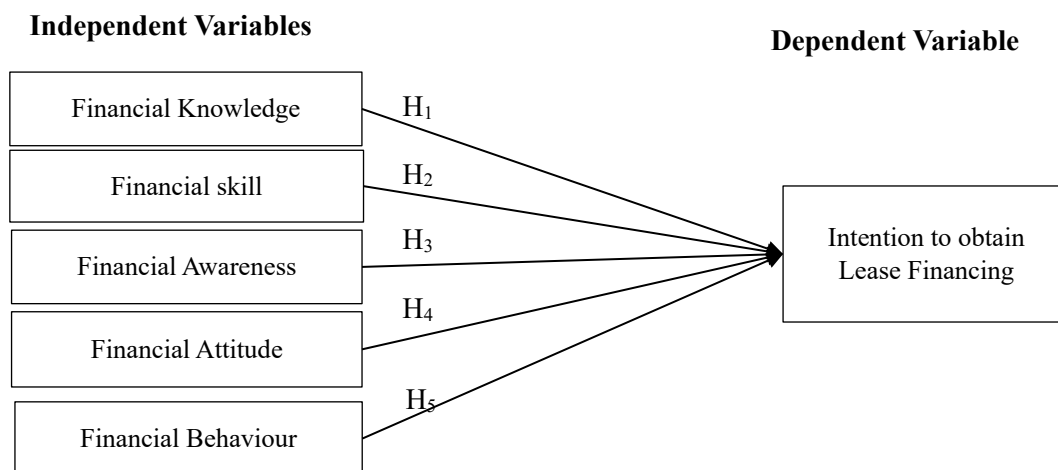


Figure 01: Conceptual Framework

Source: Compiled by Authors

As per the conceptual framework of the study following hypotheses were identified and tested.

H₁: There is a significant impact of financial knowledge on lease financing decisions

H₂: There is a significant impact of financial skill on lease financing decisions

H₃: There is a significant impact of financial awareness on lease financing decisions

H₄: There is a significant impact of financial attitude on lease financing decisions

H₅: There is a significant impact of financial behaviour on lease financing decisions

The respondents were personal vehicle lessees in the Kandy District. The study's sample size was determined using the Cochran (1977) formula, and the convenience sampling technique was employed. By focusing on lease financing, the study contributes to the growing literature on how individuals' understanding of financial concepts directly shapes their decisions in a specific, under-researched domain. The findings offer actionable insights for individuals, policymakers, and leasing companies to tailor solutions for lease financing decisions.

Findings

A total of 394 responses were collected from online-based forms and paper-based forms. The demographic data reveals a diverse age distribution, with the majority aged 20-30, with males being more active in vehicle leasing activities. Educational qualifications vary, with 42.1% having a degree or diploma, 32.5% reaching G.C.E. A/L, and 22.3% holding up to G.C.E. O/L. Employment is 41.6% full-time, 32.2% self-employed, 16.8% part-time, and 9.4% unemployed. The majority earn between Rs.60,001 and Rs.100,000.

The study of Cronbach's alpha for the dependent and independent variables indicates satisfactory internal consistency. The overall study's Cronbach's alpha is 0.955 confirming acceptable construct reliability. A pilot study was conducted to ensure appropriateness and relevance. An inter-item correlation analysis was conducted to test the validity of the questionnaire. Pearson correlation analysis provided evidence of convergent validity. The results showed a positive and significant relationship between all items, with a coefficient (r) value greater than +0.5 indicating a strong linear relationship at a 0.01 level of significance. The study used graphical methods to assess normality, as it allowed good judgment in situations where numerical tests might be over or under-sensitive. Histograms, box plots, and Q-Q plots showed that the data was normally distributed and symmetric, with mean and median values.

Table 01: Results of the regression analysis

Variables	Intention to obtain lease financing	
	Coefficient	Sig.
(Constant)	0.712	0.005
Financial Knowledge	0.137	0.028
Financial Skill	0.126	0.076
Financial Awareness	0.188	0.010
Financial Behaviour	0.122	0.203
Financial Attitude	0.188	0.037
R ²	0.279	
Adjusted R ²	0.27	
F value	30.01	0.000

Source: Survey results (2024)

Regression is a statistical tool used to predict the value of one continuous variable from one or more other variables. The model summary includes the R square and standard error term. The R-value is 0.528, indicating a moderate positive correlation between the independent variables and the dependent variable. The adjusted R Square is 0.279, indicating that adding more predictors doesn't significantly improve the model. The ANOVA results confirm the regression model's adequateness, with a significance level of 0.001, indicating appropriate conclusions. The regression coefficient indicates a significant relationship between financial literacy and

intention to obtain lease financing decisions. Three independent variables were significant: financial knowledge, financial awareness, and financial attitude, at 95% confidence level. The t-test for financial knowledge, awareness, and attitude was statistically significant, while financial skill and behaviour were not.

The research model can be expressed as follows.

$$IOLF = 0.712 + 0.137FK + 0.188FA + 0.188FT \dots \dots \dots (1)$$

IOLF – Intention to obtain Lease financing

FK – Financial Knowledge

FA – Financial Awareness

FT – Financial Attitude

The results support H₁, H₃, and H₅, but H₂ and H₄ were rejected in the current study. Financial knowledge has a significant positive impact on lease financing decisions ($\beta = 0.137$, $p < 0.05$, $T = 2.199$). Therefore, H₁ can be accepted. The results highly collaborate with the previous findings of (Balagobei & Prashanthan, 2021; Kumari, 2020). Due to the financial skill does not significantly impact lease financing decisions ($\beta = 0.126$, $p = 0.076 > 0.05$, $T = 1.778$) H₂ would be rejected. Although financial skills are important, they do not directly influence lease financing decisions in this study. Findings align with Dewi et al., (2020), which emphasize financial knowledge and awareness as more impactful than skills. H₃ can be accepted because along with the results of the study financial awareness has a significant positive impact on lease financing decisions ($\beta = 0.188$, $p < 0.05$, $T = 2.601$). The findings comply with prior studies (Kumari, 2020; Dewi et al., 2020). Also, H₄ can be rejected due to the non-significant impact of financial behavior on leasing decisions. The results align with Mugo, (2016), indicating financial behavior has a limited impact on such financial choices. Financial attitude has a significant positive impact on lease financing decisions ($\beta = 0.188$, $p < 0.05$, $T = 2.095$). Therefore, H₅ can be accepted. The results are supported by the previous findings (Balagobei & Prashanthan, 2021; Kumari, 2020).

Conclusion

In conclusion, the study's results support the hypotheses that financial knowledge, financial awareness, and financial attitude significantly impact lease financing decisions, whereas financial skill and financial behaviour do not have a statistically significant effect. Accordingly, the study successfully achieved its objectives.

Recommendations include developing comprehensive financial literacy programs, collaborating with educational institutions and financial service providers, advocating for policy changes, and organizing awareness programs to spread the word on the importance of learning money. However, the study's limitations include its focus on the Kandy District and its self-reported data, which may exaggerate participants' actual financial literacy levels. Future research should explore different regions and cultures, examine how financial literacy influences decisions in other areas of the financial services industry, and use qualitative

methods to assess financial literacy indicators. In conclusion, this research underscores the importance of financial literacy in lease financing decisions and suggests that stakeholders should take steps to promote financial literacy and create a culture of competent financial behaviour among people.

References

- Ashok, K. ., Rajendran, R., & Nataraj, B. (2018). Factors influencing the choice criteria of Vehicle Finance Loans- a study with special reference to Namakkal District , India . *Journal of Advance Management Research*, 6(1), 63–74.
- Balagobei, S., & Prashanthan, V. (2021). Impact of Financial Literacy on Investment Decisions: Evidence from Individual Investors in Jaffna District. *International Journal of Accounting and Business Finance*, 7((Special Issue)), 155–170. <https://doi.org/10.4038/ijabf.v7i0.113>
- Dewi, V. I., Febrian, E., Effendi, N., Anwar, M., & Nidar, S. R. (2020). Financial literacy and its variables: The evidence from indonesia. *Economics and Sociology*, 13(3), 133–154. <https://doi.org/10.14254/2071-789X.2020/13-3/9>
- Jima, C., & Andualem, G. (2018). *Determinants of Vehicles Buying Decision: in case of Addis Ababa*. <https://scholar.archive.org/work/g2tbx4g2z5ge7lld66lpumvoam/access/wayback/https://nadre.ethernet.edu.et/record/17228/files/AnaniaTassew.pdf>
- Karunanayake, R. K. T., & Wanninayake, D. W. M. . B. (2015). Impact of Key Purchasing Determinants on Purchase Intention of Hybrid Vehicle Brands in Sri Lanka, an Empirical Study. *Journal of Marketing Management (JMM)*, 3(1), 40–52. <https://doi.org/10.15640/jmm.v3n1a4>
- Kumari, D. A. T. (2020). Determinants of Financial Literacy: with Special Reference to Consumers in Financial Service Industry. *Sri Lanka Journal of Marketing*, 6(2), 93–125. <https://doi.org/10.4038/sljmuok.v6i2.44>
- Mugo, E. (2016). *Effect of Financial Literacy on Investment Decisions Among Savings and Credit Co-Operative Societies Members in Nairobi*.
- Muthukrishnan, R., Mathews, S., Sanjana, M., & Sandeep, S. (2023). Socio-Economic Factors' Impact on Vehicle Financing & Consumer Behaviour. *Journal of Survey in Fisheries Sciences*, 10(1S), 5055–5065.
- Nkundabanyanga, S. K., Kasozi, D., Nalukenge, I., & Tauringana, V. (2014). Lending terms, financial literacy and formal credit accessibility. *International Journal of Social Economics*, 41(5), 342–361. <https://doi.org/10.1108/IJSE-03-2013-0075>
- Thavaseelan, R., Krishnapillai, S., & Santhirasegaram, S. (2021). Economic Impact of Leasing on Lessees in Jaffna District of Sri Lanka. *International Journal of Economics and Financial Issues*, 11(1), 109–113.

FINANCIAL LITERACY AND SAVINGS BEHAVIOR AMONG SRI LANKAN YOUTH

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ABSTRACT

This study investigates the differences in saving behavior among youth with varying levels of financial literacy in the North Western Province of Sri Lanka. Using Lusardi's Financial Literacy questions and the Theory of Planned Behavior, the study assesses financial literacy and savings behavior through structured questionnaires from 384 respondents. The findings reveal that youth with higher financial literacy exhibit more positive attitudes towards savings, greater social influence to save, and higher perceived control over their saving efforts. This research provides valuable insights for financial institutions, policymakers, and future researchers, highlighting the importance of financial literacy in shaping saving behaviors.

Introduction

This study aims to evaluate the financial literacy of youth aged 15-29 in Sri Lanka's North Western Province and analyze their savings behavior, in varying financial literacy levels. Financial literacy is essential for youth, as it lays the foundation for informed financial decisions and long-term stability. According to the Organisation for Economic Co-operation and Development (OECD), financial literacy encompasses the knowledge, skills, attitudes, and behaviors necessary for making sound financial decisions. Despite varying definitions, it generally includes personal financial management, budgeting, credit and debt management, savings, investments, risk management, and financial goal setting. Studies indicate that only 33% of adults worldwide are financially literate, highlighting significant deficiencies in developing economies (Klapper et. al., 2015). Savings, defined as income not spent, are crucial for financial stability, particularly during periods of income instability or unexpected expenses. Factors influencing savings behavior include income, financial literacy, family size, and consumption patterns, with parental financial teaching playing a significant role. Theories such as the Life-Cycle Hypothesis and Behavioral Economics Theory provide frameworks for understanding the interplay of economic, psychological, social, and cultural factors in shaping savings decisions. Youth, typically aged 15-29, face challenges such as poverty, unemployment, and lack of opportunities, making financial literacy and early savings crucial, which is the key focus of this study.

Research on the level of financial literacy and savings behavior among youth is vital for several reasons. It empowers young individuals to make informed financial decisions, fostering long-term stability and independence. Understanding these levels aids policymakers in designing targeted financial education programs that address the specific needs of youth. Additionally, it underscores the importance of early financial education in preventing future financial difficulties and promoting responsible financial behavior. Finally, such research provides insights into the socio-economic factors influencing financial literacy and savings behavior, enabling more effective interventions and support for vulnerable populations.

The OECD model of financial literacy encompasses three key aspects: financial knowledge, financial attitude, and financial behavior. Financial knowledge, a crucial element, involves understanding essential financial concepts such as interest rates, inflation, the time value of money, and risk diversification. This study aims to assess participants' financial knowledge using three multiple-choice questions developed by Lusardi and Mitchell, focusing on interest compounding, inflation, and risk diversification (Lusardi & Mitchell, 2011). Additionally, the Theory of Planned Behavior (TPB), introduced by Icek Ajzen in 1985, provides a framework for predicting human behavior through three components: Attitudes Toward Behavior, Subjective Norms, and Perceived Behavioral Control (Ajzen, 1991). Attitudes reflect an individual's positive or negative perceptions of behavior, subjective norms involve social pressures, and perceived behavioral control indicates the ease or difficulty of performing the behavior. The study examines savings behavior by analyzing these components, offering insights into how attitudes, social influences, and perceived control shape financial decisions.

Scheresberg's (2013) study in the United States identified that young adults, particularly females, ethnic minorities, and those with low income or education, exhibit low levels of financial literacy, with higher financial literacy correlating with improved financial behavior and planning for retirement and emergencies. Kalmi and Ruuskanen (2018) in Finland demonstrated that, despite the country's overall good financial literacy, women, the unemployed, low earners, and those with only primary education have lower levels, adversely affecting their retirement planning. Mouna, et al. (2020) in France revealed that financial literacy and risk aversion significantly impact saving behavior, with increased financial education mitigating the connection between risk attitudes and saving tendencies. Garg & Singh (2017) in India found that financial literacy among youth is low, with socio-economic and demographic factors significantly influencing financial literacy levels. In Sri Lanka, Padmakanthi (2022) highlighted poor financial literacy among university students, particularly among females, while Tharanga and Gamage (2021) found that a significant majority of students exhibited good to very high levels of financial literacy and financial behavior.

Methodology

This study adopts a positivist research philosophy and a deductive approach, employing structured questionnaires to gather quantitative data from a substantial sample. The research is conducted within a cross-sectional time horizon, utilizing convenient sampling to select 384 respondents, representing approximately 5.125 million youth between the ages of 15-29 (Ministry of Sports and Youth Affairs, 2020) as determined by the Morgan table for a 95% confidence level and a 5% margin of error. To address potential sample bias, blind data collection methods were implemented, participant eligibility was clearly defined, and a pilot study was conducted.

The independent variable, Level of Financial Literacy is assessed using three multiple-choice questions developed by Lusardi and Mitchell (2011), with a scoring system that categorizes financial literacy levels as either low or high. The dependent variable, savings behavior, is analyzed through the TPB framework, focusing on subjective norms, attitudes, and perceived behavioral control, with responses rated on a five-point Likert scale. To account for the multiple

criteria involved in assessing savings behavior, the Weighted Sum Model (WSM) is employed, ensuring a comprehensive evaluation of the factors influencing financial decisions.

Hypothesis:

H₁: There is a statistically significance difference in savings behavior between the basic low level of financially literate youth and the basic high level of financially literate youth.

Findings

The reliability testing, as measured by Cronbach's alpha, demonstrated that Subjective Norms (0.829), Attitudes (0.812), and Perceived Behavioral Control (0.824) all exhibit good internal consistency, surpassing the acceptable benchmark value of 0.7. The sample's adequacy is confirmed by a KMO value of 0.740, while Bartlett's Test of Sphericity indicates a significant relationship between variables with a P-value of 0.000, affirming the data's suitability for analysis.

An independent sample t-test was employed to compare the means of two independent groups, with Levene's test assessing the null hypothesis of equal variances. The t-test results reveal a statistically significant difference in savings behavior between youth with low and high levels of financial literacy, evidenced by a p-value of 0.000, which is less than 0.05. The mean difference of 0.465 points indicates that, on average, one group's savings behavior score is 0.465 points higher than the other. The 95% confidence interval, ranging from 0.300 to 0.631, further corroborates this finding, as it does not include zero. Consequently, the null hypothesis is rejected, and it is concluded that there is a statistically significant difference in savings behavior between youth with low and high levels of financial literacy in the North Western Province of Sri Lanka. This finding underscores the importance of financial literacy in influencing savings behavior among youth in the North Western Province of Sri Lanka.

Table 01: Independent Sample T-Test

	F	sig	t	df.	Sig.(2-tailed)	Mean difference	Std. error difference	95% confidence interval of the difference	
								Lower	Upper
Equal variance assumed	2.412	0.121	5.516	382.000	0.000	0.465	0.084	0.300	0.631
Equal variance not assumed			5.142	54.178	0.000	0.465	0.091	0.284	0.647

Source: Survey results (2024)

Conclusion

The primary objective of this study is to identify the significant differences in saving behavior between youth with basic low and high levels of financial literacy in the North Western Province of Sri Lanka. While previous research has explored the relationship between financial literacy and savings behavior (Andrew et. al., 2017; Peiris, 2021), this study uniquely focuses on the differences in savings behavior based on varying levels of financial literacy among youth

in this specific region. The findings reveal a statistically significant difference in savings behavior, with youth possessing higher financial literacy demonstrating more positive attitudes towards savings, greater social influence to save, and higher perceived control over their saving efforts compared to their less financially literate counterparts.

The study's findings have practical implications for youth in the North Western Province of Sri Lanka, helping them manage their finances more effectively by understanding the impact of financial literacy on savings behavior. Financial institutions can use these insights to create tailored savings platforms, while policymakers can design financial policies and regulations that cater to the varying needs of youth based on their financial literacy levels. Additionally, the study offers a valuable empirical foundation for future researchers exploring the nuances of financial literacy and savings behavior.

In conclusion, this study highlights the critical role of financial literacy in shaping savings behavior among youth in the North Western Province of Sri Lanka. The significant differences in savings behavior between youth with varying levels of financial literacy underscore the need for targeted educational and policy interventions. By enhancing financial literacy through comprehensive educational programs, community initiatives, and technological tools, we can empower youth to make informed financial decisions and foster a culture of savings. These efforts will not only benefit individuals but also contribute to the overall economic stability and growth of the region.

References

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [http://dx.doi.org/10.1016/0749-5978\(91\)90020-T](http://dx.doi.org/10.1016/0749-5978(91)90020-T).
- Andrew, A., Tharanika, K., & Kanagatharan, T. (2017). Factors Influencing on Saving Behaviour Among University Students- With Special Reference to the Students of Faculty Of Commerce and Management, Eastern University, Sri Lanka. *International Journal of Research*, 4(14), 861-871.
- Kalmi, P., & Ruuskanen, O. (2018). Financial literacy and retirement planning in Finland. *Journal of Pension Economics and Finance*, 17(3), 335-362. <https://doi.org/10.1017/S1474747217000270>,
- Klapper, L., Lusardi, A., & Oudheusden, P. v. (2015). *Financial Literacy Around the World*. Washington DC: Standard & Poor's Ratings Services Global Financial Literacy Survey.
- Lusardi, A., & Mitchell, O.S. (2011). Financial literacy around the world: an overview. *Financial literacy around the world*, 10(4), 497-508. doi:10.1017/S1474747211000448.
- Ministry of Sports and Youth Affairs, (2020). *About the Ministry: About Us*. <https://www.moys.gov.lk/about#:~:text=Youth%20community%20represents%20a%20significant,23.6%25%20of%20the%20total%20population>.
- Mouna, A., Jarboui, A., & Salhi, B. (2020). Evaluating the Effects of Socio-Demographic Characteristics and Financial Education on Saving Behavior. *International Journal of*

Sociology and Social Policy, 40(11/12), 1423-1438. <https://doi.org/10.1108/IJSSP-03-2020-0048>.

Padmakanthi, N.P.D. (2022). An Analysis of Financial Knowledge of the Students in the Faculty of Social Sciences and the Faculty of Arts of the State Universities in Sri Lanka. *Vavuniya Journal of Business Management*, 5(2), 1-16.

Peiris, T. U. (2021). Effect of Financial Literacy on Individual Savings Behavior: the mediation role of intention to saving. *European Journal of Business and Management Research*, 6(5), 94-99. <https://doi.org/10.24018/ejbmr.2021.6.5.1064>.

Scheresberg, C.D.B. (2013). Financial Literacy and Financial Behavior among Young Adults: Evidence and Implications. *Numeracy*, 6(2), Article 5. <http://dx.doi.org/10.5038/1936-4660.6.2.5>.

Tharanga, B. B., & Gamage, S. C. (2021). Impact of Financial Literacy on Financial Behavior of Management Undergraduates in Sri Lanka -Evidence from A State University Of Sri Lanka. *International Journal of Economics, Commerce and Management*, 9(9), 126-136.



Track 04

Contemporary Finance

EFFECT OF MOBILE BANKING ON CUSTOMER SATISFACTION IN COMMERCIAL BANKS IN GAMPAHA DISTRICT, SRI LANKA

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ABSTRACT

This research investigates the impact of mobile banking on customer satisfaction in commercial banks in the Gampaha District, Sri Lanka. Key areas analyzed include mobile banking responsiveness, ease of use, technological expertise, and perceived security. A quantitative approach was adopted, using structured questionnaires distributed to 309 users. Regression analysis revealed that responsiveness and ease of use positively influence satisfaction, while security demonstrates the strongest positive effect. The findings provide actionable insights for banks to enhance mobile banking services, focusing on customer satisfaction indicators critical for growth in developing financial markets.

Introduction

The purpose of this research is to evaluate the customers' levels of satisfaction on mobile banking in the Gampaha District, Sri Lanka in which technological improvements enhanced the field of financial services. There is often necessity from feature such as simplicity, speed and flexibility that is necessary for customer maintenance and development. Key drivers of satisfaction such as response time, technical competence, usability, and security are examined as service disruptions as well as differential adoption of technologies may be problematic for the customer. The many and varied industries in the region make Gampaha an excellent area to examine the effects, bridging research knowledge gaps in addition to enabling the desired evolution of appropriate traditional banking paradigms that can successfully meet consumer demand (Abeysekera, 2020).

Research Problem and Gap

Studies on mobile banking's impact on customer satisfaction in Sri Lanka, particularly in the Gampaha District. While mobile banking enhances financial inclusion, key factors like responsiveness, ease of use, technological proficiency, and security remain understudied in this context. Existing research shows mixed findings and low adoption rates. This study aims to bridge the knowledge gap by exploring these factors and their influence on customer satisfaction in Gampaha.

Literature Review

The literature review underscores the significance of mobile banking in enhancing customer satisfaction, guided by theories like the Technology Acceptance Model (TAM), SERVQUAL, Unified Theory of Acceptance and Use of Technology (UTAUT), and Diffusion of Innovations. Mobile banking offers convenience, accessibility, and efficiency, key drivers of customer satisfaction. Studies reveal factors like ease of use, responsiveness, and security significantly influence satisfaction, though gaps exist in understanding semi-urban contexts like Gampaha. Empirical evidence from Sri Lanka and beyond highlights mobile banking's

potential to redefine customer experiences. However, challenges like low adoption rates and varied perceptions of service quality persist, emphasizing the need for user-centric designs and improved technology adoption strategies tailored to diverse user groups.

This research will provide a solution to scholars who have done previous research and found that mobile banking services provided by commercial banks have positive or negative effects or no effect. For example, in a survey by Jayasena and Perera (2020), he reported that a significant majority of commercial bank customers value the convenience, ease of access, and time-saving features of mobile banking. These factors have been found to be key determinants of customer satisfaction, indicating that users greatly benefit from the ability to transact anytime and anywhere. Thus, the results of this test can confirm various ideas or reject certain ideas.

Main objective

The main objective of the study is to examine the effect of mobile banking on customer's satisfaction in selected commercial banks in Gampaha district.

Sub objectives

1. To determine the effect of responsiveness of mobile banking application on customer's satisfaction in selected commercial banks in Gampaha District.
2. To examine the effect of ease of application use on customer's satisfaction in selected commercial banks in Gampaha District.
3. To determine the effects of mobile banking technology proficiency on customer satisfaction in selected commercial banks in Gampaha District.
4. To investigate the effect of security of mobile banking on customer's satisfaction in selected banks in Gampaha District.

Methodology

The population of the study includes customers using mobile banking services in Gampaha district of Sri Lanka. 309 customers were selected through convenience sampling from among the customers availing mobile banking services in Gampaha district which is the population of the study. A cross-sectional design is used for this research as all the observations are used for one period. A survey-based methodology was used for this investigation and a quantitative approach was used. Because the deductive method systematically tests existing theories, it is suitable for structured inquiry (Creswell, 2014). The survey instrument is structured to measure responsiveness of mobile banking applications, app ease of use, technology proficiency and security across four dimensions. Data were collected from 309 participants by distributing a questionnaire among costumers. SPSS statistical software was used to analyze the data. Regression analysis was also conducted to assess the effect of mobile banking service usage on customer satisfaction. The following reasons influenced the use of such methods. Convenience sampling method was chosen to ensure representativeness of mobile banking users in commercial bank to obtain convenience sample for this study. The use of regression analysis was appropriate as it allowed the calculation of the effect of the independent variable on the dependent variable. Accordingly, a model can be developed to measure the independent effect on the dependent variables. The regression model was developed as follows.

$$\text{Customer Satisfaction (CS)} = f(\text{RMB, EPU, MBTP, SMB}) \dots\dots\dots(2)$$

CS = Customer Satisfaction

f = Functional notation

RMB = Responsiveness of Mobile Banking

EPU = Ease of Product Use

MBTP = Mobile Banking Technology Proficiency

SMB = Security of Mobile Banking

This model is stated in econometric form as:

$$CS = \alpha + \beta_1RMB + \beta_2EPU + \beta_3MBTP + \beta_4SMB + \epsilon \dots\dots\dots(2)$$

Where:

Y =Dependent Variables

α = Constant Term

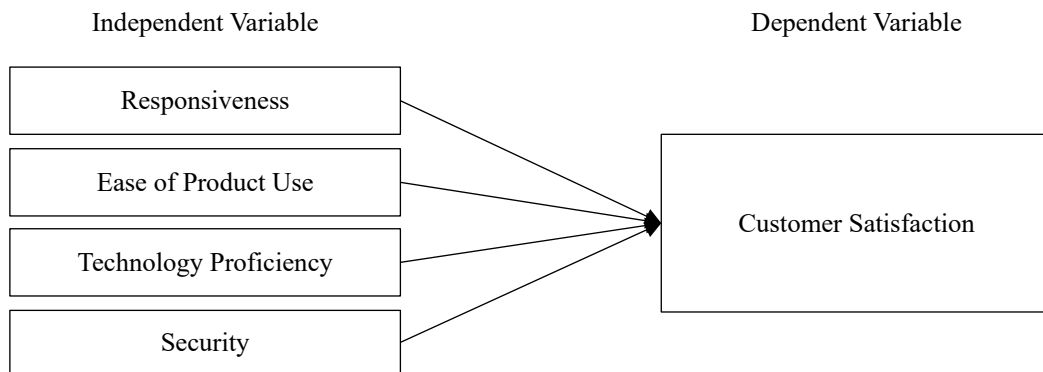


Figure 01: Conceptual Framework

Source: Author Constructed

Findings

The analysis for this research begins with the examination of descriptive statistics. It shows age, gender, education level, occupation, monthly income and frequency of mobile banking usage among 309 consumers using mobile banking services in Gampaha district surveyed. The reliability of the research instrument was analyzed and confirmed by Cronbach's Alpha, which showed a high overall reliability score of 0.983 and alpha values exceeding 0.9 for all constructs. It confirmed that there was strong internal consistency among all constructs. It found that there is a significant correlation between the use of mobile banking services and customer satisfaction. It strongly confirms the validity of the four selected criteria: all the correlation values of RMB (0.822), EUMB (0.866), TP (0.826) and SMB (0.828) exceed the critical value of 0.112891, so the validity is found to be very high.

Table 01: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.912 ^a	0.831	0.829	0.36545

a. Predictors: (Constant), SMB, RMB, EUMB, TP

Source: Author Constructed

The regression model demonstrates a strong relationship between the dependent variable and the predictors (SMB, RMB, EUMB, TP), as indicated by an R value of 0.912 and an R Square value of 0.831, explaining 83.1% of the variance. The Adjusted R Square (0.829) closely aligns, confirming the model's generalizability, while the low standard error of estimate (0.36545) reflects high accuracy and a good fit.

Table 02: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	0.021	0.103		0.202	0.840		
RMB	0.268	0.046	0.242	5.773	0.000	0.316	3.165
EUMB	0.379	0.046	0.383	8.257	0.000	0.259	3.868
TP	0.185	0.052	0.186	3.582	0.000	0.206	4.846
SMB	0.177	0.052	0.179	3.407	0.001	0.202	4.949

a. Dependent Variable: CS

Source: Author Constructed

First hypothesis (H1): Customer satisfaction in particular Gampaha District commercial banks is influenced by the responsiveness of mobile banking applications. The variable RMB (responsiveness of mobile banking) helps to test this idea. With a significance value (Sig%), of 0.000, the beta coefficient for RMB is 0.268. RMB clearly has a statistically significant positive impact on customer satisfaction since this significance threshold is much below the normal alpha level of 0.05. The positive beta value implies that customer satisfaction rises as responsiveness gets better. Consequently, Hypothesis 1 is approved.

Hypothesis 2 (H2): Customer satisfaction in a few chosen Gampaha District commercial banks depends on product simplicity of use. We investigate this hypothesis using the variable EUMB (ease of use of mobile banking). With a significance value of 0.000 the beta coefficient for EUMB is 0.379. This significance value is much less than 0.05, hence it is clear that customer satisfaction is statistically strongly and favorably influenced by user ease of use. The quite large beta value confirms even more the significant influence of simplicity of use on satisfaction. Hypothesis 2 is so accepted.

Hypothesis 3 (H3): Customer satisfaction in a few chosen Gampaha District commercial banks shows improvement when knowledge of mobile banking technologies increases. We test this hypothesis using the variable TP (knowledge of mobile banking technology). With a significance value of 0.000 the beta coefficient for TP is 0.185. Technology expertise and customer satisfaction show a statistically significant link according to the significance degree. The effect is still positive and noteworthy even with the smaller beta value than RMB and EUMB. Hypothesis 3 is so approved.

Hypothesis 4 (H4): Consumer satisfaction in a few chosen commercial banks in Gampaha District is influenced by security of mobile banking. Variable SMB stands for security. With a significance value of 0.001 the beta coefficient for SMB is 0.177. With a significance threshold below 0.05, security clearly statistically significantly influences customer satisfaction.

Although among the predictors the beta value is the lowest, the significance level guarantees that this predictor is still meaningful. Hypothesis 4 is hence accepted.

Conclusion

In conclusion, this study identifies responsiveness, ease of use, technical understanding, and security as key drivers of customer satisfaction with mobile banking services in the Gampaha District. Ease of use emerged as the strongest predictor, while security significantly influences trust and long-term loyalty. Responsiveness and technical understanding also play critical roles in shaping customer experiences. Despite limitations, the findings offer actionable insights for improving mobile banking services. Future research should explore broader demographics, emerging technologies, and additional variables to further enhance customer satisfaction in digital banking.

References

- Abeyssekara, N. L. M. (2020). Determinants of capital structure: A study of listed banks in Colombo Stock Exchange in Sri Lanka. *Peradeniya Management Review*, 2(1), 71. <https://doi.org/10.4038/pmr.v2i1.35>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.).
- Jayasena, & Perera. (2020). The impact of mobile banking on customer satisfaction in Sri Lanka. *International Journal of Digital Banking*, 57–74.
- Priyangika, R. D., et al. (2016). An empirical investigation on customer attitude and intention towards internet banking: A case of licensed commercial banks in Colombo District, Sri Lanka. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2910306>

THE ADOPTION OF CLOUD-BASED ACCOUNTING SOFTWARE IN SMALL AND MEDIUM-SIZED ENTERPRISES

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ABSTRACT

This study explores the factors influencing the adoption of cloud-based accounting software in Sri Lankan SMEs, examining technological, organizational, and environmental challenges and benefits. Using the Technology Acceptance Model (TAM) and the Technology-Organization-Environment (TOE) framework, a quantitative survey was conducted with SME owners and financial managers. The results reveal that perceived usefulness, ease of use, and organizational readiness are essential for adoption, though barriers like infrastructure gaps, resistance to change, and skills shortages persist. The research offers targeted strategies to overcome these challenges, providing policymakers and practitioners with insights to advance SME digital transformation in developing economies.

Introduction

This research explores the factors influencing the adoption of Cloud Computing Software in Small and Medium-sized Enterprises (SMEs), focusing on key technological, organizational, and environmental determinants. It aims to understand how these factors improve business performance and competitiveness in the Digital Economy, specifically in Western province, Sri Lanka. Despite widespread studies on cloud adoption, there is a gap in research addressing cloud computing adoption within SMEs, particularly in combining technological, organizational, and environmental factors. Existing studies often focus on isolated aspects, leaving the interplay between these factors underexplored (Gangwar et al., 2015).

To fill this gap, the study integrates several theoretical frameworks: the Technology Acceptance Model (TAM), the Technology-Organization-Environment (TOE) framework, Diffusion of Innovations theory, and the Resource-Based View (RBV). These frameworks will help analyze how SMEs adopt cloud computing, leveraging it for improved financial management, operational efficiency, and competitive advantage. This study offers a comprehensive perspective on the adoption process and provides actionable insights for businesses aiming to optimize CCA in the Digital Economy.

Empirical studies on cloud computing adoption in SMEs highlight its positive impact on business performance worldwide. In Europe, cloud solutions foster growth and innovation by overcoming resource limitations (Assante et al., 2016). In India, cloud-based ERP systems improve efficiency and reduce IT costs, supporting better decision-making (Sharma et al., 2010). In Sri Lanka, cloud accounting enhances efficiency, transparency, and strategic decision-making (Kariyawasam, 2019). In Palestine and Thailand, cloud adoption boosts operational efficiency and resilience during crises like COVID-19 (Sastararuji et al., 2022). In New Zealand, trust and security improve financial management (Nesbit & Sidabutar, 2022). Despite challenges, cloud computing is increasingly viewed as essential for SME growth, innovation, and resilience (Cajamarca-Palomo et al., 2019; Rawashdeh et al., 2023).

Theoretical frameworks on cloud-based accounting adoption in SMEs focus on key factors influencing technology acceptance and adoption. The Technology Acceptance Model (TAM) explores user acceptance through perceived ease of use and perceived usefulness, while the Technology-Organization-Environment (TOE) framework expands this by examining internal and external factors that influence adoption decisions, such as organizational readiness and market conditions (Shetty & Panda, 2021). The Diffusion of Innovations theory explains the pace and geographic spread of technology adoption. The Resource-Based View highlights the strategic importance of cloud accounting as a resource for competitive advantage (Gastermann et al., 2015). Additionally, the Unified Theory of Acceptance and Use of Technology integrates various factors such as performance expectancy and facilitating conditions (Rawashdeh & Rawashdeh, 2023). The study's objective is to identify key factors influencing cloud adoption, using SEM analysis to examine relationships and providing recommendations for optimizing cloud adoption in SMEs (Ali et al., 2023).

Methodology

The research focuses on Small and Medium-sized Enterprises (SMEs) across diverse sectors in the Western Province, with a sample of 385 SMEs from the Gampaha District. Using a quantitative research methodology and surveys for data collection, the study is grounded in TAM and TOE frameworks, providing actionable insights for businesses and policymakers.

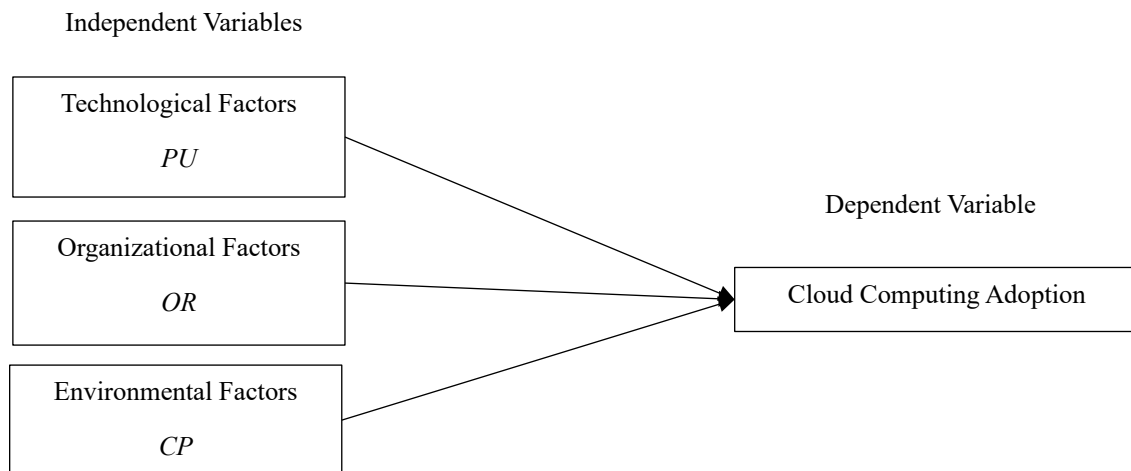


Figure 01: Conceptual Framework

Source: Author Constructed

These models help to understand the drivers of cloud adoption, focusing on the perceived ease of use, perceived usefulness, organizational readiness, top management support, and external pressures such as competition.

1. Technological Factors:

Perceived Usefulness: SMEs are more likely to adopt cloud technology when they perceive it as beneficial (Kariyawasam, 2019; Sharma et al., 2010).

Perceived Ease of Use: Easier-to-use systems increase adoption likelihood (Assante et al., 2016; Nesbit & Sidabutar, 2022).

2. Organizational Factors:

Organizational Readiness: Resource availability and readiness influence cloud adoption in SMEs (Mousa et al., 2024; Rawashdeh & Rawashdeh, 2023).

Top Management Support: High-level management involvement is critical to successful adoption (Assante et al., 2016; Kariyawasam, 2019).

3. Environmental Factors:

Competitive Pressure: SMEs in competitive environments are more inclined to adopt cloud solutions to remain competitive (Rawashdeh & Rawashdeh, 2023; Sastararужи et al., 2022).

Findings

The study identifies key factors influencing the adoption of cloud-based accounting software by SMEs. Technological factors (10.4%), organizational readiness (32%), and environmental pressures (27%) significantly impact adoption. Factors such as system ease of use, organizational support, and external competition are critical. A comprehensive, multidimensional approach is essential for successful cloud computing adoption implementation.

Regression Model

Table 01: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change
1	.525 ^a	0.276	0.263	1.378	0.276

a. Predictors: (Constant), EF, OF, TF

b. Dependent Variable: CCA

Table 02: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.509	0.830		6.636	0.000
TF	-0.044	0.058	-0.072	-0.753	0.453
OF	0.376	0.065	0.526	5.826	0.000
EF	0.110	0.100	0.089	1.105	0.271

a. Dependent Variable: CCA

Source: Author Constructed

Conclusion

This study investigates the factors influencing the adoption of cloud-based accounting software in Small and Medium-sized Enterprises (SMEs). Technologically, it identifies a significant positive effect ($R^2 = 0.104$, $F = 18.86$, $p = 0.000$), highlighting key factors such as internet connectivity, system expansion, data security, and ease of use. These findings are consistent with prior research, which emphasizes affordability, adaptability, and IT readiness (Alshamaila et al., 2013; Hsu et al., 2014; Gangwar et al., 2015; Gupta et al., 2013), with the study adding

statistical validation and a focus on integration simplicity. Organizationally, the study shows the most substantial impact ($R^2 = 0.320$), with management support, employee training, and organizational readiness for change being critical. These findings align with existing literature on management willingness and employee ability (Oliveira et al., 2014; Low et al., 2011), while introducing teamwork as a previously underexplored factor. Regarding environmental factors, the research indicates a moderate influence ($R^2 = 0.270$), with competition, regulation, and market developments playing a significant role ($t = 1.897$, $p = 0.06$). This supports existing literature (Tehrani & Shirazi, 2014; Gangwar et al., 2015; Alshamaila et al., 2013; Low et al., 2011) but provides additional quantitative insight into these dimensions.

Finally, the study emphasizes the synergistic effect of technological, organizational, and environmental factors ($R^2 = 0.320$, $F = 7.243$, $p = 0.000$), reinforcing the literature's call for a comprehensive approach to cloud adoption (Oliveira et al., 2014; Gangwar et al., 2015). This approach is substantiated by statistical evidence that no single factor alone is sufficient for successful adoption. This study focuses on cloud accounting software adoption by SMEs in Sri Lanka, examining technological, financial, and organizational barriers. It highlights the influence of environmental factors like economic status and legislation, external support mechanisms, and the advantages of cloud systems. Limitations include geographic focus, secondary data constraints, and reliance on self-reports.

Future research should explore how emerging technologies (AI, blockchain) impact cloud accounting adoption, longitudinal effects on SMEs' financial performance, and the role of organizational culture. Further studies could investigate customized solutions for specific industries, security concerns, government policies, and integration with other business systems. Additionally, a detailed cost-benefit analysis and employee training's impact on adoption should be examined.

References

- Rawashdeh, A., Rawashdeh, B. S., & Shehadeh, E. (2023). The Determinants of Cloud Computing Vision and Its Impact on Cloud Accounting Adoption in SMBs. *Human Behavior and Emerging Technologies*, 2023(1), 8571227. <https://doi.org/10.1155/2023/8571227>
- Ali, A. F., Hassan, A. A., Abdullahi, H. O., & Abdulah, R. H. (2023). Analyzing the factors influencing the adoption of cloud computing by SMEs. *International Journal of Advanced and Applied Sciences*, 10(7), 66-79.
- Assante, D., Castro, M., Hamburg, I., & Martin, S. (2016). The Use of Cloud Computing in SMEs. *Procedia Computer Science*, 83, 1207–1212. <https://doi.org/10.1016/J.PROCS.2016.04.250>
- Gastermann, B., Stopper, M., Kossik, A., & Katalinic, B. (2015). Secure Implementation of an On-premises Cloud Storage Service for Small and Medium-sized Enterprises. *Procedia Engineering*, 100(January), 574–583. <https://doi.org/10.1016/J.PROENG.2015.01.407>
- Kariyawasam, A. (2019). Analysing the impact of cloud-based accounting on business. *The Business and Management Review*, 10, 8.

- Nesbit, T. (2022). Adoption of Cloud-based Accounting by SMEs: Revisiting the Benefits, Risks and Motivations: A New Zealand Context Exploratory Study. *Acta Scientific Computer Sciences*.
- Cajamarca-Palomo, G., Quisimalin-Santamaría, M., Medina-Chicaiza, P., Cajamarca-Palomo, G., Quisimalin-Santamaría, M., & Medina-Chicaiza, P. (2019). Current Status of the Use of Cloud Computing in SMEs in the City of Latacunga, Ecuador. *Open Journal of Business and Management*, 7(2), 633–649. <https://doi.org/10.4236/OJBM.2019.72043>
- Sastararuji, D., Hoonsopon, D., Pitchayadol, P., & Chiwamit, P. (2022). Cloud accounting adoption in Thai SMEs amid the COVID-19 pandemic: an explanatory case study. *Journal of Innovation and Entrepreneurship*, 11(1), 1–25. <https://doi.org/10.1186/S13731-022-00234-3/FIGURES/1>
- Shetty, J. P., & Panda, R. (2021). An overview of cloud computing in SMEs. *Journal of Global Entrepreneurship Research* 2021 11:1, 11(1), 175–188. <https://doi.org/10.1007/S40497-021-00273-2>
- Gangwar, H., Date, H., & Ramaswamy, R. (2015). Understanding determinants of cloud computing adoption using an integrated TAM-TOE model. *Journal of Enterprise Information Management*, 28(1), 107–130. <https://doi.org/10.1108/JEIM-08-2013-0065>

IMPACT OF DIGITAL FINANCE ON FINANCIAL INCLUSION OF SMES: EVIDENCE FROM SMES IN PUTTALAM DISTRICT

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ABSTRACT

This study aims to determine the impact of digital finance on the financial inclusion of Small and Medium Enterprises (SMEs) in Puttalam District. The study uses 100 SMEs in Puttalam district using simple random sampling technique. Usage of Internet banking, mobile banking, mobile wallets, debit cards, and credit cards were taken as the independent variables while the dependent variable is financial inclusion. The results of the multiple regressions revealed that all the independent variables have a significant impact on the financial inclusion of SMEs in Puttalam District. To the best of researchers' knowledge, there is no study done in Sri Lanka concerning evaluating these distinct independent variables influencing the financial inclusion of SMEs with the background of a challenging dynamic digital environment.

Introduction

SMEs are significant to both developed and developing countries; the Sri Lankan classification of SME depends on capital investment and employment numbers (National Policy Framework for SME Development, 2015). SMEs are known to be significant employers in the creation of jobs as well as incapacitating human resources and regional development (Weerakkody, 2013). Extending support for SMEs has been a consistent feature of the Sri Lankan government (Rathnasiri, 2014). Mobile banking, Internet banking or digital banking is one of the ways of delivering financial services to the people in the emerging economies and making these services considerably cheaper and more available. As for SMEs, it enhances the efficiency of transactions, and time-saving and helps control their financials better (Ozili, 2018). As a result, digital financial services are secure, provide convenience, or simply to save, borrow, and transact in the financial systems, particularly in the lowest classes living in rural areas. Digitization in the financial sector also benefits the SMEs whereby safe affordable services are offered in contrast to conventional financial services (Ozili, 2018). and appropriately provided. Previous research has established that mobile banking and digital wallets have expanded access to financial services to SMEs and enhanced that by easing transactions (Hinson et al., 2019; Pierrakis & Collins, 2013). According to Ozili (2018) Fintech solutions of digital finance have a net beneficial effect on financial inclusion globally for both emergent and developed economies: it provide more convenient access and is often cheaper than other forms of regulated and costly bank services for low and variable-income earners. Yue et al. (2022) found that digital finance improves the level of financial inclusion but also worsen financial vulnerability because credit access enhances consumption expenditure coupled with high probabilities of default if credit lines are withdrawn. The study is based on the theories as Theory of Technology Acceptance Model (TAM) and Diffusion Innovation Theory.

SMEs also suffer from financial problems as the traditional financial structure for SMEs is ineffective because of a lack of available data acceptable collateral and government support (Dissanayake et al., 2023). Many people and small business users especially in the emerging economies now own internet-enabled devices but lack formal financial services because there are no consistent banking systems in place (Owen & Pereira, 2018). Digital finance has provided some solutions like Accounts and; Loan application which in turn increases SME financial freedom and fastens the investment procedure. But currently, few studies have examined the influence of a single integrated approach of digital finance on financial inclusion in SMEs. This paper examines the impact of digital financial services about the financial development of SMEs in Puttalam District in terms of access, cost, and engagement. It is necessary to reveal the impact of digital finance services, such as online banking, and mobile wallet services on SMEs' financial inclusion and economic growth for the particular region.

Methodology

This research philosophy is positivist and uses the deductive approach. This study develops hypotheses and tries to validate the information using the scientific method, experiments, and mathematical proof. This research used structured questionnaires, which is a quantitative strategy. The questionnaire was developed based on the literature and the views of SME owners were collected using five-point Likert scale questions. The target population constitutes SMEs in Puttalam District. According to the Industry Survey of Census and Statistics (2013), there are 3,286 SMEs. The researchers used the simple random sampling technique and the sample size is 100 SMEs. The SPSS software application (Statistical Application for Social Sciences) was used to analyze the collected data. The data from a sample can be summarized using descriptive statistics, and the effects of credit cards, debit cards, mobile wallets, online banking, and mobile wallets on the financial inclusion of SMEs can be assessed using regression analysis, correlation analysis, and ANOVA.

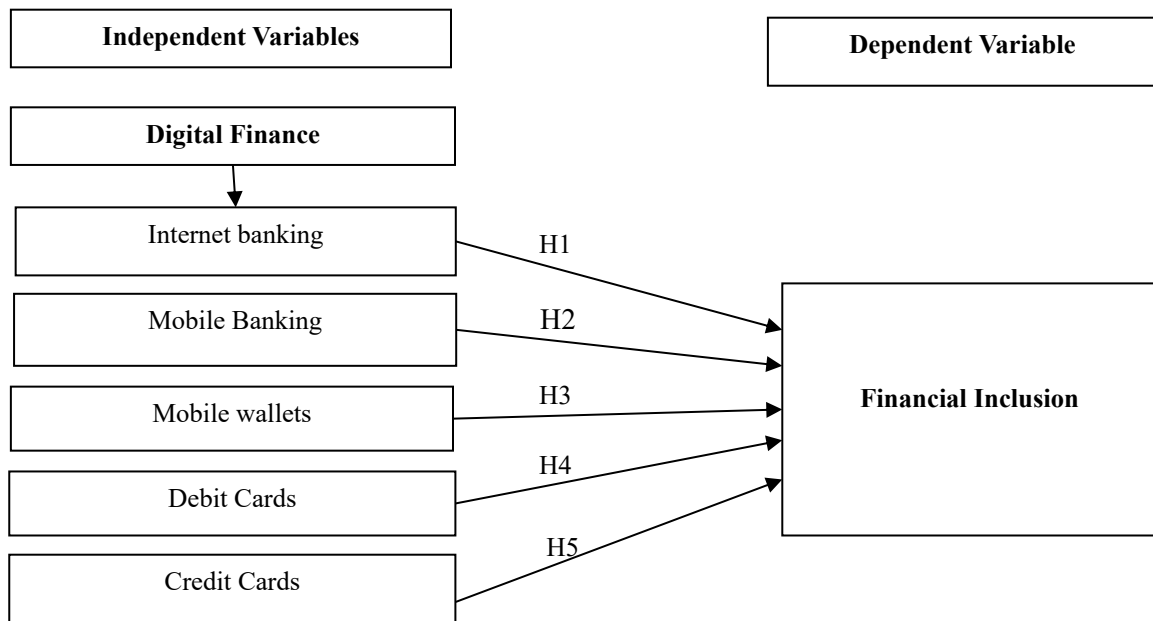


Figure 01: Conceptual Framework

Source: Author Constructed

$$Y(FI) = \alpha + \beta_1IB + \beta_2MB + \beta_3DC + \beta_4CD + + \beta_4CC + \epsilon \dots \dots \dots (1)$$

FI = Financial Inclusion

IB = Internet Banking

MB = Mobile Banking

MW= Mobile Wollet

DC = Debit Card

CD = Credit Card

Findings

In the context of Puttalam District, where 58% of the respondents were male and 55% were aged between 26-35 years, the high adoption of internet banking (mean score of 4.0760 out of 5) suggests a tech-savvy SME population leveraging digital banking for financial management. Mobile Banking demonstrated a significant positive effect on financial inclusion ($\beta = 0.203$, $p < 0.05$). In Puttalam District, mobile banking showed the highest mean score (4.1140) among all digital finance variables, indicating its widespread adoption and perceived usefulness among SMEs. Mobile Wallets revealed a significant positive relationship with financial inclusion ($\beta = 0.199$, $p < 0.05$). In the context of Puttalam District, where 90% of the surveyed SMEs were in the manufacturing sector, mobile wallets (mean score 3.9860) appear to be providing a convenient digital payment solution for business transactions.

According to the correlation results, all digital finance variables (IB, MB, MW, DC, CC) show strong positive correlations with financial inclusion (FI), with r values ranging from 0.775 to 0.859. This suggests that increased adoption of digital financial services is associated with higher levels of financial inclusion. Mobile Banking shows the strongest correlation with FI ($r = 0.859$), followed closely by Internet Banking with $r = 0.854$. This indicates that these two digital banking services may have the most substantial relationship with financial inclusion among SMEs. Credit Cards show the weakest correlation with FI ($r = 0.775$), though still strong and positive. All correlations are statistically significant at the 0.01 level, providing strong evidence for the relationships observed. Inter-correlations among the independent variables are also high (ranging from 0.644 to 0.841), which is expected given that they all represent aspects of digital finance. The study concludes that digital finance plays a crucial role in enhancing financial inclusion among SMEs in Puttalam District.

The model summary shows an R value of 0.929, indicating a very strong correlation between the predictor variables (digital finance factors) and the dependent variable (financial inclusion). The R Square value of 0.863 suggests that 86.3% of the variance in financial inclusion can be explained by the digital finance variables in the model. This high explanatory power indicates that the selected digital finance factors are indeed significant predictors of financial inclusion among SMEs in Puttalam District. The ANOVA table shows an F -statistic of 118.469 with a significance level of 0.000 ($p < 0.05$). This indicates that the regression model as a whole is

statistically significant, confirming that the combination of digital finance variables significantly predicts financial inclusion. All five hypotheses are supported by the data, with statistically significant positive relationships found between each digital finance variable and financial inclusion. The strongest effects are observed for Debit Cards and Internet Banking, followed closely by Mobile Banking and Mobile Wallets. While Credit Cards show the weakest effect, it is still statistically significant and positive.

Table 01: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.929 ^a	.863	.856	.21977

a. Predictors: (Constant), CC, MW, DC, MB, IB

Source: Survey data, (2024)

Table 02: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.018	.170		.104	.917
	IB	.221	.085	.216	2.595	.011
	MB	.203	.078	.213	2.615	.010
	MW	.199	.068	.214	2.927	.004
	DC	.209	.062	.230	3.343	.001
	CC	.156	.058	.166	2.697	.008

a. Dependent Variable: FI

Source: Survey data, (2024)

Conclusion

All examined digital finance services significantly contribute to financial inclusion, with debit cards and Internet banking emerging as the strongest predictors. Based on these findings, several recommendations are proposed, financial service providers should develop integrated digital finance packages that combine various services to provide comprehensive financial solutions for SMEs. Given the high adoption rates observed across all digital finance variables (mean scores ranging from 3.9860 to 4.1220), there is clear demand for such integrated solutions. Banks and fintech companies should invest in user-friendly interfaces and customer education programs, considering that 63% of respondents had GCE A/L education. Policymakers, particularly the Central Bank of Sri Lanka, should develop a supportive regulatory framework that encourages innovation in digital finance while ensuring consumer protection and data security. Building on the 2018-2023 financial sector development roadmap, policies should be implemented that incentivize financial institutions to extend digital financial services to underserved SMEs. SME development agencies, such as the National Enterprise Development Authority (NEDA) of Sri Lanka, should incorporate digital finance literacy programs into SME development initiatives. Given that 99% of respondents were business owners, these programs should be tailored to decision-makers' needs and concerns. Technology providers should collaborate with financial institutions to develop SME-specific digital finance solutions that address unique business needs, particularly in the manufacturing sector. They should invest in robust security measures to build trust in digital financial services among SME

users. SMEs in Puttalam District should actively explore and adopt diverse digital finance services to enhance financial management and access to formal financial services. Given the positive impact observed across all digital finance variables, SMEs should invest in digital literacy and financial management skills to maximize the benefits of these services.

The limitations of this research focusing on the digital finance adoption among SMEs in Puttalam District; limited sample size, the study has adopted a cross-sectional approach, analysis of responses has relied on the SMEs' self-report, and bias toward manufacturing SMEs. Future research should include future research designs, sector-level analysis, explorations, country comparisons, explanations of antecedents that instigate adoption, and evaluations of the effects of digital finance on business performance including growth and profitability.

References

- Kambi, E. N. (2022). Effects of Digital Financial Inclusion on financial growth of micro, small & medium enterprises in Kenya. *The Strategic Journal of Business & Change Management*, 9 (4), 476-493.
- Ardhendu Shekhar Singh, D. B. (2014). Role of Mobile banking in Financial Inclusion. *SSRN Electronic Journal*.
- Asfaw, H. A. (2015). Financial Inclusion through Mobile Banking: Challenges and Prospects. *Research Journal of Finance and Accounting*, 6(5), 98-104.
- Benard Omae Ouncho¹, P. B. (2023). Effect of Mobile Banking on Financial Inclusion among Small-Medium Enterprises in Kakamega County, Kenya. *African Journal of Empirical Research*, 4(2), 457-463 <https://doi.org/10.51867/ajernet.4.2.46>
- Dissanayake, H., Iddagoda, A., Rukshan, T., & Deshika, T. (2023). Digital financial literacy and entrepreneurial performance: A perspective from a developing economy. Digitalization, Sustainable Development, and Industry 5.0: An Organizational Model for Twin Transitions, 67–81. <https://doi.org/10.1108/978-1-83753-190-520231005/FULL/XML>
- Tabitha Durai, G. S. (2019). Digital finance and its impact on financial inclusion. *Journal of Emerging Technologies and Innovative Research*, 6(1), 122-127.
- Jamgun Jensen Iravonga¹, D. J. (2018). Effect of Mobile Banking on Financial Performance of Small Scale and Medium Enterprises in Kakamega County. *International Journal of Management and Commerce Innovations*, ISSN 2348-7585 (Online).
- Ogbonna, K. S. (2023). Effect of financial technology on financial inclusion in Nigeria. *African Banking and Finance Review Journal (ABFRJ)*, 67-89.
- Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329–340. <https://doi.org/10.1016/j.bir.2017.12.003>
- Yue, P., Korkmaz, A. G., Yin, Z., & Zhou, H. (2022). The rise of digital finance: Financial inclusion or debt trap? *Finance Research Letters*, 47(PA), 102604. <https://doi.org/10.1016/j.frl.2021.102604>

ROLE OF SOCIAL MEDIA ON GENERATION Z's INVESTMENT INTENTION

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ABSTRACT

This paper analyses how social media influences generation Z's (Gen Z) investment plans in Sri Lanka. As seen from the data, through continually using the internet, especially the frequently used social media, Gen Z has polished the skills of using social networks. Although it appeared that they possessed clear concepts regarding financial instruments, their cognition is still in its developmental stage. The research seeks to establish the impact of four independent variables; online community behavior on social media, corporate image on social media, content on social media and information usefulness on their investment intentions. This study adopting the quantitative research approach and cross-sectional survey of 497 respondents affirms that the revealed behavior on the online community and the perceive information usefulness has a positive influence on the investment intention whereas the corporate image and the content shared on the social media have a negative influence on the investment intention of an investor. The implications of the study can help guide financial organizations in marketing to Gen Z on social media.

Introduction

Generation Z is more popularly recognized as “digital natives”. They are the people born between 1996 and 2010 and who have grown up in a technological era of smartphones, tablets, and the internet (Szymkowiak, 2021). This generation is well proficient in social media and digital platforms for information sharing, communication, and information content sharing. Despite their adeptness with technology, Gen Zs are still trying to figure out the instruments of finance. Although there is an extensive body of literature on social media and consumer behavior, a literature gap exists regarding the impact that social media can have on investment intentions in the context of Sri Lanka. While much research has studied the impact of social media material, online community activity, and corporate image on investment decisions, very little attention has been given to the specificity of Gen Z investor traits and interests. This study aims to investigate this gap by focusing on the determinants of investment intention among Generation Z with a specific focus on the post-COVID-19 pandemic period.

The increasing popularity of social media ensures that consumers are not willing to be advised by professionals when purchasing products since social media narrows down recommendations of various products to consumers themselves (Chen et al., 2014). Also remaining in the realm of future research is how social media material affects other real-world events that are dependent on time. Nowadays, people can interact with others only through social networks and such services as Facebook, Twitter, WhatsApp other and etc. It is not surprising social media data is being used to predict real-life occurrences as it plays a major role in external communications (Siikanen, 2018). Again, some research did look at the effect of social media

on GEN Z investment intention. For instance, a study identifying the factors influencing the e Nepali stock market concluded that content on social media platforms, post behavior of the online community, and the image of the firm in the context have a positive influence on investment decisions (Khadka, 2023). Further, Ismail (2018), examined three independent social media variables in his study of the influence of social media on Malaysian investors: corporate image, conduct of the online community, and information related to social media (Ismail, 2018). Information media always has a pattern that increases the effect of information quality, subjective norms, and perceived behavioral control on the sharia investment decisions of Generation Z of Lampung Province (Khavid, 2023).

More importantly, there is a dearth of studies that aim to answer the research question of whether social media influences GEN Z's investment decision in the context of Sri Lanka. Hence, this study is an effort to fulfill this knowledge gap.

Methodology

This section explains the methodology of the present study. The study was designed as a quantitative study following the deductive approach within the positivist philosophical stance. Online community behavior on social media, corporate image on social media, Content on social media, and Information usefulness were identified as the independent variables and Investment intention was the dependent variable.

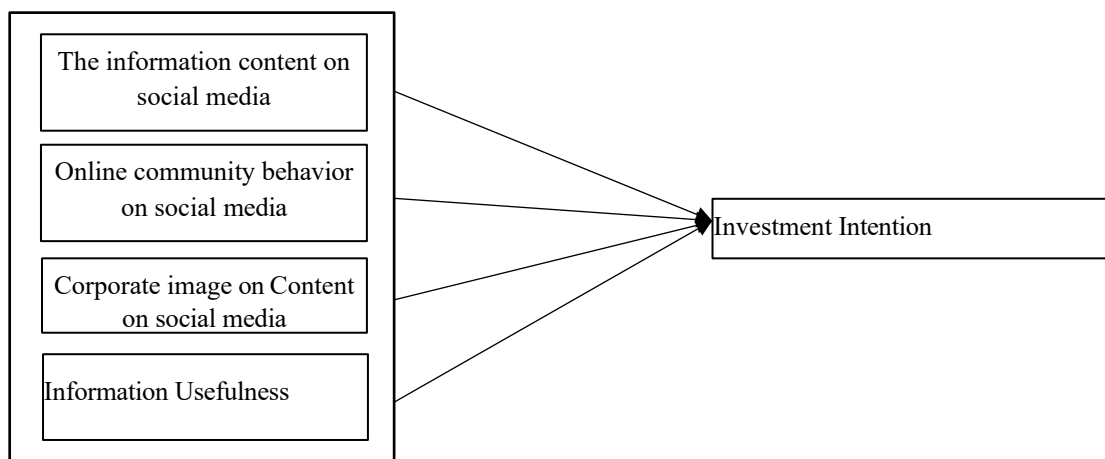


Figure 01: Conceptual Framework

Source: Survey data, (2024)

Based on the conceptual framework, the below hypothesis was developed.

H₁: The information content on social media affects investment intention.

H₂: The online community behavior on social media affects investment intention.

H₃: The corporate image on social media affects investment intention.

H₄: The information usefulness affects the investment intention.

The study employed a cross-sectional survey to collect the primary data required for the analysis. The convenience sampling technique was utilized and data were collected from 497 Gen Z individuals. In this study, convenience sampling technique has been used after the initial study using the G* software sample size as down to the minimum requirement for this study

sample size of the 500 Gen Z participant. The survey instrument was developed referring to the prior literature. And, the questionnaire consisted of closed-ended questions. Further, a pilot study was conducted for pre-testing and the reliability of the survey instrument was ensured. The data analysis was accomplished with both descriptive and inferential statistics. Thus, the statistical techniques of descriptive analysis, correlation analysis, and regression analysis were employed. This study employed partial least squares structural equation modelling (PLS-SEM) for data analysis.

Findings

The Kolmogorov-Smirnov and Shapiro-Wilk tests of normality revealed that the variables of Investment Intention (II) are normally distributed. And no significant outliers were detected. In addition, the VIF values were below 3 indicating the non-existence of a multi-collinearity problem.

According to the demographic of the participants, 56.1% are 18-25 years, 42.9% are 26-35, and 0.08% are 36-45 years. The male is dominant with 58% while the female is only 42%. Of education, 66.7% have a bachelor's degree. Employment status shows that 72.5% are fully employed, 26.3% part time employed and 1.2% are unemployed.

Next, the measurement model was assessed. Under the measurement model assessment construct reliability, convergent validity and discriminant validity were tested. The reliability analysis establishes that all Cronbach's alpha coefficients are greater than 0.7 and hence satisfactory, with Investment Intention (II) having the highest reliability of 0.877. The composite reliability was also ensured.

Convergent validity was assessed through AVE, which indicates how much of the variance of one construct is accounted for by the variance of other related constructs. AVE values greater than 0.5 are deemed appropriate.

The Heterotrait-Monotrait Ratio (HTMT) is employed to test Discriminant validity, to confirm that the constructs are unique. In most cases, the HTMT value below 0.85 or 0.90 symbols a satisfactory level of discriminant validity.

After the measurement model assessment, the structural model was analyzed. Path coefficient analysis establishes that Information Usefulness has the largest positive effect on Investment Intention with a high path coefficient of 0.906, highly significant $t = 21.565$, and $p = 0.000$. OCB is also positively related to II with a magnitude of 0.123 and t -value of 3.526 and a significance level of 0.000. On the other hand, the findings show that Corporate Image (CIS) and Corporate social media (CSM) have a negative impact on II. CIS has a negative path coefficient of -0.125, $t = 2.967$, and $p \leq 0.003$ which indicates a direct however weak negative relationship with II. Therefore, CSM shows a stronger negative relationship with II, where path coefficient is -0.161 $t = 4.729$ and $p = 0.000$, which reflects that level of service has a negative impact on investment intentions.

The Coefficient of determination (R^2) exponent describes part of the variance of the dependent variable that will be explained by the independent variables in the model formula. However, the multiple regression analysis generates an $R^2 = 0.610$ for Investment Intention (II); this

signifies that 61% of the variation resulting from the dependent variable (Investment Intention) is influenced by the four independent variables.

Table 01: Hypothesis Testing

	Path coefficients	t-value	p-value
CIS -> II	-0.125	2.967	0.003
CSM -> II	-0.161	4.729	0.000
IU -> II	0.906	21.565	0.000
OCB -> II	0.123	3.526	0.000

Source: Constructed by Authors

The hypothesis testing approves certain interconnecting features between the variables incorporated in the framework. Hypothesis 1 and 2 testing the relationship between Social Media Content and Investment Intention, as well as Online Community Behavior and Investment Intention respectively registered a statistically significant but negative correlation. Specifically, Hypothesis 3, concerning the relationship between Corporate Image and Investment Intention, received full support in terms of providing a highly positive and significant linkage. Information usefulness also positively and significantly impacted Investment intention as hypothesized in Hypothesis 4 with a smaller effect size. The total results provided statistical support for all hypotheses with different levels of significance.

Conclusion

This study has offered a new perspective regarding the factors that shape the investment intentions of persons, touching upon the interdependent nature of corporate image, social media marketing communication, online community activities, and information usefulness. The findings revealed that corporate image and information useful have an endorsement of investment intention, whereas social media content and online activities in the community have an endorsement of negative influence.

From the ideas expressed above, corporate image has a high relationship and a positive influence on the investment intention hence the need for a positive and trustworthy brand image. Corporates, whose predominant focus is on their corporate image and how it affects the level of trust amongst potential investors stand a greater chance of getting more investors. Equally, the explanation of the positive effect of information usefulness indicates the relevance for organizations to focus on things that will be helpful in the eyes of potential investors. On the other hand, the very weak negative relationship between the two variables calls for additional future studies that can shed light on how conflicting information can have a negative influence on investment intention. This negative correlation in contrast goes against the thinking that an enhancement of social media marketing will translate to improved investment behavior. The results also do a lot to support why there is a negative influence on the investment behavior caused by the exposure.

Overall, the research contributes to an understanding of how digital presence and content affect investment intentions by setting a base for future studies exploring such dynamics.

Finding indicate that social media plays a very important role in the investment intentions of the genotype population most especially with regards to the impacts of online community

behaviors and perceived information usefulness. Regulated financial organizations are to make content easily and interesting and develop corporate image to attract generation Z to invest.

References

- Akmese, H., Aras, S., & Akmese, K. (2016). Financial Performance and Social Media: A Research on Tourism Enterprises Quoted in Istanbul Stock Exchange (BIST). *Procedia Economics and Finance*, 39, 705–710. [https://doi.org/10.1016/S2212-5671\(16\)30281-7](https://doi.org/10.1016/S2212-5671(16)30281-7).
- Chen et al. (2014). Wisdom of Crowds: The Value of Stock Opinions Transmitted Through Social Media. *The Review of Financial Studies*, 27(5), 1367–1403, <https://doi.org/10.1093/rfs/hhu001>.
- Siikanen. (2018). Facebook drives behavior of passive households in stock markets.
- Szymkowiak, A. M. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. 65.
- Halil Akmesea, S. A. (2016). Financial Performance and Social Media: A Research on Tourism Enterprises Quoted in Istanbul Stock Exchange (BIST). 6.
- Hernández, S. R., & Fernández, C. C. (2010). *metodología de la Investigación*. Quinta edición. Mc Graw Hill. México. 613 p, javascript:void(0);.
- Khavid Normasyhuri, Y. D. (2023). Generation Z Sharia investment decision patterns: Does information media matter?
- Kumar, A. S. (2023). The impact of social media on investment decisions of Gen Z investors. *Journal of Financial Markets and Portfolio Management*, 37(1), 1-15. doi: 10.1007/s11408-022-09434-6.
- Kumari, J. S. (2023). “Predicting Investors’ Intention to Invest in the Stock Market during COVID-19: Can We Use an Extended Theory of Planned Behavior?”. *Journal of Asia Business Studies*, 17(4):681–700.doi: 10.1108/JABS-12-2021-0517.

THE IMPACT OF DIGITAL FINANCIAL LITERACY ON RESPONSIBLE CREDIT CARD USAGE

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ABSTRACT

This study evaluates the impact of Digital Financial Literacy (DFL) on Responsible Credit Card Usage (RCCU) and its components: Attention (AT), Retention (RT), Reproduction (RP), and Motivation (MT). Utilizing the OECD definition of DFL and Social Learning Theory, the study employs a deductive approach, analyzing literature and using surveys to gather data from Sri Lankan credit card users. Regression analysis reveals significant positive relationships between DFL and all RCCU components, indicating that higher digital knowledge, skills, behaviors, and attitudes enhance responsible credit card usage, leading to better personal financial management, and reduced high-APR charges. This research offers a comprehensive evaluation of DFL's impact on RCCU, providing valuable insights into financial education and consumer protection policies. The study's originality lies in its detailed analysis of the relationship between DFL and RCCU, contributing to the existing literature and providing a strong foundation for future research and policy development in the field of digital financial literacy and credit card management.

Introduction

The rise of digital financial services has transformed how individuals manage their finances. With the introduction of online banking, mobile payment systems, and digital investment platforms, digital financial literacy (DFL) has become essential. This study explores how DFL influences responsible credit card usage, focusing on how knowledge and skills related to digital financial tools can improve financial decision-making and reduce credit card debt among households in Sri Lanka. It also provides insights into how enhanced digital financial knowledge can mitigate the risks associated with credit card debt and promote financial well-being. The proceeding sections of this paper will discuss the findings related to the behavioral question: "Does DFL among individuals impact responsible credit card usage?"

The study is significant as it addresses the growing need for financial education in the digital age. With the increasing reliance on digital platforms for financial transactions, understanding how DFL influences credit card usage is crucial. This research can provide insights into how individuals can be better equipped to manage their credit responsibly, potentially reducing debt and improving financial stability. It also highlights the importance of integrating DFL into educational programs to foster responsible financial behavior from a young age.

The study used Social Learning Theory to explain how behavior is learned through socialization, highlighting the influence of social class, parental guidance, and social capital on credit card usage in Sri Lanka. Research shows parents significantly impact college students' credit card use, with parental guidance negatively correlating with outstanding balances (Pinto et al., 2005). In urban areas of developing economies, credit card usage is linked to social capital indicators like societal participation and professional memberships (Hewa Kuruppuge,

et. al., 2017). Socioeconomic factors such as life insurance, cash savings, and occupation status are crucial determinants, while demographic factors like gender, age, and income are less influential (Hew Kuruppuge et al., 2017).

DFL has become essential in the digital age, encompassing the knowledge and skills for sound financial decision-making using digital devices. The OECD defines financial literacy as enhancing financial knowledge and competence for decision-making (Lusardi, 2006). Digital Financial Readiness (DFR) combines knowledge, skills, attitudes, and behaviors for safe engagement with digital financial services (OECD, 2023). The COVID-19 pandemic has accelerated the adoption of digital financial services, emphasizing the importance of DFL, which includes financial knowledge, attitudes, skills, and behaviors. Factors such as age, education, employment status, and income influence DFL, with younger individuals generally demonstrating higher levels (Lyons & Kass-Hanna, 2021).

Research from developed countries underscores the importance of DFL in shaping financial behaviors and credit card usage. Studies from the U.S.A., U.K., and South Korea highlight that higher financial and digital literacy levels improve access to financial services, enhance financial well-being, and protect against digital fraud (Lyons & Kass-Hanna, 2021; Robb & Sharpe, 2009; Lusardi, 2006; Mathews & Slocum, Jr., 1969; Choung et al., 2023). In Sri Lanka, DFL significantly impacts financial behaviors among management undergraduates, advocating for enhanced digital financial education through collaborations between financial institutions and universities (Dewmini et al., 2023). Demographic factors, such as gender and age, influence credit card debt behavior, with higher knowledge about credit cards leading to better financial management and lower indebtedness (Silva & Patabendige, 2021; Wickramasinghe & Gurugamage, 2012).

This study investigates the evolution of credit card usage among Sri Lankan youth in the context of rising DFL. Despite technological advancements, research on this topic is limited, especially in developing countries like Sri Lanka. Therefore, it aims to address the empirical gap by exploring how digital knowledge, skills, behavior, and attitudes influence credit card usage behaviors, including attention, retention, reproduction, and motivation.

Methodology

This study applies positivism to objectively measure the impact of DFL on responsible credit card use, facilitating the generalization of findings. Employing a deductive approach, it analyzes previous literature to develop hypotheses and conduct structured analysis, allowing for quantitative evaluation and comparison with past studies. Utilizing the survey method, the study flexibly and inexpensively gathers data through questionnaires, as interviews were impractical for covering a large population. The research population includes all credit card users above 18 years of age in Sri Lanka, totaling 1,940,872 individuals according to the latest 2022 CBSL report. The Morgan Table recommends a sample size of around 384 participants to ensure a representative and statistically significant sample. A convenient sampling technique is used to ensure representativeness. To reduce bias and enhance reliability, techniques such as blinding the data collection process and utilizing standard data collection tools are employed. Primary data is collected through a 46-question online questionnaire distributed via Google Forms, WhatsApp, and email, using a five-point Likert scale to evaluate responses.

Conceptualization:

The independent variable, DFL, is measured using four constructs based on the OECD definition: digital knowledge, digital skills, digital behaviors, and digital attitudes. The Weighted Sum Model (WSM) is employed to derive DFL due to the multiple criteria involved. The dependent variable, Credit Card Usage, is measured through Attention (AT), Retention (RT), Reproduction (RP), and Motivation (MT), as supported by social learning theory.

Hypothesis:

- H1: Digital financial literacy significantly impacts credit card usage
- H2: Digital financial literacy significantly impacts attention to credit card usage
- H3: Digital financial literacy significantly impacts on retention of credit card usage.
- H4: Digital financial literacy significantly impacts reproduction to credit card usage.
- H5: Digital financial literacy significantly impacts motivation for credit card usage.

Findings

Cronbach’s alpha coefficients for the study variables, ranging from 0.904 to 0.927, demonstrate high internal consistency, affirming the reliability of the survey items in measuring both independent and dependent variables, thereby instilling confidence in the study's findings. Additionally, a KMO value of 0.978 indicates a robust partial correlation among the variables, and significant Bartlett’s test results (P<0.05) confirm their interrelation, validating their suitability for analyzing DFL and credit card usage.

Table 01: Regression Analysis and Hypothesis Testing

Hypothesis	Variable	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta				Lower Bound	Upper Bound	Tolerance	VIF
H1	(Constant)	0.192	0.097			1.970	0.050	0.000	0.383		
	DFL	0.940	0.023	0.897		40.847	0.000	0.895	0.986	1	1
a. Dependent Variable: CCU											
H2	(Constant)	0.451	0.108			4.172	0.000	0.239	0.664		
	DFL	0.887	0.025	0.866		34.829	0.000	0.837	0.937	1	1
a. Dependent Variable: Attention											
H3	(Constant)	0.629	0.142			4.419	0.000	0.349	0.909		
	DFL	0.825	0.034	0.775		24.629	0.000	0.760	0.891	1	1
a. Dependent Variable: Retention											
H4	(Constant)	0.511	0.129			3.973	0.000	0.258	0.764		
	DFL	0.860	0.030	0.816		28.408	0.000	0.801	0.920	1	1
a. Dependent Variable: Reproduction											
H5	(Constant)	0.481	0.138			3.489	0.001	0.210	0.752		
	DFL	0.863	0.032	0.798		26.623	0.000	0.799	0.927	1	1
a. Dependent Variable: Motivation											

Source: Survey data

The regression analysis provides a thorough evaluation of the impact of DFL on Credit Card Usage (CCU) and its components: Attention (AT), Retention (RT), Reproduction (RP), and Motivation (MT). The results reveal significant findings across all hypotheses, indicating a robust relationship between DFL and the dependent variables. DFL, encompassing digital knowledge, skills, behaviors, and attitudes, significantly enhances CCU by promoting proper and effective usage of credit cards, avoiding high-APR charges, and preventing over-limit penalties. Higher levels of digital knowledge positively impact attention to credit card management, retention of important credit card information, reproduction of learned behaviors in practical contexts, and motivation for responsible credit card usage. The high significance levels, strong coefficients, and absence of multicollinearity issues enhance confidence in the validity and reliability of the findings, demonstrating that DFL significantly influences Credit Card Usage and its components among the people of Sri Lanka.

Conclusion

The study demonstrates that DFL significantly influences Credit Card Usage (CCU) and its components: Attention (AT), Retention (RT), Reproduction (RP), and Motivation (MT). The principles inferred from the results indicate that higher levels of digital knowledge, skills, behaviors, and attitudes enhance responsible credit card usage, promoting better financial management and reducing the risk of incurring high Annual Percentage Rate (APR) charges and penalties. Theoretically, the study supports the application of social learning theory in understanding financial behaviors, while practically, it underscores the importance of targeted financial education programs to improve DFL among credit card users.

The conclusions drawn from this research suggest that enhancing DFL can lead to more responsible credit card usage, with significant implications for financial education and consumer protection policies. Recommendations include the development of comprehensive DFL programs, particularly targeting younger demographics and incorporating practical debt management skills. Additionally, collaborations between financial institutions and educational entities can further enhance the effectiveness of these programs.

However, the study has certain limitations. The reliance on self-reported data may introduce bias, and the cross-sectional nature of the research limits the ability to infer causality. Future research could address these limitations by employing longitudinal designs and incorporating objective measures of financial behavior. Despite these limitations, the study provides valuable insights into the role of DFL in promoting responsible credit card usage in Sri Lanka.

References

- Choung, Y., Chatterjee, S., & Pak, T. (2023). *Digital Financial Literacy and Financial Well-Being*. Finance Research Letters, ISSN 1544-6131, Elsevier, Amsterdam. <https://doi.org/10.1016/j.frl.2023.104438%0A>.
- De Silva, L. G. R. V. & Patabendige, S. S. J. (2021). Factors Impact on Consumer Credit Card Usage Behaviour: Evidence from Sri Lanka. *Sri Lanka Journal of Marketing*, 7(2), 146-168. <https://doi.org/10.4038/sljmuok.v7i2.68>.

- Dewmini, T., Wijekumara, N., & Sugathadasa, K. (2023). Digital Financial Literacy on Financial Behaviour Among Management Undergraduates of State Universities in Sri Lanka. *Journal of Management Matters*, 10(2), 73-90. <https://doi.org/10.4038/jmm.v10i2.56>.
- Hewa Kuruppuge, R., Gamage, S. K. N., & Nadelea, A. M. (2017). Credit Cards As A Determinant Of Social Capital: A Study Of Rational Behaviour Of Urbanised Consumers. *Ecoforum*, 6(1(10)). <http://www.ecoforumjournal.ro/index.php/eco/article/view/567/358>.
- Lusardi, A. (2006). Financial Literacy and Financial Education: Review and Policy Implications. *NFI Policy Brief No. 2006-PB-11*. <http://dx.doi.org/10.2139/ssrn.923437>.
- Lyons, A.C. & Kass-Hanna, J. (2021). *A Multidimensional Approach to Defining and Measuring Financial Literacy in the Digital Age. Handbook on Financial Literacy Research: Chapter 5*. Routledge, Taylor & Francis Group. <http://dx.doi.org/10.2139/ssrn.3873386>
- Mathews, H.L., & Slocum, Jr., J.W. (1969). Social Class and Commercial Bank Credit Card Usage. *Journal of Marketing*, 33(1),71-78. <https://doi.org/10.2307/1248749>.
- OECD, (2023). OECD/INFE 2023 International Survey of Adult Financial Literacy. *OECD Business and Finance Policy Papers*, 39, OECD Publishing, Paris. <https://doi.org/10.1787/56003a32-en>.
- Pinto, M. B., Parente, D. H., & Mansfield, P. M. (2005). Information Learned From Socialization Agents: Its Relationship to Credit Card Use. *Family & Sciences Research Journal*, 33(4), 357-367. <https://doi.org/10.1177/1077727X04274113>
- Robb, C. A. & Sharpe, D. L. (2009). Effect of Personal Financial Knowledge on College Students' Credit Card Behavior. *Journal of Financial Counseling and Planning*, 20(1), 25-43. SSRN: <https://ssrn.com/abstract=2224225>.
- Wickramasinghe, V., & Gurugamage, A. (2012). Effects of social demographic attributes, knowledge about credit cards and perceived lifestyle outcomes on credit card usage. *International IJC*, 36(1), 80-89. <https://doi.org/10.1111/j.1470-6431.2010.00993.x>.

THE INFLUENCE OF DIGITAL FINANCIAL LITERACY ON MOBILE BANKING USAGE IN SRI LANKA

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ABSTRACT

This study explores the impact of digital financial literacy on mobile banking adoption in Sri Lanka, using the Technology Acceptance Model (TAM). A quantitative approach with a sample of 384 participants, selected through convenience sampling, was employed. Data was collected via self-administered questionnaires. Findings reveal that digital financial literacy significantly enhances mobile banking adoption, with practical know-how being the most influential factor. This research contributes to understanding the role of digital financial literacy in promoting financial inclusion and mobile banking usage in developing countries.

Introduction

The widespread adoption of digital technologies has profoundly transformed the global economic landscape, positioning mobile banking as a pivotal driver of financial inclusion in developing countries (Deb & Agrawal, 2017). This study investigates the impact of digital financial literacy on the utilization of mobile banking services in Sri Lanka, emphasizing the roles of digital knowledge, awareness, and practical know-how. Employing the Technology Acceptance Model (TAM), the research assesses users' intentions and attitudes towards mobile banking, focusing on perceived usefulness and ease of use. The study conceptualizes digital financial literacy (DFL) as introduced by Lyons & Kass-Hanna (2021), encompassing the knowledge, skills, and abilities required to effectively access and utilize digital financial services.

The significance of this research lies in addressing the substantial gap in digital financial literacy (DFL) behavioral studies in Sri Lanka, which hinders the effective use of mobile banking services. By understanding the relationship between DFL and mobile banking adoption, the study aims to enhance financial inclusion and unlock socio-economic benefits for the population. The findings can guide policymakers and financial institutions in developing strategies to increase mobile banking usage, ultimately contributing to a more inclusive and digitally empowered financial ecosystem in Sri Lanka.

The study employed the Technology Acceptance Model (TAM) in understanding the usage of mobile banking services, highlighting factors such as perceived usefulness, ease of use, and behavioral intention. Studies from both developed and developing countries reveal that digital financial literacy, financial skills, and perceived ease of use significantly influence mobile banking adoption (Alsamydai, 2014; Deb & Agrawal, 2017; Giovanis et. al., 2019; Hasan et. al., 2022; Ullah et. al. 2022). Research in Sri Lanka indicates that perceived usefulness, ease of use, credibility, and awareness are crucial for mobile banking adoption among undergraduates and the general population (Ravichandran & Bandaralage, 2016; Tennakoon & Aluthge, 2017). This study aims to build on these findings by exploring the impact of digital

financial literacy on mobile banking adoption in Sri Lanka, considering additional factors like digital knowledge, awareness, and practical know-how.

Despite extensive research on factors influencing mobile banking adoption and usage in various countries, including Sri Lanka (Alsamydai, 2014; Deb & Agrawal, 2017; Giovanis et. al., 2019; Hasan et. al., 2022; Ullah et. al. 2022; Ravichandran & Bandaralage, 2016; Tennakoon & Aluthge, 2017), there remains a notable gap regarding the specific influence of digital financial literacy on mobile banking services in the Sri Lankan context. While existing studies have explored factors such as perceived usefulness, ease of use, trust, perceived risk, and social influences, the role of digital financial literacy as an independent determinant has not been adequately addressed. This research seeks to fill this gap by examining the impact of digital financial literacy on mobile banking adoption in Sri Lanka.

Methodology

The methodology delineates the research philosophy, approach, design, and site selection rationale. Anchored in the objectivity of Positivism, this study prioritizes measurable data and empirical evidence. Employing a deductive research approach, it tests existing theories and hypotheses within a quantitative framework. The target population comprises mobile banking users in Sri Lanka, with convenience sampling employed due to the undefined population. A sample size of 384 is determined using a 95% confidence level. Primary data will be collected through self-administered questionnaires, ensuring the acquisition of firsthand information to address the research objectives comprehensively.

Conceptualization:

The study employs digital knowledge (DK), awareness of digital financial services (AWS), and practical know-how (PKH) to measure digital financial literacy, which serves as the independent variable (Lyons & Kass-Hanna, 2021). These factors are hypothesized to influence the dependent variable, namely the use of mobile banking services. Utilizing the Technology Acceptance Model (TAM), the research investigates mobile banking usage by focusing on perceived ease of use (PEOU) and perceived usefulness (PU). The study used a 5-scale Likert questionnaire to measure the independent and dependent variables. To account for the multiple criteria involved in assessing both independent and dependent variables, the Weighted Sum Model (WSM) is employed (Budiharjo et. al., 2017).

$$R_{ij} = w_j \cdot (X'_{i,j})_1 + w_j \cdot (X'_{i,j})_2 + \dots + w_j \cdot (X'_{i,j})_n \dots \dots \dots (1)$$

where: R_{ij} is the main variable, X_{ij} is the value of the construct (j) for the i th response, & w_j is the weight applied based on the number of constructs. The current study has given equal weight to all constructs when deriving the main variable.

Hypothesis:

H₁: Digital Financial Literacy exerts a significant positive influence on the Perceived Ease of Use (PEOU) of mobile banking services among users.

H₂: Digital Financial Literacy significantly enhances the Perceived Usefulness (PU) of mobile banking services for users.

H3: Digital Financial Literacy (DFL) has a substantial positive impact on the overall adoption and utilization of mobile banking services.

Findings

Table 01: Cronbach’s alpha value, KMO, & Bartlett’s Test of Sphericity Output

Variable	Cronbach’s alpha value	Number of items
DFL	0.975	4
DK	0.976	4
AWS	0.980	4
PKH	0.982	4
UMBS	0.989	5
PEOU	0.989	5
PU	0.987	5
Test	Value	Interpretation
Kaiser-Meyer-Olkin (KMO)	0.885	Data suitable for analysis
Bartlett’s Test of Sphericity	$\chi^2 = 6509.249$	Significant ($p < 0.001$)
Degrees of Freedom (df)	21	

Source: SPSS Output

The reliability analysis indicates that all seven variables have Cronbach’s alpha values above 0.7, confirming the reliability of the questionnaire used in this study. Specifically, the Cronbach’s alpha values range from 0.975 to 0.989, demonstrating high internal consistency across the variables. Additionally, the validity measures, including a KMO value of 0.885 and a significant Bartlett’s Test of Sphericity, further support the adequacy and suitability of the data for the analysis.

Model 1 to test H1: Digital Financial Literacy exerts a significant positive influence on the Perceived Ease of Use (PEOU) of mobile banking services among users.

Table 02: Regression output

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std.Error			
1	(Constant)	1.393	.124		11.217	.000
	DK	-.087	.070	-.097	-1.246	.214
	AWS	.468	.145	.527	3.215	.001
	PKH	.336	.129	.377	2.594	.010

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.794 ^a	.630	.629		.27658	1.847

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	54.004	1	54.004	705.977	<.001 ^b
	Residual	31.669	414	.076		
	Total	85.674	415			

Source: SPSS Output

The regression analysis provides significant insights into the predictors of Perceived Ease of Use (PEOU) in mobile banking services. The model demonstrates a strong correlation ($R = 0.794$) with 63% of the variance in PEOU explained by the predictors, as indicated by the R Square value. The adjusted R Square of 0.629 further confirms the model's robustness. The ANOVA results underscore the model's statistical significance, with an F-value of 705.977 and a p-value less than 0.001, indicating that the predictors collectively have a significant impact on PEOU. Among the predictors, Awareness of Digital Financial Services (AWS) and Practical Know-How (PKH) significantly and positively influence PEOU, with β values of 0.527 and 0.377, respectively. In contrast, Digital Knowledge (DK) does not exhibit a significant impact on PEOU, as indicated by its β value of -0.097 and a p-value of 0.214.

Model 2 to test H₂: Digital Financial Literacy significantly enhances the Perceived Usefulness (PU) of mobile banking services for users.

Table 03: Regression output

Model		Unstandardized Coefficients	Standardized Coefficients Beta	t	Sig.	
		B	Std.Error			
2	(Constant)	1.610	.129	12.502	.000	
	DK	-.080	.072	-.091	1.104	.270
	AWS	.314	.151	.364	2.083	.038
	PKH	.438	.134	.505	3.263	.001
Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin-Watson	
2	.769 ^a	.592	.591	.28272	1.826	
Model		Sum Squares	of Df	Mean Square	F	Sig.
2	Regression	47.979	1	47.979	600.268	<.001 ^b
	Residual	33.091	414	.080		
	Total	81.070	415			

Source: SPSS Output

The regression analysis provides significant insights into the predictors of Perceived Usefulness (PU) in mobile banking services. The model demonstrates a strong correlation ($R = 0.769$) with 59.2% of the variance in PU explained by the predictors, as indicated by the R Square value. The adjusted R Square of 0.591 further confirms the model's robustness. The ANOVA results underscore the model's statistical significance, with an F-value of 600.268 and a p-value less than 0.001, indicating that the predictors collectively have a significant impact on PU. Among the predictors, Awareness of Digital Financial Services (AWS) and Practical Know-How (PKH) significantly and positively influence PU, with β values of 0.364 and 0.505, respectively. In contrast, Digital Knowledge (DK) does not exhibit a significant impact on PU, as indicated by its β value of -0.091 and a p-value of 0.270. This suggests that enhancing AWS and PKH is crucial for increasing the perceived usefulness of mobile banking services, while DK alone may not be sufficient.

Model 3 to test H₃: Digital Financial Literacy (DFL) has a substantial positive impact on the overall utilization of mobile banking services.

Table 04: Regression Output

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
3	(Constant)	1.563	.129		12.126	.000
	DK	-.114	.072	-.129	-1.575	.116
	AWS	.178	.151	.203	1.177	.240
	PKH	.617	.134	.704	4.594	.000

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin-Watson
3	.768 ^a	.589	.588	.28709	1.774

Model		Sum Squares	of Df	Mean Square	F	Sig.
3	Regression	48.997	1	48.997	594.491	<.001 ^b
	Residual	34.121	414	.082		
	Total	83.118	415			

Source: SPSS Output

The regression analysis reveals significant insights into the predictors of mobile banking service usage. The model demonstrates a strong correlation ($R = 0.768$) with 58.9% of the variance in usage explained by the predictors, as indicated by the R Square value. The adjusted R Square of 0.588 further confirms the model's robustness. The ANOVA results underscore the model's statistical significance, with an F-value of 594.491 and a p-value less than 0.001, indicating that the predictors collectively have a significant impact on mobile banking service usage. Among the predictors, Practical Know-How (PKH) shows a significant positive effect on usage ($\beta = 0.704$, $p = 0.000$), while Digital Knowledge (DK) and Awareness of Digital Financial Services (AWS) do not exhibit significant impacts, as their p-values are 0.116 and 0.240, respectively. This suggests that enhancing practical know-how is crucial for increasing mobile banking adoption, whereas digital knowledge and awareness alone may not be sufficient. As per Kass-Hanna et al. (2021) and Lyons & Fontes (2021) Some clients will need specialized guidance on how to access, use, and actively engage with mobile accounts.

Conclusion

This study addresses the challenges of low mobile banking adoption in Sri Lanka by investigating the factors influencing its usage among Sri Lankan customers. The research highlights the significant impact of digital financial literacy, measured by digital knowledge, awareness of digital financial services, and practical know-how on the use of mobile banking services. Notably, digital knowledge was found to have an insignificant influence, suggesting that practical skills and awareness are more critical for user behavior. The study underscores the importance of enhancing digital financial literacy to improve mobile banking usage, particularly in regions with low banking infrastructure. Future research should explore the interaction between digital financial literacy and external factors like technological infrastructure and internet access. Additionally, longitudinal studies could provide insights into how user perceptions evolve. Researchers are encouraged to use probability sampling methods for more reliable outcomes and to consider new variables that may influence mobile banking adoption. Overall, this research contributes to a deeper understanding of the factors driving

mobile banking adoption in Sri Lanka and offers valuable recommendations for enhancing financial inclusion.

References

- Alsamydai, M. J. (2014). Adaptation of the Technology Acceptance Model (TAM) to the Use of Mobile Banking Services. *International Review of Management and Business Research*, 3(4), 2039-2051.
- Budiharjo, Windarto, A. P., & Muhammad, A. (2017). Comparison of Weighted Sum Model and Multi-Attribute Decision Making Weighted Product Methods in Selecting the Best Elementary School in Indonesia. *International Journal of Software Engineering and Its Applications*, 11(4), 69-90. <http://dx.doi.org/10.14257/ijseia.2017.11.4.06>.
- Deb, M., & Agrawal, A. (2017). Factors impacting the adoption of m-banking: understanding brand India's potential for financial inclusion. *Journal of Asia Business Studies*, 11(1), 22–40. <https://doi.org/10.1108/JABS-11-2015-0191>.
- Giovanis, A., Athanasopoulou, P., Assimakopoulos, C., & Sarmaniotis, C. (2019). Adoption of mobile banking services: A comparative analysis of four competing theoretical models. *International Journal of Bank Marketing*, 37(5), 1165–1189. <https://doi.org/10.1108/IJBM-08-2018-0200>.
- Hasan, M. M., Yajuan, L., & Khan, S. (2022). Promoting China's Inclusive Finance Through Digital Financial Services. *Global Business Review*, 23(4), 984–1006. <https://doi.org/10.1177/0972150919895348>.
- Kass-Hanna, J., Lyons, A. C., & Liu, F. (2021). Building Financial Resilience Through Financial and Digital Literacy in South Asia and Sub-Saharan Africa. (Forthcoming). <https://doi.org/10.2139/ssrn.3496562>.
- Lyons, A. C., & Kass-Hanna, J. (2021). A methodological overview to defining and measuring “digital” financial literacy. *Financial Planning Review*, 4(2), e1113. <https://doi.org/10.1002/cfp2.1113>.
- Ravichandran, D., & Hiti Bandaralage A. H. M. (2016). Factors Influencing Mobile Banking Adoption in Kurunegala District. *Journal of Information Systems & Information Technology (JISIT)*, 1(1), 24-32. <https://doi.org/10.13140/RG.2.2.29276.74883>.
- Tennakoon, W.D.N.S.M., & Aluthge, D.N. (2017). *Determinants of mobile banking adoption in Sri Lanka: Evidence from undergraduates of Sri Lankan local universities*. 1st Annual Research Symposium in Management, Kuliypitiya, Sri Lanka.
- Ullah, S., Kiani, U. S., Raza, B., & Mustafa, A. (2022). Consumers' Intention to Adopt m-payment/m-banking: The Role of Their Financial Skills and Digital Literacy. *Frontiers in Psychology*, 13(2022). <https://doi.org/10.3389/fpsyg.2022.873708>.

THE IMPACT OF FINANCIAL LITERACY ON ONLINE TRADING PLATFORM USAGE AMONG YOUNG ADULTS IN SABARAGAMUWA PROVINCE, SRI LANKA

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ABSTRACT

This study examines the influence of financial literacy on the usage of online trading platforms among young adults in the Sabaragamuwa Province of Sri Lanka. Employing a deductive approach, the research utilized a survey strategy with a sample of 384 respondents, collecting data via Google questionnaires and analyzing it using SPSS. The findings reveal that financial literacy significantly enhances the perceived usefulness, ease of use, and actual usage behavior of online trading platforms. This study fills a gap in the literature by focusing on the unique socio-economic and cultural context of Sri Lankan youth, offering tailored insights for improving financial literacy and platform design.

Introduction

This research aims to explore the impact of financial literacy on the use of online trading platforms among young adults in the Sabaragamuwa Province of Sri Lanka. Over the past two decades, the rise of affordable high-speed computers and internet connections has significantly increased the prevalence of online trading platforms, particularly in Western countries. The COVID-19 crisis further accelerated this trend, highlighting the importance of financial literacy for navigating market trends and risks (Aharon & Qadan, 2020).

Financial literacy, a subset of economic literacy, is crucial for effective resource management and decision-making, encompassing skills such as cash management, savings, credit, and insurance (Walstad et. al., 2013). The S&P Global Financial Literacy survey reveals significant disparities in financial literacy across different demographics, with women, low-income earners, and those with lower education levels often being less financially literate. Educational attainment and cognitive abilities are key determinants of financial literacy, with higher education levels providing the necessary skills to understand complex financial concepts (Klapper et. al. 2015).

The age range of 18-30, often categorized as "youth,"; the age group that is highly proficient in using digital platforms, including social media, online communication tools, and mobile applications, influencing how this age group access information, communicate and engage with online services, including financial platforms and investment opportunities. Understanding these digital tendencies is crucial for designing effective communication and engagement strategies tailored to this age group (Arnett et. al., 2014).

This research leverages the Technology Acceptance Model (TAM) to investigate the factors influencing the use of online trading platforms among young adults in the Sabaragamuwa Province. By focusing on financial literacy, the study aims to enhance our understanding of user behavior in the digital trading environment and inform strategies to improve financial

literacy and promote responsible trading practices. The findings are expected to contribute to the development of more user-friendly and effective online trading platforms, supporting better financial decision-making among young investors. Existing literature highlights the significant impact of financial literacy on investment decisions, with socio-economic factors like age, gender, income, and education shaping financial behavior and technology usage (Farida et. al., 2021; Grag & Singh, 2017; Gunardi et. al., 2017; Kulathunga & Athapaththu, 2018; Kumari, 2020). However, there is a gap in understanding how Sri Lanka's unique socio-economic and cultural landscape influences the financial behavior of its youth in the context of online trading. Addressing this gap can provide tailored recommendations for enhancing financial literacy programs and designing platforms that align with the cultural and economic realities of young Sri Lankans.

Methodology

This research adopts a positivist philosophy, emphasizing the verification of data through experimentation, observation, and logical proof. A deductive approach is employed, where hypotheses are formulated based on existing theories and subsequently tested through data collection. The survey strategy is utilized for data collection, involving the administration of questionnaires to a sample population, with a Likert scale to measure key variables. A mono-method design is implemented, focusing on a quantitative approach to examine the relationship between financial literacy and the use of online trading platforms. The target population comprises individuals engaged in online financial transactions, with a sample size of 384 determined through convenient sampling. Data is collected via Google questionnaires, ensuring an efficient and systematic approach to data gathering.

Conceptualization:

In this research, financial literacy is examined through three independent variables: financial literacy, financial behavior, and financial attitudes. Financial literacy involves the knowledge and understanding of financial concepts and products, enabling informed decision-making. Financial behavior encompasses actions and decisions related to finances, such as saving, investing, and spending. Financial attitudes reflect individuals' mindsets and perceptions towards financial management and decision-making (Lusardi & Mitchell, 2011). The dependent variables, based on the Technology Acceptance Model (TAM), include the perceived usefulness of online trading platforms (OTP), perceived ease of use of OTP, and usage behavior of OTP. Together, these variables provide a comprehensive framework to explore how financial literacy impacts the usage of online trading platforms among young adults in the Sabaragamuwa Province. To account for the multiple criteria involved in assessing the independent variable, the Weighted Sum Model (WSM) is employed (Budiharjo et. al., 2017).

$$R_{ij} = w_j \cdot (X'_{i,j})_1 + w_j \cdot (X'_{i,j})_2 + \dots + w_j \cdot (X'_{i,j})_n \dots \dots \dots (1)$$

where: R_{ij} is the main variable, $X_{i,j}$ is the value of the construct (j) for the i th response, & w_j is the weight applied based on the number of constructs. The current study has given equal weight to all constructs when deriving the main variable.

Hypothesis:

To test the research question regarding the influence of financial literacy on the usage of online trading platforms among young adults in the Sabaragamuwa Province of Sri Lanka, we formulated three hypotheses:

H₁: Financial literacy positively and significantly impacts the perceived usefulness of online trading platforms among young adults in the Sabaragamuwa Province.

H₂: Financial literacy positively and significantly impacts the perceived ease of use of online trading platforms among young adults in the Sabaragamuwa Province.

H₃: Financial literacy positively and significantly impacts the usage behavior of online trading platforms among young adults in the Sabaragamuwa Province.

Findings

The results from the Kaiser-Meyer-Olkin (KMO) values and Bartlett's Test of Sphericity affirm the dataset's suitability for exploratory factor analysis, with all variables demonstrating acceptable sampling adequacy and significant correlations. KMO values, ranging from 0.732 to 0.797, indicate robust sampling adequacy, while Bartlett's Test results (p-value = 0.000) confirm significant correlations across all variables. Furthermore, the reliability analysis using Cronbach's Alpha reveals good internal consistency for all variables, with values spanning from 0.718 to 0.790. Notably, Perceived Usefulness and Financial Behavior exhibit the highest reliability, while Usage Behavior remains within the acceptable range. These findings collectively validate the measurement scales and underscore the reliability of the data for subsequent analysis.

Table 01: Regression output

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	0.743	0.200		3.713	0.000		
1 FK	0.237	0.043	0.237	5.450	0.000	0.693	1.443
1 FB	0.229	0.045	0.226	5.064	0.000	0.655	1.528
1 FA	0.378	0.047	0.380	8.084	0.000	0.593	1.688

a. Dependent Variable: PU

Model	R	R Square	Adjusted R Square	R	Std. Error of the Estimate	Durbin-Watson
1	.699 ^a	0.489	0.485	0.2713	1.651	

a. Predictors: (Constant), FA, FK, FB

b. Dependent Variable: PU

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	27.55	3	9.183	124.741	.000 ^b
1 Residual	28.785	391	0.074		
Total	56.336	394			

a. Dependent Variable: PU

b. Predictors: (Constant), FA, FK, FB

Source: SPSS Output

Model 1 to test H1: Financial literacy positively and significantly impacts the perceived usefulness of online trading platforms among young adults in the Sabaragamuwa Province.

The regression analysis for Model 1, which examines the hypothesis that financial literacy positively impacts the perceived usefulness of online trading platforms among young adults in the Sabaragamuwa Province, reveals compelling evidence in support of this hypothesis. With an R Square value of 0.489, the model indicates that 48.9% of the variance in perceived usefulness is explained by financial knowledge (FK), financial behavior (FB), and financial attitudes (FA). Notably, all predictors are statistically significant (p-values = 0.000), with financial attitudes exerting the most substantial influence (Beta = 0.380), followed by financial knowledge (Beta = 0.237) and financial behavior (Beta = 0.226). The Durbin-Watson statistic of 1.651 suggests no significant autocorrelation, affirming the robustness of the model.

Model 2 to test H2: Financial literacy positively and significantly impacts the perceived ease of use of online trading platforms among young adults in the Sabaragamuwa Province.

In Model 2, which tests the hypothesis that financial literacy positively impacts the perceived ease of use of online trading platforms, the findings are equally robust. The model's R Square value of 0.421 indicates that 42.1% of the variance in perceived ease of use is accounted for by FK, FB, and FA. All predictors are significant (p-values = 0.000), with financial attitudes again showing the highest impact (Beta = 0.334), followed by financial behavior (Beta = 0.250) and financial knowledge (Beta = 0.199). The Durbin-Watson statistic of 1.889 confirms the absence of significant autocorrelation, reinforcing the model's validity.

Table 02: Regression output

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
2	(Constant)	1.215	0.203	5.996	0.000			
	FK	0.189	0.044	0.199	4.310	0.000	0.693	1.443
	FB	0.241	0.046	0.250	5.265	0.000	0.655	1.528
	FA	0.316	0.047	0.334	6.681	0.000	0.593	1.688

a. Dependent Variable: PEOU

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
2	.649 ^a	0.421	0.417	0.2746	1.889	

a. Predictors: (Constant), FA, FK, FB

b. Dependent Variable: PEOU

Model	Sum of Squares	df	Mean Square	F	Sig.	
2	Regression	21.461	3	7.154	94.896	.000 ^b
	Residual	29.476	391	0.075		
	Total	50.937	394			

a. Dependent Variable: PEOU

b. Predictors: (Constant), FA, FK, FB

Source: SPSS Output

Model 3 to test H₃: Financial literacy positively and significantly impacts the usage behavior of online trading platforms among young adults in the Sabaragamuwa Province.

Model 3, which explores the hypothesis that financial literacy positively impacts the usage behavior of online trading platforms, also provides substantial support. The R Square value of 0.351 suggests that 35.1% of the variance in usage behavior is explained by FK, FB, and FA. All predictors are significant, with financial behavior (Beta = 0.318) having the most substantial impact, followed by financial attitudes (Beta = 0.276) and financial knowledge (Beta = 0.111). The Drbin-Watson statistic of 1.814 indicates no significant autocorrelation, validating the model's reliability. These findings collectively underscore the critical role of financial literacy in enhancing the perceived usefulness, ease of use, and actual usage behavior of online trading platforms among young adults in the Sabaragamuwa Province. The findings align with existing empirical literature, allowing for the generalization of the current study (Farida et al., 2021; Garg & Singh, 2017; Gunardi et al., 2017; Kulathunga & Athapaththu, 2018; Kumari, 2020).

Table 03: Regression Output

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
3	(Constant)	1.185	0.236		5.020	0.000	
	FK	0.116	0.051	0.111	2.273	0.024	0.693
	FB	0.337	0.053	0.318	6.314	0.000	0.655
	FA	0.287	0.055	0.276	5.207	0.000	0.593

a. Dependent Variable: UB

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
3	.592 ^a	0.351	0.346		0.3198	1.814

a. Predictors: (Constant), FA, FK, FB

b. Dependent Variable: UB

Model		Sum of Squares	df	Mean Square	F	Sig.
3	Regression	21.627	3	7.209	70.495	.000 ^b
	Residual	39.985	391	0.102		
	Total	61.612	394			

a. Dependent Variable: UB

b. Predictors: (Constant), FA, FK, FB

Source: SPSS Output

Conclusion

The transformation of traditional trading into online trading, driven by advancements in financial literacy and digital technologies, has significantly impacted how young adults engage with financial markets. This study investigates the influence of financial literacy on the usage of online trading platforms among young adults in the Sabaragamuwa Province of Sri Lanka, employing the Technology Acceptance Model (TAM) to understand the role of financial

literacy in enhancing the usage of online trading platforms. The findings reveal that financial knowledge, behavior, and attitudes significantly enhance the perceived usefulness, ease of use, and actual usage behavior of online trading platforms. Overall, financial literacy plays a crucial role when users decide to engage with online trading platforms. These insights underscore the importance of financial literacy in fostering informed and responsible trading practices among the youth. The study also highlights a critical gap in the existing literature, particularly in the Sri Lankan context, and provides tailored recommendations for enhancing financial literacy programs and designing user-friendly trading platforms. Future research should expand this investigation to other demographics and regions, employing diverse data collection methods to enrich the understanding of online trading behaviors. By addressing these areas, researchers can contribute to the development of more effective financial education initiatives and trading platforms that align with the evolving needs of young investors.

References

- Aharon, D. Y., & Qadan, M. (2020). When do retail investors pay attention to their trading platforms? *The North American Journal of Economics and Finance*, 53(C), number S1062940820301066. <http://dx.doi.org/10.1016/j.najef.2020.101209>.
- Arnett, J.J., Žukauskienė, R., & Sugimura, K. (2014). The new life stage of emerging adulthood at ages 18-29 years: Implications for mental health. *The Lancet Psychiatry*, 1(7), 569-576. [http://dx.doi.org/10.1016/S2215-0366\(14\)00080-7](http://dx.doi.org/10.1016/S2215-0366(14)00080-7).
- Budiharjo, Windarto, A. P., & Muhammad, A. (2017). Comparison of Weighted Sum Model and Multi-Attribute Decision Making Weighted Product Methods in Selecting the Best Elementary School in Indonesia. *International Journal of Software Engineering and Its Applications*, 11(4),69-90. <http://dx.doi.org/10.14257/ijseia.2017.11.4.06>.
- Farida, M.N., Soesatyo, Y., & Aji, T.S. (2021). Influence of Financial Literacy and Use of Financial Technology on Financial Satisfaction through Financial Behavior. *International Journal of Education and Literacy Studies*, 9(1), 86-95. <http://dx.doi.org/10.7575/aiac.ijels.v.9n.1p.86>.
- Grag, N. & Singh, S. (2017). Financial literacy among youth. *International Journal of Social Economics*, 45(2), 173-186. <https://doi.org/10.1108/IJSE-11-2016-0303>.
- Gunardi, A., Ridwan, M., & Sudarjah, G. M. (2017). The Use of Financial Literacy for Growing Personal Finance. *Jurnal Keuangan dan Perbankan*, 21(3), 446-458. <http://dx.doi.org/10.26905/jkdp.v21i3.1489>.
- Klapper, L., Lusardi, A., & Oudheusden, P. v. (2015). Financial Literacy Around the World. Washington DC: Standard & Poor's Ratings Services Global Financial Literacy Survey.
- Kulathunga, D. & Athapaththu, J. (2018). Factors Affecting Online Purchase Intention: A Study Of Sri Lankan Online Customers. *International Journal of Scientific & Technology Research*, 7(9), 120-128.
- Kumari, D.A.T. (2020). The Impact of Financial Literacy on Investment Decisions: With Special Reference to Undergraduates in Western Province, Sri Lanka. *Asian Journal*

of Contemporary Education, 4(2), 110-126.
<http://dx.doi.org/10.18488/journal.137.2020.42.110.126>.

Lusardi, A., & Mitchell, O.S. (2011). Financial literacy around the world :an overview. *Financial literacy around the world*, 10(4), 497-508. doi:10.1017/S1474747211000448.

Walstad, W. B., Rebeck, K., & Butters, R. B. (2013). The Test of Economic Literacy: Development and Results. *The Journal of Economic Education*, 44(3). <http://dx.doi.org/10.1080/00220485.2013.795462>.



Track 05

Corporate Governance

THE IMPACT OF INTELLECTUAL CAPITAL ON SHAREHOLDER VALUE CREATION: EVIDENCE FROM LISTED COMPANIES IN SRI LANKA

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ABSTRACT

The objective of this study is to investigate the impact of intellectual capital on shareholder value creation of non-financial companies listed on the Colombo Stock Exchange (CSE). The study uses the theoretical literature review and Empirical findings to analyze research on the impact of Intellectual capital on shareholder value creation. The sample of this research is 107 non-financial PLCs on CSE. The findings indicate that there is a positive and significant impact of intellectual capital on shareholder value creation. This paper offers the novelty of the study compared to literature of empirical studies on Intellectual capital (IC) and expands the discussion regarding its value relevance across various stages of IC research.

Introduction

In the evolving landscape of global financial markets, intellectual capital has become a critical asset for companies to drive shareholder value, particularly in non-financial sectors. Non-financial companies listed on the Colombo Stock Exchange (CSE) are now increasingly leveraging their intellectual resources to create value, moving beyond the traditional capital-intensive business models (Malikah & Nandiroh, 2024). In today's knowledge-driven economy, intellectual capital has emerged as a key determinant of corporate success and shareholder value creation. Intellectual capital, comprising Human Capital (HCE), Structural Capital (SCE), and Capital Employed (CEE), plays a significant role in enhancing shareholder wealth by improving market performance and competitiveness (Radjenovic & Krstic, 2017).

This research addresses the problem of determining how intellectual capital influences shareholder value creation in non-financial companies listed on the Colombo Stock Exchange during the period from 2018 to 2022. This study aims to address gaps in the existing literature on intellectual capital and its impact on shareholder value creation. Previous research has explored various components of intellectual capital such as, human, structural, and relational capital using differing methodologies and often yielding inconsistent findings. In Sri Lanka, studies on this subject are particularly limited, with results frequently conflicting on the extent to which intellectual capital drives shareholder value. This research is therefore essential to provide empirical evidence on the relationship between intellectual capital and shareholder value creation.

There exists a body of literature in Sri Lanka that discusses the influence of intellectual capital on several elements. But there is a contextual gap that has to be addressed in Sri Lanka's literature on impact of intellectual capital on shareholder value creation. The main objective of the study is to identify the influence of intellectual capital on shareholder value creation in Nonfinancial PLCs in Sri Lanka. The sub-objectives examine intellectual capital's influence on

shareholder value, specifically exploring human and structural capital, capital employed, their interrelations, and recommended practices for enhancing value.

Reviewing the literature is crucial for determining a method to perform the study and addressing the research problem. Based on the investigation carried out by Sunday et al. (2023), The value-added intellectual coefficient, a proxy for intellectual capital, was found to have a strong positive correlation with shareholders' wealth. The findings also showed that although structural capital efficiency has a positive but not statistically significant relationship with the creation of shareholder wealth, human capital efficiency, relational capital efficiency, and capital employed efficiency all of which are components of intellectual capital are significantly and positively associated with shareholders' wealth. Based on the investigation carried out by Wanigasekara et al., (2022) the findings of the study suggest that value creation is significantly benefited by both structural and intellectual capital. The impact of human capital and relational capital on value creation is minimal. Moreover, intellectual capital's ability to explain value creation was not as strong as that of its separate components. According to the views of Ujwary-Gil (2017), Human, structural, and relational capital are the three components of intellectual capital that interact in creating value creation.

As intellectual capital becomes a more vital component of value creation, understanding its role in the Sri Lankan market context can offer insights into effective corporate strategies for maximizing shareholder wealth. The purpose of this study is to investigate how intellectual capital affects shareholder value creation in Nonfinancial plc in Sri Lanka.

Methodology

Researcher used the Positivist research philosophy for this research study. because the knowledge of the research based on natural phenomena and their properties and logical observation. This study developed hypotheses based on existing theory in the literature, and then designs a research strategy to test those hypotheses. Therefore, this research follows deductive approach as a research approach. This study was designed according to survey technique (quantitative method). It was helped to analysis truthful information to achieve research objectives successfully.

To achieve the research objectives, the study employed a quantitative approach, using secondary data sourced from the annual reports of 107 non-financial companies listed on the CSE. The data covers a five-year period from 2018 to 2022. Researcher considered Market Value Added (MVA) as the dependent variable and HCE, SCE, and CEE as the independent variables. The VAIC model was utilized to quantify intellectual capital. To meet the goals of this study, descriptive statistics, regression analysis, and correlation analysis were used to evaluate the collected data. The Random effects regression analysis was used to assess the relationship between intellectual capital components (HCE, SCE, and CEE) and shareholder value creation, measured by MVA.

The link between the independent and dependent variables is represented by the conceptual framework. Human Capital, Structural Capital and Capital employed are the independent variables and Shareholder Value Creation is the dependent variable of the current study. following figure demonstrates the conceptual framework of the current research study.

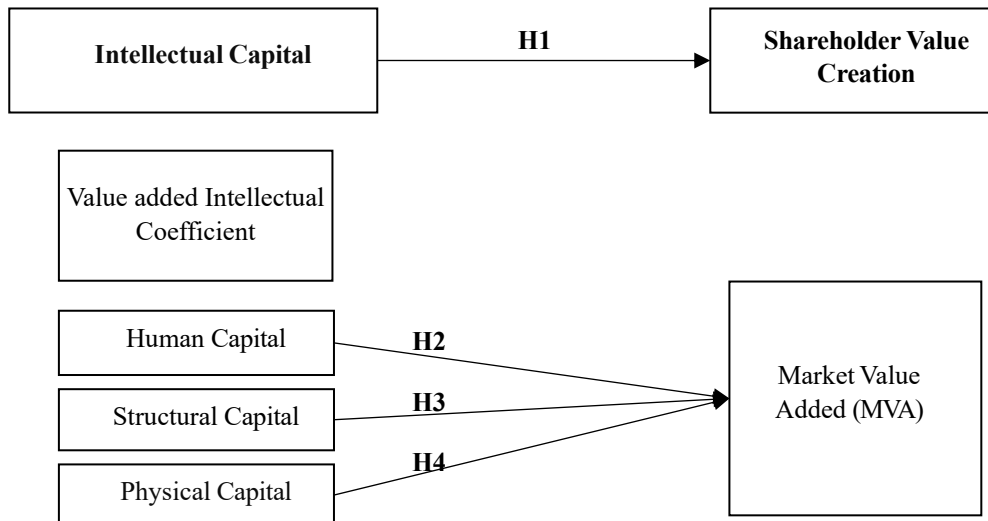


Figure 01: Conceptual Framework

Source: Author Constructed

The hypotheses are developed based on conceptualization framework. The investigation is given direction, specificity, and increased emphasis by the hypotheses. The following lists the research's hypotheses.

H1: There is a positive and significant impact of intellectual capital on shareholder value creation.

H2: There is a significant impact of Human Capital on Shareholder value creation.

H3: There is a significant impact of Structural capital on shareholder value creation.

H4: There is a significant impact of Capital Employed on shareholder value creation.

Findings

The impact of intellectual capital on shareholder value creation of non-financial companies in Colombo Stock Exchange results were discussed using the collected data. To meet the goals of this study, Researcher used descriptive statistics, regression analysis, and correlation analysis to evaluate the collected data. The descriptive analysis reveals significant variability in MVA and VAIC, with MVA ranging from -5.44 to 3.63 and a mean of 2.86. VAIC exhibited a maximum of 1055.47 and a mean of 15.17. Additionally, Human Capital Efficiency, Structural Capital Efficiency, and Capital Employed Efficiency showed diverse performance metrics, reflecting varying contributions to shareholder value creation.

The correlation coefficient provides better results of the relationship between intellectual capital and shareholder value creation of non-financial companies in Colombo Stock Exchange. A corresponding p-value below a threshold (likely 0.05) shows the relationship is significant. According to the correlation analysis, there is a positive and statistically significant correlation between MVA and HCE, with a correlation coefficient of 0.3016. In contrast, SCE exhibits a negligible and non-significant correlation (0.0105) with MVA. Although CEE shows a weak positive relationship with MVA, with a correlation coefficient of 0.1600, it remains

statistically significant. Additionally, MVA correlates positively with the VAIC at 0.3017. Overall, HCE and VAIC positively influence MVA, while SCE shows minimal impact.

Table 01: Correlation Analysis

	MVA	HCE	SCE	CEE	VAIC
MVA	1.0000				
HCE	0.3016*	1.0000			
SCE	0.0105	0.0348	1.0000		
CEE	0.1600*	0.2245*	-0.0310	1.0000	
VAIC	0.3017*	0.9996*	0.0636	0.2262*	1.0000

Source: STATA Output

Regression analysis helps to securely determine which aspects are most important, which factors may be neglected, and how these factors interact. According to the Hausman test, null hypothesis cannot be rejected since the p-values are greater than 0.05. This shows that the random effects model is better suited for this study. The study's panel data regression results show that HCE and CEE have statistically significant positive effects on MVA, with $P < 0.05$. However, SCE does not have a statistically significant impact. ($P = 0.971$). The VAIC also significant positively influences MVA.

Table 02: Regression Analysis

MVA	Coef.	Std. Err.	Z	P>Z
HCE	1.24e+08	2.13e+07	5.82	0.000
SCE	2.47e+07	6.83e+08	0.04	0.971
CEE	1.52e+10	7.22e+09	2.10	0.036
VAIC	1.35e+08	2.07e+07	6.55	0.000

Source: STATA Output

The regression analysis results indicate a positive and significant impact of intellectual capital on shareholder value creation. Human capital also shows a strong positive effect. However, structural capital does not have a statistically significant impact, as its p-value of 0.971 exceeds 0.05, despite a positive coefficient. Lastly, capital employed significantly influences shareholder value creation, with a p-value of 0.036 and a positive coefficient of 1.35e+08. Hence, hypotheses H1, H1a, and H1c are accepted, while H1b is rejected.

Conclusion

The study concludes that intellectual capital is indeed a critical factor in shareholder value creation for non-financial companies listed on the Colombo Stock Exchange. For this study, information was gathered from the annual reports of 107 non-financial companies from 2018 to 2022. In this perspective, intellectual capital is classified into three categories: Human Capital, Structural Capital and Capital Employed. The findings suggest that Human Capital and Capital Employed have a positive and significant impact on shareholder value creation, while Structural Capital shows no significant relationship.

However, its full potential remains underutilized due to various organizational and market-related barriers. The study concludes that intellectual capital, particularly human and capital employed efficiency, plays a critical role in enhancing shareholder value in non-financial companies in Sri Lanka. The results underscore the importance of strategic investment in

human resources and efficient use of capital to drive long-term value creation. Moreover, the varying impact of structural capital across sectors suggests that companies should tailor their structural capital management strategies to industry-specific needs.

References

- Malikah, A., & Nandiroh, U. (2024). Intellectual Capital and Value of the Firm: A Systematic Literature Review. *International Journal of Humanities Education And Social Sciences (IJHESS)*, 3(4), 2169–2177. <https://ijhess.com/index.php/ijhess/>
- Radjenovic, T., & Krstic, B. (2017). Intellectual capital in the theory of the firm. *Ekonomika*, 63(4), 13–27. <https://doi.org/10.5937/ekonomika1704013r>
- Sunday, O., Godspower, A., & Sunday, E. (2023). Intellectual Capital and Shareholders' Wealth The Economic Value Added Approach. *International Journal of Applied Business and Management Sciences*, 4(1), 97–116. <https://doi.org/10.47509/IJABMS.2023.v04i01.05>
- Ujwary-Gil, A. (2017). The business model and intellectual capital in the value creation of firms: A literature review. *Baltic Journal of Management*, 12(3), 368–386. <https://doi.org/10.1108/BJM-10-2016-0224>
- Wanigasekara, W. A. D. K. J., Weligamage, S. S., & Karunarathne, W. V. A. D. (2022). Does intellectual capital matter for value creation of companies? evidence from Sri Lanka. *Journal of Business Studies*, 9(2), 1–22. <https://doi.org/10.4038/jbs.v9i2.87>

THE IMPACT OF CREDIT RISK ON COMMERCIAL BANKS' FINANCIAL PERFORMANCE IN SRI LANKA

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ABSTRACT

This study examines the impact of credit risk, measured by the Non-Performing Loan Ratio (NPLR) and Capital Adequacy Ratio (CAR), on the financial performance of Sri Lankan commercial banks from 2014 to 2023. Using secondary data from 13 listed banks, the analysis applied descriptive statistics, correlation analysis, and panel data regression. The findings reveal that NPLR negatively influences ROE and ROA, while CAR negatively affects ROE but has an insignificant impact on ROA. These results highlight the importance of effective credit risk management in minimizing NPLs to enhance profitability and ensure financial stability in Sri Lankan banks.

Introduction

Credit risk which arises from lending, is central to commercial banking context and particularly related to banking and finance industry in Sri Lanka, where banks fund the development of key sectors in the economy such as agriculture, tourism, and manufacturing. Economic disruptions, such as the COVID-19 pandemic, aggravated credit risk, causing a significant rise in Non-Performing Loans (NPLs) as businesses struggled to meet their loan obligations. Credit risk for banks always threatens the profitability and will increase the distress of the bank in terms of capital adequacy ratios, limiting their ability to extend new credit, thus slowing the economic growth (Ranasinghe et al., 2017). Small and medium enterprises (SMEs) were especially affected from this scenario where the banks would not be able to extend new credit lines. Relief measures such as loan moratoriums will temporarily ease the burden, but as they expired, NPLs are expected to rise again. Some of the reputed commercial banks in the Sri Lankan banking industry experienced declining Return on Assets (ROA) and Return on Equity (ROE) due to increased provisions for bad debts (Central Bank of Sri Lanka, 2020). The pandemic highlighted the vulnerability of Sri Lanka's banking sector to external shocks, and such external shock can potentially lead to a credit crunch and affect foreign investment, trade, and employment (Rajkumar & Hanitha, 2015). This study aims to examine the impact of credit risk on bank performance, providing insights into improving credit risk management and ensuring long-term financial stability. In addition to that, the global studies on credit risk and banks financial performance are abundant, but research specifically addressing Sri Lanka's distinct banking and regulatory framework remains limited, leaving a contextual gap. Additionally, many existing studies analyze data from periods before major events like COVID-19 or Sri Lanka's 2022 economic crisis. Exploring recent data is crucial to understanding how credit risk influences financial performance in Sri Lanka's rapidly evolving economic environment, providing more relevant and updated insights. The theoretical aspect of this research is based on Value at Risk (VaR) theory, a statistical tool used to estimate the potential loss in value of a portfolio over a defined period with a specified confidence level. VaR is essential for managing

credit risk in commercial banks. In the context of Sri Lanka, applying VaR enables banks to quantify credit risk, implement effective risk management strategies, and ensure regulatory compliance, ultimately enhancing financial stability and performance.

Methodology

This study examines the impact of credit risk on the performance of commercial banks in Sri Lanka over the period from 2014 to 2023. The research utilizes secondary data, obtained primarily from the annual reports of 13 licensed commercial banks out of the 25 licensed commercials. These banks were chosen using a purposive sampling method based on the availability of data relevant to credit risk and financial performance.

To operationalize the variables, two key credit risk indicators were used as independent variables: the CAR and the NPLR. These credit risk indicators were analyzed for their effect on two dependent variables: ROA and ROE. ROA reflects the profitability of a bank relative to its total assets, and ROE measures profitability relative to shareholders' equity. Figure 1 depicts the conceptual framework used by the researcher to analyze the impact of Credit risk on commercial banks' financial performance in Sri Lanka.

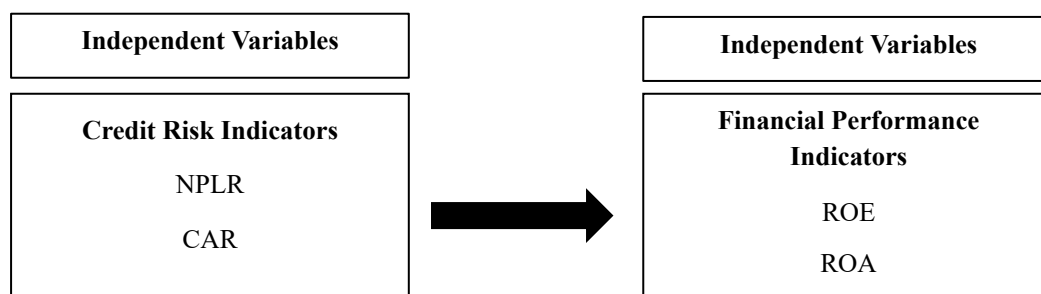


Figure 01: Conceptual Framework

Sources: Rasika & Sampath, 2015

The methodology was carefully structured to address the research objectives, ensuring that the relationships between credit risk factors and performance metrics were effectively examined. The study's robust approach, which integrates secondary data analysis with Eviews tools, offers significant insights into the resilience of Sri Lankan commercial banks and their capacity to manage credit risks during periods of economic instability. The findings of this research will provide valuable input for regulators, investors, and bank management, aiding in the formulation of strategies to enhance financial stability.

Findings

The results of this study emphasize the intricate relationship between credit risk and the financial performance of commercial banks in Sri Lanka, focusing on key indicators such as the NPLR, CAR, ROE and ROA. The regression analysis reveals several significant relationships that align with expectations from financial theory, with particular emphasis on the impact of credit risk, as captured by NPLR, on bank performance metrics.

The researcher has confirmed the normality of data using the histogram test and tested the stationary of the data using Levin Lin Chu test. According to the test results, p-values of all variables were stationary at 5% significance level. Further, through the test of homoscedasticity

as the p-value of the test was less than 0.05, researcher has achieved the assumption that the variance of the error term in the regression model is constant.

Table 01: Hausman Test

	Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Model 1 (ROE)	Cross-section random	1.355454	2	0.0028
Model 2 (ROA)	Cross-section random	4.349013	2	0.1137

Source: EViews Output

The researcher has performed a Hausman test for two models as to identify the appropriate model between the fixed effect model and the random model. To identify the appropriate model using the Hausman test, two hypotheses were developed as follows;

H0: Differences in Coefficients are not systematic (Random Effect Model is appropriate)

H1: Differences in Coefficients are systematic (Fixed Effect Model is appropriate)

According to the results of the Hausman Test as presented in Table 01, the probability value was less than 0.05 of ROE model. Thus, the researcher has rejected the null hypothesis and selected Fixed Effect to run the regression model 01. As probability value was greater than 0.05 for the model 02, the researcher has accepted the null hypothesis and selected to perform a Random Effect model for ROA model. The results of the random effect panel regression model and fixed effect panel regression model for each profitability measures were presented in Table 02.

Table 02: Results of Fixed Effect and Random Effect Panel Regression Models

Variables	Model 1 (ROE)			Model 1 (ROA)		
	R-squared	Coefficient	Probability	R-squared	Coefficient	Probability
C		36.3788	0.0000		1.1854	0.1514
NPLR	0.7569	-3.4619	0.0000	0.02402	-0.1359	0.0768
CAR		-7.3574	0.0136		0.0629	0.8360

Source: EViews Output

The results confirm a strong negative relationship between NPLR and both ROE and ROA, indicating that as non-performing loans increase, bank profitability declines. Specifically, the coefficient of -3.4619 for NPLR in the ROE model highlights that a unit increase in NPLR leads to a 3.46-unit decrease in ROE. Similarly, the negative coefficient of -0.1359 for NPLR in the ROA model implies a detrimental impact on the efficiency with which a bank utilizes its assets to generate earnings. The high statistical significance of these findings, particularly for ROE, points to the importance of effective credit risk management in maintaining bank profitability.

In contrast, CAR's influence on financial performance is more nuanced. The regression analysis reveals a significant negative relationship between CAR and ROE, with a coefficient of -7.3574, suggesting that an increase in CAR, which serves as a buffer against potential losses, may reduce equity returns. This result highlights a potential trade-off between maintaining a strong capital base and maximizing shareholder returns. The negative impact of CAR on ROE could be attributed to the conservative use of equity capital, which might limit banks' ability to generate higher profits. However, this relationship is not mirrored in the ROA model, where the effect of CAR is statistically insignificant, as indicated by the high p-value

(0.8360). This suggests that while CAR plays a critical role in ensuring financial stability, its direct effect on a bank's asset profitability may not be as pronounced.

The Hausman test results further refine the understanding of these relationships by confirming the suitability of different regression models for the ROE and ROA analyses. A fixed-effects model is selected for the ROE regression, explaining 75.7% of the variance in ROE, while a random-effects model is used for the ROA regression, which explains a much smaller portion (2.4%) of the variance. These findings suggest that while the model is robust in explaining variations in ROE, it is less effective in capturing the factors driving changes in ROA.

The overall analysis points to the critical role of credit risk, particularly NPLR, in determining bank performance. The significant negative impact of NPLR on both ROE and ROA highlights the importance of minimizing bad loans to enhance profitability and asset efficiency. In contrast, while CAR is essential for safeguarding against financial distress, its immediate impact on profitability metrics, particularly ROA, appears limited. This suggests that Sri Lankan banks need to strike a balance between maintaining sufficient capital buffers and optimizing their use of capital to improve profitability.

The findings align with literature emphasizing the negative impact of NPLR on ROE and ROA, consistent with studies linking high non-performing loans to reduced profitability. However, the significant negative relationship between CAR and ROE contrasts with some studies suggesting CAR enhances performance. Additionally, CAR's insignificant impact on ROA highlights a divergence from research indicating its broader influence on asset efficiency.

Conclusion

The study reveals that higher NPLR negatively impact the profitability and efficiency of commercial banks in Sri Lanka, emphasizing the need for effective credit risk management. Although CAR is crucial for stability, it does not necessarily enhance returns, highlighting the challenge of balancing capital requirements and profitability. Policymakers and bank management should focus on reducing NPLR, understanding CAR's relationship with profitability, and improving asset management to enhance financial performance, stability, and shareholder returns in the Sri Lankan banking sector.

The current study has used only the listed local commercial banks in Sri Lanka for its study sample where the future researchers can include all commercial banks in the sample to make the results more representative of the population and as this study has used secondary data of only ten years of period, future researchers can collect time series data of period more than that.

References

- Asllanaj, R. (2018). Does Credit Risk Management affect the Financial Performance of Commercial Banks in Kosovo? *International Journal of Finance & Banking Studies* (2147-4486), 7(2), 49–57. <https://doi.org/10.20525/ijfbs.v7i2.902>
- Bhattacharai, Y. R. (2016). The Effect of Credit Risk on Nepalese Commercial Banks. *NRB Economic Review*, vol28(1), 41–64. https://nrb.org.np/ecorev/articles/vol28-1_art3.pdf

- Kibui, N. (2014). Effects of Credit Risk Management on Financial Performance of. *International Academic Journal of Information Sciences And Project Management*, 1(3), 157–172.
- Mwangi, G. N. (2012). *the Effect of Credit Risk Management on the Financial Performance of Commercial Banks in Kenya a Research Project Presented in Partial Fulfillment of the Requirement of Master of Business Administration, School of Business, University of Nairobi*. November, 1–87.
- Naji, A. S., & Syed Shabib – Ul - Hassan. (2023). Credit Risk Management and Its Impact On the Performance of Commercial Banks in Pakistan: An Application of Penal Var Approach. *International Journal of Social Science & Entrepreneurship*, 3(1), 258–281. <https://doi.org/10.58661/ijssse.v3i1.97>
- Pandey, C., & Joshi, B. K. (2023). Impact of Credit Risk Management on Profitability of Nepalese Commercial Banks. *The Harvest*, 2(1), 17–32. <https://doi.org/10.3126/harvest.v2i1.54406>
- Perinpanathan, R., & Vijeyaratnam, H. (2015). The Impact of Credit Risk Management on Financial Performance A Study of State Commercial Banks in Sri Lanka. *Processding of International Conference on Contemporary Management, 2015*, 206–212. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3070276
- Poudel, M. J., Shrestha, M. C. N., Sedai, S. P., & ... (2021). Journal of Balkumari College. *Journal of ...*, 10(1). <https://www.balkumaricollege.edu.np/wp-content/uploads/2021/11/Full-Journal-2078.pdf>
- Ranasinghe. (2017). Impact of Credit Risk Management on Profitability of Commercial Banks of Sri Lanka From 2014 To 2017. *Ranasinghe, R.A.P.D.*
- Rasika, D. G. L., & Sampath, H. R. (2015). Impact of Credit Risk on Financial Performance of Sri Lankan Commercial Banks: Special Referecnce to Systemically Important Banks. *ResearchGate, September 2016*, 1–8.
- Serwadda, I. (2018). Impact of Credit Risk Management Systems on the Financial Performance. *Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis*, 66(6), 1627–1635.
- Singh, A. (2015). Performance of credit risk management in Indian commercial banks. *International Journal of Management and Business Research*, 5(3), 169–188.
- Wijewardana, Wp., & Wimalasiri, P. (2017). Impact of Risk Management on the Performance of Commercial Banks , in Sri Lanka. *International Journal of Advanced Research*, 5(11), 1441–1449. <https://doi.org/10.21474/ijar01/5919>
- YAA, D. S., & MWANZIA (PhD), D. S. (2022). Effect of Credit Risk Management on Financial Performance of Commercial Banks in Kenya. *Strategic Journal of Business & Change Management*, 9(4), 292–316. <https://doi.org/10.61426/sjbcem.v9i4.2420>

THE IMPACT OF CORPORATE GOVERNANCE ON INTEGRATED REPORTING

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ABSTRACT

The objective of this research is to investigate the impact of corporate governance on integrated reporting in integrated reporting adopting companies in Sri Lanka. In this research study utilizes a total of 70 companies. The analysis used in this research was the panel regression. Results shows that corporate governance had no notable influence on integrated reporting. This research study has provided an empirical analysis through various stages using collected data on the impact of corporate governance on integrated reporting. This study faced with the rarity of studies linking the corporate governance and integrated reporting.

Introduction

This research study delves into the background of corporate governance and its intricate relationship with integrated reporting. Understanding the mechanisms through which governance frameworks support or hinder integrated reporting practices is crucial for investors, regulators, and other stakeholders. Research from Hichri (2022) discovered that corporate governance, as part of integrated reporting, has been developed to instill confidence that the interests of owners are aligned with the interests of managers and to rebuild stakeholder trust (Hichri, 2022). Moreover, the study seeks to analyse how corporate governance impacts the alignment of business strategy with sustainable development goals, as reflected in integrated reports. The general objective of this study is to identify the impact of corporate governance on integrated reporting in integrated reporting adopting companies in Sri Lanka.

This study explores how corporate governance influences integrated reporting, an emerging tool for companies to better understand value creation and communicate effectively with stakeholders. Despite the growing global relevance of integrated reporting, no studies have investigated its relationship with corporate governance in Sri Lanka, nor have there been longitudinal studies to examine reporting patterns over time. Sri Lanka presents a unique case due to its recent rapid adoption of integrated reporting, supported by a strong accounting profession and conducive cultural values. Cooray et al (2020) said that revised corporate governance codes in 2013 and 2017 have further emphasized the inclusion of environmental, social, and governance (ESG) information (Cooray et al, 2020). This study, therefore, seeks to empirically investigate whether corporate governance mechanisms significantly impact integrated reporting, addressing the Problem Statement: “Is there any impact of corporate governance on integrated reporting?”.

This research explores the impact of corporate governance on integrated reporting in Sri Lankan companies, emphasizing its role in enhancing transparency, accountability, and sustainability. Cooray et al (2020) found that integrated reporting provides a comprehensive view of a company’s financial, environmental, social, and governance performance, with

corporate governance ensuring ethical practices and long-term value creation (Cooray et al, 2020). The study offers insights for regulators, policymakers, and businesses to improve governance frameworks supporting integrated reporting. It also aids investors in assessing risks and opportunities through reliable information.

According to the empirical evidence, agency theory highlights the relationship between principals (owners) and agents (managers) and the conflicts that arise when their interests diverge (Suttipun & Bomlai, 2019). To mitigate these issues, corporate governance mechanisms like independent boards, audit committees and transparency initiatives enhance accountability and reduce agency costs. Integrated reporting further supports this by providing detailed, transparent information that aligns shareholder and managerial interests. Stakeholder theory underscores the importance of meeting stakeholder expectations for long term success and reputation, while legitimacy theory emphasizes aligning corporate actions with societal norms to maintain corporate acceptance (Tambunan et al, 2022). Together, these frameworks support enhanced corporate governance and integrated reporting for sustainable business practices.

Methodology

The research follows a positivist philosophy, aligning with the processes and variables of the study, and builds on existing theories using empirical analysis. It employs a deductive approach, interpreting regression output to address the research question and focusing on quantifying data, generalizing results, and testing hypotheses related to the study's objectives. The study utilizes secondary data, collected through surveys based on annual reports from companies listed on the Colombo Stock Exchange. The population includes 85 companies in Sri Lanka that adopted integrated reporting, out of 284 listed companies, with a sample of 70 selected using the Morgan table, covering the period from 2019 to 2023. Data will be sourced from published annual reports and will undergo content analysis to examine corporate governance disclosures, financial statements, and integrated reporting information. Panel regression analysis is used to explore the relationship between dependent variable and set of independent variables.

Hypotheses

H₁: There is a significant impact of board size on Integrated reporting

H₂: There is a significant impact of audit committee on Integrated reporting

H₃: There is a significant impact of Board Composition on Integrated reporting

H₄: There is a significant impact of Gender Diversity on Integrated reporting

H₅: There is a significant impact of CEO Duality on Integrated reporting

H₆: There is a significant impact of separate risk management committee on Integrated reporting

Conceptual Framework

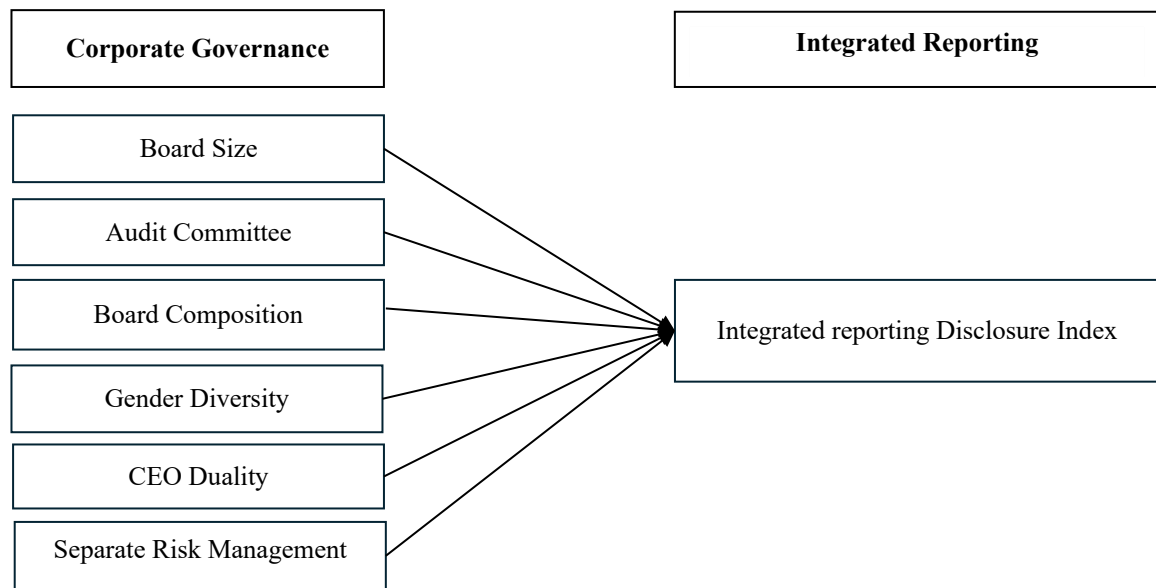


Figure 01: Conceptual Framework

Source: Constructed by authors

Findings

Correlation Analysis

Table 01: Correlation Matrix (P < 0.1)

Variable	IR	BS	AC	IB	GD	CD	RC
IR	1.0000						
BS	0.0842	1.0000					
AC	0.0495	0.2614*	1.0000				
IB	0.0329	-0.0186	0.2321*	1.0000			
GD	-0.0692	-0.0089	-0.1164*	0.1867*	1.0000		
CD	-0.0676	-0.1617*	-0.1668*	-0.0370	0.1480*	1.0000	
RC	0.0541	0.0783	0.1011*	0.1659*	0.3243*	0.0055	1.0000

Source: Constructed by authors

The analysis shows weak correlations between integrated reporting (IR) and corporate governance variables in Sri Lanka. Board size, audit committee, independence board composition, and risk management committee exhibit weak positive correlations with integrated reporting, while gender diversity and CEO duality show weak negative correlations. None of the relationships are strong, suggesting minimal linear connections between integrated reporting and these governance variables. This indicates that other factors, possibly non-linear, may better explain variations in integrated reporting. Overall, there is no significant relationship between integrated reporting and corporate governance in the Sri Lankan context.

Panel Regression Analysis

The results from Table 02 indicate that corporate governance variables are not statistically significant at the 5% level. However, 2022 and 2023 are statistically significant, with strong effects in 2023 (P = 0.000). The R² is 1.73%, suggesting corporate governance has minimal impact on integrated reporting. Board size, audit committee, and board independence positively

relate to integrated reporting, while gender diversity, CEO duality, and risk management committee show negative relationships. All hypotheses are rejected. Looking at this regression analysis, it is clear to us there is no significant impact of corporate governance on Integrated reporting.

Table 02: Regression Analysis

Integrated Reporting	Coefficient	Std. err.	z	P> z
Board Size	0.0070466	0.0042675	1.65	0.099
Audit Committee	0.009324	0.0074715	1.25	0.212
Board Composition	0.0762643	0.0582474	1.31	0.190
Gender Diversity	-0.1522906	0.0785888	-1.94	0.053
CEO Duality	-0.0321302	0.326596	-0.98	0.325
Separate Risk Management Committee	-0.0076306	0.204088	-0.37	0.708
Years				
2020	-0.0025882	0.0130631	-0.20	0.843
2021	0.019911	0.0133608	1.49	0.136
2022	0.0446625	0.0132649	3.37	0.001
2023	0.0712962	0.0135844	5.25	0.000
_cons	0.803135	0.0576452	13.93	0.000

Source: Constructed by authors

Table 03: Summary of Hypotheses Testing

No	Hypotheses	Results	Tools
H ₁	There is a significant impact of corporate governance on Integrated reporting	Rejected	Regression
H ₂	There is a significant relationship between corporate governance and Integrated reporting	Rejected	Correlation
H ₃	There is a significant impact of board size on Integrated reporting	Rejected	Regression
H ₄	There is a significant impact of audit committee on Integrated reporting	Rejected	Regression
H ₅	There is a significant impact of board independence composition on Integrated reporting	Rejected	Regression
H ₆	There is a significant impact of gender diversity on Integrated reporting	Rejected	Regression
H ₇	There is a significant impact of CEO duality on Integrated reporting	Rejected	Regression
H ₈	There is a significant impact of separate risk management committee on Integrated reporting	Rejected	Regression

Source: SPSS Output

According to the regression analysis, all corporate governance variables probability values are more than 0.05(5%). Therefore, as results of that all hypotheses can be rejected because probability is not significant. It is clear to us that corporate governance variables such as board size, audit committee, independence of the board, gender diversity, CEO duality and separate risk management committee have no effect on integrated reporting. Therefore, H₁ hypotheses

can be rejected. And also, according to the correlation analysis, we can see there is no significant relationship between integrated reporting and corporate governance in Sri Lankan context. So, H₂ hypotheses can be rejected.

Conclusion

This research examines the impact of corporate governance (CG) on integrated reporting (IR) in Sri Lankan companies, focusing on 70 firms from the Colombo Stock Exchange that adopted IR between 2019 and 2023. Six Corporate Governance Factors Board Size, Audit Committee, Board Composition, Gender Diversity, CEO Duality, and Separate Risk Management Committee are analyzed in relation to integrated reporting, using an integrated reporting disclosure index. The study employs regression and correlation analyses, finding no significant impact or relationship between corporate governance and integrated reporting in the Sri Lankan context. Secondary data from annual reports were used for this research study. These insights are valuable to investors, regulators, and corporate managers, as well as students researching corporate governance and reporting practices in Sri Lanka. Finally, many avenues will be opened for further research investigating the impact of corporate governance on integrated reporting as all hypotheses related to this research are rejected.

This study recommends that board engagement and effective decision-making matter more than structural factors like board size or gender diversity. While gender diversity and risk management committees showed no direct statistical impact, improving these areas and promoting stakeholder engagement can enhance value creation and integrated reporting practices within corporate governance frameworks.

References

- Cooray et al. (2020). Does corporate governance affect the quality of integrated reporting. *Sustainability*, 12(4262), 2-30.
- Hichri, A. (2022). Corporate governance and integrated reporting: evidence of French companies. *Journal of financial reporting and Accounting*, 20(3/4), 472-492.
- Hurghis, R. (2012). Integrated reports and financial performance: An analysis. *Economics and Business Administration*, 6-15.
- Suttipun, M., & Bomlai, A. (2019). The Relationship between corporate governance and integrated reporting. *International Journal of business and Society*, 20(1), 350-351.
- Tambunan et al. (2022). The impact of corporate governance on the integrated reporting quality of Indonesian firms: Moderating role of CSR disclosure and corporate sustainability. *14(04)*, 256.

THE IMPACT OF FINANCIAL DISTRESS ON BUSINESS PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN KURUNEGALA, SRI LANKA

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ABSTRACT

The purpose of this study is to measure the impact of financial distress on the business performance of small and medium enterprises (SMEs) in Kurunegala. The study was conducted with positivism, deductive approach, and quantitative primary data research and distributed a physically structured questionnaire focused on collecting from 271 sample SMEs in Kurunegala. Subsequently, the sample study was done through a simple random sampling method. The findings disclosed that financial distress significant impact on the business performance of SMEs in Kurunegala. When compared with prior studies, this paper raised the voice of SMEs and filled the methodology, theoretical and empirical research gaps.

Introduction

Couwenberg, (2015) defined financial distress is as the scenario that arises in not sufficient operating cash flow to fulfil the current obligation and take action to correct the current cash flow. According to Muriuki et al. (2018), financial distress is when a company can't meet its financial obligation due to high fixed costs, illiquid assets, or revenue sensitive to economic downturns. Rubab et al., (2022) reported that financial performance is a firm's ability to control resources and determine financial robustness in a specific period. Thus, financial performance is a complete evaluation of how a business uses assets to generate revenue. Small and Medium-sized Enterprises (SMEs) employ less than 300 employees and annual turnover not exceeding Rs. 750Mn income level (Ministry of Industry and Commerce, 2015). Considering 2013/14 statistical data, SMEs contributed 28.7% to industry, 40% to trade, and 30.3% to service (Department of Census and Statistics, 2023). Small and Medium Enterprises are the backbone of the Sri Lankan economy and account for more than 75% of all entrepreneurs, 45% of the country's employment, and 52% of gross domestic production (GDP) (Ministry of Industry and Commerce, 2015). During the financial crisis, 20.2% of SMEs closed permanently or temporarily and the number of permanently closed businesses is more than three times of temporarily closed businesses at the end of 2022 (Department of Census and Statistics, 2023).

Furthermore, the Department of Census and Statistics, (2023) reported that the highest percentage of closures was 33.4% in 2020 and 41.1% closures in 2019-2020. According to that situation, small and medium entrepreneurs are in question whether they should continue their operations or not, because the environment is uncertain. This paper measures financial distress through liquidity, profitability, solvency, return on assets, and capital turnover. Most of the prior researchers consider financial distress a single variable. However, Shaukat and Affandi, (2015) and Sporta, (2018) scholars considered that financial distress as multiple variables.

This study focuses on financial distress, specifically examining liquidity, profitability, solvency, return on assets, and capital turnover among SMEs operating within the Kurunegala Divisional Secretariat area in Sri Lanka. Additionally, business performance is assessed exclusively in terms of financial performance. The research is guided by five specific objectives:

1. To measure the impact of profitability on the business performance of SMEs in Kurunegala.
2. To examine the impact of solvency on the business performance of SMEs in Kurunegala.
3. To find out the impact of liquidity on the business performance of SMEs in Kurunegala.
4. To identify the impact of return on assets on the business performance of SMEs in Kurunegala.
5. To measure the impact of capital turnover on the business performance of SMEs in Kurunegala

Methodology

This study used the positivism approach, cross-sectional, deductive method, and quantitative method to measure the impact of financial distress on the business performance of SMEs in Kurunegala. The primary data were collected through a questionnaire and 271 SMEs as the sample in Kurunegala divisional sectary, registered, resident, and not considered subsidiaries of holding company in this area. Cronbach’s alpha test was used to measure the reliability and to check the validity of the questionnaire, KMO’s and Bartlett’s tests were used. The data collected was analyzed with IBM SPSS statistic version 26. This study used descriptive analysis with mean, median, and standard deviation. Moreover, Nonparametric Tests and Exploratory Data Analysis were used to prove data fitness and normality of the data set which reduced outliers. In addition to that, correlation, regression ANOVA, and coefficient were used to test the significance of variables.

$$BPF = \alpha + \beta_1 LIQ + \beta_2 PRO + \beta_3 SOL + \beta_4 ROA + \beta_5 CAT + E \dots\dots\dots (1)$$

Where BPF (Business performance) is the dependent variable, α is the constant, $\beta_{1,2,3,4,5}$ are the coefficient of the predictor variables LIQ (Liquidity), PRO (Profitability), SOL (Solvency), ROA (Return on Asset), and CAT (Capital Turnover) respectively while E is the error term of the model.

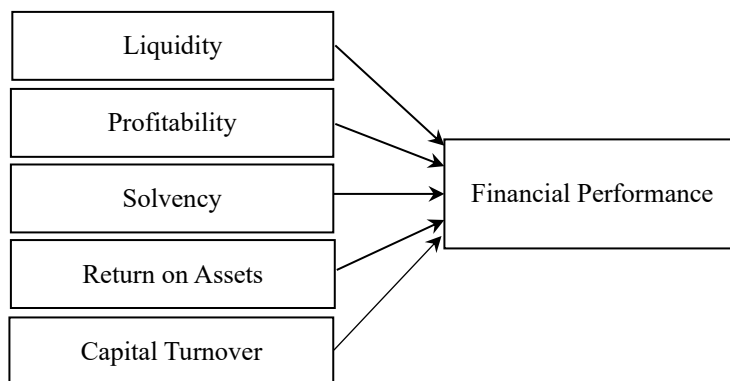


Figure 01: Empirical Framework

Source: Shaukat & Affandi, 2015

Findings

Using a Person’s product-moment correlation with a 2-tailed test of significance, the correlation is tested between liquidity, profitability, solvency, capital turnover, return on asset, and business performance. A high significant impact five independent variables on the business performance of SMEs in Kurunegala were observed.

Table 01: Correlation Analysis

	LIQ	PRO	SOL	CAT	ROA	BPF
Liquidity - LIQ	1					
Profitability - PRO	.621**	1				
Solvency - SOL	.742**	.699**	1			
Capital Turnover - CAT	.756**	.661**	.756**	1		
Return on Assets - ROA	.734**	.678**	.698**	.709**	1	
B. Performance - BPF	.809**	.734**	.825**	.896**	.778**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Constructed by the authors

The correlation analysis reveals high significant impact Business Performance and the selected financial indicators. Capital Turnover exhibits the strongest correlation ($r = .896$), suggesting that efficient utilization of assets to generate revenue is a critical driver of business performance. Solvency also shows a high correlation ($r = .825$), indicating that businesses with strong financial stability and the ability to meet long-term obligations tend to perform better. Liquidity ($r = .809$) and Profitability ($r = .734$) further demonstrate significant associations, highlighting the importance of maintaining sufficient short-term funds and achieving consistent profits. Finally, return on Assets ($r = .778$) underscores the role of efficient asset utilization in enhancing financial outcomes. All correlations are statistically significant, emphasizing the interconnectedness of these factors with business performance.

According to the regression analysis, study R-Square value is 0.883 which means 88% of the valuation in business performance can be explained by the independent variables. Also, the F-test is significant, and the overall regression model is statistically significant. According to that, the regression equation is,

$$BP = 0.160LIQ + 0.116PRO + 0.197SOL + 0.452ROA + 0.121CAT \dots\dots\dots(1)$$

Where; BP(Business Performance), (LIQ(Liquidity), PRO(Profitability), SOL(Solvency), ROA (Return on Assets) and CAT (Capital Turnover)

Table 02: Hypotheses Testing

Hypotheses	Coefficient	P value	Impact	Result
H ₁	.160	.000	Significant	Accepted
H ₂	.116	.001	Significant	Accepted
H ₃	.197	.000	Significant	Accepted
H ₄	.452	.000	Significant	Accepted
H ₅	.121	.001	Significant	Accepted

Source: Constructed by the authors

According to the Table 02, the beta coefficient of H₁ is 0.160 (P <0.05), which means liquidity P value is under the threshold and significant impact on business performance, and the alternative hypothesis is rejected. When explicating that liquidity significantly impacts on business performance of SMEs in Kurunegala to the extent of 0.160 units. However, Hillary (2018) and Shaukat and Affandi (2015) addressed that liquidity insignificant impact on financial performance. Even though Sporta (2018) denoted that liquidity significant impact on financial performance.

H₂ proposes that profitability significantly impacts on business performance of SMEs in the Kurunegala. The finding supported this hypothesis ($\beta=.116$, $p<0.05$). Similarly Shaukat and Affandi, (2015) agreed that profitability significant impact on financial performance.

The third hypothesis (H₃) proposed that solvency significantly impacts on business performance of SMEs in the Kurunegala. As per table intimate ($\beta=.197$, $p<0.05$), the null hypothesis is accepted while the alternative hypothesis is rejected. Paradoxically Hillary, (2018) argued that solvency insignificant impact on financial performance.

When considering the H₄ distinguished coefficient is 0.452 and the P value < 0.005 which indicates the return on assets significantly impacts on business performance of SMEs in the Kurunegala. Thus null hypothesis is accepted while the alternative hypothesis is rejected. Shaukat and Affandi, (2015) found that return on asset significant impact on financial performance and this study agreed with him.

The beta coefficient ($\beta=.121$, $p<0.05$) of the H₅ confirmed that the capital turnover significantly impacts on business performance of SMEs in Kurunegala. Sporta, (2018) disclosed that capital turnover significant impact on financial performance and this study agreed with him.

Conclusion

This study can conclude that financial distress has a significant impact on the business performance of SMEs in the Kurunegala divisional sector. This study was suggested to improve liquidity, profitability, solvency, return on assets, and capital turnover to enhance business performance.

References

- Couwenberg, O. (2015). Financial Distress. In *Wiley Encyclopedia of Management* (pp. 1–3). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118785317.WEOM040039>
- Department of Census and Statistics (2023). Impact of Economic Crisis on MSMEs. In *Ministry of Finance, Economic Stabilization & National Policies Sri Lanka* (1). <https://doi.org/10.21125/iceri.2022.0985>
- Hillary, O. K. (2018). Effects of Financial Distress on Financial Performance of Manufacturing. *IJARKE Business & Management Journal*. 1(1), 211–220.
- Ministry of Industry and Commerce. (2015). National Policy Framework for Small and Medium (SME) Development. *Ministry of Industry and Commerce*, 1–13. www.industry.gov.lk/web/images/pdf/framew_eng.pdf

- Muriuki, A., Abdullah, D., & Ali, I. (2018). Determinants of Financial Performance in Small and Medium Enterprises in Mombasa County Kenya. *International Journal of Management and Commerce Innovations*, 6(1), 82–90. www.researchpublish.com
- Rubab, S. T., Hanif, N., Bukhari, S. A. F., & Kamran, M. M. (2022). The Impact of Financial Distress on Financial Performance of Manufacturing firms listed at Pakistan Stock Exchange. *Bulletin of Business and Economics*, 11(2), 382–391.
- Shaukat, A., & Affandi, H. (2015). Impact of financial distress on financial performance -a study related to Pakistani corporate sector. *International Journal of Current Research*, 7(2012), 12991–12996.
- Sporta, F. O. (2018). *Effect of financial distress factors on performance of commercial banks in Kenya* [University of Agriculture and Technology]. <http://ir.jkuat.ac.ke/handle/123456789/4617>

CORPORATE DECISION-MAKING DOMINANCE AND AGENCY COST

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ABSTRACT

The objective of this study is to examine the impact of decision-making dominance within corporate boards and management teams on agency costs in Sri Lankan firms. The data window covers 200 listed firms for a period of 13 years starting from 2011. While the dependent variable is agency cost, corporate decision-making dominance is taken as the independent variable. The findings reveal that board decision-making dominance does not increase agency cost, but decision-making dominance in the management team create more agency conflicts. The literature provides ample of evidence on how managerial actions can lead agency conflicts. The current study tests how decision-making dominance of directors and managers can inspire agency problems.

Introduction

In the early 20th century, the seed of corporate governance sprouted in the United States. Corporate governance evaluation is a critical ongoing process that seeks to assess how effectively a company is led and controlled. The main objective of corporate governance is to maximize the return of shareholders and debt holders. In recent years, corporate governance has achieved many developments. The core concept of corporate governance is encompassed by agency cost which is well known as the ground concept of corporate governance.

The separation of ownership from control is the foundation of agency cost. When a firm becomes larger, the governance debates the problem of the separation of ownership and control (Berle & Means, 1932). Accordingly, a conflict of interest exists between so-called agent and agent-principal. It was later formalized by Jensen & Meckling (1976). When managers use their decision-making power to pursue self-interested behavior, it can lead to agency costs. Thus, managers may have more bargaining power over decision-making.

Shareholders may expect some monitoring mechanisms to mitigate such self-interested behavior of management. Thus, the appointment of members of the board of directors came to the forefront. However, it is debatable in the literature whether boards are playing their intended role. CEO empowerment, and lack of autonomy and insider dominance can lead to increased agency cost (Hermalin & Weisbach, 1998; Jensen, 1993). Moreover, mechanisms like board diversity and founder involvement can enhance governance by improving decision making dominance (Cook & Glass, 2015; Anderson & Reeb, 2003). As far as board composition is concerned, the board room typically comprises executive as well as non-executive directors. If a board consists of the majority of executive directors, then they may mark their own examination papers. Board decision-making can also be dominated by an executive chairman or by a unitary leader who holds both the positions of board chair and CEO. Family dominance in decision-making can also be observed if the majority of directors represents the same family.

If the founding chairman still holds the board chair position, board decisions can be her best interest. Ethnic homogeneity of board members can also lead to biased board decisions.

Decision-making dominance can also prevail in the top management team. Where the CEO may dominate in decision-making within the management committee because of her power generated through different sources. CEOs with 1) a considerable share ownership, 2) longer tenure under the same employer, 3) many cross directorships, and 4) expertise knowledge could be influential in decision-making. Moreover, CEO masculinity could also be considered as a social power of the CEO in a masculine society.

In view of such structures in the board room as well as management team, study addresses the research question of “to what extent decision-making dominance in board rooms and top management teams enhance agency costs of Sri Lankan firms?”.

Methodology

To study how corporate decision-making dominance by way of board decision-making dominance and managerial decision-making dominance affects agency costs, this study sourced data from Sri Lankan firms. The data window covers 200 listed firms for a period of 13 years from 2011 to 2023 resulting 2,574 firm-year observations. The sample was chosen randomly from 284 firms representing industries under Global Industry Classification Standard (GICS). It excluded bank, finance and insurance companies owing to their different accounting treatments and disclosure requirements. Companies listed or delisted recently were also not accounted for the sample.

The dependent variable of the study is agency cost which is measured by a composite index. Following Nazliben et al. (2023), it combines several agency costs proxies; higher capital expenditure, lower dividend payout ratio, lower leverage, lower ownership concentration, higher free cash flow, inefficient asset utilization, and higher operating expenses. All such proxies are taken as binary variables. When they are present, value is taken one, otherwise zero.

Independent variables are board decision-making dominance and managerial decision-making dominance. The former is measured by a composite index that counts several board characteristics such as CEO duality, executive directorship, family directorship, founding chairman, and ethnic homogeneity (Nazliben et al., 2023). Decision-making dominance in management team is also represented by a composite index. It considers several characteristics of the CEO (i.e., CEO share ownership, CEO tenure, CEO cross directorship, CEO expertise knowledge, and CEO Masculinity) which enable him/ her to be dominant in the top management team (Nazliben et al., 2023). While firm size and age are used as control variables, the presence of a large shareholder is applied as a moderator.

The main source of data is companies' annual reports which disclose both non-financial and financial information. Board composition was accessed through *report of directors* in the annual report. CEO profile carries information regarding CEO's share ownership, CEO tenure, CEO cross directorship, CEO expertise knowledge, CEO masculinity. Financial statements provide data for the proxies of agency costs. Gathered data are prepared in a panel data window which estimates the following econometric model.

$$\begin{aligned}
 \text{Agent.Costit} = & \beta_0 + \beta_1 \text{Board Domi.it} + \beta_2 \text{Manag. Domi.it} + \\
 & \beta_3 \text{Board Domi.it} * \text{Larg.Shareh.it} + \beta_5 \text{Manag. Domi.it} * \text{Larg.Shareh.it} + \\
 & \beta_7 \ln(\text{Total Assets})it + \beta_8 \ln(\text{Age})it + \text{Years} + \text{Industries} + \\
 & \text{Uit} \dots \dots \dots (1)
 \end{aligned}$$

Findings

As a part of data exploration, descriptive statistics are presented in Table 01. Accordingly, the mean of agency cost is 3.443 (out of 7), indicating that sample firms experience relatively moderate level of agency cost. Both board and management dominance stand at 1.405 and 2.914 respectively. Though both values are relatively lower, managerial decision-making dominance outstrips board decision making dominance. The presence of a large shareholder is reported at 90.6 percent occasions.

Table 01: Descriptive Statistics

Variable	Obs.	Mean	S.D.	Minimum	Maximum
Agency cost index (Y)	2,574	3.443	1.457	0	7
Board dominance index (X ₁)	2,574	1.405	0.936	0	4.667
Managerial dominance index (X ₂)	2,574	2.915	0.989	0	6
Large shareholder (M)	2,574	0.906	0.292	0	1
Log (Total assets) (C ₁)	2,574	21.852	1.527	12.684	25.856
Log (Age) (C ₂)	2,574	1.643	0.727	0	2.485

Source: Constructed by the Authors

Table 02 illustrates correlations among study’s variables. Both board dominance index and managerial dominance index are positively related to agency cost index. This indicates that decision making dominance in both board room and top management team leads to more agency conflicts. The presence of a large shareholder also shows a weak positive relation with agency cost index. Agency cost seems to be higher in large firms but lower in mature firms.

Table 02: Correlation Matrix

	1	2	3	4	5	6
Agency cost index	1					
Board dominance index	0.043	1				
Managerial dominance index	0.087	0.041	1			
Large shareholder	0.047	-0.034	-0.043	1		
Log (Total assets)	0.111	0.061	-0.008	0.013	1	
Log (Age)	-0.175	-0.012	0.064	0.054	0.136	1

Source: Constructed by the Authors

In Table 03, it is presented a set of models [(01)-(08)] to explain the effect of corporate decision-making dominance on agency costs. In overall, board decision-making dominance negatively and significantly affects agency cost (see models (1), (2) and (8)) at 10 percent level. It seems that board decision-making dominance discourages agency conflicts between managers and shareholders. However, models (1) and (7) illustrate that managerial decision-making dominance leads to higher agency cost. This could be due to the fact that management committee is represented only by executives. In the literature, however, executives are assumed to work for the success of the firm (Davis et al., 1997), and their dominance improves performance (Fang et al., 2020). The presence of large shareholders does not play any

moderating role on the relation between corporate decision-making dominance and agency costs.

Table 03: Regressions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
X ₁	-0.055* (0.033)	-0.143* (0.082)	-0.012 (0.059)	0.005 (0.105)	0.009 (0.079)	0.037 (0.124)	-0.055 (0.034)	-0.143* (0.074)
X ₂	0.078*** (0.029)	0.049 (0.047)	-0.007 (0.037)	-0.031 (0.056)	-0.037 (0.040)	-0.049 (0.060)	0.078*** (0.028)	0.049 (0.042)
X ₁ *M	-	0.103 (0.087)	-	-0.018 (0.101)	-	-0.030 (0.108)	-	0.103 (0.080)
X ₂ *M	-	0.036 (0.042)	-	0.026 (0.046)	-	0.013 (0.049)	-	0.036 (0.039)
C ₁	0.070*** (0.020)	0.071*** (0.020)	-0.057 (0.037)	-0.057 (0.037)	-0.232*** (0.053)	-0.231*** (0.054)	0.070*** (0.020)	0.071*** (0.020)
C ₂	-0.347*** (0.053)	-0.352*** (0.053)	-0.324*** (0.039)	-0.325*** (0.039)	-0.290*** (0.040)	-0.290*** (0.040)	-0.0347*** (0.052)	-0.352*** (0.052)
Industry	yes	yes	yes	yes	no	no	yes	yes
Year	yes	yes	yes	yes	yes	yes	yes	yes
Constant	2.191***	2.223***	5.286***	5.277***	8.796***	8.778***	2.191***	2.223***
Pool	yes	yes	no	no	no	no	no	no
RE	no	no	yes	yes	no	no	no	no
FE	no	no	no	no	yes	yes	no	no
Robust	no	no	no	no	no	no	yes	yes
R ²	0.2169	0.2193	0.1997	0.2004	0.0057	0.0058	0.2169	0.2193
Groups	-	-	205	205	205	205	-	-
Obs.	2369	2369	2369	2369	2369	2369	2369	2369

Source: Constructed by the Authors

Conclusion

Study argued that corporate decision-making dominance by means of board decision-making dominance and managerial decision-making dominance can create agency conflicts between managers and shareholders. However, study concludes that board decision-making dominance does not increase agency conflicts. This could be due to the fact that corporate governance code of Sri Lanka encourages dual leadership structure and board balance. Decision-making dominance in the top management team seems to be created more agency conflicts. As management team comprises wholly executives, agency conflict occurrence could be a typical phenomenon. The presence of large shareholders fails to moderate the relation between corporate decision-making dominance and agency conflicts given that the lack of shareholders' activism in Sri Lanka.

References

- Berle, A. and Means, G. (1932) *The Modern Corporation and Private Property*. Commerce Clearing House, New York.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1), 20.
- Fang, H., Lee, J., Chung, C., Lee, Y., & Wang, W. (2020). Effect of CEO power and board strength on bank performance in China. *Journal of Asian Economics*, 69, 101215.

- Jensen, M.C. and Meckling, W.H. (1976) Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure. *Journal of Financial Economics*, 3, 305-360
- Nazliben, K. K., Renneboog, L., & Uduwalage, E. (2023). CEO social power, board inclusiveness, and corporate performance after ethnic conflicts. *Emerging Markets Review*, 56, 101056.

THE IMPACT OF CREDIT RISK MANAGEMENT ON FINANCIAL PERFORMANCE OF LICENSED COMMERCIAL BANKS AND LICENSED SPECIALIZED BANKS IN SRI LANKA

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ABSTRACT

The importance of credit risk management for banking sector become tremendous while financial institutions have faced difficulties over the years for a multitude of reasons. The main purpose of this research is to empirically examine the quantitative impact of credit risk management (CRM) on financial performance (FP) of licensed commercial banks (LCBs) and licensed specialized banks (LSBs) in Sri Lanka. And also aim to investigate the relationship, by considering banking soundness index indicators (CAMEL Model). The study used secondary data which was published in CSE, over the period of 10 years (2013-2022). In this research multiple regression analysis done with fixed effect model and E-Views software was used to analyze the data. Statistically, the hypotheses claims that capital adequacy and asset quality had a statistically significant negative impact on the FP of LCBs and also an insignificant negative impact on the FP of LSBs. Earnings quality and liquidity have a positive significant impact on the FP of both sectors and positive insignificant impact between management efficiency and FP in two sectors. Therefore, finally this study suggests that CAMEL model can be used as a proxy for CRM and conclude that there is an impact of CRM on FP of LCBs and LSBs in Sri Lanka.

Introduction

The global financial crisis is the main explanation for why credit risk management in the banking industry is becoming increasingly crucial. In Sri Lankan context, due to the recent political and economic crisis creates a huge impact to the performance of the financial institutional sector. In literature most of researchers have focused on LCBs and showed different results. (Rajkumar & Hanitha, 2015), performed a study for impact of credit risk management on financial performance of state commercial banks in Sri Lanka. (Wijerathna & Basnayake, 2021), performed a study of effect of credit risk management on financial performance by considering evidence from commercial banks in Sri Lanka. Further the researches of Kodithuwakku (2015), Rasika and Sampath (2015), Perera (2015), Udesika, (2015) also only considered the credit risk management impact on commercial banks in Sri Lanka. Most of Sri Lankan studies have focused on commercial banks, but they have a less focus on LSBs. (Liyanage, Dewa, & Ismail, 2021), performed a study of credit risk management and bank performance with special reference to specialized banks in Sri Lanka. However, very few researchers have put the comparative researches between LCBs and LSBs in Sri Lanka and only few studies performed using credit risk indicator CAMEL approach. Further lack of use bank size as a variable that can impact on the banks' financial performance.

The aim of this study is to fill that literature gap about the comparison of the impact of credit risk management on the financial performance of LCB and LSB using the banking soundness index indicator, CAMEL (capital adequacy, assets quality, management efficiency, earning, and

liquidity), as an indicator for the credit risk management determinants. Hence, the main problem of this research is to examine “What extent the credit risk management impact on financial performance of Sri Lankan LCBs and LSBs”. This study seeks to,

1. Identify the impact of banking soundness index indicators-CAMEL (Capital adequacy, Assets quality, Management efficiency, Earnings, Liquidity) on financial performance (ROE) of LCB and LSB in Sri Lanka.
2. The relationship between banking soundness index indicators-CAMEL (Capital adequacy, Assets quality, Management efficiency, Earnings, Liquidity) and financial performance (ROE) of LCB and LSB in Sri Lanka.

The scope of the study is to empirically examine the quantitative effect of credit risk on the financial performance of 11 licensed commercial banks and 4 licensed specialized banks in Sri Lanka over the period of 2013-2022.

Methodology

The study was attempted to answer the questions of,

1. What is the impact of credit risk management on the financial performance of the Sri Lankan LCBs and LSBs?
2. What is the relationship between CAMEL indicators and financial performance (ROE) of LCB and LSB in Sri Lanka?

The study used panel data regression for a sample of 11 out of 24 licensed commercial banks and 04 out of 06 licensed specialized banks of Sri Lanka during 2013-2022. Descriptive statistics, correlation analysis and panel regression analysis were used to analyze the collected secondary data using the E-Views 12 student version software.

Variables of the Study

Table 01: Operationalization of variables

Concept	Variable	Acronyms	Indicator	Measurement
Financial performance (Dependent)	Return on Equity	ROE	Ratio	Net income/ Total equity
Credit risk management (Independent)	Capital Adequacy	CAR	Ratio	Total Equity / Total Assets
	Assets Quality	AQR	Ratio	Non-Performing Loans / Total Loans & Advances
	Management Efficiency	MER	Ratio	Loan and Advances/ Total deposits
	Earning Quality	EQR	Ratio	Operating Income / Total Assets
	Liquidity	LR	Ratio	Liquid Assets / Total deposits
Bank size (Control)				Natural logarithm of total assets

Source: Rajkumar & Hanitha, 2015

Conceptual Framework

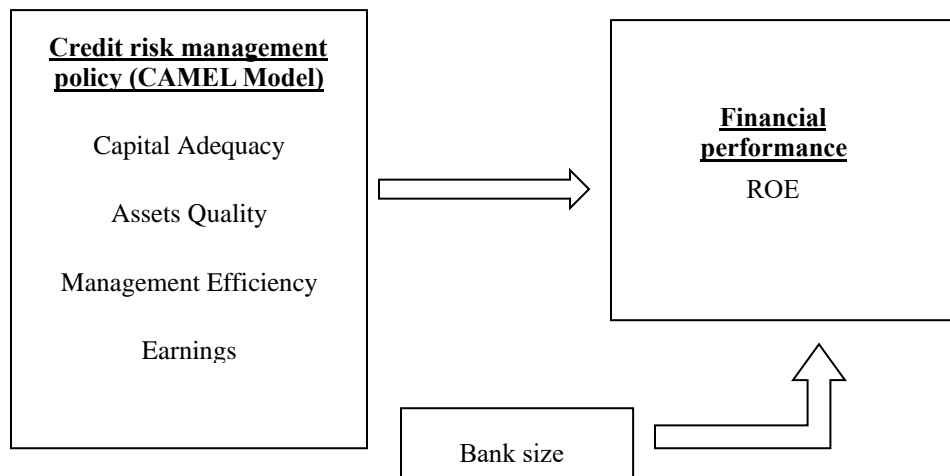


Figure 01: Conceptual Framework

Source: Constructed by the Authors

Findings

This study evaluates the level of credit risk management practices employed by Sri Lankan LCBs and LSBs using descriptive statistics. The correlation analysis is used to examine the relationship between CRM and the FP of the LCBs and LSBs in Sri Lanka. Correlation analysis indicates whether and how strongly variables are correlated. The linear regression model is employed to examine the impact of credit risk management practices on the FP of the banks and to test the hypotheses in research while using CAMEL approach indicators of credit risk and with the Bank Size as a control variable.

Unit Root Test Results

As per the unit roots test summary results for every variable derived from Levin, Lin & Chu, Im, Pesaran and Shin, Fisher ADF, and PP tests, most of the tests yielded a matching p-value exceeding 5% at the level, indicating the researcher's rejection of the Null hypothesis. It means that all the data does not have a unit root and hence all the variable ratios are stationary data at Level.

Correlation Analysis

Table 02: Pearson Correlation Analysis of LCBs

Correlation	ROE	CAR	AQR	MER	EQR	LR	BSIZE
ROE	1.000000						
CAR	-0.657329	1.000000					
AQR	-0.21365	0.107100	1.000000				
MER	0.053191	0.150640	-0.214779	1.000000			
EQR	0.143658	0.044031	0.438126	0.034138	1.000000		
LR	0.180901	0.043859	0.214634	-0.020535	0.068827	1.000000	
BSIZE	0.525768	-0.601912	0.086332	-0.375609	-0.169618	0.240206	1.000000

Source: Eviews Output

ROE has a moderately negative relationship with capital adequacy and a weakly negative relationship with asset quality. ROE and Earning Quality, ROE and Liquidity, and ROE and

Management Efficiency have a weak positive relationship. At the same time, there is a moderate positive relationship between ROE and Bank Size.

Table 03: Pearson Correlation Analysis of LSBs

Correlation	ROE	CAR	AQR	MER	EQR	LR	BSIZE
ROE	1.000000						
CAR	-0.496528	1.000000					
AQR	-0.322290	0.754882	1.000000				
MER	-0.624064	0.604325	0.158769	1.000000			
EQR	-0.394868	0.373558	-0.022511	0.795567	1.000000		
LR	0.722151	-0.662872	-0.348776	-0.824352	-0.710852	1.000000	
BSIZE	0.579804	-0.865447	-0.555693	-0.807987	-0.654822	0.743472	1.000000

Source: Eviews Output

Conversely, ROE has a moderate negative relationship with management efficiency and a weakly negative relationship with capital adequacy, asset quality, and earning quality. Liquidity and bank size have a moderate positive relationship with ROE.

Regression Analysis

The Hausman test is used to determine whether individual effects have a correlation or no correlation with the independent variables. The Fixed Model is statistically significant at a 5% level based on the Hausman test results. Therefore, using EViews to analyze panel data, the fixed models were accepted and the null hypothesis was rejected.

Table 04: Regression Analysis of LCBs

Variable	Coefficient	Std.Error	t-Statistic	Prob.
CAR	-0.308809	0.157074	-1.966013	0.0523
AQR	-1.113332	0.226420	-4.917119	0.0000
MER	0.058995	0.057531	1.025448	0.3078
EQR	3.024248	0.489356	6.180056	0.0000
LR	0.133182	0.052240	2.549446	0.0124
BSIZE	-1.817847	0.921339	-1.973049	0.0515
C	44.76803	27.00554	1.657735	0.1007

Source: Eviews Output

According to the table above, the linear regression model estimate is,

$$ROE = 44.77 - 0.31CAR - 1.113AQR + 0.06MER + 3.02EQR + 0.133LR - 1.82BSIZE + \epsilon \quad (1)$$

The model's probability (F Statistic) is 0.0000, meaning that the model as a whole has an important role in predicting the financial performance of the commercial bank sector. Durbin Watson's measure, 1.59, identifies the model's autocorrelation issue, though it falls between 1.5 and 2.5, there is no autocorrelation between the variables is shown.

The model's probability (F Statistic), is 0.000, indicating that the model as a whole plays a significant part when determining the profitability of the specialized bank sector. According to the results of the OLS panel regression, it is 73.43%, meaning that all considered independent variables explain approximately 73% of the dependent variable of the model, which is Return

on Equity. Durbin Watson's Measure is 2.11. Being in the range of 1.5 to 2.5. It is shown that the variables do not auto correlate.

Table 05: Regression Analysis of LSBs

Variable	Coefficient	Std.Error	t-Statistic	Prob.
CAR	-1.016030	0.845863	-1.201176	0.2391
AQR	-0.117022	0.224049	-0.522302	0.6053
MER	0.121690	0.104344	1.166237	0.2527
EQR	7.943123	1.527203	5.201093	0.0000
LR	0.170907	0.052332	3.265851	0.0027
BSIZE	4.215297	2.164886	1.947122	0.0609
C	-146.3337	61.32193	-2.386320	0.0235

Source: Eviews Output

According to the table above, the linear regression model estimate is,

$$ROE = -146.33 - 1.02CAR - 0.12AQR + 0.12MER + 7.94EQR + 0.17LR + 4.22BSIZE + \epsilon \dots\dots\dots(2)$$

The results indicate a statistically significant negative impact of the CAR on the FP of LCBs. This result aligns with the findings of (Wijerathna & Basnayake, 2021). LCBs should maintain a balanced CAR to ensure stability while avoiding excess capital which lower returns. CAR had an insignificant negative impact on LSBs' ROE ratio. In case of LSBs, the changes of CAR do not strongly influence the financial performance of LSBs. LCBs should improve their Asset Quality by reducing NPL and strengthening credit evaluation processes, since the result shows a significant negative impact on ROE. This finding is also consistent with the conclusions of (Wijerathna & Basnayake, 2021). In case of LSBs, since the result shows an insignificant negative impact on ROE, they should maintain effort to improve asset quality but focus more on other factors that directly influence ROE. Though the current study found that the ROE ratio was negatively impacted by both AQR and CAR and these impacts were statistically insignificant in case of LSBs, (Liyanage, Dewa, & Ismail, 2021), reported a statistically significant negative relationship between ROE and both AQR and CAR. The MER has a statistically insignificant positive impact on ROE across both type of banks. It suggests that while management efficiency is crucial, other factors may play a larger role in influencing profitability directly. For both LCBs and LSBs, EQR is significant and positively impacts the ROE ratio. In case of LCB this result echoes the findings of (Rajkumar & Hanitha, 2015). In order to improve the bank's profitability, LCBs and LSBs should decide to raise operating income through efficient asset management and should proceed in a manner that enhances earning quality. LR and the ROE of both sectors have a significant positive relationship, so LCBs and LSBs must maintain adequate liquidity to support operational efficiency and enhance ROE, ensuring they can meet obligation while optimizing asset utilization.

Conclusion

The LSBs ranks lower than LCBs in the CAMEL composite. It shows that LCB is more able than LSB to fulfill its obligations to customers. The study highlights that certain element such as Earnings Quality, Liquidity has a statistically significant positive impact on FP. Therefore,

these aspects should be a focal point for both banks aiming to improve their FP. Therefore, before deciding where is appropriate for their investment and other financing activities, customers should take into account the interest rate, credibility, goodwill, and other facilities & perks. This study contributes to the understanding of how credit risk management influences FP of LCBs and LSBs, while it underscores the importance for bank management and regulatory bodies to prioritize earnings quality and liquidity in their strategies to enhance competitiveness and customer trust. Though the study measured the FP of Sri Lankan banks using ROE, the measurement of market-based and economic-based financial performance can be achieved by incorporating additional pertinent dependent variables, like Tobin's Q and economic value added, which are not amenable to measurement using traditional ratios. The research recommends conducting more research on the effect of using CAMEL indicators for CRM on the FP of other financial institutions in Sri Lanka. The purpose of this is to determine whether the other financial institutions in the Sri Lankan market can use the CAMEL model as a stand-in for credit risk management.

References

- Aktan, B., & Bulut, C. (2008). Financial performance impacts of corporate entrepreneurship in emerging markets: A case of Turkey. *European Journal of Economics, Finance and Administrative Sciences*, 1530-2275.
- Basel. (1999). *Principles for the Management of Credit Risk*. Basel Committee on Banking Supervision, Basel.
- Kodithuwakku, S. (2015). The impact of credit risk management on the performance of commercial banks in Sri Lanka. *International Journal of Scientific Research and Innovative Technology*, 2, 7.
- Liyanage, Dewa, & Ismail. (2021). Credit Risk Management and Bank Performance: With Special Reference to Specialized Banks in Sri Lanka. *Asia-Pacific Journal of Management and Technology*, 2(1), 01-10.
- Perera, W. T. (2015). *The effect of credit risk management on financial performance of commercial banks in Sri Lanka*. Department of Finance, University of Kelaniya, Sri Lanka. .
- Rajkumar, P., & Hanitha, V. (2015). The impact of credit risk management on financial performance A Study of State Commercial Banks in Sri Lanka. *Proceeding of International Conference on Contemporary Management*, University of Jaffna.
- Rasika, D. G., & Sampath, H. R. (2015). Impact of Credit Risk on Financial Performance of Sri Lankan Commercial Banks: Special Reference to Systematically Important Banks. Sabaragamuwa University of Sri Lanka, Belihuloya, Sri Lanka.
- Tefera, T. (2011). *Credit risk management and profitability of commercial bank in Ethiopia*. Addis Abeba University.
- Udesika, D. M. (2015). *Impact of Credit Risk Management on Profitability in Commercial Banks in Sri Lanka*. Department of Finance, University of Kelaniya, Sri Lanka.

- Weerasinghe, V., & Perera, T. (2013). Determinants of profitability of commercial banks in Sri Lanka. *International Journal of Arts and Commerce*, 2(10), 141-170.
- Wijerathna, W., & Basnayake, W. (2021). Effect of Credit Risk Management on Financial Performance: Evidence from Commercial Banks in Sri Lanka. *9th Students' Research Symposium. 1*, 120-148. Sri Lanka: Department of Finance, University of Kelaniya.



Track 06

Financial Markets and Corporate Finance

DOES DIVIDEND POLICY MATTER FOR THE SHARE PRICE? PERSPECTIVE OF BIRD-IN-THE HAND THEORY: EVIDENCE FROM LISTED NON-FINANCIAL COMPANIES IN SRI LANKA

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ABSTRACT

The objective of this paper is to analyze and critically converse the impact of dividend policy on share price of non-financial public listed companies in Sri Lanka in the perspective of bird-in-the hand theory. The study considered entire population and based on the data availability gathered 300 observations and uses regression analysis method to review the impact of dividend policy on share price. The findings of this study reflect mix of outcome as dividend per share shows positive and dividend payout, dividend yield ratios show negative impact on share price. This thesis provides an overview of empirical studies on the impact of share price by dividend policy and broaden the discussion regarding its influence in non-financial companies in Sri Lanka.

Introduction

Maximizing shareholder wealth is a primary objective of the companies. This goal is achieved through a combination of strategic decisions, including investment decisions, financing decisions, dividend decisions, and working capital decisions. This study focuses on dividend policy as a key factor influencing the share price of non-financial companies listed in the Colombo Stock Exchange (CSE) in Sri Lanka. The relationship between dividend policy and share price has been a topic of debate for decades, with no definitive conclusion (Raza et al., 2018). While some researchers believe that a strong dividend policy positively impacts share price, others argue that it can have negative consequences as well (Kengatharan & Ford, 2021). This lack of consensus, particularly within the Sri Lankan context, motivates this research. Therefore, this study aims to bridge the existing gap in knowledge by examining the impact of dividend policy on share price in Sri Lanka's non-financial public listed companies (PLC) and it adopts the perspective of the "Bird-in-the-Hand" theory, which suggests that distributing additional funds as dividends to shareholders is more beneficial than reinvesting them for potential capital gains (Gordon, 1959). Thus, the primary objective of this study is to investigate the impact of dividend policy on the share price of non-financial PLCs listed on the CSE in the perspective of bird-in-the hand theory. This will be achieved through a series of specific objectives as describing the various dividend payment behaviors, analyzing the different share price trends of the listed companies, as per (Warrad, 2017; Ohiaeri et al., 2019; Malhotra & Tandon., 2013) as cited in identifying the influence of dividend per share, dividend payout ratio, and dividend yield ratio on share price. Which means it examine whether a dividend policy prioritizing shareholder payouts through reduced reinvestment really impacts share price. On the other side, the significance of this study lies in its contribution to a critical gap in knowledge because existing research on the Sri Lankan market is limited, and the "Bird-in-the-Hand" theory suggest that the higher dividend payouts may increase the share price of the company and this perspective has not been extensively explored. Therefore, this study will

try to provide valuable insights into how dividend policy practices differ among non-financial companies listed on the CSE, the impact of dividend policy on share price fluctuations, aiding investors and board members in making informed investment and policy decisions and provide knowledge for investors to predict future share price trends and make optimal investment choices. Further, the study acknowledges certain limitations as it focuses on Sri Lanka's non-financial PLCs listed on the CSE during a specific timeframe (2019-2023). Additionally, the study only considers three specific dividend policy factors (dividend payout ratio, dividend per share, and dividend yield ratio) and the "Bird-in-the-Hand" theory and develop the research problem as Does the dividend policy affect positively on Share price of Non-Financial PLCs in Sri Lanka? (Kengatharan, 2021) (Gordon, 1963). Finally, the findings of this research will be of interest to investors, academics, and policymakers seeking to understand the complex relationship between dividend policy and share price in the Sri Lankan market.

Methodology

This study adopts a positivism approach. Since, it's focusing on measurable, numerical data to evaluate the hypothesis and the collected data is practically measurable. A deductive approach was employed, since, the study is starting with the established Bird-in-the-Hand theory and relying on quantitative research methods. The study analyses secondary data, such as annual reports of non-financial public listed companies in the Colombo Stock Exchange from 2019 to 2023 and it was analyzed and identify the different behaviors of dividend policy and share price. The study accepts these dividends per share, dividend yield ratio, and dividend payout ratio as its key metrics to measure the dividend policy. A quantitative strategy was used to analyze the numerical data and test hypotheses. Statistical methods were employed to examine the relationship between dividend policy and share price. The study considered the entire population of 225 non-financial public listed companies in the Colombo Stock Exchange as at 31st March 2024 as per CSE website. However, a sample of 60 companies were selected based on specific criteria, such as the financial statement availability and dividend payment availability for 5 years (2019-2023) since the study period of the research is from 2019 to 2023. This ensured a representative and relevant sample for the study.

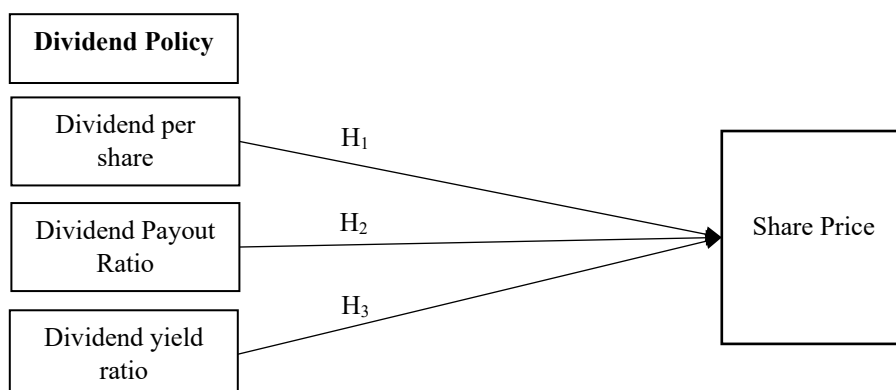


Figure 01: Conceptual Framework

Source: Constructed by Authors

Hypotheses

The developed hypotheses based on the support of Bird-in-the-hand theory are as follows,

H1: There is a significant positive impact of dividend per share ratio on share price of non-financial public listed companies registered in CSE.

H2: There is a significant positive impact of dividend payout ratio on share price among non-financial public listed companies registered in CSE.

H3: There is a significant positive impact of dividend yield ratio on share price of non-financial public listed companies registered in CSE.

Data collection and analysis method

This study employed secondary data to analyze the impact of dividend policy on share price in non-financial public listed companies in Sri Lanka. Data from 60 companies listed on the Colombo Stock Exchange between 2019 and 2023 were collected primarily from annual reports. Regression and correlational analyses were conducted using STATA software to examine the relationship between share price (dependent variable) and various measures of dividend policy (independent variables) (Sharin, 2023; Usman et al., 2020; Zahir & Rajeshwaran, 2020). The panel data approach allowed for the analysis of multiple companies over time, providing a comprehensive understanding of the relationship between these variables.

Results and Discussions

According to descriptive statistics the data revealed variations in share price, dividend payout ratio, dividend per share, and dividend yield ratio among the selected companies. The mean share price was 255.58 with a standard deviation of 521.68, indicating a wide range of share prices. Dividend payout ratios varied significantly, with an average of 0.552552 and a standard deviation of 6.571. Dividend per share also showed variation, averaging 8.1568 with a standard deviation of 18.837. Finally, the dividend yield ratio had a mean of 0.0450 and a standard deviation of 0.4498.

The correlation analysis results, indicate that dividend per share has a positive correlation with share price, while dividend payout ratio and dividend yield ratio have negative correlations. However, only dividend payout ratio was found to be statistically insignificant. Overall, the findings suggest that while dividend payout ratio and dividend yield ratio may have a negative impact on share price, dividend per share is a significant positive impact. Based on the results of 5 regression assumption test the study had met the major three assumptions such as multicollinearity, linearity and normality.

A multiple linear regression model was used, with share price as the dependent variable and dividend payout ratio, dividend per share, and dividend yield ratio as independent variables. The fixed-effect model was selected as the best fit based on the Hausman test. The results indicate that dividend per share has a positive and significant impact on share price, while the dividend yield ratio has a negative and significant impact. The dividend payout ratio also has a negative but insignificant impact. Overall, the independent variables explained 44.91% of the variation in share price.

$$SP = \beta_0 + \beta_1DP + \beta_2DPS + \beta_3DY + \varepsilon \dots\dots\dots(1)$$

Where: SP (Share Price), DP (Dividend Payout Ratio), DPS (Dividend Per Share), DY (Dividend Yield)

Table 01: Correlation coefficient between the dependent variables and independent variables

	SP	DP	DPS	DY
SP	1.0000			
DP	-0.0167 0.7739	1.0000		
DPS	0.6241*** 0.0000	0.0217 0.7076	1.0000	
DY	-0.1439** 0.0126	0.0560 0.3341	0.1788*** 0.0019	1.0000

Source: Author Constructed through STATA

Note: Results significant at the 10% significance level are followed by *, at the 5% significance level by **, and at the 1% significance level by ***.

Table 02: Summary of hypotheses testing

Hypotheses	Data analysis tool	Accept / Reject
H ₁ : There is a significant positive impact of dividend per share ratio on share price of non-financial public listed companies registered in CSE.	Regression coefficient: 0.000 (P > t)	Accepted
H ₂ : There is a significant positive impact of dividend payout ratio on share price among non-financial public listed companies registered in CSE.	Regression coefficient: 0.761 (P > t)	Rejected
H ₃ : There is a significant positive impact of dividend yield ratio on share price of non-financial public listed companies registered in CSE.	Regression coefficient: 0.009 (P > t)	Rejected

Source: Author constructed

Conclusion

This comprehensive study investigates the impact of dividend policy on share price in Sri Lankan non-financial public listed companies in the perspective of bird-in-the hand theory. By analyzing data from 2019 to 2023, the study found that dividend per share has a positive and significant effect on share price, while the dividend yield ratio has a negative significant effect on share price. The dividend payout ratio has a negative insignificant impact on share price. Along with these results we can say that only dividend per share aligns with bird-in-the hand theory other 2 indicators are not aligned with this theory so therefore it can be concluded that the dividend policy does not create a significant positive impact on share price in the perspective of bird-in-the hand theory. The study employed a fixed-effect regression model and addressed various diagnostic tests to ensure the validity of the findings.

Based on the results of the study it reveals that the bird-in-the-hand theory is not practically proven since the findings reveal that there's no positive impact on share price by dividend policy. The key recommendations include that the company should be very cautious while

developing its dividend policy and ensuring market transparency for informed investment decisions. Any how this finding could be beneficial to the share market investors and the it shows that the implications of this theory are not possible in practical scenarios.

In addition to this future research could explore more on this theory since the theoretical view is contradicts with the practical scenario. In addition, this research could take place by comparing financial and non-financial companies, the combined effects of dividend policy and economic uncertainties. Additionally, future studies could expand the sample size, include more variables, and consider data from other countries to provide a broader perspective.

References

- Gordon, M. (1959). Dividends, earnings, and stock prices. *The Review of Economics and Statistics.*, 41(2). <https://doi.org/10.2307/1927792>
- Kengatharan, N. L., & Ford, N. J. S. D. (2021). Dividend Policy and Share Price Volatility: Evidence from Listed Non-Financial Firms in Sri Lanka. *International Journal of Business and Society*, 22(1), 227–239. <https://doi.org/10.33736/ijbs.3172.2021>
- Malhotra, N., & Tandon, K. (2013). Determinants of stock Prices: Empirical evidence from NSE 100 companies. *International Journal of Research in Management & Technology*, 3(3), 2249–9563, 2013.
- Ohiaeri, N. V., Akinbowale, F. I., & Ogumeru, B. (2019). The impact of dividend policy on the share price of quoted companies in Nigerian Stock Exchange. *International Journal of Economics and Management Studies*, 6(8), 145–156. <https://doi.org/10.14445/23939125/ijems-v6i8p116>
- Raza, H., Ramakrishna, S., Gillani, S. M. A. H., & Ahmad, H. (2018). The Effect of dividend policy on share Price: A Conceptual Review. *International Journal of Engineering & Technology*, 7(4.28), 34–39.
- Sharin, S. (2023). The effect of dividend policy and financial performance on the P/E ratio. *Umea School of Business, Economics and Statistics SE- 901 87*.
- Usman, B., Lestari, H. S., & Sofyan, S. (2020). The effect of dividend policy on share price manufacturing companies in Indonesia. *Advances in Economics, Business and Management Research/Advances in Economics, Business and Management Research*. <https://doi.org/10.2991/aebmr.k.210311.023>
- Warrad, L. H. (2017). The effect of market valuation measures on stock price: An Empirical investigation on Jordanian Banks. *International Journal of Business and Social Science*, 8(3), ISSN 2219-1933. <http://www.ijbssnet.com/>
- Zahir, Z., & Rajeshwaran, N. (2020). Dividend policy and stock return of the non-financial companies: empirical evidence from Colombo Stock Exchange. *Journal of Management*, 15(1), 61. <https://doi.org/10.4038/jm.v15i1.7597>

DYNAMIC VOLATILITY SPILLOVERS BETWEEN THE USA AND SOUTH ASIAN EQUITY MARKETS: DCC-GARCH CONNECTEDNESS APPROACH

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ABSTRACT

This study aims to investigate the volatility spillovers between the USA and South Asian equity markets, with a focus on understanding their interconnectedness and sensitivity to global shocks. The study employs the Dynamic Conditional Correlation-Generalized Autoregressive Conditional Heteroskedasticity (DCC-GARCH) Connectedness Approach, using daily stock market data spanning from March 2005 to March 2024. The analysis reveals significant yet varying levels of spillovers. India's NIFTY50 demonstrates the highest sensitivity to external shocks from the USA, whereas smaller markets like Pakistan (KSER) and Sri Lanka (SLASPIR) remain relatively insulated. Spillover dynamics are notably heightened during global crises, such as the 2008 financial crisis and the COVID-19 pandemic, underscoring the influence of systemic events. This study offers novel insights into the volatility dynamics and interconnectedness between global and emerging markets, providing valuable implications for economic stability, risk management, and policy-making. It also highlights opportunities for future research by suggesting the inclusion of additional markets and macroeconomic factors.

Introduction

Financial markets are pivotal in facilitating the exchange of capital globally, connecting investors and corporations across borders. With globalization and financial liberalization, market interdependence has grown significantly, highlighting the critical role of volatility spillovers in understanding global financial dynamics. Volatility spillovers, or the transmission of market shocks between economies, influence portfolio diversification, risk management, and policy design (Diebold & Yilmaz, 2012).

The United States, as the world's largest economy, exerts significant influence on global markets. Major USA indices, such as the NASDAQ, are closely monitored for signals of economic trends, and their fluctuations can ripple through emerging markets, particularly in South Asia. Countries like India, Sri Lanka, Pakistan, and China are increasingly integrated into the global financial system, creating pathways for volatility transmission. However, the complexity of these spillovers remains underexplored, especially in the context of dynamic economic conditions and crises (Gabeur et al., 2021).

This study employs the Dynamic Conditional Correlation Generalized Autoregressive Conditional Heteroskedasticity (DCC-GARCH) model to analyze the evolution of volatility spillovers between the U.S. and South Asian equity markets. The DCC-GARCH framework is particularly suited for capturing time-varying correlations, offering insights into how interdependencies evolve during periods of stability and turbulence (Engle, 2002).

Empirical evidence has consistently shown significant volatility spillovers between developed and emerging markets. For example, studies highlight the role of global factors, such as U.S. market shocks, in influencing South Asian indices like India's Nifty 50 and Sri Lanka's ASPI (Diebold & Yilmaz, 2012; Gabeur et al., 2021). Additionally, these spillovers are often asymmetric, intensifying during crises like the 2008 financial meltdown or the COVID-19 pandemic (Bala and Takimoto, 2017).

Despite progress in understanding financial interlinkages, gaps persist, particularly in capturing spillovers between developed and emerging markets over time. This study aims to fill this void, focusing on the intensity, direction, and bidirectional nature of volatility spillovers between the U.S. and South Asia. The findings will provide actionable insights for investors, regulators, and policymakers striving to navigate an increasingly interconnected financial landscape.

Methodology

This study investigates the volatility spillovers between the USA and South Asian equity markets (India, Sri Lanka, Pakistan, and China) using the DCC-GARCH Connectedness Approach, as developed by Diebold and Yilmaz (2012) and extended by Gabauer (2021). Daily data spanning from March 1, 2005, to March 31, 2024, were used, with indices representing the markets including NASDAQ (USA), NIFTY 50 (India), ASPI (Sri Lanka), PSX (Pakistan), and Shanghai Composite Index (China). The data, collected from Bloomberg and official stock exchange platforms, were converted into return series for further analysis.

The DCC-GARCH Connectedness Approach enables the estimation of time-varying volatility spillovers among financial markets. This methodology calculates forecast error variance decompositions to determine the intensity and direction of volatility spillovers over time. The Total Connectedness Index (TCI) is employed to summarize the overall level of market interconnectedness, while directional connectedness measures assess spillover effects from and to individual markets.

The model implementation was conducted using advanced statistical software to ensure robust and accurate estimation of dynamic relationships. This approach provides empirical insights into the integration of global financial markets and the transmission of volatility across regions, offering practical implications for risk management and portfolio diversification.

Findings

The analysis reveals that volatility transmission varies significantly across these markets, reflecting the diverse levels of market integration and economic linkages among them.

The descriptive statistics demonstrate that all indices exhibit non-normal return distributions, with significant leptokurtosis and negative skewness. The Indian equity market (NIFTY50R) records the highest average return, while the Sri Lankan market (SLASPIR) shows a pronounced negative skewness, highlighting its downside risks. Jarque-Bera test results strongly reject the null hypothesis of normality, confirming that the return distributions are heavy-tailed, a common characteristic of financial time series. The presence of significant autocorrelation in returns and squared returns, as evidenced by Q-statistics, confirms volatility clustering, which justifies the use of the DCC-GARCH model for analyzing these markets.

The DCC-GARCH connectedness results, summarized in Table 01, provide insights into the direction and magnitude of volatility spillovers. The Indian equity market emerges as a net transmitter of volatility, contributing significantly to the Chinese market (5.58%) while receiving moderate spillovers from both the USA (3.34%) and China (3.51%). China's equity market, represented by SHIR, retains a high proportion of its volatility (92.77%) internally, with moderate spillovers to India, reflecting strong economic linkages between the two economies. The USA market, represented by NASDAQR, retains 95.21% of its volatility, demonstrating its dominance and self-contained nature. However, it transmits minor spillovers to India (3.88%) and China (0.73%), suggesting limited direct integration with South Asian markets. The Pakistani market (KSER) and the Sri Lankan market (SLASPIR) exhibit the least integration, with over 98% of their volatility retained internally. Although these markets are relatively insulated, they are not immune to external shocks, as indicated by small but significant spillovers.

Table 01: DCC GARCH Connectedness Results

	NIFTY50R	SHIR	NASDAQR	KSER	SLASPIR	FROM
NIFTY50R	91.04	3.51	3.34	1.06	1.05	8.96
SHIR	5.58	92.77	1.00	0.51	0.13	7.23
NASDAQR	3.88	0.73	95.21	0.17	0.00	4.79
KSER	0.92	0.28	0.13	98.12	0.55	1.88
SLASPIR	0.52	0.04	0.00	0.32	99.11	0.89
TO	10.91	4.56	4.47	2.06	1.74	23.74
NET	1.95	-2.67	-0.32	0.18	0.85	cTCI/TCI 5.94/4.75
NPT	2	0	1	3	4	

Source: Constructed by Authors

The Total Connectedness Index (TCI) presented in Figure 01, further highlights the dynamic nature of volatility spillovers over time. Peaks in TCI during global events, such as the COVID-19 pandemic in 2020 and the Chinese stock market crisis in 2015, indicate heightened connectivity among these markets during periods of financial turmoil. Notably, during these periods, the USA market's volatility had a more pronounced influence on India and China, while smaller markets like Pakistan and Sri Lanka remained relatively detached. However, these smaller markets still experienced some spillovers, underscoring their vulnerability to global shocks despite their lower integration.

The findings of this study align with prior research, which suggests that larger markets, such as India and China, exhibit greater interdependence due to their economic size and regional linkages. The USA market, while a global economic leader, demonstrates limited direct volatility transmission to South Asian markets, except for its moderate impact on India. Smaller markets, such as Pakistan and Sri Lanka, remain less integrated but are not entirely isolated, especially during periods of global financial distress. These results emphasize the dynamic and evolving nature of global market interdependence, with significant implications for investors and policymakers seeking to understand and manage the risks associated with financial contagion and volatility spillovers.

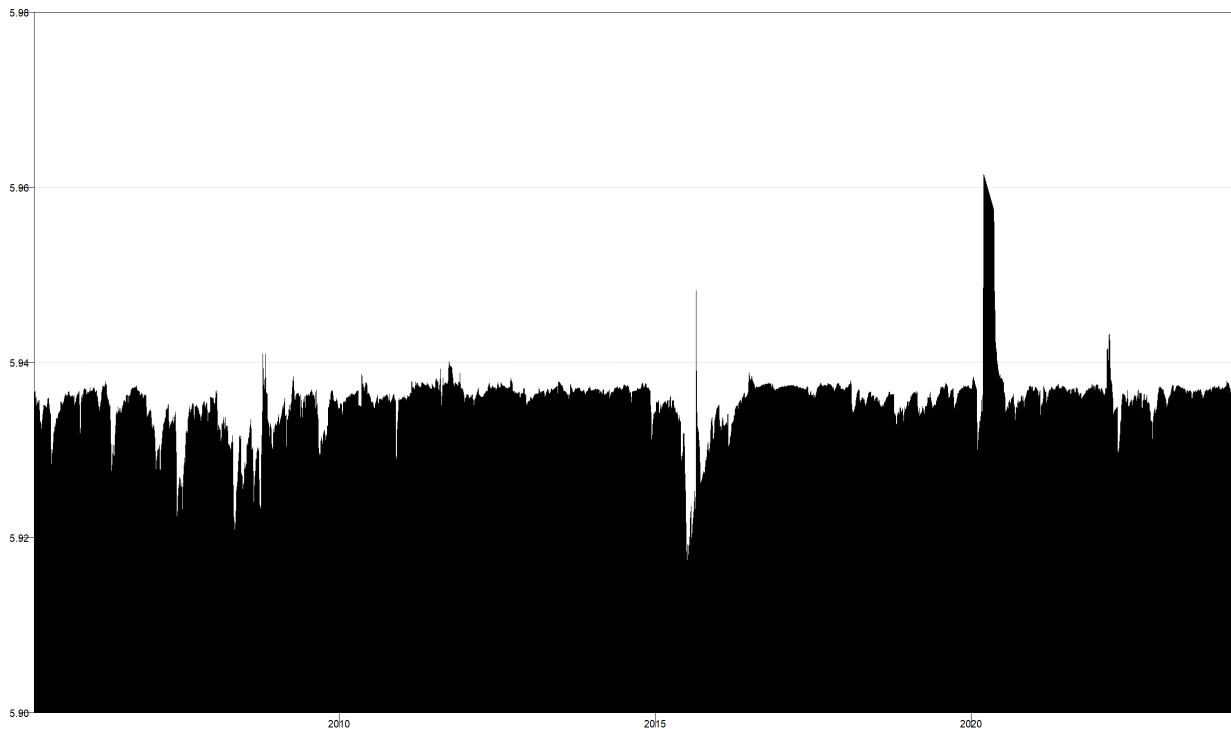


Figure 01: Total Connectedness Index

Source: Constructed By Authors

Conclusion

This study analyzed the volatility spillovers between the USA and South Asian equity markets using the DCC-GARCH Connectedness Approach. The findings confirm significant but varying levels of spillover, with the USA acting primarily as a transmitter of volatility to South Asia. India's NIFTY50 exhibited the highest sensitivity to external shocks, while smaller markets like Pakistan (KSER) and Sri Lanka (SLASPIR) displayed limited interconnectedness, highlighting regional disparities in market integration. Dynamic fluctuations in spillovers were observed, with heightened connectivity during global crises such as the 2008 financial crisis and the COVID-19 pandemic, emphasizing the role of systemic events in amplifying market interdependencies.

The results have several implications. Economically, they highlight the vulnerability of South Asian markets to global shocks, calling for robust risk management frameworks. For policymakers, the study suggests measures to mitigate external volatility impacts, particularly during crises. Academically, the research advances the understanding of emerging market dynamics and provides a basis for future studies to explore broader regions or incorporate macroeconomic variables. However, limitations, such as model assumptions and the exclusion of external factors like macroeconomic policies, suggest avenues for further research using alternative models or exploring additional global markets.

References

Bala, D. A., & Takimoto, T. (2017). Stock markets volatility spillovers during financial crises: A DCC-MGARCH with skewed-t density approach. *Borsa Istanbul Review*, 17(1), 25-48. <https://doi.org/10.1016/j.bir.2017.02.002>

- Diebold, F. X., & Yilmaz, K. (2012). Better to give than to receive: Predictive directional measurement of volatility spillovers. *International Journal of forecasting*, 28(1), 57-66. <https://doi.org/10.1016/j.ijforecast.2011.02.006>
- Engle, R. (2002). Dynamic conditional correlation: A simple class of multivariate generalized autoregressive conditional heteroskedasticity models. *Journal of business & economic statistics*, 20(3), 339-350. <https://doi.org/10.1198/073500102288618487>
- Gabauer, D. (2021). Dynamic measures of asymmetric & pairwise connectedness within an optimal currency area: Evidence from the ERM I system. *Journal of Multinational Financial Management*, 60, 100680. <https://doi.org/10.1016/j.mulfin.2021.100680>

VOLATILITY SPILLOVERS AMONG CRUDE OIL, GOLD, EXCHANGE RATES, AND STOCK MARKETS: EVIDENCE FROM SOUTH ASIA USING THE DCC-GARCH APPROACH

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ABSTRACT

This study examines dynamic volatility spillovers among crude oil, gold, exchange rates, and stock markets in South Asia, focusing on India, Pakistan, and Sri Lanka. It aims to identify key transmitters and receivers of volatility and assess the impact of global crises on market connectedness. The analysis uses the dynamic conditional correlation-generalized autoregressive conditional heteroskedasticity (DCC-GARCH) connectedness approach, covering data from January 2005 to March 2024. The Indian stock market and exchange rate are significant volatility transmitters, while gold acts as a net receiver, reflecting vulnerability to external shocks. Global crises, including the 2008 financial crisis and COVID-19 pandemic, drive heightened market connectedness, highlighting susceptibility to systemic risks. This study offers actionable insights for policymakers to manage economic risks and for investors to optimize portfolio diversification. It highlights limitations, such as a regional focus and reliance on a single model, and suggests future research on other emerging economies with additional variables.

Introduction

Volatility spillovers among financial markets are a focal point in economic research, especially in the context of globalization and advancements in communication technologies. These spillovers manifest when fluctuations in the volatility of one market affect another, revealing intricate interdependencies that can significantly impact economic stability and investment strategies (Diebold & Yilmaz, 2012). This study explores the dynamic interactions among crude oil, gold, exchange rates, and stock markets in South Asia, focusing on India, Pakistan, and Sri Lanka. Given the critical role these markets play in the region's economic framework, understanding their interconnectedness is essential for policymakers, investors, and researchers aiming to mitigate systemic risks.

Crude oil, often considered the lifeblood of the global economy, impacts production costs, inflation, and overall economic performance, thereby influencing financial markets. Gold serves as a hedge against inflation and market uncertainty, reinforcing its role as a safe-haven asset during financial turbulence (Gabauer, 2020). Exchange rates are crucial for trade and investment flows, with their volatility affecting economic competitiveness and stability (Gabauer, 2021). Stock markets, as indicators of economic vitality, facilitate capital allocation and investment, influencing economic development (Gabauer, 2021). The dynamic interplay among these variables highlights the importance of analyzing cross-market volatility spillovers in South Asia, particularly as emerging economies remain sensitive to global financial shocks.

This research employs the Dynamic Conditional Correlation-Generalized Autoregressive Conditional Heteroskedasticity (DCC-GARCH) connectedness approach to assess time-varying spillovers and dynamic interactions. The DCC-GARCH model addresses the

limitations of traditional methods, such as arbitrary window selection and data loss, offering a robust framework for analyzing interdependencies (Diebold & Yilmaz, 2012). By focusing on the interactions among crude oil, gold, exchange rates, and stock markets, this study contributes to the limited literature on cross-market volatility dynamics in South Asia, particularly during crises like the COVID-19 pandemic.

The findings provide critical insights for policymakers to enhance financial stability through targeted interventions and for investors to optimize portfolio diversification and risk management strategies. This research aims to advance academic discourse on financial market interconnections, offering a foundation for further studies on resilience and integration in South Asia's financial systems.

Materials and Methods

This study investigates the interrelationships among crude oil, gold, exchange rates, and stock markets in South Asia, focusing on India, Pakistan, and Sri Lanka. Daily time-series data spanning from January 1, 2005, to March 1, 2024, are utilized for the analysis. Key variables include crude oil prices (ICE Europe Brent crude oil futures), gold prices (COMEX Gold Composite Commodity Futures), exchange rates (USD to INR, USD to PKR, and USD to LKR), and stock market indices (India's NIFTY 50, Pakistan's KSE Index, and Sri Lanka's ASPI Index).

The analysis employs the Dynamic Conditional Correlation-Generalized Autoregressive Conditional Heteroskedasticity (DCC-GARCH) connectedness approach. This method captures time-varying correlations and dynamic spillover effects, offering a detailed understanding of volatility interactions between the variables. It quantifies the magnitude and direction of volatility spillovers, highlighting how market shocks in one variable influence others. By using the DCC-GARCH model, the study provides a robust framework for assessing interdependencies among financial markets in the selected South Asian countries.

Analysis and Discussion

The analysis of daily time series data from January 3, 2005, to March 1, 2024, reveals significant insights into the interconnectedness of South Asian stock markets, exchange rates, gold, and crude oil prices. As shown in the connectedness table (Table 01) most variables exhibit a high degree of internal dependence, with diagonal values indicating that variances are largely self-explanatory. For instance, NIFTY50R (86.66%), USDINR (81.89%), Brent crude oil (91.30%), and GoldR (87.02%) demonstrate substantial internal dynamics. Similarly, USD/LKR and USD/PKR exchange rates are predominantly driven by their own shocks, with 99.59% and 98.99% of their variances explained internally.

The off-diagonal elements of the connectedness in Table 01 reveal notable spillover effects between variables. USDINR impacts NIFTY50R by contributing 9.35% of its variance, underscoring the sensitivity of the Indian stock market to exchange rate fluctuations. Additionally, GoldR affects USDINR by 6.89%, reflecting the interconnectedness between currency and commodity markets. Brent crude oil prices also contribute to USDINR variance at 2.66%, highlighting the significant role of global energy markets in regional financial systems.

Table 01: DCC GARCH Connectedness Table

	NIFTY50R	USDINR	BrentR	GoldR	USDLKR	USDPKR	KSER	SLASPIR	FROM
NIFTY50R	86.66	9.35	1.79	0.18	0	0.02	1	0.99	13.34
USDINR	12.15	81.89	1.95	2.54	0.2	0.04	0.46	0.83	18.11
BrentR	3.17	2.66	91.3	2.55	0	0.04	0.07	0.22	8.71
GoldR	0.64	6.89	5.08	87	0.1	0.01	0.01	0.28	12.98
USDLKR	0.01	0.11	0	0.02	100	0.02	0.18	0.06	0.41
USDPKR	0.08	0.11	0.09	0.01	0.1	99	0.31	0.32	1.01
KSER	0.91	0.32	0.04	0	0.2	0.07	97.93	0.55	2.07
SLASPIR	0.52	0.34	0.06	0.04	0	0.04	0.31	98.65	1.35
TO	17.47	19.78	9.01	5.34	0.5	0.25	2.35	3.25	57.98
Inc.Own	104.13	101.7	100	92.4	100	99.3	100.3	101.9	cTCI/TCI
NET	4.13	1.67	0.3	-7.6	0.1	-0.75	0.28	1.9	8.28/7.25
NPT	4	3	2	1	5	0	6	7	

Source: Constructed by Authors

Smaller markets, such as the Karachi Stock Exchange (KSER) and the Sri Lankan Stock Market (SLASPIR), exhibit relatively lower levels of external influence, with spillover effects of 2.07% and 1.35%, respectively. This suggests that these markets are less integrated with global financial systems, aligning with observations that smaller or emerging markets tend to be more insulated from external shocks. Despite this relative insulation, KSER and SLASPIR maintain some interactions with other variables, as shown by minor spillovers from NIFTY50R and Brent crude oil prices.

Directional spillovers further illuminate the dynamics of interdependence. NIFTY50R emerges as a key net transmitter of shocks, contributing 4.13% to other variables, while USDINR follows with 1.67%. Conversely, GoldR is identified as a significant net receiver, with a net connectedness value of -7.64%, indicating its susceptibility to external market influences. This asymmetry underscores the leading role of Indian markets and currency in regional financial dynamics while highlighting gold's reactive nature as a safe-haven asset.

The total connectedness index (TCI), (Figure 01), ranging between 8.20% and 8.40%, reflects relatively stable interconnections among the analyzed variables. Notable fluctuations coincide with major global events, such as the 2008 financial crisis and the COVID-19 pandemic. The 2008 crisis led to a temporary decline in connectedness, likely due to divergent market responses to economic shocks. Conversely, the recovery phase post-crisis saw a gradual increase in connectedness, reflecting market normalization and reintegration into global networks. Similarly, during the COVID-19 pandemic, the initial disruptions caused significant declines in connectivity, particularly as crude oil prices collapsed and gold gained prominence as a hedge. However, policy interventions and market adaptations contributed to a steady recovery in connectedness by late 2021, demonstrating the resilience of financial systems in responding to global challenges.

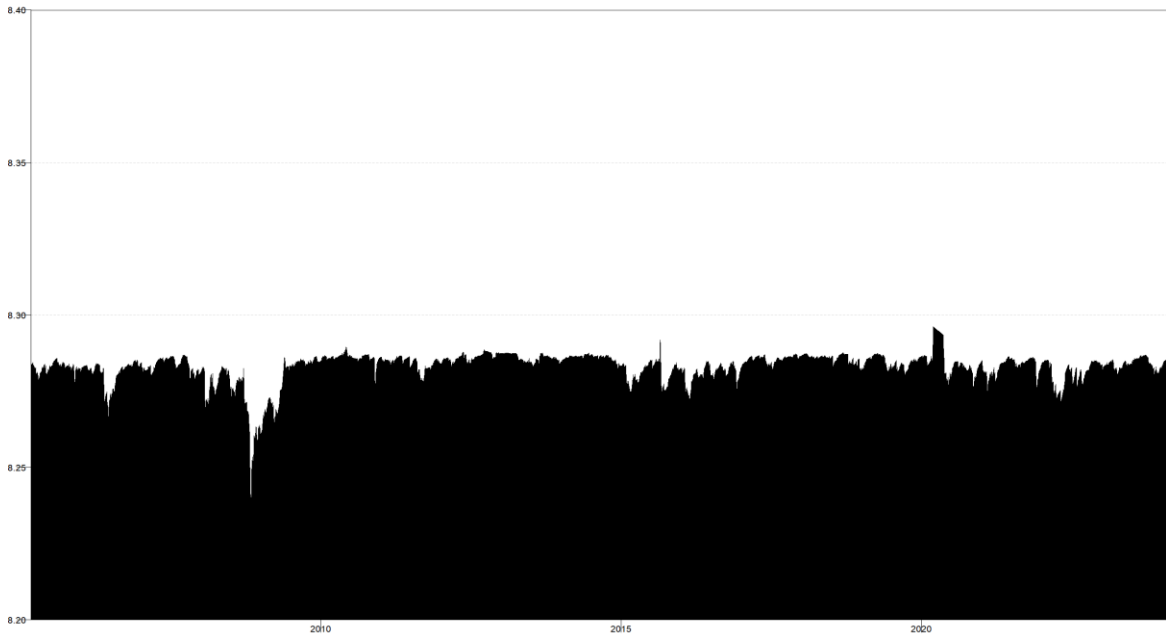


Figure 01: Total Connectedness Index

Source: Constructed by Authors

These findings emphasize the importance of understanding spillover effects and interdependencies in South Asian financial markets. They offer critical insights for policymakers, investors, and risk management professionals, highlighting the need for adaptive strategies to navigate cross-market volatility and foster financial stability. The asymmetric spillovers and dynamic connectivity patterns underscore the complex interplay among stock markets, exchange rates, gold, and crude oil prices in the region, offering valuable guidance for future financial decision-making and policy formulation.

Conclusion

The findings of this study provide a comprehensive understanding of volatility spillovers among crude oil, gold, exchange rates, and stock markets in South Asia, focusing on India, Pakistan, and Sri Lanka. Using the DCC-GARCH connectedness approach, this research highlights the interconnectedness among these financial variables, with notable spillovers from Indian markets and currencies to others in the region. The study reveals the dynamic nature of these interdependencies, particularly during periods of global financial crises and the COVID-19 pandemic, emphasizing the importance of understanding these relationships for effective risk management and policy formulation.

The implications of these findings are multifaceted. For policymakers, the results underline the importance of proactive measures to stabilize markets during periods of heightened volatility. Policies aimed at mitigating external shocks, such as exchange rate stabilization mechanisms and diversification strategies, can enhance regional economic resilience. For investors and portfolio managers, the study provides valuable insights into the asymmetric nature of spillovers, highlighting the necessity of diversification and tailored risk management strategies to optimize portfolio performance amid cross-market volatility.

Despite its contributions, the study has certain limitations. The analysis is confined to three South Asian countries, which may not capture the broader dynamics of interconnectedness in the region. Additionally, the use of daily data, while offering high-frequency insights, might not account for structural changes or long-term trends. The reliance on the DCC-GARCH model, though robust, has inherent limitations in capturing nonlinearities and other complex dynamics in financial markets.

Future research can address these limitations by expanding the scope to include more countries in South Asia and other emerging markets. Integrating macroeconomic factors, such as interest rates and geopolitical risks, could provide deeper insights into the drivers of volatility spillovers. Moreover, exploring alternative methodologies, such as time-varying parameter models or machine learning techniques, can enrich the analysis and uncover additional dimensions of financial market interconnectedness. These directions will further enhance the understanding of global and regional financial dynamics, contributing to the development of more resilient and integrated financial systems.

References

- Diebold, F. X., & Yilmaz, K. (2012). Better to give than to receive: Predictive directional measurement of volatility spillovers. *International Journal of Forecasting*, 28(1), 57-66. <https://doi.org/10.1016/j.ijforecast.2011.02.006>
- Gabauer, D. (2020). Volatility impulse response analysis for DCC-GARCH models: The role of volatility transmission mechanisms. *Journal of Forecasting*, 39(5), 788-796. <https://doi.org/10.1002/for.2648>
- Gabauer, D. (2021). Dynamic measures of asymmetric & pairwise connectedness within an optimal currency area: Evidence from the ERM I system. *Journal of Multinational Financial Management*, 60, 100680. <https://doi.org/10.1016/j.mulfin.2021.100680>

DO CHINA AND THE USA INFLUENCE SOUTH ASIAN MARKETS? A STUDY OF VOLATILITY SPILLOVERS USING THE DCC-GARCH CONNECTEDNESS APPROACH

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ABSTRACT

This study investigates volatility spillovers among crude oil, gold, exchange rates, South Asian stock markets, and the equity indices of the USA and China, focusing on their interconnectedness. It aims to identify the role of South Asian financial markets within the global volatility transmission network and to evaluate gold's behavior as a safe-haven asset during uncertainty. The study employs the dynamic conditional correlation-generalized autoregressive conditional heteroskedasticity (DCC-GARCH) connectedness approach, analyzing daily data from 2005 to 2024. South Asian markets, particularly the NIFTY50 index and USD-INR exchange rate, emerge as key volatility transmitters, while gold predominantly acts as a receiver, reflecting safe-haven dynamics. The Total Connectedness Index indicates moderate spillover levels, with spikes during global crises and geopolitical tensions, highlighting intensified cross-market interactions. This research provides unique insights into the pivotal roles of South Asian markets and gold in global volatility dynamics, offering significant implications for policymakers, investors, and academics in risk management and stabilization strategies.

Introduction

Volatility spillovers among financial markets play a critical role in shaping global economic dynamics, especially in the interconnected financial landscape of today. The transmission of volatility across markets reflects the degree of interdependence and systemic risk, which can significantly impact investment strategies and policy decisions. This study investigates the volatility spillovers between crude oil, gold, exchange rates, and equity markets in South Asia (India, Pakistan, Sri Lanka), the USA, and China using the Dynamic Conditional Correlation-Generalized Autoregressive Conditional Heteroskedasticity (DCC-GARCH) connectedness approach. These variables encompass key global financial drivers, providing a comprehensive understanding of their interconnected behavior across both emerging and developed markets.

The DCC-GARCH framework, introduced by Engle (2002), is well-suited for capturing time-varying correlations and analyzing the dynamic interactions of financial variables. Recent advancements, such as the connectedness measures proposed by Diebold and Yilmaz (2012) and enhanced by Gabauer (2020, 2021), enable a more granular understanding of directional volatility spillovers. This methodology provides an efficient framework to quantify the transmission of volatility between markets and identify their respective roles as net transmitters or receivers of shocks.

Emerging South Asian economies, represented by indices such as NIFTY50R, KSER, and ASPIR, are particularly susceptible to external volatility due to their relatively high sensitivity to global commodity prices and exchange rate fluctuations. On the other hand, developed markets like the USA (NASDAQ) and China (Shanghai Index) exert significant influence on

global financial systems. Crude oil and gold, serving as critical commodities, often act as conduits of financial shocks during periods of economic uncertainty, while exchange rates play a crucial role in determining trade competitiveness and cross-border investment flows.

Using daily data spanning from 2005 to 2024, this study examines the interconnectedness of these variables and the implications of cross-market volatility dynamics. The findings are expected to provide valuable insights for policymakers, portfolio managers, and researchers by highlighting the extent and direction of volatility transmission among these markets. This research contributes to the growing body of literature on financial spillovers by offering a nuanced understanding of the interactions between emerging and developed economies, particularly in the context of systemic shocks such as financial crises and geopolitical uncertainties.

This comprehensive analysis of the South Asian equity markets alongside global benchmarks such as the USA and China highlights the evolving nature of market integration and its implications for financial stability and risk management.

Materials and Methods

This study examines the volatility spillovers among crude oil, gold, exchange rates, and equity markets in South Asia (India, Pakistan, Sri Lanka), the USA, and China. The analysis utilizes the Dynamic Conditional Correlation-Generalized Autoregressive Conditional Heteroskedasticity (DCC-GARCH) connectedness approach, a robust methodology for capturing time-varying correlations and quantifying directional spillovers among financial variables. The DCC-GARCH model allows for the measurement of dynamic relationships and facilitates the decomposition of spillover effects across markets.

The dataset consists of daily closing prices covering the period from 2005 to 2024. The variables included in the analysis are the NIFTY50 index (NIFTY50R) for India, the KSE index (KSER) for Pakistan, the ASPI index (ASPIR) for Sri Lanka, the Shanghai Index (SHIR) for China, and the NASDAQ index (NASDAQR) for the USA. Additionally, two critical global commodities—crude oil, represented by the ICE Europe Brent Crude Oil Futures (BrentR), and gold, represented by COMEX Gold Composite Commodity Futures (GoldR)—are incorporated to capture their influence on the financial markets. Exchange rates considered in the study include USD/INR (Indian Rupee), USD/PKR (Pakistani Rupee), USD/LKR (Sri Lankan Rupee), and USD/CNY (Chinese Renminbi).

Daily log returns for all variables are computed to ensure stationarity and to analyze the percentage changes over time. The DCC-GARCH approach is applied to model the interactions between the variables dynamically. The methodology decomposes the forecast error variance into components attributable to each variable, enabling the identification of net transmitters and receivers of volatility. This process provides insights into the direction and magnitude of spillovers, as well as the roles of individual markets and assets in the interconnected system.

The inclusion of a broad dataset spanning nearly two decades ensures the robustness of the analysis while accounting for major global financial events, such as the 2008 financial crisis and the COVID-19 pandemic. The findings from this methodology offer valuable insights into

the interconnectedness of global and regional financial markets, contributing to the understanding of risk transmission and market dynamics.

Analysis and Discussion

The analysis and discussion of the results focus on understanding the volatility spillovers among the variables using the connectedness table (Table 01) and the Total Connectedness Index (Figure 01). The connectedness table reveals the percentage of forecast error variance in each variable explained by its shocks (diagonal elements) and the extent of spillovers from other variables (off-diagonal elements).

The diagonal elements indicate that most variables are predominantly driven by their internal dynamics. For instance, the NIFTY50R (81.12%), SHIR (89.13%), NASDAQR (89.31%), BrentR (86.83%), and GoldR (83.96%) exhibit high levels of self-explanatory variance, reflecting their autonomy in volatility movements. Among exchange rates, USDINR (75.2%) and USDRNMBR (91.1%) demonstrate strong internal influences. The USDLKR (99.46%) and USDPKR (98.96%) are almost entirely self-driven, while the equity indices KSER (97.44%) and SLASPIR (98.66%) exhibit similar characteristics.

The off-diagonal elements highlight the spillover effects, indicating the influence of external shocks. USDINR is a notable transmitter of volatility, contributing to the NIFTY50R (11.03%) and GoldR (6.55%). Similarly, BrentR impacts NASDAQR (3.05%) and GoldR (4.85%). While the NASDAQR shows limited spillover to other variables, it receives contributions from BrentR (3.05%) and USDINR (3.98%). GoldR exhibits bidirectional interactions, receiving spillovers from BrentR (4.85%) and USDINR (6.55%) while transmitting to other variables to a lesser extent.

The Total Connectedness Index (Figure 01) reflects the overall volatility interactions among the variables, with values averaging around 10.88%. The stable range indicates moderate interconnectedness, with episodic spikes corresponding to significant global events. The peak connectedness aligns with periods of heightened uncertainty, such as financial crises or geopolitical tensions, showcasing the increased interaction among markets during such times.

Directional spillovers reveal interesting dynamics. NIFTY50R emerges as a net transmitter (7.08%), indicating its influence on other markets, particularly USDINR and GoldR. Conversely, GoldR acts as the main receiver (-9.56%), highlighting its role as a safe-haven asset absorbing shocks from other variables. USDINR also plays a dual role, both transmitting and receiving spillovers, showcasing its central position in the volatility network.

Table 01: DCC GARCH Connectedness Results

	NIFTY50R	SHIR	NASDAQR	BrentR	USDINR	USDRNMBR	GoldR	USDLKR	USDPKR	KSER	SLASPIR	FROM
NIFTY50R	81.12	3.06	2.89	1.64	8.54	0.74	0.17	0.01	0.02	0.91	0.89	18.88
SHIR	5.26	89.13	0.94	1.03	1.43	1.24	0.16	0.22	0	0.47	0.12	10.87
NASDAQR	3.54	0.67	89.31	2.07	3.78	0.46	0	0	0.01	0.15	0	10.69
BrentR	2.96	1.08	3.05	86.83	2.47	0.9	2.4	0	0.04	0.07	0.2	13.17
USDINR	11.03	1.08	3.98	1.77	75.2	3.28	2.32	0.14	0.03	0.41	0.75	24.8
USDRNMBR	1.1	1.07	0.55	0.74	3.76	91.1	1.37	0.02	0	0.28	0	8.9
GoldR	0.61	0.33	0	4.85	6.55	3.36	83.96	0.05	0.01	0.01	0.27	16.04
USDLKR	0.01	0.13	0	0	0.11	0.01	0.02	99.46	0.02	0.18	0.06	0.54
USDPKR	0.08	0	0.04	0.09	0.11	0.01	0.01	0.09	98.96	0.3	0.31	1.04
KSER	0.88	0.27	0.12	0.04	0.31	0.18	0	0.17	0.07	97.44	0.52	2.56
SLASPIR	0.5	0.04	0	0.06	0.32	0	0.04	0.03	0.04	0.3	98.66	1.34
TO	25.96	7.74	11.58	12.3	27.39	10.19	6.49	0.73	0.26	3.08	3.12	108.83
Inc.Own	107.08	96.86	100.9	99.13	102.59	101.29	90.44	100.19	99.22	100.52	101.78	cTCI/TCI
NET	7.08	-3.14	0.9	-0.87	2.59	1.29	-9.56	0.19	-0.78	0.52	1.78	10.88/9.89
NPT	8	3	6	2	5	4	1	7	0	9	10	

Source: Constructed by Authors

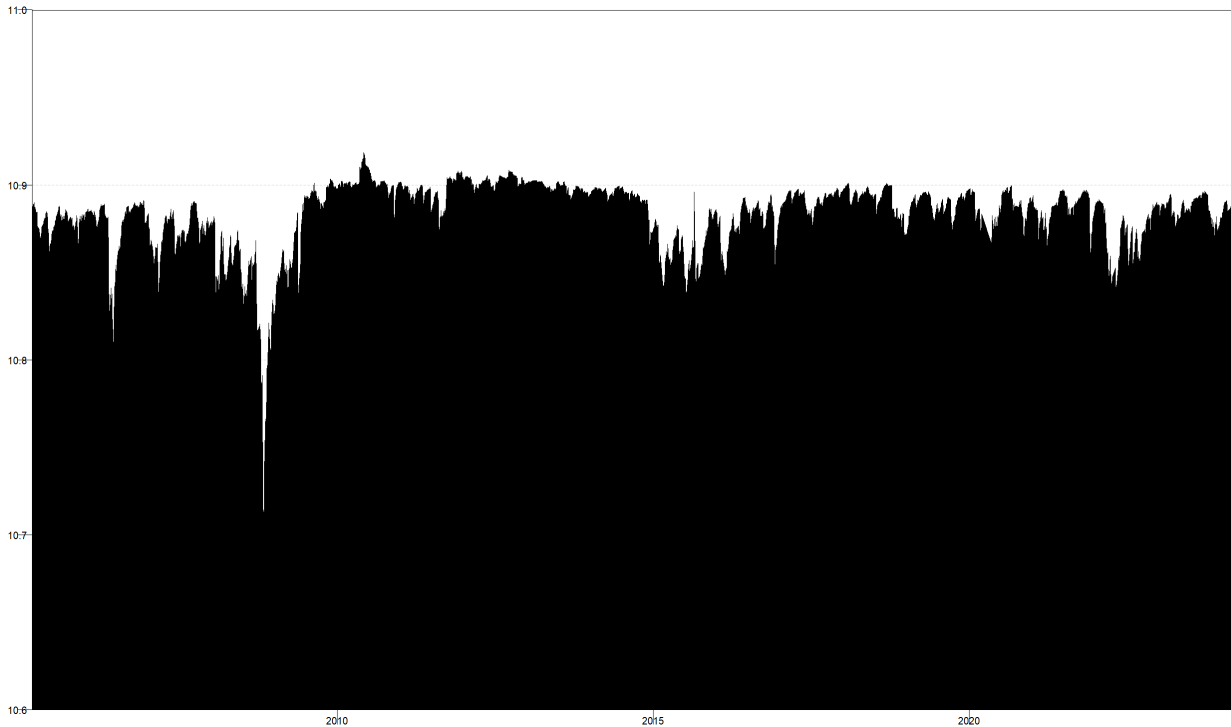


Figure 01: Total Connectedness Index

Source: Constructed by Authors

Conclusion

The study provides significant insights into the dynamics of volatility spillovers among crude oil, gold, exchange rates, South Asian stock markets, and the USA and China equity indices. Using the DCC-GARCH connectedness approach, the analysis identifies key transmitting and receiving markets, highlighting the complex interactions between financial variables over nearly two decades. The findings underscore the dominant role of variables like NIFTY50R and USDINR as net transmitters of volatility, while GoldR emerges as a key receiver, reflecting its function as a safe-haven asset during periods of heightened uncertainty. The Total Connectedness Index indicates moderate overall interconnectedness, with notable spikes during global economic disruptions such as financial crises and geopolitical events.

The implications of these findings are multifaceted. For policymakers, the study underscores the need to monitor cross-market volatility to mitigate systemic risks and stabilize financial markets during periods of turmoil. For investors, the results provide valuable insights for portfolio diversification and hedging strategies, especially in emerging and interconnected markets. From an academic perspective, the study contributes to the literature on financial market integration and volatility dynamics, particularly in the context of South Asia and global markets.

Despite its contributions, the study has certain limitations. The analysis is constrained to a specific set of variables and countries, which may not fully capture the global financial network's complexity. Additionally, while the DCC-GARCH model effectively captures dynamic correlations, it assumes linear relationships and may not fully reflect nonlinear spillover dynamics. Future research could address these limitations by incorporating a broader

range of variables, including other emerging markets and macroeconomic factors like interest rates or geopolitical indices. Additionally, employing alternative methodologies such as nonlinear models or machine learning techniques could provide deeper insights into volatility transmission mechanisms.

Overall, the study highlights the importance of understanding volatility spillovers in a globally interconnected financial system. It emphasizes the critical role of financial integration in shaping the dynamics of emerging and developed markets and provides a foundation for future research aimed at exploring more intricate and comprehensive models of financial interdependence.

References

- Diebold, F. X., & Yilmaz, K. (2012). Better to give than to receive: Predictive directional measurement of volatility spillovers. *International Journal of Forecasting*, 28(1), 57–66. <https://doi.org/10.1016/j.ijforecast.2011.02.006>
- Engle, R. (2002). Dynamic conditional correlation: A simple class of multivariate generalized autoregressive conditional heteroskedasticity models. *Journal of Business & Economic Statistics*, 20(3), 339–350. <https://doi.org/10.1198/073500102288618487>
- Gabauer, D. (2020). Volatility impulse response analysis for DCC-GARCH models: The role of volatility transmission mechanisms. *Journal of Forecasting*, 39(5), 788–796. <https://doi.org/10.1002/for.2648>
- Gabauer, D. (2021). Dynamic measures of asymmetric & pairwise connectedness within an optimal currency area: Evidence from the ERM I system. *Journal of Multinational Financial Management*, 60, 100680. <https://doi.org/10.1016/j.mulfin.2021.100680>

DOES STOCK MARKET REACT TO POLITICALLY APPOINTED CENTRAL BANK GOVERNOR?

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ABSTRACT

This study investigates the impact of Central Bank governor appointments on the Sri Lankan share market, focusing on the mode of appointment (political vs. internal promotion) and the governor's ethnicity to assess their influence on market reactions. The study uses event study methodology to analyze the impact of Central Bank governor appointments on the Sri Lankan share market (1995–2022). It calculates Cumulative Average Abnormal Returns around a 20-day event window. The results demonstrate that market responses are more favorable toward governors with prior Central Bank of Sri Lanka (CBSL) experience, while political appointments and ethnicity have minimal influence. This research provides a novel analysis of Central Bank governor appointments' impact on stock market dynamics in Sri Lanka, addressing gaps in the literature by focusing on both the mode of appointment and ethnicity.

Introduction

This study addresses the share market reactions to Central Bank governor appointments within the Sri Lankan context. Central Banks are often responsible for managing large public funds, such as the Employees' Provident Fund (EPF). The Central Bank invests these funds in different sources, such as the stock market, to generate higher returns. The involvement of the Central Bank governor can influence how much is invested in the stock market to generate returns. Therefore, the decisions made by the Central Bank governor may have an impact on stock market reactions. So, this study aims to examine whether the stock market is affected by the political appointment of the Central Bank governors and the ethnicity of the appointed governors. Thus, this study aims to examine whether the stock market is affected by the political appointment of the Central Bank governors and the ethnicity of the appointed governors. The research examines whether the governor's specific characteristics like mode of appointment (political vs from internal promotion within Central Bank) and ethnicity mattered for market reactions. This study tries to fill this gap in the literature and provides important implications for how the stock market reacts to the announcement of governor appointments for the Central Bank of Sri Lanka by addressing these aspects.

Previous literature employing event study methodology to estimate the effects of events on stock returns can be categorized into two primary groups. The first group predominantly addresses events related to mergers and acquisitions as well as dividend policies, which can be collectively referred to as business events. This group constitutes the majority of the studies. The second group focuses on assessing the impact of political elections and related events on stock returns (Škrinjarić & Orlović, 2019)

First, the notion of an efficient stock market, which refers to “security prices fully reflect all available information” (Fama, 1991,p. 383), provides a fundamental theoretical assumption for an event study (Fama et al., 1969 as cited in Wang & Ngai, 2020). For supporting the current study, it is valuable to consider existing literature that explores the impact of political factors on stock prices. The influence of political events on financial markets has been a subject of interest and investigation by previous researchers. While the results of these studies vary, they provide important context for understanding the potential effects of political factors on stock

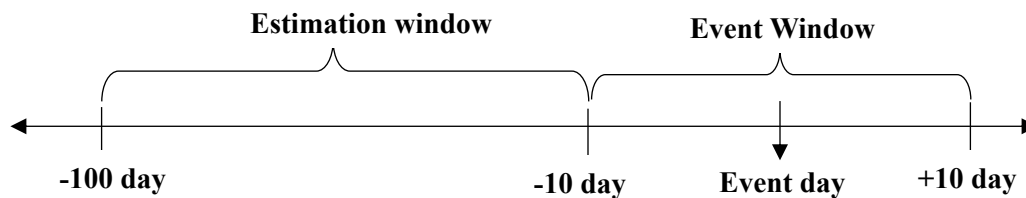
market reactions, which can inform the examination of the impact of Central Bank governor appointments on the Sri Lankan share market.

Event studies have been widely used to explore the impact of political changes on stock market returns, providing insights into how investors react to new information about political events. One notable study, by Bouoiyour and Selmi (2017), investigates the impact of political uncertainty on the United States stock market during the 2016 presidential election.

In relation to the Sri Lankan context, Ramesh and Rajumesh (2015) examine how the Sri Lankan stock market reacts to its political events. Incorporating these prior findings into the analysis of the impact of Central Bank governor appointments on the Sri Lankan share market provides a broader perspective on the potential role of political factors in financial market reactions.

Methodology

This study uses the event study methodology which is well recognized for its effectiveness in examining the impact of specific events on asset prices to investigate how changes in Central Bank governor appointments affect the Sri Lankan share market. The research focuses on governor appointments from 1995 to 2022, utilizing a comprehensive event window of 10 days before (pre-event window) and after (post event window) each appointment to calculate Cumulative Average Abnormal Returns (CAARs). This approach is supplemented by a 100-day estimation window to ensure the reliable base for calculations of normal returns. The sample comprises seven governors. Secondary data from the Colombo Stock Exchange (CSE) and relevant sector indices were analyzed, with a primary focus on the All Share Price Index (ASPI) as a key indicator of market performance. Statistical tests were employed to evaluate the significance of the observed effects, allowing for a rigorous analysis of how these factors influence share market dynamics.



El Ghouli et al. (2023) utilize a multi-step process for calculations. This study adopts a similar approach with the following key steps.

First measure the abnormal returns (AR) generated in the event window. Abnormal return is calculated by deducting actual return from the expected return. To calculate the expected returns, it is necessary to determine alpha (the y-intercept) and beta (the slope) of the prices over a sufficiently long estimation window. The following equations can be used for this purpose;

$$\text{Normal Return (Expected Return)} = \alpha + (\beta * \text{Market return}) \quad (1)$$

$$\text{Market Return} = \frac{\text{ASPI current value} - \text{ASPI previous value}}{\text{ASPI previous value}} \quad (2)$$

$$\text{Abnormal Return} = \text{Actual return} - \text{Expected return} \quad (3)$$

$$\text{Actual Return} = \frac{\text{Daily market index of previous day}^1 - \text{Closing price}^2 \text{ of today}}{\text{Daily market index of Today}^3} \quad (4)$$

Then need to add up the abnormal return over the entire period of time to get the cumulative abnormal return. After that average abnormal return (AAR) can be calculated in every sector that are considered in this study. Where the standard deviations are estimated using the average abnormal returns obtained in the estimation window. The Cumulative Average Abnormal Return (CAAR) is determined by first calculating the Cumulative Abnormal Return (CAR) for each sector individually. Once the CAR is computed for all sectors, the CAAR is obtained by taking the average of these CAR values across all sectors.

Findings

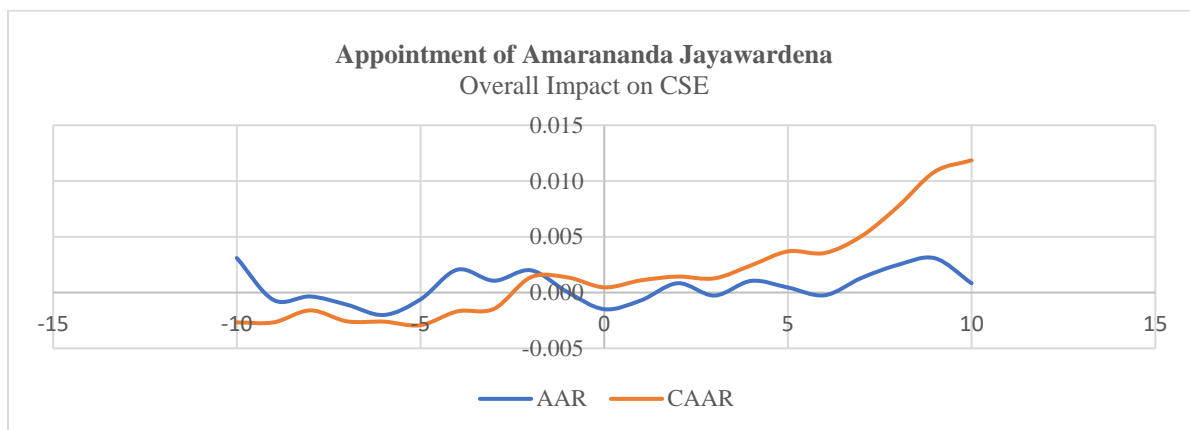


Figure 01: Market Reaction to Amaranath Jayawardena's Appointment

Source: Constructed by Authors

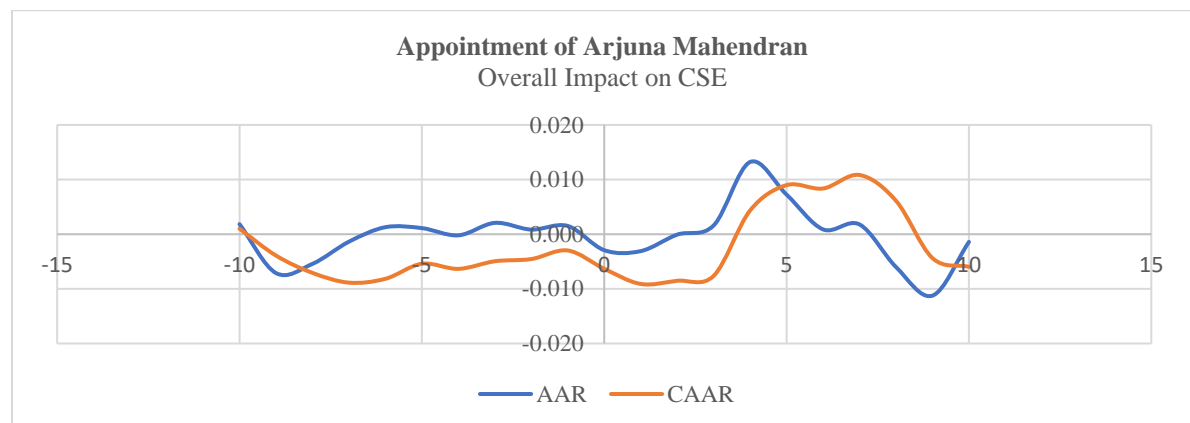


Figure 02: Market Reaction to Arjuna Mahendran's Appointment

Source: Constructed by Authors

The analysis reveals that the appointments of governors such as Amaranath Jayawardena (Figure 01), Arjuna Mahendran (Figure 02), and Nandalal Weerasinghe (Figure 03) have had a statistically significant positive impact on the Sri Lankan stock market. Notably, all three individuals possessed prior experience at CBSL prior to their appointments, underscoring the potential advantages of appointing a governor with a solid background in the institution. This finding indicates that a leadership transition within the Central Bank, characterized by

¹ Previous day = The day before the considering date in event window or estimation window for the calculation

² Closing Price = Stock market daily closing price of respective sectors

³ Today = The day which is considering in event window or estimation window for the calculation

governors who have previous experience in the Central bank rather than political appointments, may yield more favorable outcomes for the stock market.

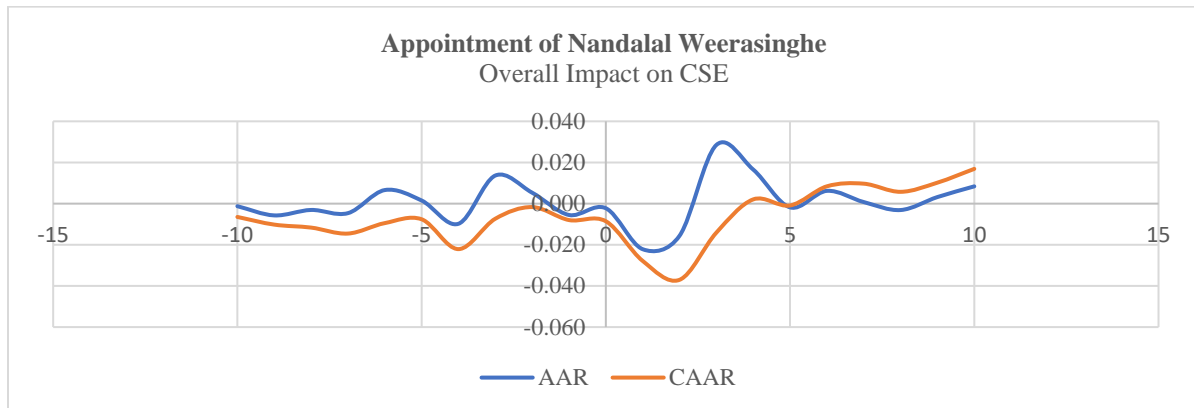


Figure 03: Market Reaction to Nandalal Weerasinghe's Appointment

Source: Constructed by Authors

Conversely, when assessing the influence of the ethnicity of Central Bank governors, the study finds no significant correlation between a governor's ethnicity and stock market reactions. For instance, while Arjuna Mahendran (Figure 02), a Singaporean Tamil, positively influenced market performance upon his appointment, the subsequent appointment of Indrajit Coomaraswamy (Figure 04), a Sri Lankan Tamil, did not produce notable market effects. These results suggest that, in the context of Sri Lanka, the ethnicity of a Central Bank governor does not significantly impact stock market dynamics.

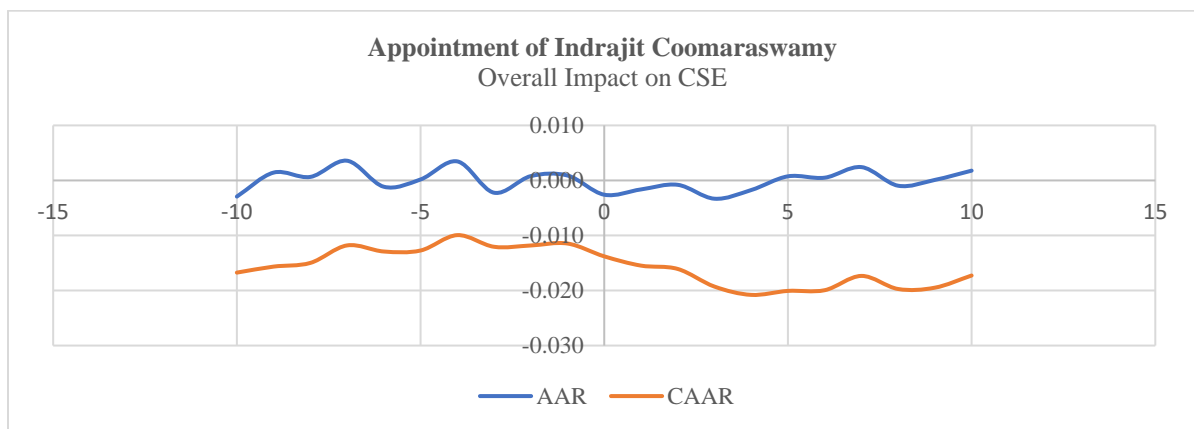


Figure 04: Market Reaction to Indrajit Coomaraswami's Appointment

Source: Constructed by Authors

Conclusion

This research contributes to the understanding of how the appointment of the Central Bank governor in Sri Lanka affects share market behavior. The findings underscore the importance of appointing governors with relevant experience at the CBSL, as such appointments are linked to positive market reactions. Furthermore, the lack of significant influence from the ethnicity of governors indicates that investors and market participants may prioritize qualifications and experience over ethnic backgrounds in assessing the potential impacts of these appointments. The study ultimately highlights the necessity of considering both the mode of appointment and the qualifications of Central Bank governors in fostering an environment conducive to economic growth and stability in Sri Lanka.

References

- Bouoiyour, J., & Selmi, R. (2017). The price of political uncertainty: Evidence from the 2016 U.S. presidential election and the U.S. stock markets. *Working Papers hal-01419295*.
- Ghoul, S. E., Guedhami, O., Mansi, S. A., & Sy, O. (2023). Event studies in international finance research. *Journal of International Business Studies*, *54*(2), 344–364.
- Škrinjarić, T., & Orlović, Z. (2019). Effects of economic and political events on stock returns: Event study of the Agrokor case in Croatia. *Croatian Economic Survey*, *21*(1), 47–86.
- Ramesh, S., & Rajumesh, S. (2015). Stock market reaction to political events: A study of listed companies in Colombo Stock Exchange of Sri Lanka. *Journal of Economics and Sustainable Development*, *6*(3), 131-139.
- Wang, Q., & Ngai, E. W. (2020). Event study methodology in business research: A bibliometric analysis. *Industrial Management & Data Systems*, *120*(10), 1863-1900.



Track 07

Sustainability

ENHANCING THE CORPORATE SOCIAL RESPONSIBILITY THROUGH INTELLECTUAL CAPITAL IN SRI LANKAN PRIVATE COMPANIES

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ABSTRACT

This paper examines how Intellectual Capital (IC) enhances Corporate Social Responsibility (CSR) in Sri Lankan private companies. The research adopts a positivist approach, employing quantitative methods. Data were collected through questionnaires distributed to 100 private companies in Export Processing Zones (EPZs) in Sri Lanka. Regression and correlation analyses were conducted using SPSS. The analysis indicates a significant positive relationship between IC (including human, structural, and relational capital) and CSR. However, human capital showed a negative correlation with CSR, highlighting the complexity of the relationship. The findings demonstrate that enhancing IC components can improve CSR outcomes, contributing to sustainable business practices and competitive advantage in Sri Lanka's private sector.

Introduction

The 21st century is more dependent on knowledge-based economy. In this era lots of firms using IC more than physical capital. Firms are trying to invest in new knowledge and skills to be successful in the market. (Shehzad, et al., 2014) IC is indeed the intangible wealth a firm accumulates through its knowledge, skills, and innovative activities. There is no doubt that tangible assets are very important for an organization but intangible assets also play a crucial role in the growth and development of an enterprise

Sri Lanka offers a compelling case for CSR research due to its vibrant private sector, which significantly contributes to economic growth and social development. Despite being a developing nation, Sri Lanka boasts a diverse corporate landscape that has embraced CSR practices to address pressing local challenges. It reflects a company's commitment to operate in an economically, socially, and environmentally sustainable manner (Brennan & Connell, 2000). In Sri Lanka, CSR has gained importance, particularly in the private sector, where companies are increasingly expected to contribute to social welfare beyond profit-making. However, despite the growing focus on CSR, its effective implementation remains a challenge for many businesses. This research explores the potential of IC in enhancing CSR initiatives within Sri Lankan private companies.

CSR refers to the efforts made by companies to contribute to societal goals and demonstrate a commitment to ethical practices, environmental sustainability, and social well-being. IC, on the other hand, comprises the intangible assets of an organization, including human capital (HC), structural capital (SC), and relational capital (RC). The interplay between CSR and IC is increasingly seen as vital for sustainable business practices.

This paper explores the significance of enhancing CSR through the strategic utilization of IC. Enhancing CSR through intellectual capital in Sri Lankan private companies is crucial for creating a sustainable, socially responsible business environment. By presenting its importance to different stakeholders, companies can ensure alignment with business goals, community needs, and broader societal expectations. This leads to a more impactful CSR strategy that drives both economic growth and positive social change. IC, which encompasses HC, SC and RC, is pivotal in fostering sustainable business practices and creating shared value. By integrating CSR with IC, companies can achieve a competitive advantage, drive innovation, and contribute to societal well-being. This study examines the theoretical foundations, practical implications, and case studies to elucidate the synergistic relationship between CSR and IC. CSR has evolved from a peripheral concern to a central component of corporate strategy. Companies are increasingly held accountable for their social, environmental, and economic impacts. IC, defined as the knowledge, skills, and relationships that a company possesses, plays a critical role in shaping CSR initiatives. This paper aims to dissect how IC can enhance CSR efforts and drive sustainable business growth.

This paper explores the research problem of how enhancing intellectual capital can lead to improved CSR outcomes. The modern business landscape demands that corporations go beyond profit-maximization to include socially responsible practices. CSR encompasses a broad spectrum of activities, including environmental management, social equity, ethical conduct, and community engagement. However, the success of CSR initiatives largely depends on the intellectual resources within an organization. IC, comprising the knowledge, skills, and relationships within a company, is a critical driver of innovation and strategic CSR (Tai & Chuang, 2014).

In this research, the present study aims to address the following objectives.

1. To explore the impact of IC on enhancing the CSR in private sector companies in Sri Lanka.
 - 1.1 To examine the impact of HC on enhancing the CSR in private sector companies in Sri Lanka.
 - 1.2 To recognize the any impact of SC on enhancing the CSR in private sector companies in Sri Lanka.
 - 1.3 To inspect the RC, contribute to enhancing the CSR in private sector companies in Sri Lanka.
2. To identify a significant relationship between IC and CSR in private limited companies in Sri Lanka.

CSR strategies' potential benefits can be defined based on initiatives' improvement or increase of IC components. However, a review of the relevant literature revealed that the links between these two concepts have been paid scant attention by researchers. In related research, Berber & Slavic (2019) argues that IC and CSR are actually the same thing, that is, two sides of the same coin, since they both describe the interface between society at large and companies. In other word, the effective IC management and maintenance practices within a company are not

isolated but are integrated and supportive of the company's broader CSR goals. This integration can lead to a more comprehensive and impactful approach to corporate social responsibility (Seleim & Khalil, 2011). According to Barnett, (2007) intangible assets play an important role in CSR's ejects, and the two aspects interact to influence companies' value.

Methodology

The objective of this study is to examine the impact of Intellectual Capital (IC) components—Human Capital (HC), Structural Capital (SC), and Relational Capital (RC)—on Corporate Social Responsibility (CSR). To achieve this, a methodological framework was developed, utilizing quantitative analysis to explore the relationships between these variables. Data was collected through structured surveys administered to corporate representatives, ensuring alignment between the study's purpose and the chosen method. By employing statistical techniques such as regression analysis, the study evaluates how each IC component individually and collectively influences CSR practices, directly addressing the research objective.

This study adopts a positivism approach. A deductive approach was employed, and relying on quantitative research method. This research is conducted on members of Private Limited Companies in Board of Investment zones in Sri Lanka. As at 21/12/2023, there are 11 Export Processing Zones under Board of Investment. Population is number of all private companies in the Export Processing Zones in the Western province. EPZs are selected as the sample for the primary data collection for the research. The sample size will be determine based on the random sampling method. The sample size is 100 private sector companies in Export Processing Zones in western province. In here data collection method is questionnaire. Data analysis is the process of systematically applying statistical or logical techniques to describe and evaluating data. The researcher will use regression and co-relation analysis for the data analyzing.

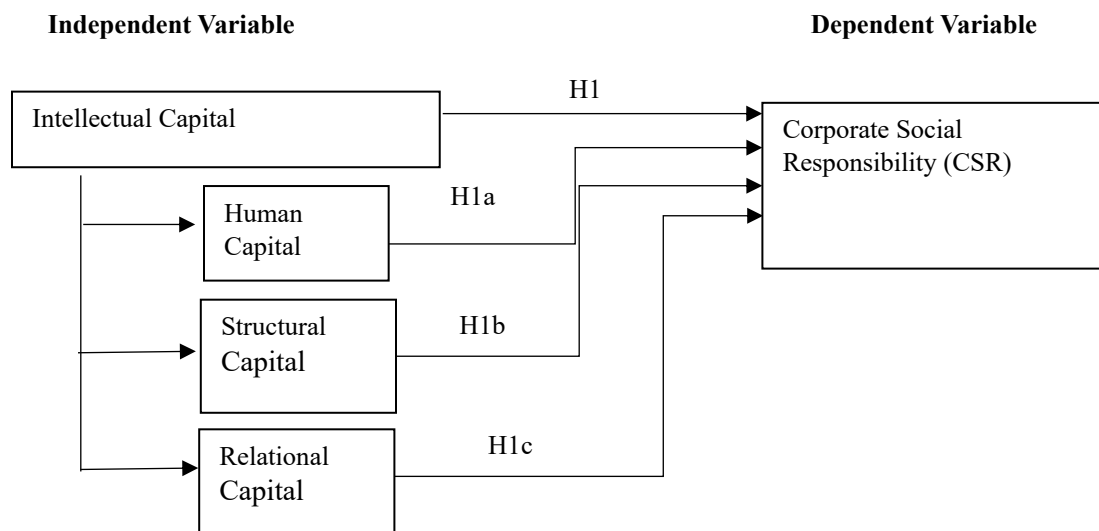


Figure 01: Conceptual Framework

Source: Author constructed

Hypotheses

- H1 -There is a significant impact of IC on CSR.
- H1a- There is a significant impact of HC on CSR.
- H1b- There is a significant impact of SC on CSR.
- H1c- There is a significant impact of RC on CSR.
- H2 -There is a significant relationship between IC and CSR.

Findings

The current study focuses on the understudied topic of Enhancing the CSR through IC in EPZ Companies in western province. It has examined and analyzed predictors of IC, and CSR.

Table 01: Correlation Test Result

	Std.devistio n Statistic	Mean Statistic	Kurtosis	Std. Error of Kurtosis	Skewness	Std. Error of Skewness
IC	.793	3.47	-.261	.490	-.204	.247
HC	.625	3.53	-.050	.490	-.234	.247
SC	1.003	3.47	-.346	.490	-.440	.247
RC	.688	3.50	-.154	.490	-.080	.247
CSR	.793	3.51	-1.108	.490	.049	.247

Source: SPSS Software

According to the Pearson correlation analysis the factor such as the Intellectual capital are strong positively (Correlation Coefficient – (0.716)) (Sig. (2-tailed) (P) – 0.000) <0.05 (05.00%) correlated with on corporate social responsibility from EPZ registered companies in Western Province at 05.00% level of significance.

Findings from the Model Summary, ANOVA Table, and Regression Coefficients

The model summary indicates that the independent variables, specifically IC, HC, SC, and RC explain 71.6% of the total variation in CSR. The ANOVA table shows that the model is statistically significant (F = 98.030, p < 0.05), meaning that the overall regression model is a good fit for the data.

Looking at the regression coefficients, we find that:

IC has a positive and statistically significant impact on CSR (B = 0.890, p < 0.05). This suggests that as IC increases, CSR tends to increase as well. HC has a negative and statistically significant impact on CSR (B = -1.249, p < 0.05). This implies that an increase in HC may lead to a decrease in CSR. SC has a positive and statistically significant impact on CSR (B = 1.020, p < 0.05). This indicates that an increase in SC is associated with an increase in CSR. RC has a positive and statistically significant impact on CSR (B = 0.981, p < 0.05). This suggests that an increase in RC is associated with an increase in CSR.

In conclusion, the model suggests that IC, SC, and RC have a positive impact on CSR, while HC may have a negative impact.

Therefore, Organizations with high HC (emphasis on skills, expertise, and individual knowledge) might focus more on personal or departmental goals like productivity and innovation, which could inadvertently deprioritize CSR efforts. High investments in HC may lead firms to concentrate resources on talent acquisition, training, and compensation, reducing

the budget or strategic emphasis on CSR initiatives. In some cases, firms with highly specialized HC may be less diverse or community-oriented, which could limit their engagement with broader societal or environmental concerns.

Table 02: Model Summary, ANOVA Table, and Regression Coefficients

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.716 ^a	.513	.508	.557

a. Predictors: (Constant), HC, SC, RC

b. Dependent Variable: CSR

ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	30.365	1	30.365	98.030	.000 ^b
	Residual	28.807	93	.310		
	Total	59.172	94			

a. Dependent Variable: Corporate social responsibility

b. Predictors: (Constant), Human Capital, Structural Capital, Relational Capital

Coefficients^a

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Beta		
1	(Constant)		1.097	.000
	IC	.716	9.901	.000
	HC	.984	-3.120	.002
	SC	1.289	8.552	.000
	RC	.851	3.446	.001

a. Dependent Variable: Corporate social responsibility

Source: SPSS Software

Hypothesis Testing

- H1 -There is a significant impact of IC on CSR. - Accepted
- H1a- There is a significant impact of HC on CSR. - Accepted
- H1b- There is a significant impact of SC on CSR. - Accepted
- H1c- There is a significant impact of RC on CSR. - Accepted
- H2 -There is a significant relationship between IC and CSR. - Accepted

Conclusion

According to the results of linear regression analysis of Intellectual capital significant positive impact of CSR on the strength & direction of Enhancing the CSR through IC. As per the results of the hypothesis testing, null hypothesis of H1 and have been enough evidence to say that the reject null hypotheses and alternative hypotheses are accepted.

In conclusion, there is a significant positive relationship between IC on CSR and there is a significant positive impact of IC on the strength & direction of enhancing the CSR.

These findings underscore the strategic importance of IC in fostering sustainable business practices. By effectively managing IC, companies can not only enhance their CSR

performance but also contribute to long-term societal well-being, setting a precedent for responsible corporate behavior in an increasingly sustainability-focused global economy.

References

- Barnett, M. (2007). Stakeholder Influence Capacity and the Variability of Financial Returns to CSR. *Academy of Management Review*, 32(3), 794-816
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pitman Publishing Imprint.
- Seleim, A. A., & Khalil, O. K. (2011). Understanding the knowledge management-intellectual capital relationship: a two way analysis. *Journal of Intellectual Capital*, 586-614. doi:10.1108/14691931111181742
- Shehzad, U., Fareed, Z., Zulfiqar, B., Shahzad, F., & Latif, H. S. (2014). The Impact of Intellectual Capital on the Performance of Universities. *European Journal of Contemporary Education*, 10, 273-280. doi:10.13187/ejced.2014.10.273
- Brennan, N., & Connell, B. (2000). Intellectual capital. *Journal of Intellectual Capital*, 206-240.
- Tai, F.-M., & Chuang, S.-H. (2014). Corporate Social Responsibility. *I Business*, 13.
- Berber, N., & Slavic, A. (2019). The relationship between corporate social responsibility. *Ekonomika*, 1-12.

THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON SHAREHOLDER VALUE CREATION: INSIGHTS FROM HIGH- MARKET-VALUED LISTED COMPANIES IN SRI LANKA

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ABSTRACT

The objective of this paper is to examine, and investigate the impact of Corporate Social Responsibility on Shareholder Value Creation among the high market value Public Listed Companies (PLCs). This study uses the quantitative research approach with the secondary data from 100 high market value PLCs to examine the impact of CSR on shareholder value creation. The findings reveal that CSR does not have a statistically significant impact on shareholder value creation. This study is mainly applied a distinctive Six- dimensional CSR model to measure CSR and shareholder value creation measures via Tobin's Q ratio, contrasting with the widely used CSR Disclosure Index in existing research.

Introduction

This research is important as it explores how Corporate Social Responsibility (CSR) affects shareholder value creation, both globally and in Sri Lanka, emphasizing the need for companies to align financial success with social responsibility in a competitive market. The corporate social responsibility has emerged as a vital aspect of the modern business landscape, striking a balance between ethical conduct and profitability to boost a company's reputation and promote long-term sustainability (Carroll & Shabana, 2010). At the same time, maximizing shareholder value remains a fundamental goal of corporate strategies designed to yield returns for investors. Therefore; this research explores the effect of Corporate Social Responsibility on Shareholder Value Creation, specifically targeting high market valued PLCs listed on the Colombo Stock Exchange (CSE) in Sri Lanka.

The main research question investigates whether CSR initiatives have a significant impact on shareholder value in the context of Sri Lanka by examining six essential dimensions of CSR such as creditors, suppliers, consumers, government, community, and shareholders. Due to the limited previous research in this specific area in other countries and Sri Lankan context, and the fact that empirical studies have employed varying variables and methodologies, often leading to conflicting results (Inyang et al., 2023), it is essential to assess the impact of Corporate Social Responsibility on Shareholder Value Creation for public limited companies of Colombo Stock Exchange in Sri Lanka.

The primary objective of this study is to examine the impact of CSR on shareholder value creation. To address this, the study focuses on several specific objectives also, by focusing on CSR practices toward various stakeholders. Specifically, it explores the impact of CSR directed at creditors, suppliers, consumers, government, community, and shareholders themselves, assessing how responsible practices in each area contribute to shareholder outcomes. By analyzing these aspects, the study provides a comprehensive view of CSR's role in enhancing shareholder value.

Prior research offers diverse insights into how CSR initiatives impact shareholder value. Inyang et al. (2023) found that CSR aimed at societal welfare enhanced shareholder wealth in Nigerian industrial firms, though CSR towards employees and tax authorities yielded mixed or negative impacts. Similarly, Fernández-Guadaño and Sarria-Pedroza (2018) concluded that CSR benefits stakeholders variably in Spanish companies, positively affecting the state but not significantly benefiting other stakeholders. Godfrey et al. (2008, 2009) further supported CSR's "insurance-like" benefit for societal stakeholders, suggesting that CSR can protect against risks. Luo and Bhattacharya (2006) highlighted that CSR enhances shareholder value when paired with high innovativeness and marketing capabilities. While these studies collectively illustrate CSR's nuanced impact on shareholder value, the findings predominantly focus on contexts outside Sri Lanka. Therefore; this underscores a gap in empirical evidence examining how CSR affects shareholder value creation in Sri Lankan PLCs, providing a unique context for this study.

Methodology

This study employs a quantitative methodology to examine the impact of CSR on shareholder value creation among high market value PLCs on the CSE in Sri Lanka. Utilizing a positivism philosophy and a deductive approach, it analyses secondary data from annual reports of 150 PLCs collected from 2018 to 2022. A stratified sampling method ensures a representative sample of high market value firms.

The dependent variable of this study is shareholder value creation and it was measured by using Tobin's Q Ratio (Hall, 2023). And also; the independent variable of this study is corporate social responsibility and it was divided in to six dimensions such as CSR towards Creditors, Suppliers, Consumers, Government, Community and Shareholders and these dimensions were measured by using Cash flow to liability ratio, Average payable turnover ratio, Main business growth rate, Efficient tax payment ratio, Donation rate and Earnings per share in respectively (Bai et al., 2022). A conceptual framework guides the study, leading to six hypotheses regarding CSR's influence on shareholder value and they are;

H1: There is a significant impact of CSR towards Creditors on shareholder value creation.

H2: There is a significant impact of CSR towards Suppliers on shareholder value creation.

H3: There is a significant impact of CSR towards Consumers on shareholder value creation.

H4: There is a significant impact of CSR towards Government on shareholder value creation.

H5: There is a significant impact of CSR towards Community on shareholder value creation.

H6: There is a significant impact of CSR towards Shareholders on shareholder value creation.

The research strategy employs survey methods to gather quantitative data, enabling advanced statistical analyses like descriptive, correlation, and regression by using STATA software, ensuring robust and valid findings that provide insights into the CSR-shareholder value relationship.

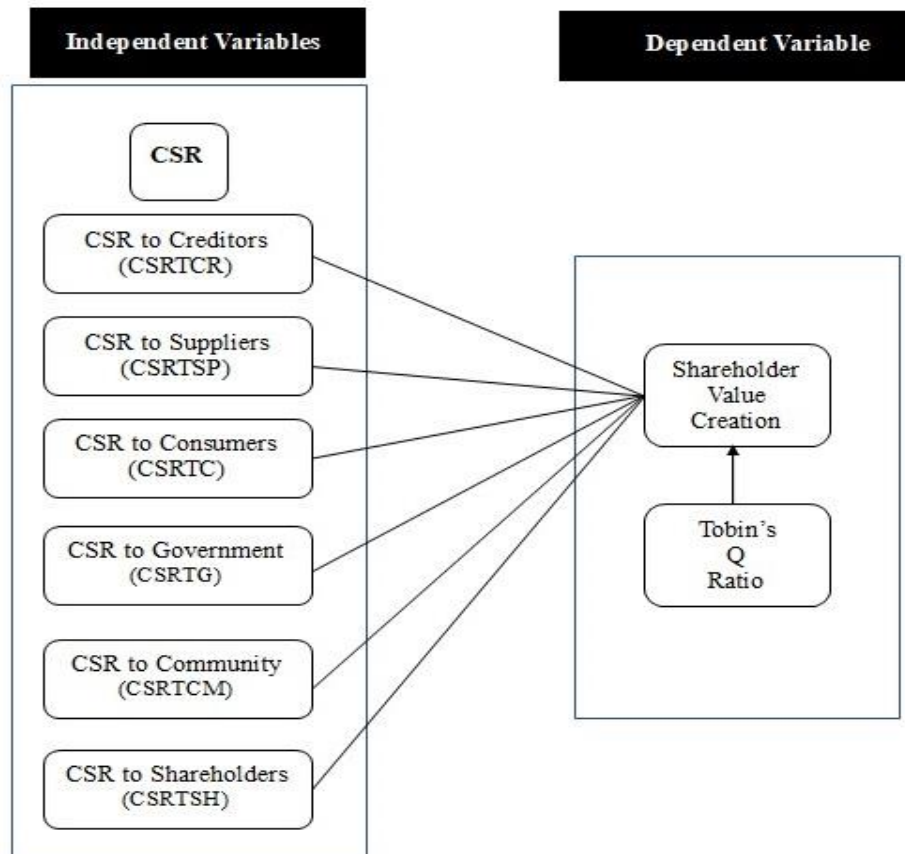


Figure 01: Conceptual Framework

Source: Author Constructed, 2024

Findings

This study investigates the impact of CSR on shareholder value creation (TBQR) through descriptive, correlation and regression analysis. The findings reveal low variability in shareholder value creation, with a mean of 0.6013 and a maximum of 32.91, indicating significant disparities among CSR values.

Correlation analysis in this study assesses the relationship between CSR activities and shareholder value creation, employing Pearson's correlation at a 0.05 significance level. The correlation results show that most CSR components have a weak to moderate positive association with shareholder value, while CSR efforts directed toward consumers display a weak, insignificant relationship (-0.0730), indicating little direct impact. CSR efforts aimed at creditors (CFTLR) and suppliers (APTR) show weak positive correlations of 0.1455 and 0.1806, respectively, suggesting minimal but positive influence on shareholder value. CSR toward government obligations (ETPR) demonstrates a moderate positive correlation (0.2714), indicating a more notable effect, while CSR activities benefiting the community (DONRT) and shareholders (EPS) exhibit weak positive correlations of 0.1555 and 0.1114, respectively. The findings imply that CSR initiatives directed at government entities and suppliers have the most substantial positive influence on shareholder value creation among the CSR components analysed.

Table 01: Correlation Analysis

	TBQR	CFTLR	APTR	MBGR	ETPR	DONRT	EPS
TBQR	1.0000						
CFTLR	0.1455*	1.0000					
	0.0011						
APTR	0.1806*	0.2296*	1.0000				
	0.0000	0.0000					
MBGR	-0.0730	-0.1315*	-0.1419*	1.0000			
	0.1030	0.0032	0.0015				
ETPR	0.2714*	0.3747*	0.3067*	-0.1790*	1.0000		
	0.0000	0.0000	0.0000	0.0001			
DONRT	0.1555*	0.1191*	0.0572	0.0195	0.0046	1.0000	
	0.0005	0.0077	0.2016	0.6631	0.9177		
EPS	0.1114*	0.4670*	0.4489*	-0.2255*	0.3755*	-0.0263	1.0000
	0.0127	0.0000	0.0000	0.0000	0.0000	0.5576	

Source: STATA output of research data

This study employs regression analysis to explore the relationship between corporate social responsibility (CSR) activities and shareholder value creation, measured by Tobin's Q Ratio (TBQR). A Hausman test determined that a fixed-effects model was most appropriate for the analysis, indicating a statistically significant model ($p < 0.05$). The R-squared value of 11.59% shows that CSR variables explain a limited portion of the variation in shareholder value.

The fixed-effect regression analysis reveals that all the Corporate Social Responsibility (CSR) dimensions do not have a statistically significant impact on shareholder value creation. Because the P Value of all these CSR dimensions are higher than to the 0.05. In addition to that; there is a positive relationship between CSR towards Creditors, Consumers, Government, and Shareholders. Further, there is a negative relationship between CSR towards Suppliers and Community. But, the effect of all these CSR dimensions is statistically insignificant on Shareholder Value Creation.

Table 02: Regression model

TBQR	Coef.	Std. Err.	t	P > t 	[95% Conf. Interval]	
CFTLR	0.0227638	0.1063969	0.21	0.831	-0.1864195	0.2319471
APRT	-0.0030842	0.0039668	-0.78	0.437	-0.0108832	0.0047148
MBGR	0.0002257	0.0442869	0.01	0.996	-0.0868454	0.0872967
ETPR	1.871554	0.9535816	1.96	0.050	-0.0032497	3.746358
DONRT	-39.07211	41.87024	-0.93	0.351	-121.3917	43.24752
EPS	0.0027133	0.0014378	1.89	0.060	-0.0001134	0.00554
Year						
2019	-0.0175057	0.0349851	-0.50	0.617	-0.0862886	0.0512772
2020	0.1111538	0.0326805	3.40	0.001	0.0469018	0.1754057
2021	0.0714136	0.33214	2.15	0.032	0.0061127	0.1367146
2022	0.0556899	0.0365604	1.52	0.129	-0.0161902	0.1275701
_cons	0.5254354	0.278204	18.89	0.000	0.4707386	0.5801322

Source: STATA output of research data

Consequently, the hypothesis testing confirms that all CSR categories do not significantly affect shareholder value creation. Therefore; based on the overall results and key findings of this study, it is evident that Corporate Social Responsibility (CSR) does not have a statistically

significant impact on shareholder value creation in the high market value PLCs listed on the Colombo Stock Exchange.

Conclusion

This study provides critical insights into the relationship between CSR and shareholder value creation among high market value PLCs in Sri Lanka, using data from the CSE for the period 2018-2022. Contrary to expectations and prevailing international findings, the study concludes that CSR, as currently structured among these companies, does not have a statistically significant impact on shareholder value creation. These findings contribute unique insights to the existing literature, especially within the Sri Lankan context, highlighting the potential disconnect between CSR initiatives and shareholder value in this setting.

From the results, several general principles emerge. First, while CSR towards government and suppliers demonstrated the strongest positive correlations with shareholder value creation, CSR towards consumers showed a weak, negative relationship, though statistically insignificant. These variations suggest that CSR dimensions may differently affect financial outcomes depending on the stakeholder focus and the operational context.

Theoretically, this research challenges assumptions about the universal financial benefits of CSR by indicating that the impact of CSR activities may be more nuanced, particularly in emerging markets like Sri Lanka. Practically, the findings suggest that Sri Lankan firms should carefully evaluate and potentially recalibrate their CSR initiatives to align more closely with financial objectives if shareholder value creation is a priority. Companies might benefit from prioritizing CSR initiatives that engage government relations and ethical supplier management, which appear more likely to contribute indirectly to financial value creation.

However, several limitations affect the conclusions of this work. The CSR measurement was based on certain specific dimensions, which may not fully capture the broader construct of CSR. Moreover, the short-term observation period may not account for the potentially delayed effects of CSR activities on financial performance. Future studies should consider more comprehensive CSR measurement approaches, incorporate longer timelines, and explore industry-specific factors to better understand the CSR-shareholder value relationship.

In summary, this study offers new empirical evidence that CSR, as practiced among Sri Lanka's high market value PLCs, does not significantly drive shareholder value creation. By highlighting these findings, this research encourages further inquiry into the contextual factors influencing CSR's financial impact, particularly in emerging economies where CSR is still developing as a strategic focus.

References

Bai, X., Li, X., & Wang, W. (2022). The impact of corporate social responsibility on competitiveness of liquor enterprises. *Advances in Economics, Business and Management Research/Advances in Economics, Business and Management Research*. <https://doi.org/10.2991/aebmr.k.220307.213>

- Carroll, A. B., & Shabana, K. M. (2010). The Business Case for Corporate Social Responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*, 12(1), 85–105.
<https://doi.org/10.1111/j.1468-2370.2009.00275.x>
- Fernández-Guadaño, J., & Sarria-Pedroza, J. H. (2018). Impact of Corporate Social Responsibility on Value Creation from a Stakeholder Perspective. *Sustainability*, 10(6), 2062. <https://doi.org/10.3390/su10062062>
- Godfrey, P.C., Merrill, C. B., & Hansen. (2009). The relationship between corporate social responsibility and shareholder value creation: An Empirical test of the risk management hypothesis. *Strategic Management Journal*, 1–21.
- Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2008). The relationship between corporate social responsibility and shareholder value: an empirical test of the risk management hypothesis. *Strategic Management Journal*, 30(4), 425–445.
<https://doi.org/10.1002/smj.750>
- Hall, J. H. (2023). Corporate shareholder value creation as contributor to economic growth. *Studies in Economics and Finance*. <https://doi.org/10.1108/sef-06-2021-0255>
- Inyang, W. S., Joel, E. E., Obeten, O. I., Orok, A. B., Ubi, I. U., & Mbu-Ogar, G. B. (2023). Corporate social responsibility and shareholders' wealth of industrial goods producing companies listed on the Exchange Group PLC of Nigeria. *International Journal of Professional Business Review*, 8(6), e02476.
<https://doi.org/10.26668/businessreview/2023.v8i6.2476>
- Luo, X., & Bhattacharya, C. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing*, 70(4), 1–18.
<https://doi.org/10.1509/jmkg.70.4.001>

DETERMINANTS OF THE AWARENESS ON WASTE MANAGEMENT: EVIDENCE FROM SRI LANKA UNDERGRADUATES

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ABSTRACT

This research aims to examine the impact of the level of awareness on waste management of undergraduates. In view of this, awareness of standards regulations, and environmental and health effects are strongly associated with waste management practices. The quantitative research design is used and questionnaires as the research instruments to collect data from students of a public university. This sample records high awareness levels and responsible disposal behaviors of wastage items, giving clear evidence of coefficient measures among the students. This paper establishes a case for the need for the youth in the emerging economy to be imparted with appropriate waste management education to enhance their environmental perception.

Introduction

Waste management is a significant problem in developing economies, and since waste is growing more frequently in these nations due to rapid population growth, it should be given priority (Dharmasiri, 2020). As a developing country, Sri Lanka is facing a serious waste management challenge, which necessitates more research interests in the awareness of waste management and waste management practices. Furthermore, the majority of earlier research on waste management in Sri Lanka concentrated on understanding the problems, opportunities, and challenges related to waste generation, leaving a gap in awareness of waste management and waste management practices. (Kumara, 2020). The major cause of waste problems in Sri Lanka is a lack of awareness.

Waste is the world's biggest environmental problem. Owing to its great impact on environmental sustainability and public health, the issue of waste management has attracted increased global attention. Globally, annually more than billion tonnes of solid waste is generated. Solid waste generation is predicted to increase from 2.3 billion tonnes. Accordingly, from 3.4 billion tonnes in 2015, this is foreseen to increase further to 3.8 billion tonnes by 2050, according to the Global Waste Management Outlook 2024 (Global Waste Management Outlook , 2024). For the time being, the East Asia and Pacific regions account for the largest share 34% of the world's garbage-against about 6% of waste coming from the collective Middle East and North Africa. (Kaza, 2018)

Universities have an important role in promoting practices for waste management among undergraduates, who are the future leaders. It is critical to educate the younger generation on the significance of waste management and enable them to make educated decisions regarding waste disposal. This study aims to assess the level of awareness on waste management among Sri Lankan Undergraduates. Understanding their awareness of waste management would allow the researcher to identify areas for improvement and build focused interventions to encourage effective waste management among young.

Being a developing country, Sri Lanka has already reached a serious challenge in waste management, and it badly needs further research interest on the awareness of waste management and waste management practices. Moreover, most of the earlier research on waste management in Sri Lanka concentrated on understanding the problems, opportunities, and challenges concerning waste generation, thus leaving a gap in awareness of waste management and its practices. (Kumara, 2020)

There are many studies related to examine the awareness on waste management in the world. The findings of the study that conducted on this area in the Philippines surface that most of students were aware of the policies and management of Solid Waste Management (SWM) but relatively not aware of their roles as students in the implementation of SWM. (Bautista, 2019).

A few studies conducted in Sri Lanka examine the awareness on waste management. Dharmasiri, 2020 conducted a study to examine the present situation of solid waste management in Sri Lanka while in determining the nature and extent of the problem, thereby identifying the challenges and opportunities toward maintaining a sustainable waste management system in Sri Lanka. The research has found a number of issues, some of which are the root causes of the current problem. These include inadequate waste collection methods, the lack of waste segregation, and the lack of public commitment to waste management. (Dharmasiri, 2020)

These studies provide valuable insights into the current status of waste in Sri Lanka. But very few studies have been conducted in Sri Lanka to examine the awareness on waste management. Therefore, I decided to do the study on this topic. The major cause of waste problems in Sri Lanka is a lack of awareness. Therefore, this study seeks to address the gaps in current knowledge by exploring how these determinants intersect and influence waste management awareness among Sri Lankan undergraduates. It endeavours to offer a detailed understanding of the multifaceted nature of factors that shape their perceptions, knowledge, and behaviors towards waste management.

Methodology

This study uses a quantitative research design to understand the determinants of waste management awareness among undergraduates in Sri Lanka. The population of the study consisted of management undergraduates studying in state Universities in Sri Lanka. According to the statistics of UGC 2022, there are 26434 Management undergraduates studying in 17 Public Universities registered under UGC and currently operating as of 30th June 2024 in Sri Lanka, which is the targeted population for this research. The size of a sample is always less as compared to the total size of the population. In this study, 200 undergraduates out of 17 universities have been selected as a sample.

A questionnaire based approach was the selected research method to collect data from the undergraduates. This was chosen because questionnaires are beneficial, cost-effective, and allow for the easy collection of large amounts of data from a large number of people. This research study employs a primary data collection approach to investigate the determinants influencing awareness of waste management practices among Sri Lankan undergraduates.

In this study analyzed the data by using Partial Least Squares Regression Model. Partial Least Squares regression allows for an exploratory approach to data analysis, where the relationships between variables can be examined and hypotheses tested without stringent assumptions about the underlying data distribution. This flexibility is beneficial when exploring new or less-studied topics like waste management awareness determinants.

Conceptual Framework

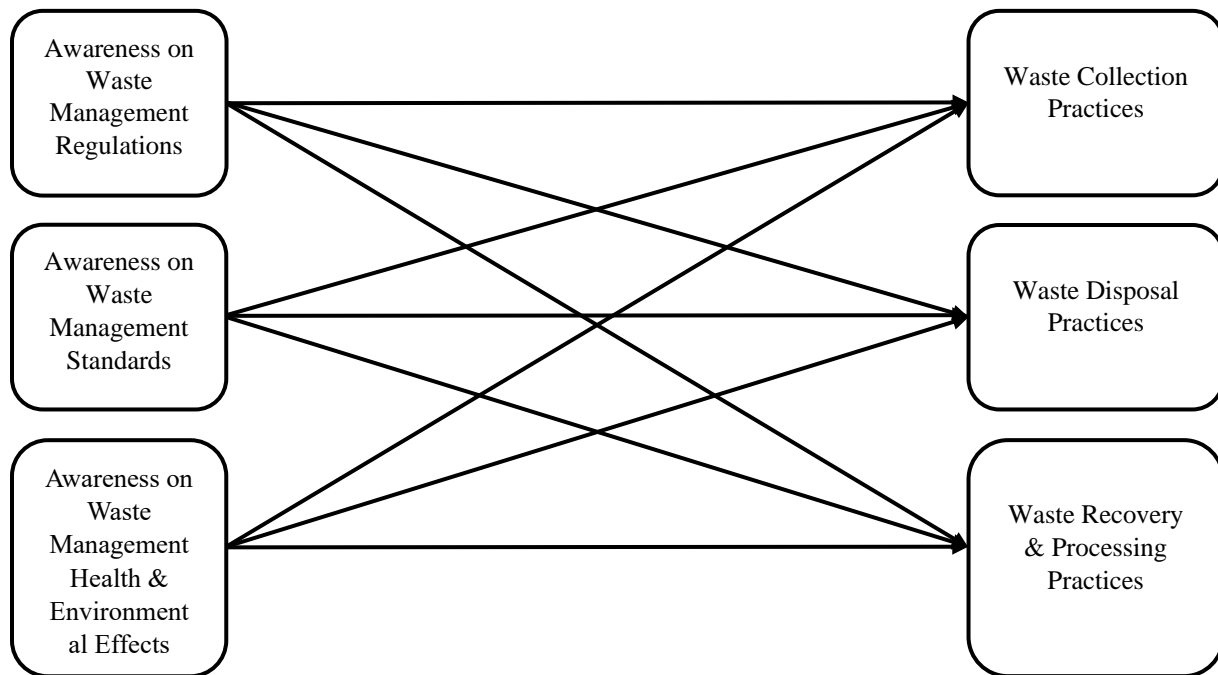


Figure 01: Conceptual Framework

Source: Constructed by Authors

Data Analysis and Findings

Descriptive Analysis

All the means for the variables are above 4, indicating that on average, participants have a high level of awareness and positive practices related to waste management. The medians are also high (close to 4.3333 or higher), suggesting that the central tendency of responses is positive. The standard deviations are relatively low (all below 1), meaning the data points are closely clustered around the mean, indicating consistency in responses. Skewness values are negative for all variables, indicating a left skew, where most data points are clustered on the higher end of the scale. Kurtosis values indicate a more peaked distribution compared to a normal distribution, especially for WDP and WCP, suggesting that responses are highly concentrated around the mean.

Table 01: Descriptive Analysis

	AOR	AOS	AOHE	WDP	WCP	WRPP
Mean	4.1550	4.1158	4.1500	4.2102	4.2008	4.1783
Median	4.3333	4.3333	4.5000	4.4286	4.3333	4.3333
Std. Deviation	.70721	.75857	.80980	.66836	.64242	.76413
Skewness	-1.668	-1.926	-1.536	-2.180	-1.855	-1.626
Kurtosis	3.500	3.483	2.743	5.047	4.024	2.618
Minimum	1.00	1.50	1.00	1.29	1.33	1.33
Maximum	5.00	5.00	5.00	5.00	5.00	5.00

Source: Constructed by Authors

Correlation Matrix

The Pearson's correlation matrix is provided in Table 02. The values of the correlations in this analysis highlight strong inter-relationships among many determinants of awareness on waste management. The high correlation between various pairs such as WDP and WCP at 0.873 and AOS and WDP at 0.815 also indicates that the relationship is very strong.

Table 02: Correlation Matrix

	AOR	AOS	AOHE	WDP	WCP	WRPP
AOR	1					
AOS	.676	1				
AOHE	.687	.675	1			
WDP	.722	.815	.701	1		
WCP	.687	.773	.711	.873	1	
WRPP	.625	.654	.682	.799	.763	1

Source: Constructed by Authors

Structural model analysis

R-square for Waste Collection Practices (WCP) indicates that 68.1% of the variance in Waste Collection Practices (WCP) is explained by the independent variables in this model. The slight difference between the R-square and the adjusted R-square suggests that the model is appropriately adjusted for the number of predictors. R-square for Waste Disposal Practices (WDP) means that 73.4% of the variance in Waste Disposal Practices (WDP) is explained by the independent variables. Again, the adjusted R-square is very close to the R-square, suggesting that the model is well-fitted with minimal overfitting. R-square for WRPP indicates that 55% of the variance in Waste Recovery and Processing Practices (WRPP) is explained by the independent variables. This value is lower compared to WCP and WDP, suggesting that other factors outside the model may also influence WRPP.

Table 03: R-squared

	R-square	R-square adjusted
WCP	0.681	0.676
WDP	0.734	0.730
WRPP	0.550	0.543

Source: Constructed by Authors

Table 04 lists nine hypotheses, each examining the relationship between an independent variable and dependent variable. Path coefficients indicate the strength and direction of these

relationships. A positive coefficient suggests a positive relationship, meaning as awareness increases, the associated waste management practice also improves. T- Statistics values are used to determine the significance of the path coefficients. A higher T-statistic suggests a more significant relationship. A P-value less than 0.05 typically indicates that the relationship is statistically significant at a 95% confidence level.

Table 04: Path Coefficients

Hypotheses	Relationships	Original sample	Sample mean	Standard deviation	T-statistics (O/STDEV)	P values	Findings
H1	AOHE -> WCP	0.275	0.271	0.092	2.975	0.003	Supported
H2	AOHE -> WDP	0.177	0.176	0.076	2.346	0.019	Supported
H3	AOHE -> WRPP	0.364	0.359	0.096	3.816	0.000	Supported
H4	AOR -> WCP	0.190	0.189	0.090	2.100	0.036	Supported
H5	AOR -> WDP	0.240	0.238	0.084	2.850	0.004	Supported
H6	AOR -> WRPP	0.181	0.179	0.097	1.865	0.062	Not Supported
H7	AOS -> WCP	0.458	0.461	0.097	4.745	0.000	Supported
H8	AOS -> WDP	0.534	0.536	0.068	7.824	0.000	Supported
H9	AOS -> WRPP	0.286	0.290	0.095	3.002	0.003	Supported

Source: Constructed by Authors

Conclusion

This study set out to examine the level of awareness of waste management among Sri Lankan undergraduates and the impact of this awareness on their waste management practices. Through a series of analyses, including hypothesis testing and descriptive statistics, gained valuable insights into the current state of awareness and its influence on practical behavior in waste management among this demographic. The key findings indicate that environmental awareness has a significant impact on waste management practices, while the knowledge of regulations and positive attitude toward waste disposal also have important roles. These factors altogether explain a large part of the variance of waste management practices among participants.

The study explored the level of awareness concerning regulations and standards on collection, disposal, and recovery practices, as well as the awareness of health and environmental effects associated with these practices. The findings show that while students are generally knowledgeable, there are disparities in how this awareness translates into actual waste management practices. Notably, while awareness of regulations and standards is high, its impact on recycling behaviors (WRPP) is less pronounced compared to collection (WCP) and disposal (WDP) practice. This highlights a potential gap between awareness and action, particularly in the domain of recovery and processing practices, where awareness does not always lead to proper recycling behaviors.

The following actionable recommendations are made for stakeholders such as institutions, policy makers, and environmental organizations to bring improvements in waste management awareness and practices among the undergraduate population:

1. Engage in Targeted Educational Programs.
2. Engage in Active Participation

3. Use digital platforms to communicate waste management practices
4. Collaboration with Local Governments
5. Monitoring and Evaluation of Programs

Limitations and Future Research

Although this study tries to outline the awareness of Sri Lankan undergraduates on waste management, it is not without limitations. The sample, though representative, consists only of management undergraduates from public universities, and this sampling may not fully represent the diversity of perspectives across different fields of study or private institutions. This research also does not allow drawing conclusions on the changes in level of awareness and practices due to its cross-sectional nature.

Future studies might investigate between-country comparisons to further understand how waste management awareness differs between countries and educational contexts. Longitudinal studies could be informative in terms of the time course of variation in awareness and practices, especially after educational treatments. Qualitative methods-activities like interviews or focus groups-could yield even deeper perceptions into attitude and behavior change relevant to the issue of waste management among students.

The study concludes that while Sri Lankan undergraduates possess a high level of awareness regarding waste management, this does not uniformly translate into all areas of waste management practices. The gap is most noticeable in recycling and proper processing practices, suggesting a need for enhanced education and initiatives focused on these areas.

References

- Aforo, O. Y. (2020). Awareness of solid waste management practices among basic school pupils in dormaa municipality.
- Ahmad, J., Noor, h. M., & Ismail, N. (2015). Investigating Students' Environmental Knowledge, Attitude, Practice, and Communication. *Asian Social Science*, 284-293.
- Barloa, E., Lapie, L., & Cruz, C. P. (2016). Knowledge, Attitudes, and Practices on Solid Waste Management among Undergraduate Students in a Philippine State University. *Journal of Environment and Earth Science* .
- Bautista, P. R. (2019). Level of awareness and practices on solid waste management (SWM) among college students.
- Comighud, E. N. (2020). Awareness and Implementation of Solid Waste Management (SWM) Practices(SWM) Practices. *UBT International Conference* , 256.
- Demirbas, A. (2010). Waste management, waste resource facilities and waste conversion processes. *Energy Conversion and Management*, 1280-1287.
- Desa, A., Kadir, N., & Yusoooff, F. (2010). A Study on the Knowledge, Attitudes, Awareness Status and Behaviour Concerning Solid Waste Management. *Kongres Pengajaran dan Pembelajaran UKM*, 643–648.
- Dharmasiri, L. M. (2020). Waste Management in Sri Lanka: Challenges and Opportunities. *Sri Lanka Journal of Social Sciences*.

- Franke, Hindle, & White. (1995). *Integrated Solid Waste Management: A Lifecycle Inventory*. (2024). *Global Waste Management Outlook* . Retrieved from <https://www.unep.org/resources/global-waste-management-outlook-2024>
- Joe F. Hair, C. M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Kaza, S. Y. (2018). What a Waste 2.0 : A Global Snapshot of Solid Waste Management to 2050 (English). *The World Bank*.
- Kumara, A. S. (2020). Household waste disposal mechanisms in Sri Lanka: Nation-wide survey evidence for their trends and determinants. *114*, 62-71.
- UNEP. (2011). *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes.*, (p. 126).

THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON FIRM PERFORMANCE OF THE HOTEL INDUSTRY IN SRI LANKA

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ABSTRACT

This study aims to investigate how CSR affects the performance of hotels in Sri Lanka. A sample of 25 high-performing hotels listed on the Colombo Stock Exchange was analyzed over an 8-year period (2015–2022). CSR disclosure was the independent variable, while firm performance, measured by earnings per share (EPS), return on assets (ROA), and return on equity (ROE), was the dependent variable. Secondary data were utilized for analysis. Three sets of ratios were used to calculate CSR and firm performance. Statistical analysis, including correlation and regression, was conducted using SPSS. The findings demonstrate a negative relationship between CSR and firm performance.

Introduction

Corporate social responsibility (CSR) can be understood as how a company is consciously responsible for its actions and non-actions, as well as the impact that these have on society and the environment. Companies are required to earn a profit, which continues to be their defining characteristic. However, the manner in which the profit is made is important because it is part of a larger process that takes into consideration the relationships that the companies have with a wide variety of individuals, groups, and institutions. The notion pertains to the methodology employed by corporations to incorporate social, environmental, and economic considerations into their values, culture, decision-making, strategy, and operations transparently and ethically (Waniak-Michalak et al., 2016).

The present study has made a significant practical contribution to the field of CSR because it contains econometric outcome supports as well as the application of appropriate CSR strategies and policies. Much of the existing research on the relationship between CSR and CP has focused on the USA, UK, Australia, and Bangladesh. The literature highlighted that the concept of corporate social responsibility (CSR) is one of voluntary engagement and international recognition. When this idea is put into practice, companies get the advantages and investors can get the benefits. The present study attempts to overcome the above issues by recognizing a relationship between CSR and firm performance in Sri Lanka.

The focus of this study is to identify the relationship between corporate social responsibilities and the firm performance of hotel sector companies in Sri Lanka. Three objectives were developed based on the problem statement: (a) To find out the relationship between CSR and Return on Asset, (b) To find out the relationship between CSR and Return on Equity, and (c) To find out the relationship between CSR and Earnings per Share

For this study, researchers used secondary data. Data was gathered from the annual reports of 25 hotel-related businesses during a period of 8 years, from 2015 to 2022. To reflect the hotel

industry's firm performance and corporate social responsibility, two distinct ratio sets were computed.

Return on Equity (ROE), Return on Assets (ROA), and Earnings per Share (EPS) were used to measure the dependent variables (i.e., firm performance). Descriptive data, including mean, median, standard deviation, and coefficient of variation, were also computed before the regression analysis was conducted to determine the effect of CSR investment on company performance.

Table 01: Dependent, Independent, and Control Variables

Independent variable	Dependent variables (Firm performance)	Control variables
CSR disclosure	ROA	Company size (Total sales/ Total assets)
	ROE	Sales growth rate
	EPS	Leverage (Total asset/ Total equity)

Source: Constructed by Authors

Methodology

The annual reports of 25 hotel-related companies listed on the Colombo Stock Exchange (CSE) for the years 2015–2022 were used to collect the secondary data. The selection of 25 high-performance hotels ensures a focus on firms with consistent success, providing a robust basis for examining CSR's effects on performance. The analysis of data spanning 2015 to 2022 captures longitudinal understanding, allowing for a comprehensive evaluation of CSR's sustained impact over time. Numerical information was taken out of the Sustainability report, the Statement of Financial Position, and the Statement of Comprehensive Income. Data from the company's website is also used when necessary. The literature review claims that multiple researchers came up with various hypotheses to accomplish the study's primary objective. Researchers used a few hypotheses to ascertain the connection between firm performance and CSR disclosure (Abeyasinghe, 2015). This study also made use of the theories, which are given below:

- H₁: The disclosure of corporate social responsibility (CSR) has a statistically significant and positive impact on businesses' return on assets (ROA).
- H₂: The disclosure of corporate social responsibility (CSR) has a statistically significant and positive impact on businesses' return on equity (ROE).
- H₃: The disclosure of corporate social responsibility (CSR) has a statistically significant and positive impact on businesses' earnings per share (EPS).

Correlation and regression were used to understand how CSR affects hotel performance. As stated elsewhere, the firm performance was measured with the help of three ratios namely Return on Asset, Return on Equity, and Earnings per share. CSR is measured as a percentage of revenue and firm size, sales growth, and leverage used as control variables. Accordingly, three regression models were formulated in the following manner.

$$ROA_{it} = \beta_0 + \beta_1 DIS_{it} + \beta_2 FSIZE_{it} + \beta_3 SGRWTH_{it} + \beta_4 LVRG_{it} + e_{it} \dots \dots \dots (1)$$

$$ROE_{it} = \beta_0 + \beta_1 DIS_{it} + \beta_2 FSIZE_{it} + \beta_3 SGRWTH_{it} + \beta_4 LVRG_{it} + e_{it} \dots \dots \dots (2)$$

$$EPS_{it} = \beta_0 + \beta_1 DIS_{it} + \beta_2 FSIZE_{it} + \beta_3 SGRWTH_{it} + \beta_4 LVRG_{it} + e_{it} \dots \dots \dots (3)$$

Where:

DIS is CSR disclosures, ROA is the return on assets, ROE represents the return on equity, EPS refers to earnings per share, FSIZE is Firm size, SGRWTH is sales growth and LVRG represents Leverage.

Findings

Correlation Analysis

Table 02: Correlation Matrix

	ROA	ROE	EPS	CSR
ROA	1			
ROE	0.938	1		
EPS	0.938	1.0	1	
CSR	-0.56	0.11	0.11	1

** Correlation is significant at the 0.01 level (2-tailed).

Source: Authors' own (2024)

The statistical results displayed in the correlation matrix allow to evaluate the extent of the connection between CSR disclosure and the variable set including ROA, ROE, and EPS of the 103 firms. Most notably, the research records a low and insignificant negative relationship between the overall CSR disclosure and the firm's Return on Asset (ROA) which equals to -0.056 and (p - value) = 0.576, meaning higher level of the overall CSR disclosure is not associated with better asset utilization among the sample firms. On the other hand, there is moderately strong positive relationship between ROA and ROE (r = 0.938; p = 0.000) which means that the firms with higher asset returns have equally high return in equities. This relationship is consistent with the positivity of ROA with EPS also having a positive relationship (r = 0.938; p < 0.001). Moreover, simple correlation analysis showed that the ROE and EPS are much related and even more strongly correlated coefficients with r = 1.000 and p = 0.000 at less than 0.001 level of significance, meaning that every change in the equity returns affects the EPS in this dataset. In total, it can be suggested that there is a weak association of CSR disclosure with financial performance measures, even though the positive and significant relationship is present between ROA, ROE and EPS stresses the connection between the values of these measures.

Hypothesis Testing

Table 03: Summary of Hypothesis Testing

Hypothesis	Coefficient	P Value	Impact	Result
H1	-0.024	0.864	Insignificant	Rejected
H2	0.126	0.364	Insignificant	Rejected
H3	0.126	0.364	Insignificant	Rejected

Source: Authors' own (2024)

H₁: The disclosure of corporate social responsibility (CSR) has a statistically significant and positive impact on businesses' return on assets (ROA).

Regression results showed that the relationship between CSR disclosure and ROA was almost zero ($R = -0.024$) and the coefficient of determination (R^2) was very low 0.001, showing that CSR disclosure has little effect on ROA. T statistic test indicates that the fit is not significant which has $p = 0.864$. In other words, it appears CSR disclosure has a negligible effect on ROA.

H₂: The disclosure of corporate social responsibility (CSR) has a statistically significant and positive impact on businesses' return on equity (ROE).

The results show that there is a very weak positive association ($R = 0.126$) and almost no variance in ROE explained by CSR disclosure ($R^2 = 0.016$), which, in turn, implies that CSR disclosure has no increase effect on ROE. P value is 0.364 and those results implies that CSR disclosure exerts insignificant impact on the firms' ROE.

H₃: The disclosure of corporate social responsibility (CSR) has a statistically significant and positive impact on businesses' earnings per share (EPS).

The study yields test results showing a very low value of $R = 0.126$, and an R^2 of only 0.016; consequently, the analysis asserts that CSR disclosure bears minimal, if any, relationship to earnings and hence has negligible effect on it. The findings support this conclusion and bearing a p value of 0.364 suggesting that there is no predictive value. Taken as a whole, the research evidence suggests that CSR disclosure has not impact on EPS.

Conclusion

Correlation matrix gives information regarding the extent of relationship between CSR disclosure, ROA, ROE and EPS. The current findings provide little evidence of a relationship between CSR disclosure and the overall ROI, as the findings reveal is negative and statistically insignificant, meaning that while CSR transparency appears to be weakly negatively related to the efficiency of assets – indicated by ROA – this is not necessarily an optimum scenario as improved CSR transparency does not appear to improve overall organizational performance. But, a positive and significant relationship has been found between ROA and both ROE and EPS to add that assets firms with high return on assets would also have high return on equity and earnings per share. Of course, ROE is wholly dependent on EPS, and one can conclude that these coefficients are completely aligned. In conclusion the results find out that CSR disclosure has no much influence on the financial performance measures of hotel industry in Sri Lanka.

These results add to the existing literature by signaling that whilst CSR strategies may not improve financial performance in the hotel industry, it is clearly mandatory for constructing the appropriate brand image and enhancing stakeholders' relations. Suggestions for future research include calls for longitudinal research, by sector and by region to understand the CSR practice as part of the existing complex structure of the hotel industry and work to enhance the knowledge of CSR in the development of sustainable business practices in this sector.

This research has a valuable contribution to the existing literature on corporate social responsibility (CSR) and firm performance in the hotel industry in Sri Lanka. In so doing, the

study fills a significant research gap by focusing on the relationship between CSR practices and the entrepreneurial orientation of firms from developing economies where CSR practices are relatively new. The results offer practical implications for any stakeholder interested in CSR, namely, the hotel management, investors, policymakers, and researchers who would benefit from learning about the sociopsychological and economic benefits of CSR projects.

This work's major contribution, therefore, is in showing that CSR activities link to improved financial performance for the hotel. The study establishes causality between discrete CSR activities including environmental stewardship, community investment, and ethical employment of labor and organizational performance indicators as measured by ROA, ROE, and EPS. Not only does this support the idea of CSR as an investment rather than a cost it also demands that the hotel operators begin to incorporate social responsibility as a strategic management into their business model. While CSR may not increase financial performance directly, it helps in building a strong brand image and good relationships with stakeholders.

References

- Das, L., & Bhunia, A. (2016). The Impact of CSR on Firms' Financial Performance– A Literature Review. *American Journal of Business, Economics and Management*, 66-74.
- Abeyasinghe, A. W. (2015). Relationship between corporate social responsibility disclosure and financial performance in Sri Lankan domestic banking industry. 111-126.
- Adewumi, T. (2018). *Corporate social responsibility (CSR) and firm performance: Impact of internal* .
- Amrousy, Z., Gavius, I., Katz, H., & Yosef, R. (2012). Corporate Social Responsibility (CSR) and Firm Performance. *Modern Accounting and Auditing*, 08, 1693-1703.
- Aras, G., Aybars, A., & Kutlu, O. (2010). Managing corporate performance Investigating the relationship between corporate social responsibility and financial performance in emerging markets. *International Journal of Productivity and Performance Management*, 229-253.
- Cho, S. J., Chung, C. Y., & Young, J. (2019). Study on the Relationship between CSR and Financial Performance. *Sustainability*, 1-26.
- Freeman, S. J., & Albinger, H. S. (2000). Corporate Social Performance and Attractiveness as an Employer to Different Job Seeking Populations. *Business Ethics*, 243-253.
- Impact of CSR on Firm's Financial Performance:A Study on Some Selected Agribusiness:Industries of Bangladesh. (2018). *American Journal of Economics, Finance and Management*, 04, 74-85.
- Madhushika, H. M., & Uluwatta, K. (2021). Impact of Corporate Social Responsibility on The Financial Performance: Evidence From Listed Manufacturing Companies In Sri Lanka. *Journal of SACFIRE*, 79-111.
- Michalak, H. W., Macuda, M., & Krasodomska, J. (2016). Corporate Social Responsibility and accounting in Poland: A literature review. *Accounting and Management Information Systems*, 255-303.

Tilakasiri, K. K. (2012). *Corporate Social Responsibility and Company Performance: Evidence from Sri Lanka.*

THE ENVIRONMENTAL MANAGEMENT ACCOUNTING PRACTICES: A CASE STUDY FROM HOTEL SECTOR IN SRI LANKA

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ABSTRACT

This study analyzes Environmental Management Accounting Practices (EMAP) in the Sri Lankan hotel sector, focusing on three hotels: Hotel A is in Dambulla, hotel B is in Colombo, and hotel C is in Sigiriya. Sources of both primary and secondary data Which included Site visits and interviews, hotel websites, and documents were used for the case study. They show that all environmental actions planned in Hotel A were realized and water, energy and waste were properly managed. The main issues cited for Hotel B's poor resource efficiency and energy costs. That notwithstanding, problems like start-up costs and the variability of the management's passion for sustainable initiatives remain a barrier, specifically affecting Hotels A and B more than Hotel C did. These are industry-based conclusion generalizing results of the study for other similar hotel organizations.

Introduction

Environmental Management Accounting (EMA) is the creation, evaluation and application of financial data pertaining to the environment for the purpose of assisting in business decision-making. When looking at the history of this technique, we find that environmental accounting came to being in the 1970s due to growing concerns about social and environmental well-being and environmental consciousness (Schaltegger & Burritt, 2010). Thus far it has been observed that these factors are employed in Sri Lankan business through accounting practices like energy management accounting, water management accounting, waste management accounting, environmental capital budgeting, Activity-based costing, life cycle analysis, environmental impact assessment and biodiversity accounting among others. (Schaltegger & Burritt, 2010) note that the global call for sustainable business practices intensifies, understanding how companies address these challenges becomes paramount.

Environmental issues have become a growing problem in all sectors and in all countries of the world. Among the recent environmental management accounting problems, deforestation and climate problems are the main ones. Most of the environmental issues have arisen due to the higher level of environmental pollution and over consumption of non-renewable resources (Burritt, 2004). Therefore, sustainable environmental and management accounting practices can be used to avoid this situation. It may help to identify inefficiencies and wasteful practices and opportunities for cost savings (Bartolomeo et al., 2000). Sustainability practices guide organizations to being as a green towards practices and supporting eco-efficiency. Also, the adoption level of EMA is very important.

Here, consider world and local environmental problems based on this study. World environmental problems, such as climate change, pollution, deforestation, and water scarcity, pose significant threats to the planet's health and human well-being. Climate change leads to global warming, extreme weather events, and loss of biodiversity. According to Pollution from

industrial activities, plastic waste, and harmful chemicals degrades air, water, and soil quality, impacting both ecosystems and human health (Janković & Krivačić, 2014). Deforestation contributes to habitat loss and exacerbates climate change, while water scarcity affects agriculture, health, and livelihoods. Addressing these issues requires global cooperation, sustainable practices, and innovative solutions to ensure a healthier and more sustainable future for all.

Local environmental problems, such as air and water pollution, waste management issues, and deforestation, significantly impact community health and ecosystems. Air pollution from vehicles and industries can cause respiratory problems and degrade air quality. Contaminated water sources affect drinking water safety and aquatic life. Improper waste disposal leads to soil contamination and attracts pesticides. Local deforestation reduces biodiversity and disrupts natural habitats. Addressing these issues requires community engagement, effective policies, and sustainable practices to protect and improve the local environment (Jayasinghe et al., 2004).

This research focuses on a case study of EMA practices within a hotel sector in Sri Lanka. Exploring the strategies, reporting mechanisms, and overall approaches employed by this company will provide valuable insights into the dynamic relationship between financial decision-making and environmental responsibility in the unique context of Sri Lanka's corporate landscape (Harrison et al, 2015). This study aims to contribute to the broader discourse on sustainable business practices and environmental accounting by offering a detailed examination of a real-world application within the Sri Lankan business environment. Similarly, the amount of research done in this study is less, so the research is being done in this regard.

Methodology

The study is carried out by using the case study approach. Because qualitative case study method was chosen in this study for identify the environmental management accounting practices in hotel sector in Sri Lanka. Also, the case study method is detailed in real work context. This method collects data from people and institutions in their everyday real situations. Research methodology is a systematic way to solve a problem. It is a science of studying how research is to be carried out and in which researchers go about their work of describing, explaining and predicting phenomena are called research methodology (Yin, 2017). It is also defined as a study of methods by which knowledge is gained and analyzing the EMA practices within the hotel sector of Sri Lanka.

The number of tourists hotels in Sri Lanka is very huge. To narrow it down, the research uses convenience sampling to focus on the three specific hotels selected from the Sri Lankan hotel sector. A hotel is in Dambulla, B hotel is in Sigiriya, and another C hotel is in Colombo. Primary data were collected by direct visiting and observing the hotel sites and interviewing the in-charge people by using interview protocol design. Secondary data were collected by web sites and other related documents maintained by the hotel on three aspects of EMA. Explanations and a building approach were used to analyze the data gathered. The data collection for the EMA practices in the Sri Lankan hotel sector will employ a mix of qualitative methods. In-depth interviews will be conducted with Key staff members, such as general

managers and environmental officers within selected hotels to gather firsthand insights into the adoption, challenges, and impact of EMA practices. The most suitable data analysis method for EMA practices in the Sri Lankan hotel sector is thematic analysis. Thematic analysis is relevant as it allows us to systematically analyze qualitative data from interviews, document analysis, and observations. It will identify and explore themes related to EMA adoption, factors influencing implementation, impacts on environmental performance, challenges faced, and recommendations.

Findings

This study aims to examine EMAP in hotel sector in Sri Lanka. The results indicated that EMAP helps to reduce energy consumption and energy costs relevant to these three hotels. This study found that EMAP helps to reduce wastages landfill, due to operation of these hotels. And this study found that three hotels could reduce consumption of water by applying EMAP. Owing to the use of EMAP, these hotels could reduce environmental costs and enhance environmental improvement of the organization to achieve environmental objectives and goals.

A hotel has successfully adopted and implemented the environmental management initiatives, and it will give common ideas regarding EMA in the entire chain of this type hotels. They manage water, energy and solid waste using various initiatives and those initiatives are discussed in descriptive nature in this paper. B as the hotel that bottom performs in terms of energy costs, and the efficiency of resources use. That notwithstanding, problems like start-up costs and the variability of the management's passion for sustainable initiatives remain a barrier, specifically affecting Hotels A and B more than Hotel C did.

Objectives of the study were achieved as follows.

Objective 1: To examine the EMA practices in Sri Lankan hotel sector

Hotel A has successfully implemented EMA initiatives focusing on renewable energy use, advanced water management systems, and waste reduction through composting and recycling. This hotel adopts solar power, biogas systems for organic waste, and rainwater harvesting. Hotel B emphasizes long-term sustainability through natural lighting, Waste management includes recycling and reducing plastic usage by replacing single-use plastics with environmentally friendly alternatives. Hotel C has incorporated an advanced energy monitoring system and solar power to optimize energy consumption and rainwater harvesting. Its waste management practices involve minimizing plastic and using organic waste for gardening

Objective 2: To examine the strengths of EMA practices in Sri Lankan hotel sector

Hotel A has a strong emphasis on maintaining sustainability across its operations, including reducing its carbon footprint and fostering biodiversity. It also enjoys a positive reputation and ISO certifications, which enhance its image as a leader in sustainable hospitality. Hotel B benefits financially from improved resource efficiency and enjoys an enhanced international corporate image through its Green Globe certification. This hotel has also integrated EMA practices with its strategic goals, strengthening its competitive position. Hotel C has achieved cost savings, improved compliance, and enhanced its eco-friendly image. It fosters a positive

relationship with stakeholders and demonstrates an effective approach to minimizing costs associated with resource consumption.

Objective 02: To examine the weaknesses / issues related to EMA practices in Sri Lankan hotel sector

Hotel A faces challenges like the high costs of implementing eco-friendly technology and training staff in EMA practices. Initial costs remain a significant barrier. Hotel B faces challenges like Initial costs and variability in management's commitment to sustainability present ongoing challenges. Staff training costs also add to the operational burden. Hotel C still faces challenges in maintaining consistent sustainability efforts across all management levels & high initial costs.

Conclusion

This study underscores the value of Environmental Management Accounting (EMA) and its related activities to support sustainability efforts within organizations, regarding water management and energy management. EMA acts as a bridge between environmental responsibility and profitability and gives organizations a way to understand and respond to their environmental responsibilities better. EMA therefore embeds both physical and monetary defense to help organizations achieve business objectives and goals while at the same time reducing organization's ecological footprint.

Therefore, this study concludes that environmental management accounting practices are essential in advancing sustainability in the hotel sector in Sri Lanka. From the evaluation of A, B, and C hotels, energy saving, use of renewable energy, efficient utilization of resources, water management, solid waste management not only decreases environmental effects. These hotels have therefore been able to incorporate and implement environmental management accounting for their operations with an overall efficiency of cost and the environment due to reduced initial costs. They also come across the despite challenges, for example the fixed costs of investing in these practices and including the training costs of the staff, however, such practices have brought an attractive issue though by achieving several awards and certifications at these hotels. According to the research findings, Sri Lankan hotel industry while continuing to play its important role into the sustainability and environmental management, can become a benchmark of responsible tourism, profitable and safe a by sustaining its focus and commitment towards sustainability and environmental management and stewardship. One of the most important findings of this study underscores the significance of environmental management accounting as a strategic tool in achieving long-term sustainability goals in the tourism & hospitality industry.

References

- Bartolomeo, M., Bennett, M., Bouma, J. J., Heydkamp, P., James, P., & Wolters, T. (2000). Environmental management accounting in Europe: current practice and future potential. *European Accounting Review*, 9(1), 31–52. .
<https://doi.org/https://doi.org/10.1080/09638180040793>

- Burritt, R. L. (2004). Environmental management accounting: roadblocks on the way to the green and pleasant land. *Business Strategy and the Environment*, 13(1), 13–32. <https://doi.org/https://doi.org/10.1002/bse.379>
- Harrison, J., Freeman, R. E., & Cavalcanti Sá de Abreu, M. (2015). Stakeholder Theory As an Ethical Approach to Effective Management: applying the theory to multiple contexts. *Review of Business Management*, 858–869. <https://doi.org/https://doi.org/10.7819/rbgn.v17i55.264>
- Janković & Krivačić. (2014). Environmental accounting as perspective for hotel sustainability: literature review. *Tourism and Hospitality Management*, 20(1), 103–120. <https://doi.org/https://doi.org/10.20867/thm.20.1.8>
- Jayasinghe, R., Tsuji, L. J. S., Gough, W. A., Karagatzides, J. D., Perera, D., & Nieboer, E. (2004). Determining the background levels of bismuth in tissues of wild game birds: a first step in addressing the environmental consequences of using bismuth shotshells. *Environmental Pollution*, 132(1), 13–20. <https://doi.org/https://doi.org/10.1016/j.envpol.2004.04.002>
- Schaltegger & Burritt. (2010). Sustainability accounting for companies: Catchphrase or decision support for business leaders? *Journal of World Business*, 45(4), 375–384. <https://doi.org/https://doi.org/10.1016/j.jwb.2009.08.002>
- Yin, R. K. (2017). *Case Study Research and Applications (6th ed.)*. SAGE Publications.

CONSUMER AWARENESS, PERCEPTION AND WILLINGNESS TO PAY FOR GREEN ATTRIBUTES OF HOTELS IN SRI LANKA

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ABSTRACT

This study explores the relationship between consumer awareness, perception, and willingness to pay (WTP) for green attributes in Sri Lankan hotels. A quantitative approach was employed, with data collected from 205 hotel guests via a structured questionnaire. The findings reveal that consumer awareness significantly influences perception, which in turn strongly impacts WTP. Both awareness and perception were found to be significant predictors of WTP, with perception having a stronger effect. The study suggests that hotels should focus on increasing consumer awareness and improving perceptions of green practices. Limitations include the use of convenience sampling, and future research could explore cultural influences on WTP.

Introduction

The hospitality industry plays a pivotal role in global sustainability efforts due to its significant environmental and social impacts (Gössling & Weaver, 2009). In recent years, there has been a growing emphasis on incorporating green practices within hotels to mitigate these impacts. Green attributes in hotels refer to environmentally friendly practices such as energy conservation, water-saving technologies, waste reduction, and the use of sustainable materials (Bohdanowicz & Martinac, 2007). These measures not only reduce environmental footprints but also align with the increasing expectations of eco-conscious consumers (Berezan et al., 2014).

In Sri Lanka, the tourism and hospitality sector is vital for economic growth, but the environmental impact of this sector is significant, as it is heavily dependent on resources like water and energy (Wijethilake, 2017). However, there is a lack of comprehensive research on how consumers perceive the green initiatives of hotels, their awareness of such attributes, and their willingness to pay a premium for these environmentally friendly services. While global studies have explored these dynamics, the cultural and economic contexts of Sri Lanka remain under-researched. Research in other regions has shown that consumer awareness of sustainability practices directly influences their purchasing decisions and willingness to support sustainable initiatives (Baber et al., 2012; Kiatkawsin & Han, 2017).

Studies in developed economies highlight that consumers increasingly prefer hotels with green certifications, and they are willing to pay a premium for such accommodations (Han et al., 2011). A study by Kang et al. (2012) found that consumers in the hospitality industry exhibit a strong willingness to pay more for services that minimize environmental impacts, driven by their awareness of sustainability issues. Additionally, a positive consumer perception of a hotel's green initiatives often translates into increased customer loyalty and a willingness to spend more on eco-friendly products and services (Lee et al., 2010; Robinot & Giannelloni, 2010).

Despite these global trends, the impact of cultural and socio-economic factors in Sri Lanka remains underexplored. Sri Lankan consumers, like their global counterparts, may exhibit varying levels of awareness, perception, and willingness to pay for green attributes depending on demographic factors such as age, income, and education level (Berezan et al., 2014). Studies in similar contexts have revealed that although environmental concern is rising, many consumers in developing countries still lack sufficient awareness of the practical implementation of green initiatives within the hospitality sector (Sharma et al., 2019).

This study seeks to bridge this gap by examining the relationships between consumer awareness, perception, and willingness to pay (WTP) for green hotel attributes in Sri Lanka. The specific objectives of this study are:

1. To evaluate the extent of consumer awareness that affect willingness to pay for green hotel attributes in Sri Lanka.
2. To analyze to what extent the consumer perceptions of the value and importance of these attributes.

By investigating these dynamics, the study will contribute to a deeper understanding of the factors that drive consumer behavior toward sustainable practices in Sri Lankan hotels, a region that has yet to fully explore the intersection of sustainability, consumer expectations, and hospitality.

Methodology

This study employs a quantitative research approach to investigate the relationship between consumer awareness, perception, and willingness to pay (WTP) for green attributes of hotels in Sri Lanka. A structured questionnaire was developed to collect primary data from hotel customers across various regions in Sri Lanka. The questionnaire was designed to assess three key aspects: the level of consumer awareness regarding green practices in hotels, their perceptions of the value and importance of these practices, and their willingness to pay a premium for hotels that adopt sustainable attributes. The survey included both closed-ended questions, which facilitated easy categorization of responses.

The operationalization of this study focuses on three key variables: Consumer Awareness, Perception of Green Attributes, and Willingness to Pay for Green Attributes. Consumer awareness is measured through respondents' familiarity with the concept of eco-friendly hotels, understanding of green practices, and knowledge of environmental certifications like LEED and Green Globe (Han et al., 2011; Bohdanowicz & Martinac, 2007). Perception is assessed by examining the perceived importance and value of green practices, as well as the belief in hotels' responsibility for environmental sustainability (Lee et al., 2010; Kang et al., 2012). Finally, willingness to pay is evaluated by exploring respondents' readiness to pay a premium for green hotels, their price sensitivity, and preference for green hotels over similar non-green alternatives (Robinot & Giannelloni, 2010; Barber et al., 2012).

A sample of 205 respondents was selected using convenience sampling, which allowed for a diverse range of participants. The sample included individuals from different demographic backgrounds, such as varying ages, income levels, educational backgrounds, and travel

frequencies, to ensure a broad representation of the Sri Lankan hotel customer base. The target participants were selected from hotel guests staying in both eco-friendly hotels and conventional hotels to assess differences in perception and willingness to pay for green attributes. Data analysis was performed using SPSS software.

Findings

This study adopts Cronbach's alpha as the measure of reliability. These high reliability coefficients, all above 0.9, (Consumer Awareness: $\alpha = 0.918$, Consumer Perception: $\alpha = 0.941$ Willingness to Pay for Green Attributes: $\alpha = 0.925$) reflect very strong internal consistency among the items measuring each construct.

The correlation analysis revealed significant positive relationships between consumer awareness, perception, and willingness to pay. Specifically, awareness of green attributes was strongly correlated with a positive perception of these attributes ($r = 0.62, p < 0.01$), supporting the hypothesis that consumers are more likely to view green initiatives favorably when they are informed about them. This finding is consistent with previous research by Kang et al. (2012), who found that greater environmental awareness leads to more favorable consumer perceptions of sustainable hotel practices.

The Model Summary indicates a strong impact of the perception of consumers and consumer awareness and the willingness to pay. With an R^2 of 0.866, the model explains 86.6% of the variance in willingness to pay, suggesting a high level of predictive accuracy. The Durbin-Watson statistic of 1.998 indicates no significant autocorrelation in the residuals. The ANOVA results show that the model is statistically significant ($F = 651.599, p < 0.01$), with the independent variables significantly influencing consumers' willingness to pay for green attributes in hotels.

Table 01. Regression Results

Model		Unstandardized Coefficients		Standardized	t statistics	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	.131	.100		1.311	.191
	CA	.560	.053	.545	10.651	.000
	PC	.407	.050	.419	8.188	.000

a. Dependent Variable: WP

Source: Constructed by Authors

The regression analysis (Table 01) demonstrated that both consumer awareness and perception were significant predictors of willingness to pay. The model explained 68% of the variance in willingness to pay ($R^2 = 0.68$), with perception having a stronger influence than awareness. Specifically, consumer perception of the value and importance of green practices had the highest standardized regression coefficient ($\beta = 0.47, p < 0.01$), suggesting that consumers are more willing to pay for green attributes when they perceive these practices as valuable, regardless of their level of awareness. This aligns with findings by Lee et al. (2010), who noted that consumer perception often mediates the relationship between awareness and willingness to pay for sustainable products and services.

Conclusion

This study aimed to examine the relationship between consumer awareness, perception, and willingness to pay for green attributes in Sri Lankan hotels. The objectives were to assess the extent of consumer awareness regarding green practices, analyze consumer perceptions of these practices, and explore the factors influencing their willingness to pay for sustainable hotel services. The findings indicate that consumer awareness has a positive effect on perception, which, in turn, significantly influences willingness to pay. The study revealed that while awareness of basic green practices was relatively high, more advanced practices, such as renewable energy use and eco-certifications, were less recognized. Moreover, consumer perception emerged as a stronger predictor of willingness to pay than awareness alone, emphasizing the importance of how consumers value green initiatives.

The implications of these findings suggest that hotels should focus on raising awareness and enhancing perceptions of their green practices. Educating consumers about the benefits and value of sustainability can lead to increased consumer support and higher willingness to pay. Additionally, hotels should tailor their marketing strategies to target consumers' environmental values and offer tiered pricing to accommodate various income groups. The study is limited by its cross-sectional design, as data was collected at a single point in time. This approach does not account for temporal changes in consumer awareness, perception, or willingness to pay for green attributes. Future research could explore the influence of cultural factors on willingness to pay, conduct longitudinal studies to examine changes over time, or analyze the impact of specific green certifications on consumer behavior in the hospitality sector.

References

- Barber, N., & Kim, Y. (2012). Sustainability and willingness to pay in the hospitality industry. *Journal of Hospitality Marketing & Management*, 21(3), 286–302.
- Berezan, O., Krishen, A. S., & Bujisic, M. (2014). The role of sustainability in the hotel industry: A review of the literature. *Tourism Management Perspectives*, 10, 1-10.
- Bohdanowicz, P., & Martinac, I. (2007). Determinants and benchmarking of resource consumption in hotels—Case study of Hilton International and Scandic in Europe. *Energy and Buildings*, 39(1), 82-95.
- Gössling, S., Hall, C. M., & Weaver, D. B. (2009). Sustainable tourism futures: Perspectives on systems, restructuring, and innovations. *Tourism and Hospitality Research*, 9(3), 119-134.
- Han, H., Hsu, L. T. J., & Sheu, C. (2011). Application of the theory of planned behavior to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management*, 32(2), 489-499.
- Kang, K. H., Lee, S., & Huh, C. (2012). Consumer behavior in green hotels: A model of ecologically conscious behavior. *International Journal of Hospitality Management*, 31(4), 1127-1135.

- Lee, J., Hsu, L., Han, H., & Kim, Y. (2010). Understanding how consumers view green hotels: How a hotel's green image can influence behavioral intentions. *Journal of Sustainable Tourism, 18*(7), 901-914.
- Robinot, E., & Giannelloni, J. L. (2010). Do hotels' "green" attributes contribute to customer satisfaction? *Journal of Services Marketing, 24*(2), 157–169. <https://doi.org/10.1108/08876041011031127>
- Wijethilake, C. (2017). Corporate sustainability and consumer behavior: Evidence from the hospitality sector in Sri Lanka. *International Journal of Hospitality Management, 61*, 1-11.

IMPACT OF FINANCIAL SOCIALIZATION AGENTS ON INVESTMENT DECISIONS; EVIDENCE FROM MANAGEMENT UNDERGRADUATES OF STATE UNIVERSITIES IN SRI LANKA

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ABSTRACT

Financial management practices are important for financial socialization agents as they directly influence the quality of financial guidance and support provided to individuals, particularly students. This paper aims to find the impact of financial socialization agents on the investment decisions of management undergraduates of state universities in Sri Lanka. The Independent variables of this study are financial socialization agents (parents, media, peers & school) while the dependent variable is investment decisions. Quantitative data was collected through a structured questionnaire using the positivism research philosophy. The population is comprised of management undergraduates from state universities in Sri Lanka. By using stratified sampling technique, the sample size is 150. Multiple regression analysis was used to test the statistics. The findings indicate that family plays a crucial role in investment decisions. This study provides a novel look at the impact of financial socialization agents on investment decisions of management undergraduates of state universities in Sri Lanka concerning their financial behavior and educational aspects.

Introduction

Financial socialization agents are the people and institutions that influence an individual's financial knowledge, attitudes, and behaviors. The most common financial socialization agents include parents, media, peers, and school. These agents influence how people learn about money management, savings, investing, and financial decision-making from a young age. Financial socialization agents can have a significant impact on university students' investment decisions. University students who are exposed to financial education courses are more likely to have a better understanding of investing and make more informed investment decisions. The study's scope is designed to provide a thorough analysis of how financial socialization agents impact investment decisions among management undergraduates in Sri Lankan state universities. The major research problem of this is the lack of investment intention among undergraduates. However, previous researchers suggested that many undergraduates have low levels of financial literacy (Castro-Gonzalez, 2014; Martínez, 2013, as cited in Alvarez and Tippins (2019)). The lack of investment intention correlates with a lack of understanding regarding investment opportunities. This problem is a multifaceted issue influenced by financial socialization agent (parents, media, peers & school). The study intends to close this gap by assessing the impact of financial socialization agents on the investment decisions of management undergraduates.

Hira et al. (2013) stated that the parents are considered instrumental in teaching children the basic aspects of consumption. Hira et al. (2013) argued that the media has a significant influence on many purchasing decisions, including the selection of investment goods, as part

of the process of financial socialization. Alvarez and Tippins (2019) stated that peers have a significant role as socialization agents for young consumers since they have the biggest influence on their shopping habits.

Methodology

A quantitative research approach was used since it allows for the systematic investigation of the impact of financial socialization agents on investment decisions among management undergraduates at state universities in Sri Lanka. This approach involves collecting numerical data through structured surveys or questionnaires. Positivism research philosophy was used because it aligns with the quantitative research design employed to explore the impact of financial socialization agents on investment decisions. The target population for this study comprises management undergraduates enrolled in state universities across Sri Lanka. Stratified sampling technique was used to select the sample. Stratified sampling was employed in this study to ensure the representation of key subgroups within the population of management undergraduates of state universities in Sri Lanka. Factors such as level of study, socioeconomic background, and exposure to financial education can influence investment decisions (Lusardi & Mitchell, 2014), stratified sampling technique allowed for a more nuanced understanding of these variables and their effects on financial behavior. By using this method, the sample size was 150 for this current study. A structured questionnaire was developed to gather quantitative data. Independent variables included financial socialization agents. Financial socialization agents included parental, media, peer, and school influences. The dependent variable is the investment decisions. All these variables were measured with five questions per variable. The following conceptual framework is used to understand the relationship between independent and dependent variables.

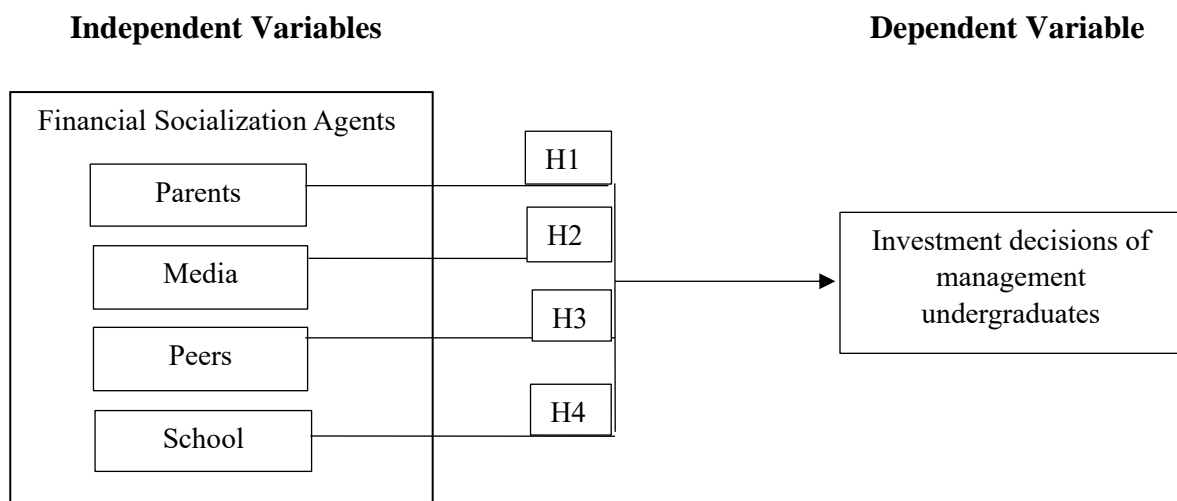


Figure 01: Conceptual Framework

Source: Developed by the authors

Findings

The researcher has found out the demographic details of respondents like gender, level of study, and the university in which they are represented. According to the frequency analysis, there were 70% of respondents were female while the rest of 30% of respondents were male. Among

all respondents 18% of respondents were in Level 1, 11.3% of respondents were in Level 2, 30% of respondents were in Level 3 and the rest of 40.7% of respondents were in Level 4. When considering university, most of the respondents were undergraduates of Wayamba University. It represents 66%.

According to the descriptive analysis, the mean value and standard deviation of parental influence is 4.35 and .452 respectively. The mean value and standard deviation of media influence are 3.76 and .574 respectively. The mean value and standard deviation of peers' influence is 3.92 and .579 respectively. The mean value and standard deviation of school influence are 3.77 and .793 respectively. Among all these variables parental influence has shown the highest mean value for organizational effectiveness.

Reliability analysis of parental influence, media influence, peer influence, school influence, and investment decisions were 0.706, 0.722, 0.802, 0.887, and 0.717 respectively. If reliability values (Cronbach's Alpha values) over 0.70 are frequently recommended (Alvarez & Tippins, 2019). In this study, all the values are higher than 0.7, and the reliability of the survey instrument was ensured. Also, according to the normality analysis, the data set is normally distributed.

Table 01: Pearson's Correlation Analysis

	PI	MI	PRI	SI	ID
PI	1				
MI	.174*	1			
PRI	.134	.664**	1		
SI	.166*	.609**	.504**	1	
ID	.265**	.392**	.391**	.321**	1

Source: Survey data

Based on the regression analysis all the independent variables were associated with investment decisions and this relationship was statistically significant too. Parental influence, media influence, peers influence and school influence demonstrated positive and significant associations (0.265, 0.392, 0.391 and 0.321) with the investment decisions (dependent variable).

Table 02: Results of Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	1.977	.381		5.193	<.001		
PI	.199	.076	.194	2.611	.010	.964	1.038
MI	.136	.087	.168	1.557	.122	.456	2.195
PRI	.170	.079	.213	2.148	.033	.543	1.842
SI	.046	.055	.079	.849	.397	.609	1.643

Source: Survey data

Based on the results of regression analysis the regression equation can be developed as;

$$ID = \beta_0 + \beta_1PI + \beta_2MI + \beta_3PRI + \beta_4SI + \mathcal{E} \dots \dots \dots (1)$$

$$ID = 1.977 + .199PI + .136MI + .170PRI + .046SI + \mathcal{E} \dots \dots \dots (2)$$

The above equation discussed that the investment decisions of management undergraduates was influenced by the parents, media, peers, and school. The above equation shows the relationship between financial socialization and investment decisions. All independent variables (parents, media, peers, & school has a positive relationship with the dependent variable (investment decisions). Among these variables, parental influence was mostly impacted on the investment decisions of management undergraduates. According to the study by (Nomlallal, 2021), majority of the respondents believe that family influence has an impact on their financial socialization.

The R-squared value is 0.226. It indicated that approximately 22.6% of the variability in the dependent variable, investment decisions can be explained by the independent variables in this model. According to the ANOVA results, it can be confirmed that the model is statistically significant.

If the probability value of the study of the probability value is less than 0.05 or the t-statistics is greater than the t-table then the proposed hypothesis is accepted (Suka et al., 2022).

Conclusion

According to the results, independent variables (parents, media, peers & school) have a positive impact on investment decisions. Parental influence and peer influence are accepted according to the regression analysis. Ultimately, it emphasizes the strong positive relationship between parental influence and investment decisions.

Based on the findings several recommendations can be made to enhance financial literacy and informed investment behavior among undergraduates. These were enhancing parental engagement in financial education, leveraging media for financial literacy campaigns, promoting peer learning and mentorship programs & integrating financial education into the curriculum. However, the study faced certain limitations including the size of the sample and its lack of representativeness. Many studies on this topic are relatively small, which limits the generalization of the findings. Further exploration of socialization agents & cross-cultural comparisons are implications for future researchers. Furthermore, strengthen financial literacy programs in universities, utilize technology and digital platforms for financial learning & broader sample diversity suggesting a need for more comprehensive data collection in future research.

References

- Adiputra, G., Bangun, N. A., & Graceilla, B. (2024). The Influence of Financial Socialization, Overconfidence and Mental Accounting on Investment Decisions. 28(1), 200-221. <https://doi.org/http://doi.org/10.24912/jm.v28i101792>
- Alvarez, E., & Tippins, S. (2019). Socialization Agents That Puerto Rican College Students Use to. *Journal of Social Change*, 11(1), 75-85. <https://doi.org/https://doi.org/10.5590/JOSC.201911.1.07>
- Castro-Gonzalez, K. C. (2014). Financial literacy and retirement planning: Evidence from Puerto Rico. *Global Journal of Business Research*, 8, 87-98.

- Hira, T., Sabri, M. F., & Loibl, C. (2013). Financial socialization's impact on investment orientation. *International Journal of Consumer Studies*, 29-35.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44.
<https://doi.org/http://doi.org/10.1257/jel.52.1.5>
- Nomlallal, B. (2021). Financial Socialization of Accounting Students in South Africa. *International Journal of Finance & Banking Studies*, 1-15.
- Suka, L. B., Fachrudin, K. A., & Silalahi, A. S. (2022). The Influence of Financial Attitude and Financial Socialization Agents of Financial Behavior with Financial Self Efficacy as Moderating Variables. *International Journal of Research and Review*, 9(1), 588-595.
<https://doi.org/https://doi.org/10.52403/ijrr.20220168>



Track 08

Multidisciplinary

IMPACT OF ARTIFICIAL INTELLIGENCE ON ACADEMIC PERFORMANCE: EMPIRICAL STUDY FROM WAYAMBA UNIVERSITY OF SRI LANKA

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ABSTRACT

This study examines the impact of AI adoption on academic performance, focusing on the perceived benefits and challenges among management undergraduates at Wayamba University of Sri Lanka. Utilizing a quantitative approach, data was collected via questionnaires from 250 students across four departments. Results reveal that AI tools enhance learning through personalized support, while challenges such as over-reliance and reduced critical thinking persist. Gender moderates the relationship between AI usage and benefits, highlighting differing impacts across groups. The findings underscore the need for structured education on AI tools, emphasizing benefits, risks, and governance to optimize AI's role in higher education.

Introduction

AI-powered learning tools are revolutionizing education and other industries, offering numerous benefits and directly impacting the quality of education. These tools perform tasks such as question generation, text summarization, and text improvement. The impact of these tools has been felt by both lecturers and students. During and after the COVID-19 pandemic, AI tools have rapidly transformed learning methods and online learning techniques. However, these tools can negatively or positively impact academic performance, critical thinking, problem-solving skills, and creativity. This study aims to bridge the gap between AI and management education, identify current gaps, and guide future research by exploring the impact of AI on academic performance from students' perspectives.

Silvia Pacheco-Mendoza (2023) stated that AI, like machine learning and natural language processing, helps improve student performance and engagement. Also Interest in Higher Education has increased due to the application of AI, which is greatly impacted by the advancement of information and communication technology (Al-Tuwayrish, 2015). Anyhow, there is no any special or the generally accepted definition for the Artificial Intelligence. In commonly it can say; the ability of computer systems to imitate the behavior of the human brain can be defined as Artificial Intelligence. AI, akin to algorithms, involves acquiring external data, learning through training, and achieving goals. It provides systematic computing capabilities in higher education, offering human-like answers and personalized support for students. AI is applied across various educational disciplines like science, engineering, mathematics, and management. Further, Ebebuwa-Okoh (2010) said “Researchers are becoming increasingly concerned about the idea of academic achievement, particularly in light of the fact that undergraduate academic performance is declining.” academic performance reflects the level of performance in a particular industry. Further, Wan Maziah Wan Ab Razak (2019) conducted research in order to identify the relationship and the main factors that affect to the academic performance of the undergraduates of higher education institutes. Also they recommended some strategies and ideas that teachers need to create more ideas on the teaching

process. Based on the age, gender, financial status, Ebeuwa-Okoh (2010) examines the influence on academic performance.

The primary objective of this research is to examine the impact of AI adoption on academic performance, specifically analyzing perceived benefits related to performance enhancement. The study aims to explore the relationship between AI usage and academic achievement. By employing a quantitative approach, the research seeks to provide a comprehensive understanding of the user experience regarding AI tools and their effectiveness in the educational context.

Materials and Methods

This study utilizes a quantitative research approach, to collect data from a diverse group of students in the Faculty of Business Studies and Finance. It employed surveys strategy to gather firsthand accounts and quantitative data, facilitating a comprehensive analysis of AI's impact on academic performance. The research framework focuses on independent variables related to AI usage and dependent variables that include the benefits and challenges of AI.

Population and Sample Selection

This study focuses on management undergraduates at Wayamba University of Sri Lanka, covering all four departments. A random sample of 250 undergraduates was selected, ensuring a diverse representation of the population.

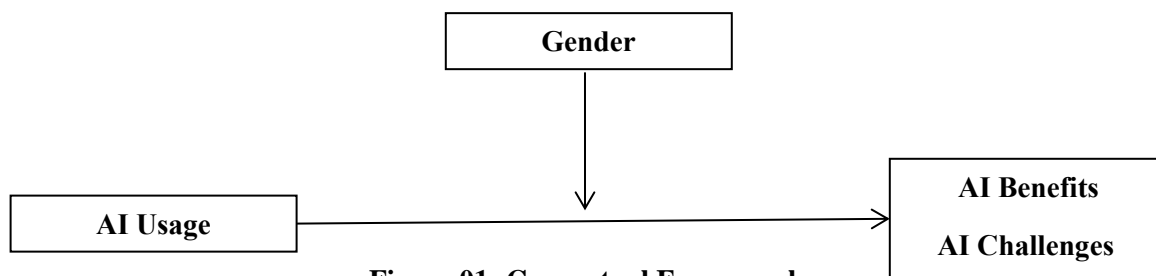


Figure 01: Conceptual Framework

Source: Constructed by Authors

Research Hypothesis

The study sought to address one broad research objective namely to examine the impact AI adoption and perceived benefits, particularly those related to performance enhancement, is expected to be positively significant. Therefore, the hypotheses have been developed to examine whether there is an impact between the AI and academic performance.

- H1: There is a significant association between AI adoption and the perceived benefits of AI.
- H2: There is a significant association between AI adoption and the perceived challenges of AI.
- H3: There is a significant association between AI adoption and the perceived benefits of AI with moderation impact of Gender.
- H4: There is a significant association between AI adoption and the perceived challenges of AI with moderation impact of Gender.

Data Collection

Data collected through using quantitative method. In quantitative method used to collect data by providing questionnaire to 250 undergraduates of Wayamba University Management Undergraduates Students by covering all 4 departments using convenient sampling technique. This method ensured that the sample was representative of different strata within the student population, including various academic levels, program types, and gender distributions, thereby enhancing the generalizability of the findings across diverse student demographics.

The questionnaire was divided into two main sections: the first section collected demographic data, while the second addressed the core objectives and hypotheses of the study. To ensure clarity and decisiveness in responses, the questionnaire employed a four-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree and 5 = Strongly Disagree.

Data Analysis Methodology

Table 01: Data Analysis Methodology

Objective	Methodology	Data	Analysis Method
To examine the effects of AI tools (Chat GPT, Bard AI, Quillbot) in the performance of undergraduate students.	Quantitative	Primary data through Questionnaire	Partial Least Squares Regression
To examine the benefits and pitfalls in adopting AI in higher education	Quantitative	Primary data through Questionnaire	Descriptive

Source: Constructed by Authors

Results and Discussion

Based on preliminary results, Artificial Intelligence (AI) tools greatly improve learning through personalized recommendations, research facilitation, and increased accessibility for students with different needs. The report does, however, also point out certain possible negative effects, such as an over reliance on technology that could result in a loss of critical thinking and teamwork abilities. Concerns about biased results and academic dishonesty are also addressed, highlighting the necessity of a balanced integration of AI in academic context.

Table 02: Reliability and Convergent Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
AIU	0.934	0.945	0.944	0.654
AIB	0.962	0.965	0.967	0.710
AIC	0.974	0.976	0.977	0.795

Source: Constructed by Authors

Analysis was conducted to evaluate the validity and reliability of AIU, AIB and AIC by using Cronbach's alpha and composite reliability (rho_a and rho_c). The results are presented in table 02. The accepted criteria for these parameters are 0.70 minimum thresholds. For the AIU construct, a Cronbach's alpha of 0.934 indicates excellent internal consistency. The composite reliability values, rho_a = 0.945 and rho_c = 0.944, further confirm the reliability, surpassing the commonly accepted threshold of 0.70. The Cronbach's alpha values of AIB and AIC are

0.962 and 0.974, respectively also their composite reliability values (AIB: rho_a = 0.965, rho_c = 0.967; AIC: rho_a = 0.976, rho_c = 0.977) demonstrate strong reliability and a high level of internal consistency. The Average Variance Extracted (AVE) used for measure the Convergent Validity of the variables and the minimum threshold of the AVE is 0.50. The analysis results represent the AVE for the AIU is 0.654; AIB is 0.710 and for AIC is 0.795 by confirming their convergent validity.

Structural Model Analysis

The structural model analysis was conducted to understand the relationships between AI Usage (AIU) and two key outcomes: AI Benefits (AIB) and AI Challenges (AIC). This analysis considered path coefficients, t-statistics, p-values, R-square values, and f-square values to evaluate the strength and significance of these relationships. The table presents the Variance Inflation Factor (VIF) values for the predictor variable AIU when used in separate regression models with AIB and AIC as dependent variables. In both cases, the VIF value is 1.000, indicating that AIU does not exhibit multicollinearity with any other predictors in the models. A VIF of 1.000 suggests that AIU is perfectly uncorrelated with other variables, ensuring that the regression coefficients are estimated without any inflation due to multicollinearity. This means that the models involving AIU as a predictor for AIB and AIC are stable, and the estimates for AIU's effects are reliable and unaffected by multicollinearity concerns.

Table 03: Structural Model Analysis

Path	Coefficient (O)	T-statistic	P-value	2.5% CI	97.5% CI	Significance
AIU -> AIB	0.735	13.020	0.000	0.616	0.836	Highly Significant
AIU -> AIC	0.585	5.964	0.000	0.379	0.763	Highly Significant
Gender x AIU -> AIB	0.235	2.980	0.003	0.083	0.393	Significant
Gender x AIU -> AIC	0.226	1.756	0.079	-0.023	0.483	Significant
Quality Criteria	AIB	AIC				
R-square	0.788	0.572				
R-square Adjusted	0.784	0.563				

Source: Constructed by Authors

This analysis focuses on understanding the role of Gender as a moderator in the relationships between AIU and the outcomes AIB and AIC. By examining the path coefficients, significance levels, confidence intervals, R-square values, and effect sizes, we can assess how Gender influences these relationships. 4.2.4 Path Coefficients and Significance The direct effect of AIU on AIB is positive and highly significant, with a path coefficient of 0.735 (t-statistic = 13.020, p-value = 0.000). Similarly, AIU also has a significant positive effect on AIC, with a path coefficient of 0.585 (t-statistic = 5.964, p-value = 0.000). When considering Gender as a moderator, the interaction effect of Gender and AIU on AIB is significant, with a path coefficient of 0.235 (t-statistic = 2.980, p-value = 0.003). This indicates that Gender positively moderates the relationship between AIU and AIB, suggesting that the impact of AIU on AIB is stronger for certain gender groups.

Furthermore, the interaction effect of Gender and AIU on AIC is significant, with a path coefficient of 0.226 (t-statistic = 1.756, p-value = 0.079). This suggests a moderating role of Gender on the AIU-AIC relationship.

Confidence Intervals

The confidence intervals provide further insights into the stability and significance of these relationships. The interaction effect of Gender and AIU on AIB is confirmed as significant, with a confidence interval ranging from 0.083 to 0.393. This confirms the positive moderating role of Gender on the AIU-AIB relationship. For the AIU-AIC relationship, the interaction effect's confidence interval ranges from -0.023 to 0.483. Since this interval includes zero, it further supports the conclusion that the moderating effect of Gender on this relationship is statistically significant.

Quality Criteria

The R-square values indicate the proportion of variance in the outcomes that the model explains. For AIB, the R-square value is 0.788, suggesting that the model explains 78.8% of the variance in AIB, which is quite strong. For AIC, the R-square value is 0.572, indicating that 57.2% of the variance in AIC is explained by the model.

Gender serves as a significant moderator in the relationship between AIU and AIB, enhancing the impact of AIU on AIB for specific gender groups. However, its moderating effect on the AIU-AIC relationship is less clear, with evidence pointing to a marginal effect that is not statistically significant. The model effectively explains a substantial portion of the variance in AIB and AIC, and the interactions involving Gender provide valuable insights into the dynamics of these relationships.

Conclusion

The hypotheses suggest that there is a considerable correlation between the use of AI software and the advantages and challenges of AI. Furthermore, the use of AI can be greatly impacted by AI tools and methodologies. Ultimately, it can be said that the relationship between the advantages and challenges of AI was considerably moderated by the users' gender. Based on these findings, it is advised that undergraduate students receive a suitable education, given the advantages and risks of using AI in the classroom. Undergraduate students will also benefit from receiving adequate instruction on the various AI tools and platforms. It also recommends that appropriate governance be imposed on these instruments by Higher Education Institute officials, along with the inclusion of pertinent laws and regulations.

References

- Al-Tuwayrish, R. K. (2015). An Evaluative Study of Machine Translation in the EFL Scenario of Saudi Arabia. *Advances in Language and Literary Studies*, 7(1), 6.
- Ebenuwa-Okoh, E. (2010). Influence of Age, Financial Status, and Gender on Academic Performance among Undergraduates. *Journal of Psychology*, 1(2), 99-103.
- Silvia Pacheco-Mendoza, C. G. (2023). Artificial Intelligence in Higher Education: A Predictive Model. *Education Science*, 13(10), 990. <https://doi.org/10.3390/educsci13100990>

Wan Maziah Wan Ab Razak, S. A. (2019). Academic Performance of University Students: A Case in a Higher Learning Institution. *KnE Social Sciences*, 1296-1304.
<https://doi.org/10.18502/kss.v3i13.4285>

UNDERGRADUATES' SATISFACTION REGARDING ONLINE LEARNING: AN EMPIRICAL STUDY ON DEPARTMENT OF ACCOUNTANCY UNDERGRADUATES OF WAYAMBA UNIVERSITY OF SRI LANKA

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ABSTRACT

During the Covid-19 pandemic, universities globally transitioned to online education and this is an empirical research paper that investigated the satisfaction of accounting undergraduates in online learning at Wayamba University of Sri Lanka. It has evaluated four major variables: quality of learning design, technology factors, interaction and communication, student engagement. The researcher conducted quantitative surveys on 133 students from different hometowns across Sri Lanka. The data was analyzed using IBM SPSS to conduct various statistical techniques including descriptive analysis, correlation analysis, multiple regression analysis. The results demonstrated significant positive relationships among its four independent variables with online learning student satisfaction.

Introduction

The term “online learning” describes the kind of learning that individuals do for professional or academic purpose completing an academic course or program online in instead of traditional ways, using the web as a learning classroom (Alquash, 2018; Nafrees, 2020). Because it has so many benefits, online learning is presently one of the most used learning approaches, more specifically in the higher education. Reducing travel time and expenses, expanding access to and opportunities for collaboration with knowledgeable professionals worldwide, giving students the freedom to access courses whenever it's convenient for them, and allows subject and content modifications are just a some of these advantages mentioned (Finch and Jacob, 2012). After Covid-19 pandemic, higher education has noticed a tremendous expansion of online learning options. Sri Lankan universities also transformed their traditional class-room-based physical education system to the online learning platform. How students feel about their educational experience is reflected of their satisfaction about online learning. It is regarded as one of the five components along with access, faculty satisfaction and learning effectiveness for the online learning consortium's evaluation of the caliber of online learning. (Moore & Kearsley, 2005)

This quantitative study aimed to analyze Undergraduates Satisfaction regarding Online Learning. For that data collect from Accountancy Undergraduates of Wayamba University of Sri Lanka. The required for online learning becomes essential to assist today's student's learning and educational trends. The growth of the internet and its influence on the educational system has created a significant factor that is considered as a great help in the world of education. Sri Lanka is also rapidly adopting online learning systems. Therefore, investigating student satisfaction with online learning is very important. This research can be narrowed down

to “To what extent do level of satisfaction of undergraduates in the department of Accountancy in Wayamba University of Sri Lanka have on regarding Online Learning?”

Methodology

A quantitative approach is applied through the survey strategy to collect data. This kind of survey was conducted on a sample of 133 undergraduate students from the Accountancy Department. The data collection has been done using a structured questionnaire that ensures a systematic and standardized collection. The research design is cross-sectional, which reflects the conditions of accountancy education and students' perceptions at the present time. The study makes use of SPSS software to analyze the data. The regression and correlation analyses are some of the methods the research uses in testing the relationships among its variables to make meaningful conclusions about the framework of education and its impacts. In this way, the research also hopes to add to the literature by offering an analysis that is informed on issues of effectiveness and perceptions of accountancy education, based upon a sound philosophical and methodological framework.

In the research dependent variable is “Students’ satisfaction regarding online learning” whereas the independent variables of this study include the quality of online learning design, interaction and communication, technology factors and students’ engagement. Based on the propose relationship between the dependent and independent variable, the following conceptual framework is developed for this study.

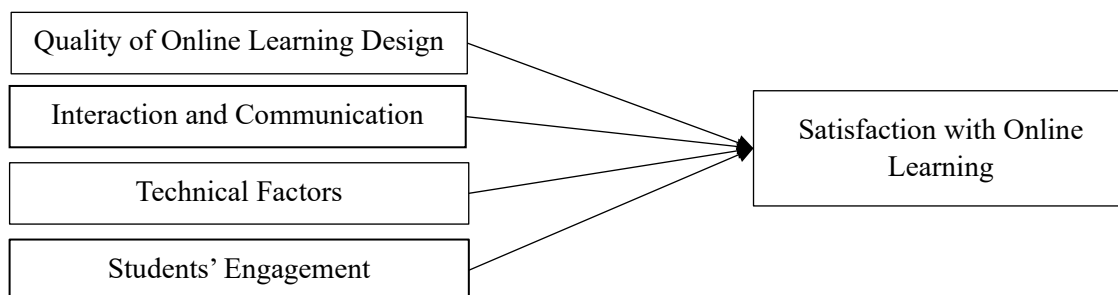


Figure 01: Conceptual Framework

Source: Developed by Researchers based on empirical evidence

Based on the conceptual framework, researchers propose four hypotheses as follows;

H1: There is a significant relationship between quality of online learning design and level of satisfaction with online learning of accountancy undergraduates.

H2: There is a significant relationship between the interaction & communication and the level of satisfaction with online learning of accountancy undergraduates.

H3: There is a significant relationship between technology factors and the level of satisfaction with online learning of accountancy undergraduates during an internship.

H4: There is a significant relationship between students’ engagement and the level of satisfaction with online learning of accountancy undergraduates.

Findings

Reliability analysis was conducted using Cronbach's alpha to assess the internal consistency of the measurement scales. Cronbach's alpha is a widely used measure of scale reliability, with values above 0.7 generally considered acceptable (Nunnally & Bernstein, 1994). Normality was assessed using skewness and kurtosis values. Skewness values between - 2 and +2 and kurtosis values between -3 and +3 are considered acceptable for assuming normality (Byrne, 2010).

Table 01: Skewness and Kurtosis Values

	Satisfaction with online learning	Quality of learning design	Interaction & Communication	Technology Factors	Student Engagement
Skewness	-.521	-.518	-.557	-.496	-.991
Std. Error of Skewness	.210	.210	.210	.210	.210
Kurtosis	-.608	-.630	-.727	-.653	1.064
Std. Error of Kurtosis	.417	.417	.417	.417	.417

Source: Survey data, (2024)

The results in Table 01 show that all variables have skewness values ranging from -0.991 to -0.496 and kurtosis values ranging from -0.727 to 1.064. These values fall well within the acceptable ranges, indicating that the data is approximately normally distributed for all variables. This finding supports the use of parametric statistical techniques in further analyses, as the assumption of normality is satisfied for the dataset.

The strongest correlations were observed between Satisfaction with Online Learning and the other variables. Quality of Online Learning Design showed the highest correlation with (r = 0.908), closely followed by Interaction & Communication (r = 0.906) and Technical Factors (r = 0.883). These strong positive correlations suggest that improvements in these areas are strongly associated with increased student satisfaction. Student Engagement demonstrated moderate positive correlations with all variables, including (r = 0.486). This indicates that while engagement is positively related to satisfaction, the relationship is not as strong as with the other factors.

Conclusion

This study underscores the critical factors influencing satisfaction of online learning. The analytical results demonstrated significant positive relationships among its four independent variables with online learning student satisfaction. Interaction and communications and satisfaction emerged as the strongest predictors of satisfaction, followed closely by the quality of online learning design. Satisfaction also had a significant, albeit smaller, positive relationship with technical factors and student engagement. The results underline the multilayered nature of satisfaction in online learning environments and the significance of a well underpinned learning experience and the balance of the above variables in influencing the students' sense of engagement. The findings of this thesis point to the importance for universities to invest in creating quality based online courses, particularly in relation to their influence on student satisfaction, which in turn is heavily linked to quality based online learning design. That can include helping faculty learn course online pedagogy, employing instructional

designers, or updating course content and course delivery on a regular basis. This research provides solid contributions to the field of how learner satisfaction is linked to online learning in the context of accounting education in Sri Lanka. It improves on the existing theoretical framework and contributes to the understanding of online learning dynamics in a variety of specialized educational settings by validating the significance of key factors in contributing to student satisfaction.

While this study provides valuable insights, it is important to acknowledge its limitations. The research was conducted in a single department at one university in Sri Lanka, which may limit the generalizability of the findings. The cross-sectional nature of the study also prevents the examination of how satisfaction may change over time. Expanding the study to include multiple universities and disciplines to enhance generalizability. Conducting longitudinal studies to examine how satisfaction with online learning changes over the course of a program. Incorporating qualitative methods to gain deeper insights into students' experiences and perceptions of online learning. Investigating the impact of cultural factors on online learning satisfaction in diverse contexts. Examining the relationship between satisfaction with online learning and academic performance.

References

- ACM. Nafrees1, *. A. (2020). Awareness of Online Learning of Undergraduates during COVID 19 with special reference to SouthEastern University of Sri Lanka. *Journal of Physics: Conference Series*, 1712(1).
- Alqurash, E. (2018). Predicting student satisfaction and perceived learning within online learning environments. *Distance Education*,
<https://doi.org/10.1080/01587919.2018.1553562>.
- AS Samarakoon#, V. L. (2022). Right to Internet Access for the Development of Online Education in Sri Lanka during Covid-19: A Comparative Analysis of Finland, France and India.
- Baber, H. (2020). Determinants of Students' Perceived Learning Outcome and Satisfaction in Online Learning during the Pandemic of COVID19 . *Journal of Education and e-Learning Research*. 7(3), 285-292.

EXPLORING THE IMPACT OF FINANCIAL STRESS ON MENTAL HEALTH AND WELLBEING: A FOCUS ON FIXED INCOME EARNERS

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ABSTRACT

This paper aims to examine the impact of financial stress on mental health and well-being of householders, and identify the specific sources of financial stress that influence these outcomes. The study primarily employs quantitative research method, with a qualitative component incorporated through data collection via open-ended questionnaires from 300 fixed income earners. The findings revealed that financial stress has a significant impact on mental health and well-being, with financial anxiety and worry being the most significant dimension. This study explores the relationship between financial stress and mental health outcomes among fixed income earners, providing new insights through a comprehensive review of existing literature.

Introduction

Financial stress is the distressing feeling of not meeting obligations, essential needs, and maintaining funds (Davis & Mantler, 2004). It can vary depending on perception and resources. In Sri Lanka, fixed income earners face economic and political challenges, leading to increased financial pressures (Harischandra, 2023; Department of Census and Statistics, 2023). This study investigates the relationship between financial stress and mental health among fixed income earners in Sri Lanka. The research aims to fill the knowledge gap and provide valuable insights for policy makers, employers, and stakeholders to develop targeted interventions and support programs for these individuals.

Sri Lankan householders face different economic pressure (Department of Census and Statistics, 2023), and it is important to understand how these stressors affect households' mental health and well-being. However, there is a lack of comprehensive research examining the relationship between financial stress and mental health outcomes in Sri Lankan householders. Furthermore, there is a limited knowledge about the specific dimensions of economic stress that significantly influence mental health and well-being in the Sri Lankan context. Therefore, there is a need for research to examine the impact of economic stress on mental health and well-being, identify specific aspects of economic stress and examine potential control factors in the Sri Lankan context. Addressing this problem provides valuable insights for designing targeted interventions and support system to improve the mental health and well-being of Sri Lankan householders facing financial stress. Therefore, this research examines "what is the relationship between financial stress faced by house holders on mental health and well-being?" And "How does the financial stress faced by householders affect their mental health and well-being?" With special reference to fixed income earners in Sri Lanka.

According to the previous literature, financial stress is the distressing feeling of not being able to meet financial obligations, meet essential needs, and maintain sufficient funds for basic expenses (Davis & Mantler, 2004). It can vary depending on individuals' perception of the

causes and resources available to manage it. Studies often overlook the distinction between financial stress and financial anxiety, focusing on specific financial constraints. Previous research on the relationship between financial stress and well-being can be divided into four main areas: financial resources, economic difficulties, financial stress itself, and strategies to cope with these challenges. Previously different authors found that financial difficulties and mental health issues are closely linked, with individuals facing financial challenges being twice as likely to experience mental health issues. Also, financial hardships can negatively impact both physical and mental health, with low-income individuals more likely to exhibit psychopathology and mental disorders.

The research questions of this study are as follows;

1. How does the financial stress impact on sleep quality of the Sri Lankan householders?
2. How does the financial stress impact on psychological functioning of the Sri Lankan householders?
3. How does the financial stress impact on social functioning of the Sri Lankan householders?
4. How does the overall financial stress impact on overall mental health of the Sri Lankan householders?

Methodology

The research philosophy is positivism, with a focus on objective measures. The research approach is deductive, testing and validating existing theories. The research methodology is structured and systematic, using qualitative and quantitative methods. Surveys will be used for data collection due to their efficiency and standardized questions. By using convenience sampling, the sample size has determined as 300 fixed income earners in Sri Lanka. The primary data was collected using open-ended questionnaire for the purpose of this study. The researcher collected qualitative data by adding one open ended question which is “what more to say about financial stress you are experience in your life?” In to the questionnaire. The researcher analyzed the quantitative data for completeness and accuracy, assuming all respondents provided true and complete data. Statistical analysis was performed using spss and descriptive statistics and regression analysis has been used to analyze dependent and independent variables. The regression model can be expressed as follows;

$$MH = \beta_0 + \beta_1 EH_1 + \beta_2 DS_2 + \beta_3 LS_3 + \beta_4 FA_4 + \beta_5 SL_5 + \varepsilon \dots \dots \dots (1)$$

(*MH – Mental Health , EH –Economic Hardship , DS – Debt Situation,LS – Limited Savings & Emergency Funds, FA – Financial Anxiety or Worry , SL – Standard of Living*)

The collected qualitative data was categorized (labeled) and organized manually by the researcher.

Findings

The findings from both quantitative and qualitative studies underscore financial stress faced by householders in Sri Lanka has negatively impacted on their mental health and well-being. This suggests that Sri Lankan householders are experiencing considerable financial stress and it has negatively impacted on their mental health and well-being. Furthermore, this study found that

financial stress significantly impacts on sleep quality, psychological functioning and social functioning.

Table 01: Beta Coefficients^a

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.248	0.118		2.101	0.036
	Economic Hardship	0.193	0.035	0.215	5.534	0.000
	Debt Situation	0.178	0.031	0.217	5.709	0.000
	Limited Savings	0.159	0.045	0.175	3.573	0.000
	Financial Anxiety	0.284	0.047	0.291	6.048	0.000
	Standard of Living	0.141	0.048	0.141	2.911	0.004

a. Dependent Variable: ME

Source: Perera, (2024)

According to the above results, the study reveals that five independent variables, including economic hardship, debt situation, limited savings and emergency funds, financial anxiety or worry, and standard of living, significantly impact the mental health and well-being of fixed income earners in Sri Lanka. Financial anxiety or worry had the greatest impact, followed by economic hardship. Standard of living had the least impact, with a 0.141 increase in impact. Accordingly, the regression equation between financial stress and overall mental health can be expressed as follows;

Equation:

$$MH = 0.248 + 0.193 EH_1 + 0.178 DS_2 + 0.159 LS_3 + 0.284 FA_4 + 0.141 SL_5 + \varepsilon \dots \dots \dots (2)$$

The analysis showed that people who have experienced economic hardship, Debt situation, financial anxiety or worry, limited savings and emergency funds and standard of living are more likely to have considerable impact on psychological functioning and social functioning. But this also suggests that people who have experienced only economic hardships, Debt situation and financial anxiety or worry have considerable impact on sleep quality. However, Zhang, et al., 2023, found that individuals who perceive their living standards to be lower tend to experience poorer sleep health. But in this study the researcher found that even though there is a positive relationship between standard of living and sleep quality this impact not significant.

The qualitative analysis also suggests that peoples who have financial stress due to inability to cover basic needs, difficulty to accumulating savings, debt situation, economic downturn and lower living standards have negatively impact on their mental health and well-being. Specially, they have expressed that financial stress has impact on not only their mental health (poor sleep quality, impact on relationships, worry and anxiety) but also their physical health (headache, back pain, etc..). Ponnet and Wouters (2014) as cited in Santiago et al. (2012), Wadsworth and Achenbach (2005) also found that experiencing financial hardship throughout one's life has a detrimental impact on both physical and mental health.

Conclusion

The objective of this paper is to explore the relationship between financial stress experienced by householders and its effects on their mental health and well-being, as well as to identify

specific sources of financial stress that contribute to these impacts. The research is grounded in a positivist philosophy, emphasizing objective measures to derive conclusions. A deductive research approach is employed, aiming to test and validate existing theories related to financial stress and mental health. The methodology is structured and systematic, integrating both qualitative and quantitative methods to provide a comprehensive understanding of the issue. Surveys are utilized for data collection, chosen for their efficiency and the ability to standardize questions across participants. The sample consists of 300 fixed-income earners in Sri Lanka, selected through convenience sampling. To gather qualitative insights, an open-ended question was included in the questionnaire.

The quantitative analysis revealed that overall financial stress has a significant positive relationship with overall mental health and well-being. This suggests that peoples who are experienced financial stress have considerable impact on their mental health and well-being. The qualitative analysis also suggests that peoples who have financial stress due to inability to cover basic needs, difficulty to accumulating savings, debt situation, economic downturn and lower living standards have negatively impact on their mental health and well-being. Specially, they have expressed that financial stress has impact on not only their mental health (poor sleep quality, impact on relationships, worry and anxiety) but also their physical health (headache, back pain, etc..). Ponnet & Wouters, 2014 as cited in Santiago et al., 2012; Wadsworth & Achenbach, 2005 also found that experiencing financial hardship throughout one's life has a detrimental impact on both physical and mental health.

Collectively, the findings from both quantitative and qualitative studies underscore financial stress faced by householders in Sri Lanka has negatively impacted on their mental health and well-being. This suggests that Sri Lankan householders are experiencing considerable financial stress and it has negatively impacted on their mental health and well-being. This also found that previous research studies; extensive research has consistently demonstrated an adverse association between unfavorable financial circumstances and mental well-being; financial struggles can negatively impact mental well-being.

The findings may have implications for policymakers, financial institutions, and mental health professionals in developing interventions and support systems to mitigate the negative effects of financial stress on mental health and well-being. The research aims to identify specific aspects of financial stress and potential control factors in the Sri Lankan context, providing valuable insights for designing targeted interventions and support systems to improve the mental health and well-being of Sri Lankan householders facing financial stress.

Even though the study used both quantitative and qualitative research methods, the qualitative data has been collected only by adding an open-ended question to the questionnaire. And also, the qualitative data was collected only from 64 respondents. Furthermore, the research findings depend on the responses collected from respondents, who are believed to be given the true and correct information. Therefore, the accuracy of the research and findings depend on the respondents and their responses.

References

- Bialowolski, P., Bialowolski, D. w., Lee, M. T., Chen, Y., Vanderweele, T. J., & McNeely, E. (2021). The Role of Financial Conditions for Physical and Mental Health. Evidence from a Longitudinal survey and insurance claim data.
- Dackehag, M., Ellegard, L.-M., Gerdtham, U.-G., & Nilsson, T. (2018). Debt and Mental Health: new insights about the relationship and the importance of the measure of mental health. *European Journal of Public Health*, 29(3), 488-493.
- Davis, C. G., & Mantler, J. (2004). The Consequences of Financial Stress for Individuals, Families, and Society.
- Department of Census and Statistics. (2023). Household survey on Impact of Economic Crisis - 2023. DCS.
- Harischandra, P. K. (2023). *The State of the Sri Lankan Economy Challenges, Policies and Outlook As Reflected in the Annual Report 2022*. Central Bank of Sri Lanka.
- Hassan, M. F., Hassan, N. M., Kassim, E. S., & Said, Y. M. (2021). Financial Wellbeing and Mental Health: A Systematic Review. *Estudios de Economia Aplicada*, 39(4), 1133-3197.
- Heartward Strategic. (2022). *Money and Mental Health*. Heartward Strategic.
- Ponnet, K., & Wouters, E. (2014). Stress and Mental Health in Families With Different Income Levels: A Strategy to Collect Multi-Actor Data. *JMIR Research Protocols*, 3(1).
- Scott, A. J., Webb, T. L., St James, M. M., Rowse, G., & Weich, S. (2021). Improving sleep quality leads to better mental health: A meta analysis of randomised controlled trials. *ELSEVIER*.
- Zhang, B., Wang, X., Liu, S., Zhang, M., Zhu, W., & Ding, H. (2023). The Relationship Between Self-assessment living standard and mental health among the older in rural china: the mediating role of seep quality. *BMC Public Health*.

IMPACT OF FOREIGN EMPLOYMENT TOWARDS CHANGING LIFESTYLES OF SRI LANKAN HOUSEHOLDS

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ABSTRACT

This study investigates the impact of foreign employment on the lifestyles of Sri Lankan households, focusing on economic, social, and emotional dimensions. Using a qualitative approach, data were collected via semi-structured interviews to gather data from expatriates and their families, and analyzed through thematic analysis. Findings emphasize that remittances improved financial stability and living standards, but emotional strain, family disruptions, and social challenges were significant negative outcomes. This study highlights the overlooked socio-cultural and emotional impacts of foreign employment, emphasizing the need for mental health support, gender-sensitive policies, and reforms to enhance expatriates' well-being.

Introduction

Foreign employment plays a significant role in shaping Sri Lanka's economy and society. It involves individuals leaving their homeland to work abroad, primarily driven by economic instability, unemployment, poverty, and aspirations for better living conditions. Remittances, defined as foreign-earned money sent back to families, serve as a lifeline for many Sri Lankan households, contributing to improved living standards and overall economic growth. Despite its financial benefits, foreign employment also presents significant challenges, such as emotional stress, family separations, and social disruptions, which require deeper exploration.

The research problem lies in the limited understanding of the socio-cultural and emotional impacts of foreign employment on Sri Lankan households. Existing studies predominantly focus on its economic benefits, overlooking how prolonged absences, dependency on remittances, and reintegration challenges reshape family dynamics and lifestyles (Siriwardhana et al., 2015). Furthermore, disparities in remittance distribution exacerbate regional inequalities, while dependency on foreign earnings discourages local economic participation. This research gap necessitates an examination of the less visible, but deeply impactful, aspects of foreign employment.

The objectives of this study are to investigate the factors driving Sri Lankans toward foreign employment, the benefits derived, the challenges faced, and the coping mechanisms adopted by individuals and their families. It aims to understand the complex interplay between economic opportunities abroad and the lifestyle changes experienced by those left behind. A brief review of the literature reveals that foreign employment, while economically beneficial, poses socio-cultural challenges. Remittances support family finances but often lead to emotional stress, stressed relationships, and social disparities. Migrant workers are often separated from their families for extended periods, which can lead to emotional stress and strain on family relationships (Ukwatta, 2010). Previous studies highlight the economic significance of this phenomenon but fail to capture its nuanced effects on personal and family life. Addressing this

gap, the study adopts a qualitative approach to provide an in-depth understanding of these lifestyle transformations and inform sustainable social policies.

Key theories

Foreign Employment

- i. Human Capital Theory
- ii. Dependency Theory
- iii. Network Theory

Remittance

- i. The Push-Pull Theory
- ii. Dual labour market theory
- iii. The Guest Worker Theory

Changing Lifestyles

- i. The Health Belief Model
- ii. Social Cognitive Theory

Table 01: The Summary of the Key Empirical Evidence

Author, Year	Title	Variables used in the Research	Population and Theories used Sample size	Research model	Methods of data analysis
Paranavithana, 2014	Do Workers' Remittances Cushion Economic Growth in Sri Lanka?	X = Workers' remittances Y = Economic growth	Using annual time series data covering over the 1977-2012 period.	Capital Accumulation Theory, Human Capital Theory	The growth model Estimation of Unit Root Test and Cointegration Test
Parahara Withanalage Niroshani Anuruddika Kumari , 2019	Analysis of motives and the impact of foreign remittance on financial development, poverty and income inequality: empirical evidence from Sri Lanka	X = Factors influencing impact of remittances on poverty reduction Y = Poverty reduction	Uncountable Population, Between 1975 and 2016 reports (IMF, CBSL, ICRG, & HIES reports)	Theories of poverty, Dual labour theory, Network theory	ARDL model Test of Serial Correlation and Stability (ADF Statistics , PP Test Statistics, ARDL Model .etc)
Kageyama, 2008	Extent of poverty alleviation by migrant remittances in Sri Lanka	X = Remittances Y = Poverty alleviation	Uncountable, 90 migrant households (Sample)	Conflict Theory, and Theory of Migration	N/A N/A
Morgan Glucksman 2017	The Rise of Social Media Influencer Marketing on Lifestyle Branding: A Case Study of Lucie Fink	X = Brain drain Y = Economic collapse	Uncountable	The Guest Worker Theory, Social Cognitive Theory	The Socioecological Model Documentation

Source: Constructed by the Authors

Methodology

This study employs an interpretivist philosophy to explore the subjective experiences of Sri Lankan households impacted by foreign employment. An inductive, qualitative approach is used, with in-depth interviews and thematic analysis capturing personal narratives and patterns. A cross-sectional time horizon offers a snapshot of the phenomenon, while non-probability sampling (Judgmental sampling and Convenience sampling) selects 100 households for both structured telephone conversations and in-depth interviews with open-ended questions.

Conceptual Framework:

The conceptual framework is used to indicate the relationship between the dependent and independent variables involved in the study. In this study, the dependent variable is Lifestyle Changes, and the independent variable is foreign employment-related dimensions. The conceptual framework for this research is designed to understand the complex relationship between foreign employment and the changing lifestyles of Sri Lankan households. The framework encompasses various factors that influence individuals' decisions to seek opportunities abroad, the benefits and challenges associated with foreign employment, and the overall impact on social and cultural aspects.

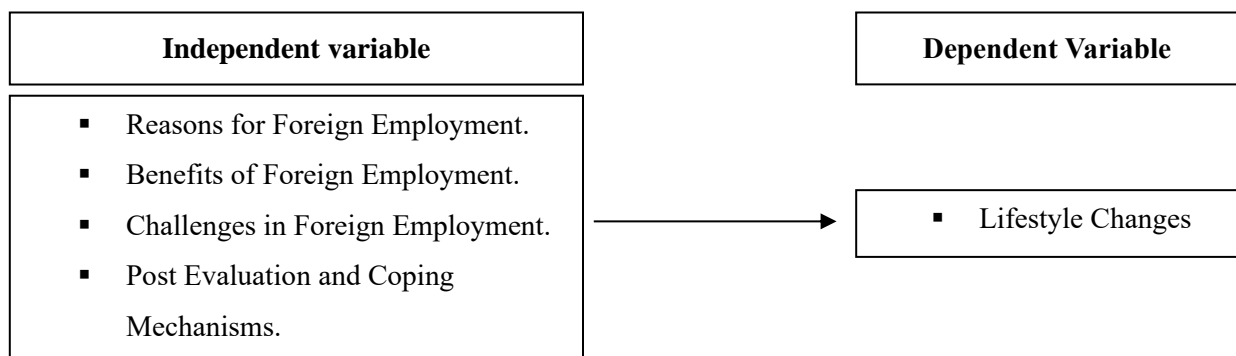


Figure 01: Conceptual Framework Developed by the Researcher

Source: Constructed by the Authors

Findings

Economic Contribution of Remittances

Empirical studies affirm the immense economic contribution of remittances to Sri Lanka, enhancing household living standards, financial security, and investments in education, health, and housing, particularly in rural areas.

Nuanced Economic Realities

This study revealed that while remittances improve household finances, expatriates often face personal financial struggles due to high living costs in host countries, highlighting an economic imbalance between workers and their families.

Social and Psychological Pressures

Workers often experience significant psychological pressure to remit money regularly, influenced by societal expectations, causing stress and emotional stress overlooked in most empirical studies.

Unpredictability of Economic Outcomes

Financial success from foreign employment varies significantly based on factors like the host country's labour laws and industry, with some workers facing exploitation, low wages, and dissatisfaction.

Changing Social Perceptions

The study highlights contrasting perceptions of expatriates, where financial gains elevate family status, yet less-skilled workers often face marginalization and stigma in host countries and at home.

Cultural and Identity Challenges

Expatriates frequently struggle with cultural dissonance and fractured identities, feeling disconnected from both host societies and home communities, a theme underexplored in empirical studies.

Coping Mechanisms and Resilience

Respondents emphasized the importance of maintaining family connections through communication, forming support networks, and participating in cultural and religious activities to cope with emotional and psychological challenges abroad.

Impact on Family Dynamics

The absence of a key family member due to foreign employment often shifts household roles, creating both economic and relational changes within families, further complicating traditional dynamics.

Holistic Understanding

This study underscores that foreign employment is not merely an economic transaction but a deeply personal and emotional experience, with social and psychological dimensions often neglected in empirical analyses.

Conclusion

This study provides an in-depth understanding of the dual impact of foreign employment on Sri Lankan households, emphasizing both its financial benefits and emotional costs. On one hand, remittances have significantly enhanced financial security, improved living standards, and provided better access to education and healthcare for many families. These economic gains have been instrumental in elevating the quality of life for households that rely on foreign employment.

However, the emotional and psychological toll on families left behind is equally significant and cannot be overlooked. Prolonged absences of key family members disrupt traditional roles, creating emotional voids and stressing relationships. Women, in particular, bear a disproportionate burden, either as expatriates dealing with stress and cultural adjustments or as primary caregivers managing households in their partners' absence.

The study also highlights disparities based on job types and regions of employment. Workers in low-skilled and precarious positions face greater challenges and fewer benefits compared to those in stable, high-paying roles. Ultimately, while foreign employment remains a vital economic resource, the associated emotional stress requires urgent attention. Addressing these psychosocial impacts is essential to ensure families can effectively manage both their finances

and emotional well-being, creating a more balanced approach to the true costs and benefits of foreign employment.

From the findings and conclusion of this study, the recommendations are as follows,

Support Systems for Local Families

There is a strong need for targeted support services for expatriate families, including counselling services, social support groups, and community-based initiatives, to provide emotional and psychological comfort to bereaved spouses and children and ease the stresses of prolonged separation.

Policy Reforms on Labour Rights and Conditions

A concerted effort should be made to improve labour conditions, ensuring that foreign workers receive fair wages, decent living conditions, and proper labour protections to minimize the economic and psychological risks they face.

Mental Health and Counseling for Foreign Employees

Individual counselling, peer and support groups, and helplines can help expatriate workers overcome loneliness, cultural adjustment, and the emotional trauma of separation from their families.

Empowering Women in Foreign Employment

Special programs should be planned for women who have gone abroad or are alone in this country in the absence of their partner, focusing on financial literacy, mental health, and legal assistance to address the social and emotional complications of overseas employment.

Improvement of Education and Vocational Training

The Sri Lankan government should invest in educational and vocational training to prepare people for higher-skilled, better-paying jobs abroad, ensuring expatriates have access to improved skills and working conditions that reduce the risks of low-skilled foreign employment

References

- Karunaratne, H. D., & I. D. (2018). Impact of Foreign Remittances on Poverty Reduction in Sri Lanka. *Hosei Economic Review*, 05-40.
- A. K. (2008). SOUTH ASIA. In A. Kageyama, *Extent of poverty alleviation by* (pp. 01-20). Tokyo: SAGE Publications.
- D. R., & S. M. (2007). *Increasing the Macroeconomic Impact of Remittances on Development*. Washington D.C: Development Prospects Group .
- Paranavithana, H. (2014). Do Workers' Remittances Cushion Economic Growth in Sri Lanka? *International Journal of Business and Social Science*, 5-13.
- Prabal , K. D., & D. R. (2012). *Impact of Remittances on Household Income, Asset and*. Taylor and Francis.
- Sami, B. M., & Mohamed, S. A. (2012). Through Which Channels Can Remittances Spur . 15-24.

- Skeldon, R. (2011). Of Skilled Migration, Brain Drains. *Social Science Research Network (SSRN)*, 01-28.
- Siriwardhana, C., Wickramage, K., Jayaweera, K., Adikari, A., Weerawarna, S., Van Bortel, T., Siribaddana, S., & Sumathipala, A. (2015). Impact of Economic Labour Migration: A Qualitative Exploration of Left-Behind Family Member Perspectives in Sri Lanka. *Journal of Immigrant and Minority Health*, 17(3), 885–894. <https://doi.org/10.1007/s10903-013-9951-0>
- Ukwatta, S. (2010). Sri Lankan female domestic workers overseas: Mothering their children from a distance. *Journal of Population Research*, 27(2), 107–131. <https://doi.org/10.1007/s12546-010-9035-0>

EFFECTS OF SELF-SERVICE TECHNOLOGY QUALITY ON CUSTOMER SATISFACTION: A STUDY OF COMMERCIAL BANKS IN GAMPAHA DISTRICT, SRI LANKA

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ABSTRACT

This study examines the effect of Self-Service Technology (SST) quality on customer satisfaction in commercial banks in Gampaha District, Sri Lanka. Data were collected qualitatively through semi-structured interviews with 100 customers from four banks, exploring five SST quality dimensions, and analyzed using thematic analysis for insights. Findings highlight that ease of use and convenience enhance satisfaction, while reliability, responsiveness, and security issues reduce trust. Localized challenges like cash shortages and infrastructure limitations also affect customer satisfaction. This research offers unique insights into SST quality challenges in Sri Lanka's banking sector, emphasizing localized strategies for improvement.

Introduction

The study explores the effect of Self-Service Technology (SST) quality on customer satisfaction in the banking sector, focusing on commercial banks in the Gampaha District, Sri Lanka. Self-service technologies (SSTs), such as ATMs, Internet banking and Mobile banking apps, have transformed service delivery by enabling customers to perform transactions independently.

The research problem is that while self-service technologies (SSTs) have become increasingly popular in the banking industry, there is a lack of understanding of the effect of SST quality on customer satisfaction in the context of banks in Sri Lanka.

Despite extensive global research on SST quality, there is a notable gap in understanding its impact on customer satisfaction within the unique context of Sri Lanka. Existing studies predominantly use quantitative methods, neglecting the emotional and experiential aspects of customer perceptions. Furthermore, localized challenges such as infrastructure limitations and cultural differences remain underexplored, necessitating qualitative research to provide deeper insights into SST quality and customer satisfaction in emerging markets (Boon-itt, 2015). This research addresses this gap by providing localized insights into the challenges and opportunities of SST adoption in the region.

The objective of the study is to investigate how key SST quality dimensions affect customer satisfaction in commercial banks in the Gampaha district. Specifically, it aims to identify the primary quality dimensions, assess their effect on customer satisfaction, and provide practical recommendations for enhancing SST services.

A review of existing literature reveals that SST quality positively correlates with customer satisfaction globally. However, studies emphasize quantitative approaches, leaving a gap in qualitative research exploring customer experiences. Dimensions like ease of use and

convenience are widely acknowledged for their positive impact, while security and reliability often emerge as critical issues.

This study contributes to the literature by adopting interpretivism, a qualitative approach to examine SST quality dimensions, offering practical and theoretical insights relevant to the unique socio-economic context of Sri Lanka's banking industry. It aims to guide banks in optimizing their SST offerings to enhance customer satisfaction.

Key theories:

- Technology Acceptance Model (TAM)
- Service Quality Model (SERVQUAL)
- E-Service Quality Model
- Customer Satisfaction Model
- Self-Service Technology (SST) Quality Framework

Table 01: The Summary of the Key Empirical Evidence

Author/s Name and Publication Year	Title	Variable Used in the Research Y= X=	Theories Used	Method of Data Analysis	Major Findings
Sakun Boon-itt, 2015	Managing self-service technology service quality to enhance e-satisfaction.	Y = E-satisfaction X = Technology readiness (TR), Service Quality of Self-Service Technologies (SQ-SSTs)	Technology Acceptance Model (TAM), Self-Service Technology (SST) Quality Adoption Model	Confirmatory Factor Analysis (CFA), Structural Equation Modeling (SEM)	The study found that service quality dimensions significantly influence e-satisfaction, with security and assurance being critical for user confidence in digital banking self-service technologies.
Buddhika, H. K. T. and Gunawardana T.S.L.W.	The Impact of E-Banking on Customer Satisfaction in Private Commercial Banks, Sri Lanka.	Y= E-Banking Practices (ATM, Internet Banking, Mobile Banking, Credit Cards, Debit Cards, telephone Banking) X= Customer Satisfaction	Structural Equation Modeling (SEM), American Customer Satisfaction Model, Thailand Customer Satisfaction Model	Confirmatory Factor Analysis (CFA), Partial Least Squares Structural Equation Modeling (PLS-SEM), Statistical Package for the Social Sciences (SPSS), Path Coefficients and t-values.	The study found that ATM, internet, online, credit, and debit banking positively impact customer satisfaction, while telephone and mobile banking have negative effects.

A.P.P. Perera and H.M.S. Priyanath, 2018	Impact of internet banking service quality on customer satisfaction: An empirical investigation of customers in Sri Lanka	Y = Customer Satisfaction, X = Internet Banking Service Quality	Service Quality Theory, E-Service Quality Theory, Customer Satisfaction Theory	Partial Least Squares Structural Equation Modeling (PLS-SEM), Measurement Model Evaluation, Multi-collinearity Check, Structural Model Assessment.	The study found that high Internet banking service quality significantly enhances customer satisfaction, impacting retention and profitability in the Sri Lankan banking sector.
R. A.S. Weerasiri & K.C. Koththage, 2016	The Impact of Automated Teller Machines (ATMs) Service on Customer Satisfaction: A Study Based on State Banks in Sri Lanka.	Y = Customer Satisfaction, X = ATM Service Quality	Service Quality Theory	Regression, ANOVA, T-test, Frequency Analysis	The study found that ATM service quality significantly impacts customer satisfaction, with key factors including security, ease of use, and demographic influences on satisfaction levels.
Matthew L. Meuter, Amy L. Ostrom, Robert I. Roundtree, & Mary Jo Bitner, 2000	Self-service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounter	Y = Customer Satisfaction, X = Self-Service Technologies (SSTs)	Critical Incident Technique	Qualitative analysis of critical incidents	The study identifies key factors influencing customer satisfaction and dissatisfaction with self-service technologies, highlighting the importance of technology design and user experience in service encounters.

Source: Constructed by Authors based on the literature

Methodology

This study adopts an interpretivism approach to explore customers' subjective experiences with SSTs in four commercial banks in Gampaha district, Sri Lanka. The research question investigates how SST quality influences customer satisfaction, contributing to both theoretical and practical understanding of customer behavior in the banking context.

A qualitative strategy was employed to collect non-numerical data, offering detailed insights into customer perceptions. The study focused on individual bank customers in the Gampaha District who use SSTs from the Bank of Ceylon, Peoples' Bank, Sampath Bank, and Commercial Bank. A sample of 100 customers was selected using random and purposive sampling techniques, with 25 customers from each bank.

Data were gathered through semi-structured interviews, providing a flexible and in-depth exploration of customers' experiences, challenges, and expectations. The researcher approached randomly visiting customers sitting near the lobby of the four selected banks. During the semi-structured interviews, notes were taken in a notebook and observations were made while discussing with the clients. Also, utterances made by customers were recorded with their permission. A cross-sectional time horizon was used to ensure efficiency and timely insights. Primary data were analyzed using thematic analysis to identify patterns and themes, making this approach suitable for addressing the research question and generating actionable recommendations.

Conceptual framework:

The conceptual framework examines the relationship between self-service technology quality (independent variable) and customer satisfaction (dependent variable) in the banking sector. Self-service technology quality is the variable that manipulates or assesses the potential cause. The self-service technology quality dimensions include ease of use, reliability, responsiveness, security and convenience. Customer satisfaction is the variable that measures the outcome or result. It reflects the overall satisfaction of customers with the self-service technologies provided by the banks.

Self-Service Technology Quality

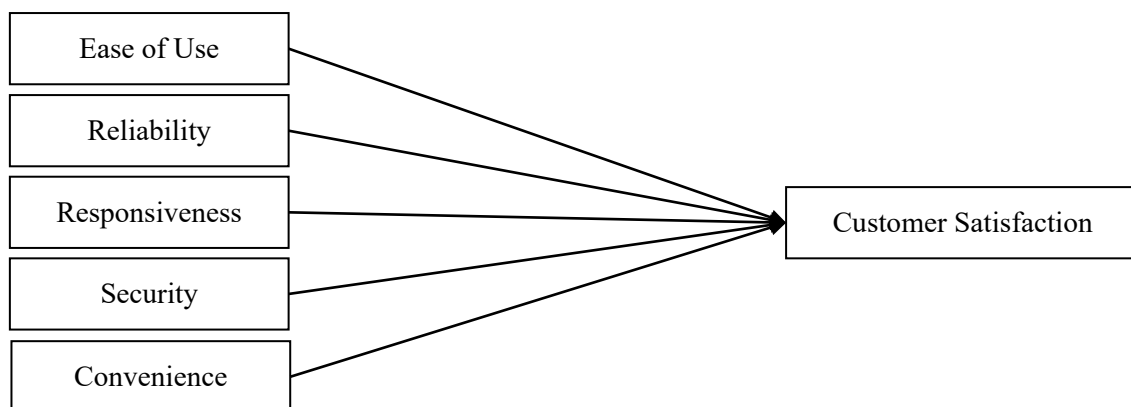


Figure 01: Conceptual Framework Developed by the Researcher

Source: Constructed by the Authors

Findings

The findings of this study provide an in-depth understanding of how SST quality impacts customer satisfaction, with a focus on five key dimensions: ease of use, reliability, responsiveness, security, and convenience.

- **Ease of Use:** Consistent with previous research, this study highlights the importance of ease of use as a crucial determinant of customer satisfaction. Customers from the Bank of Ceylon and People's Bank praised the user-friendly interfaces and intuitive navigation of SSTs.
- **Reliability:** Trust in Self-Service Technologies (SSTs) depends heavily on their consistent performance. Customers from the Bank of Ceylon and Sampath Bank

emphasized the reliability of ATMs and mobile banking apps, which they identified as critical for maintaining trust.

- **Responsiveness:** Delays in SMS notifications and prolonged transaction processing times emerged as significant sources of frustration. Unlike earlier studies, this research uncovers the emotional toll of delayed responsiveness on customer satisfaction. Most of the responsiveness issues were emphasized by customers from the Bank of Ceylon and People's Bank.
- **Security:** Customers expressed concerns over unauthorized access and data breaches, highlighting the emotional impacts of security vulnerabilities. This study provides a deeper understanding of how such experiences influence the trust and satisfaction of customers.
- **Convenience:** While SSTs offer 24/7 accessibility, localized issues like cash shortages, long queues, and infrastructure limitations negatively impact convenience, presenting challenges unique to Sri Lanka.

This study demonstrates that addressing these dimensions is crucial for improving customer satisfaction, offering nuanced insights beyond traditional quantitative approaches.

Conclusion

This study concludes that the quality of SST significantly influences customer satisfaction in the banking sector. Focusing on collected data from customers of the Bank of Ceylon, People's Bank, Sampath Bank, and Commercial Bank in Gampaha district, Sri Lanka, it highlights strengths and weaknesses in self-service technologies (SSTs). The study confirms that ease of use, reliability, responsiveness, security, and convenience are critical dimensions shaping customer perceptions. While customers appreciate the convenience and ease of use, problems like system failures and slow responses can cause frustration.

Theoretically, this research contributes to the understanding of emotional and behavioral aspects of self-service technology (SST) usage, offering insights that extend beyond quantitative findings. Practically, it underscores the importance of improving SST reliability and security, alongside enhancing responsiveness, to foster trust and satisfaction. This research provides practical insights for banks to refine their technological and support frameworks. These insights reflect the unique contextual challenges faced by Sri Lankan banks in leveraging SSTs for superior customer experiences.

The following recommendations are based on the findings and conclusion of this study.

- Banks should improve the user interface of SSTs by simplifying logins, introducing biometric options, and streamlining transaction processes to ensure customer satisfaction.
- Address technical issues like ATM failures and unexpected charges to build trust and foster customer loyalty.
- Banks should speed up SMS alerts and transaction processing times for mobile banking to meet customers' needs for quick service.

- Implement advanced security measures, such as faster alerts for unauthorized transactions to enhance customer's confidence and safety.
- Address issues like cash shortages in ATMs and long lines, ensuring SSTs are available during busy times.
- Deploy additional ATMs to improve accessibility and reduce customer inconvenience.
- Regularly collect feedback to identify areas for continuous improvement and adapt services accordingly.
- Identify common SST issues and share resolutions or troubleshooting methods via the bank's website.
- Strengthen customer support and technology solutions to enhance the overall performance of SST services.

References

- Boon-itt, S. (2015). Managing self-service technology service quality to enhance e-satisfaction. *International Journal of Quality and Service Sciences*, 7(4), 373–391. <https://doi.org/10.1108/IJQSS-01-2015-0013>
- Firdaus, A. (2020). Customer Satisfaction Mediates the Effect of Self Service Technology on Customer Loyalty in of Islamic Bank E-Banking Services in Indonesia. In *Iltizam Journal of Shariah Economic Research*, 5(2).
- Marfo, J. S., Owusu-Bio, M. K., & Asamoah, P. (2022). The Effect of Self-Service Technologies on Customer Experiences in Banking. *International Journal of Online Marketing*, 12(1), 1–18. <https://doi.org/10.4018/ijom.299404>
- Mohideen Bawa, M. I. (2010). *Determinants of retail customer satisfaction in banking industry in the Eastern Province of Sri Lanka*. <https://www.researchgate.net/publication/235645695>
- Perera, A. P. P., & Priyanath, * H M S. (2018). Impact of Internet Banking Service Quality on Customer Satisfaction: An Empirical Investigation of Customers in Sri Lanka. In *International Journal of Management*, 8. <http://www.ijmra.us>, <http://www.ijmra.us>, <http://www.ijmra.us>,
- Tslw, G. (n.d.). *The Role of Business Intelligence in Shaping Organizations in Emerging Economies*. <https://www.researchgate.net/publication/344341923>
- Weerasiri, S. (2016). *The Impact of Automated Teller Machines (ATMs) Service on Customer Satisfaction: A Study Based on State Banks in Sri Lanka*. <https://www.researchgate.net/publication/306182322>
- Yee-Wan LAI, F. (2003). *The Behavioral Consequences of Service Quality in Hong Kong Banking Industry: Does Market Segmentation Matter, Service Quality and Behavioral Consequences i Acknowledgement*.

SATISFACTION OF UNDERGRADUATES ON INTERNSHIP PROGRAM: AN EMPIRICAL STUDY ON DEPARTMENT OF ACCOUNTANCY UNDERGRADUATES IN WAYAMBA UNIVERSITY OF SRI LANKA

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ABSTRACT

Assessing satisfaction is vital for successful internship programs. This evaluates the satisfaction of accountancy undergraduates at Wayamba University with their internship program through learning opportunities, supervision quality, work environment, and relevance of tasks assigned. Primary data collected through survey strategy from 162 interns were analyzed using IBM SPSS. The results indicated significant positive relationships between independent variables and satisfaction. Learning opportunities had the most substantial impact, followed by task relevance, supervision quality, and work environment. The regression model explained over half the variance in satisfaction. Recommendations are provided to foster the development of future industry professionals.

Introduction

The internship is a crucial portion in degree programs that bridge the gap between academic and corporate world. To become professional accountants, accountancy undergraduates should enhance their professional skills through supervised practical experience which is internships (Thompson, 2011). The current study assessed the internship programme from the viewpoint of undergraduate interns. This study was limited to fourth-year accountancy undergraduate interns in Wayamba University as it is situated in somewhat rural area, it is essential to examine the level of satisfaction of undergraduates on internship programme, yet research in this area remains limited. The primary objective was to assess the satisfaction of accountancy undergraduates incurred on internships. Apart from that this is conducted to assess the impact of learning opportunities, supervision quality, work environment, and relevance of task assigned on satisfaction. Accordingly, this is conducted to answer the problem of “What is the level of satisfaction of accountancy undergraduates of Wayamba University have on their internship programme?” Evaluations may lead to declining negative opinions on internships by taking correct actions (Kim & Park, 2013). Satisfaction is an expression of the level of gratification on fulfillment of consumption which may be over-fulfilment or under-fulfilment (Ismail et al., 2021). On the other hand, according to Bukaliya (2012), an internship is a period in which students are employed in an organization under smooth supervision which leads to make learning goals based on working experience during internship attachment.

Methodology

As the study is tested an existing theory, positivism approach is applied here. It generated and explored four hypotheses as H₁: There is a significant relationship between learning opportunities and satisfaction of undergraduates, H₂: There is a significant relationship between the supervision quality and satisfaction of undergraduates, H₃: There is a significant

relationship between the work environment and satisfaction of undergraduates and finally, H4: There is a significant relationship between the relevance of task assigned and satisfaction of undergraduates. As this conducted while answering the problem statement identified and four research questions of how learning opportunities, supervision quality, work environment and relevance of task assigned impact on satisfaction on internship, this study is used deductive approach.

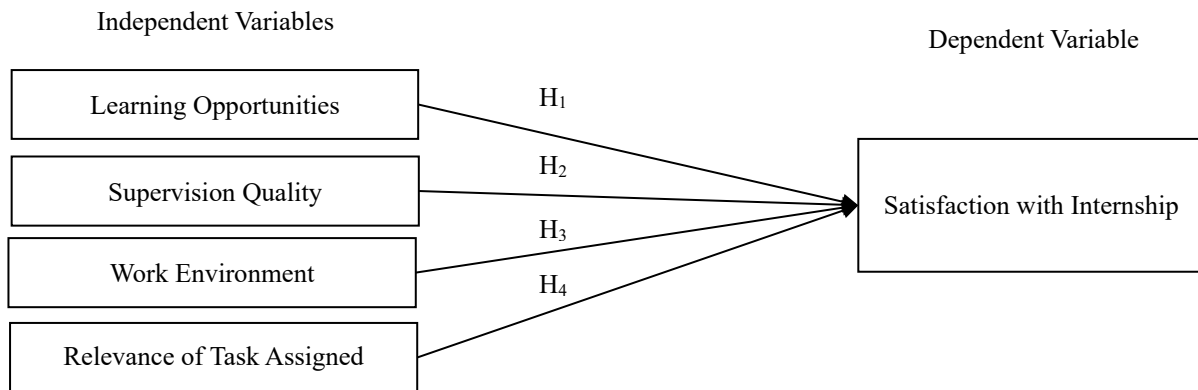


Figure 01: Conceptual Framework

Source: Karunarathna, 2024

Though the primary data collected at a specific point in time by applying cross-sectional approach through survey strategy (self-administered questionnaire) from accountancy interns are used to quantify and generalize the results from sample to population of interest, it can be stated that this has employed quantitative strategy. Based on the philosophy and strategies selected, the choice is mono method. It has identified that, final year accountancy undergraduate intern in Wayamba University as the unit of analysis. Here, the population is 282 of accountancy undergraduate interns in Wayamba University. Using Morgan's table, 163 students were identified as sample selected using simple random sampling technique which allows to make strong statistical assumptions about the overall population. Further, to measure hypothesis regression model is used and IBM SPSS statistical package is used to analyze data.

Findings

The analysis has been done with the data collected from 162 participants. According to frequency analysis, all demographic variables were valid. The same results have been derived in the study by Jean et al. (2012), though the university introduced many internship opportunities, majority had their own placement. According to Dissanayaka (2016), somewhat low allowance received by interns in public practice organizations compared to others while interns in audit firms obtain some non-financial benefits.

In reliability analysis, all variables including overall reliability were reliable by exceeding their minimum value of 0.7 (0.742, 0.800, 0.786, 0.804, 0.816, 0.930 respectively for Satisfaction with Internship (SI), Learning Opportunities (LO), Supervision Quality (SQ), Work Environment (WE), Relevance of Task Assigned (RT), and Overall Reliability. Cronbach's Alpha value should be greater than its minimum value of 0.7 to be acceptable (Hair et al., 2012 as cited in Ismail et al., 2021).

The suitability of data for factor analysis is measured through Kaiser –Meyer –Olkin (KMO) test which test the strength of the partial correlation between variables. The test's minimum value should be 0.5 (Vijayamohan & Rjumohan, 2020). Bartlett’s Test of Sphericity has been applied and it ensured that the validity is established in between variables. KMO-MSA was in the meritorious category. Also, Bartlett’s Test of Sphericity for the correlation matrix was highly significant (Sig. = 0.000). Accordingly, it was clear that the inter-correlation matrix was factorable. In addition to that, analysis of criterion validity indicates that validity is established and no problem with validity by showing a higher computed value than the table value of Pearson-correlation-table (Computed value > Table value). All the computed values were greater than table value of 0.159 and all the indicators were significant (Sig. = 0.000). Graphical methods of histogram, boxplot and Q-Q plots has been performed to test normality and to identify outliers. Accordingly, the analysis hadn’t influenced by outliers and normality has been ensured in the data set.

The mean values of all indicators were greater than 4.0 demonstrating that nearly all of the participants agreed on independent variables and satisfaction with internship. It says respondents have rated this research as being of high quality. SI1 has the highest standard deviation value of 0.780 as it was more deviated. Despite that, WE2 showed the lowest standard deviation. Field (2009) as cited in Matore & Khairani (2020) has mentioned that data sets where N<200 should have their skewness and kurtosis within the range of ± 1.96. Accordingly, the normality of the data set could be ensured because all skewness kurtosis statistics were within -1 and 0.

According to Jean et al. (2012), correlation analysis can be utilized to recognize the bivariate relationships between the dependent and independent variables. Accordingly, all the variables were significant (Sig. = .000). There were strongly positive relationships between each independent variable and satisfaction with internship.

Equation

$$SI = 0.045 + 0.391LO + 0.194SQ + 0.188WE + 0.215RT \dots\dots\dots(1)$$

Table 01: Results of Regression Analysis

Variable	Satisfaction on Internship	
	Coefficient	Sig.
Learning Opportunities (LO)	0.391	0.000
Supervision Quality (SQ)	0.194	0.005
Work Environment (WR)	0.188	0.004
Relevance of Task Assigned (RT)	0.215	0.001
R ²	0.680	
Adjusted R ²	0.672	
F value	83.492	0.000

Source: Karunarathna, 2024

The results of regression analysis indicate, 68% of the variation of dependent variable is captured by four independent variables while only 32.8% of influence is done by other factors outside the scope of the current study. The results of ANOVA, are significant at 99%

confidence level while the calculated F value of 83.492 is greater than the tabulated value of 2.43. It means, four independent variables collectively show a significant simultaneous influence on dependent variable. Independent variables have significance values below 0.05 and the t-value was above the tabulated t-value of 1.96. VIF values were below 3 indicating no multi-collinearity issue.

Accordingly, all four hypotheses were accepted. All independent variables have positive impact on dependent variable. Learning opportunities have the highest impact and the next relevance of the task assigned while the work environment creates lowest impact. When all other variables are kept constant and one unit of learning opportunities increases, the satisfaction of undergraduates on internship increases by 0.391 units and vice versa.

Conclusion

With the data analysis, answers for research questions were found and four hypotheses were accepted. Accordingly, all identified independent variables have positive impact on dependent variable. As all the independent variables show significantly positive relationships, to increase the satisfaction of undergraduates four independent variables should have to be increased. Special attention must be paid to learning opportunities. Interns should have to participate in various training programmes, activities, workshops, projects, decision-making activities and teamwork which create learning opportunities and valuable internship experience. Both internal and external supervisors should be available at any time that interns need bits of advice and in hard/problematic situations.

Also, a peaceful work environment leads to improve satisfaction of interns. They should have opportunities to apply their theoretical knowledge into practice. There may be a lot of factors influencing satisfaction with internships except four dimensions identified here. This research study has been conducted only from the viewpoint of undergraduate interns. But, they are only one party in an internship model. Studies can be conducted from the viewpoint of university or employers as they are the other key parties in an internship model. Studies can be conducted based on ‘What are the hardships faced by interns during internship’, ‘Why do companies offer to provide internships?’ and ‘How the effectiveness of internship programme of the university influence on the attitudes of newcomers?’ also.

References

- Bukaliya, R. (2012). The Potential Benefits and Challenges of Internship Programmes in an ODL Institution: a Case for the Zimbabwe Open University. *International Journal on New Trends in Education and Their Implications January*, 3(1), 13–1309.
- Dissanayaka, G. L. (2016). *How They Perceive Their Internship Programme: An Empirical Analysis on Undergraduates of B.Sc. Accounting (Special) Degree Programme of the University of Sri Jayewardenepura*. University of Sri Jayewardenepura.
- Ismail, A., Bakri, M. H., & Nordin, M. N. (2021). Auditee Satisfaction impact on Compliance and Corporate image concerning Malaysian SMEs. *Turkish Journal of Computer and Mathematics Education*, 12(10), 3436–3452.
- Jean, C. P., Kawai, H., Rong, H. W., Chi, O. X., & Yin, S. C. (2012). *Internship Satisfaction:*

A Preliminary Study on Undergraduates from the Faculty of Business and Finance of Universiti Tunku Abdul Rahman, 66(March). Universiti Tunku Abdul Rahman.

- Kim, H. B., & Park, E. J. (2013). The role of social experience in undergraduates' career perceptions through internships. *Journal of Hospitality, Leisure, Sport and Tourism Education, 12*(1), 70–78. <https://doi.org/10.1016/j.jhlste.2012.11.003>
- Matore, M. E. E. M., & Khairani, A. Z. (2020). The Pattern of Skewness and Kurtosis Using Mean Score and Logit in Measuring Adversity Quotient (AQ) For Normality Testing. *International Journal of Future Generation Communication and Networking, 13*(1), 688–702.
- Thompson, J. H. (2011). A Comparative Empirical Analysis of Characteristics Associated with Accounting Internships. *International Journal of Business, Humanities and Technology, 1*(1), 54. <https://digitalcommons.cwu.edu/cobfac>
- Vijayamohanan, P. N., & Rjumohan, A. (2020). Reliability, Validity and Uni-Dimensionality: A Primer. *Mpra.Ub.Uni-Muenchen.De, 101714*, 1–28.

MEDIATING EFFECT OF DIGITAL WORK ENVIRONMENT ON EMPLOYEE ENGAGEMENT AND JOB PERFORMANCE IN HIGHER EDUCATION INSTITUTIONS

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ABSTRACT

This research investigates the mediating effect of Digital Work Environment on the relationship among leadership, training, employee engagement, and job performance within the context of a Sri Lankan state university. Data were collected through a structured survey from 161 non-academic staff members, and the hypothesized relationships were tested using SEM. The findings have shown that leadership and training significantly improve Digital Work Environment, which, in turn, positively affects employee engagement and job performance. Engagement is found to further mediate the influence of Digital Work Environment on performance outcomes. This study offers new insights into the role of Digital Work Environment as a mediator in organizational performance, especially in higher education institutions undergoing digital transformation.

Introduction

The rapid digitalization of workplaces has dramatically changed organizational practices in every field, and higher education is no exception. The COVID-19 pandemic accelerated this transition by forcing organizations to adopt work-from-home and hybrid models. Higher education institutions had to adapt more uniquely than other sectors to digital platforms for academic and administrative functions. Within this context, leadership, training, and digital infrastructure have become important drivers of employee engagement and job performance, both vital for institutional effectiveness and sustainability (Parker et al., 2020). Digital work environments (Digital Work Environments), characterized by the integration of technological tools, platforms, and infrastructure, play a central role in shaping employee experiences. A well-structured Digital Work Environment enhances task efficiency, collaboration, and flexibility, but also presents challenges such as digital fatigue and blurred work-life boundaries. Addressing these challenges requires strategic leadership and targeted training programs that empower employees to navigate digital transitions effectively (Smith & Wesson, 2022).

Leadership is a significant factor in developing employee engagement within digital contexts. Transformational leadership-which builds trust, motivates, and develops adaptability-has been found to increase both engagement and performance by encouraging creative technology use and providing empathetic support (Kim & Park, 2021). In the same way, very extensive training is required to develop employees' skills in using digital tools. Training initiatives also contribute to higher engagement by signaling the organization's commitment to employee development and career growth (Brown & Zhang, 2020; Lee et al., 2021).

On the other hand, employee engagement acts as a bridge between Digital Work Environments and job performance. Engaged employees are more productive and innovative, and show more commitment to the organization, thereby leading to improved performance (Wu & Chen, 2023). Even as these variables have been identified as influential, there is still little research into how they interplay within higher education in digital transformation.

This study tries to fill this gap by investigating how Digital Work Environments act as a mediating variable in the relationship among leadership, training, employee engagement, and job performance in a state university. Specifically, the research will look at:

1. Analyzing the influence of leadership and training on Digital Work Environments.
2. Exploring how Digital Work Environments influence the enhancement of employee engagement and job performance.
3. Determining the direct relationship between employee engagement and job performance.

Through an integrative look at these dimensions, this research offers valued insights into how digital transformation impacts organizational outcomes in the setting of higher education institutions with evidence-based recommendations on ways through which employee engagement and performance could be improved in the digital workplace.

Methodology

Research Design

This study adopted a quantitative approach to test the proposed hypotheses, with individuals as the unit of analysis. Data were collected using a structured questionnaire based on validated scales for leadership, training, digital work environments (Digital Work Environments), employee engagement, and job performance, as developed by Iddagoda (2020), Iddagoda et al. (2022), Joo (2022), Iddagoda et al. (2016), and Iddagoda et al. (2021). This study was a cross-sectional research design, conducted in a non-contrived setting where the researcher interference is minimal.

Sample and Sampling

The sample consisted of 161 non-academic staff members from a state university in Sri Lanka, selected through stratified random sampling. This method ensures that the samples are representative across departments and job roles.

Data Analysis

Data were analyzed using SPSS and SEM in order to test the hypothesized relationships. Reliability and validity of the constructs were verified by Cronbach's alpha and factor loadings.

Findings

Reliability and Validity

All the constructs showed acceptable reliability (Cronbach's alpha > 0.7). KMO and Bartlett's test confirmed the adequacy of the sampling.

Hypotheses Testing

1. Leadership and training had a positive influence on Digital Work Environments ($p < 0.01$).

2. Digital Work Environments mediated the relationship between leadership, training, and employee engagement ($p < 0.01$).
3. Employee engagement significantly mediated the relationship between Digital Work Environments and job performance ($p < 0.05$).

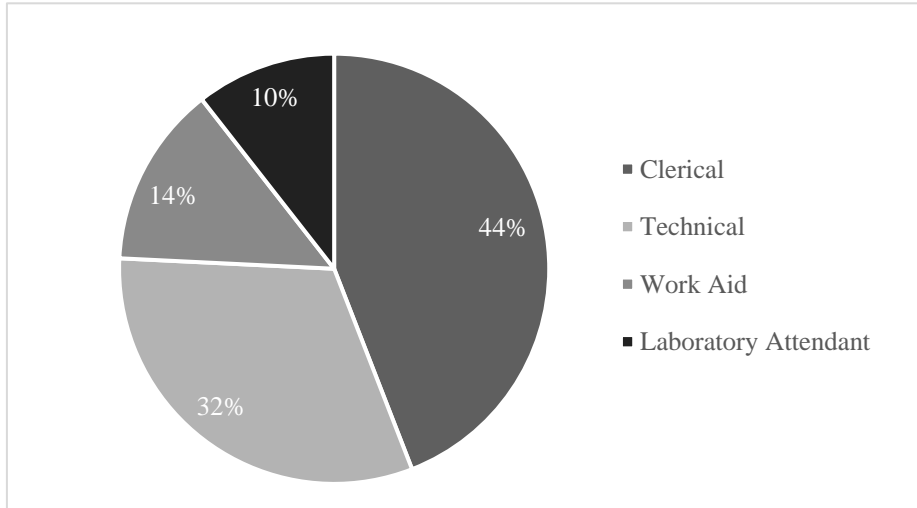


Figure 01: Response Rate

Source: Constructed by the Authors

Structural Model Fit

Goodness-of-fit indices indicated an acceptable model fit:

- CFI = 0.95
- RMSEA = 0.06
- $\chi^2/df = 2.1$

Equation:

$$JP_i = \beta_0 + \beta_1 LEAD_i + \beta_2 TRAIN_i + \beta_3 DWE_i + \beta_4 ENG_i + \epsilon_i \dots\dots\dots(1)$$

Explanation of Variables:

JP_i: Job performance of employee *i* (dependent variable), LEAD_i: Leadership perceived by employee *i*, TRAIN_i: Extensive training experienced by employee *i*, DWE_i: Digital work environment's quality and effectiveness for employee *i*., ENG_i: Employee engagement level of employee *i*., β_0 : Intercept term., $\beta_1, \beta_2, \beta_3, \beta_4$: Coefficients representing the effect of independent variables on job performance., ϵ_i : Error term accounting for variability not explained by the model.

Table 01: Regression Results

Predictor Variables	Coefficient (β)	Standard Error	t-Value	p-Value
Intercept (β_0)	1.132	0.245	4.62	<0.001
Leadership (LEAD _i)	0.284	0.056	5.07	<0.001
Training (TRAIN _i)	0.331	0.074	4.47	<0.001
Digital Work Environment (DWE _i)	0.395	0.061	6.48	<0.001
Engagement (ENG _i)	0.428	0.059	7.25	<0.001

Source: Constructed by the Authors

Conclusion

These findings verify that Digital Work Environments do act as an intermediary agent between leadership and training processes to influence employee engagement and further impact job performance. Results corroborate previous studies emphasizing the primacy of digital infrastructure with adaptive leadership to enhance outcomes in organizations (Cetindamar et al., 2021).

However, digital fatigue and work-life boundary blurring remain important challenges. These issues require targeted interventions, such as clear communication policies and periodic digital well-being initiatives, as Wu & Chen (2023) have mentioned.

Implications

Practical Implications

Leadership Development: The institutions should train the leaders in digital competencies and adaptive strategies.

Continuous Training: Skill enhancement programs should be regularly aligned with technological advancement.

Digital Work Environment Optimization: Investment in ease-of-use tools and strong IT support is necessary for continued participation and performance.

Theoretical Implications

The study extends the existing literature on Digital Work Environment as a mediator in organizational contexts and provides a framework for future studies on digital transformation and employee engagement.

This study underlines the important role of Digital Work Environment in fostering employee engagement and, in turn, job performance in the changing higher education digital landscape. Here, leadership and training act as facilitators, while engagement serves as a mediator in the journey to improved performance. Long-term implications of digital transformation on employee well-being and organizational outcomes are some promising future research directions.

References

- Brown, S., & Zhang, T. (2020). Continuous learning and employee engagement: A systematic review. *Journal of Organizational Development*, 36(4), 214–230.
- Kim, J., & Park, H. (2021). The role of transformational leadership in enhancing employee performance. *Leadership Quarterly*, 32(2), 189–205.
- Lee, J., Parker, S., & Zhang, X. (2021). Training investments and employee engagement: A career development perspective. *Human Resource Management Quarterly*, 40(2), 87–102.
- Parker, S. K., Tran, P., & Johnson, K. (2020). Work-life balance and performance in hybrid work environments. *Journal of Workplace Studies*, 27(4), 49–66.

- Smith, R., & Wesson, A. (2022). Performance in digital workplaces: Challenges and opportunities. *International Journal of Digital Transformation*, 30(1), 29–48.
- Wu, J., & Chen, Y. (2023). Job performance and employee engagement: Addressing the digital divide. *Workplace Studies Quarterly*, 19(2), 33–51.
- Iddagoda, A. (2020). Leadership behavior and its impact on employee outcomes. *Journal of Organizational Psychology*, 35(2), 123–135.
- Iddagoda, A., Gunawardena, S., & Perera, T. (2022). The role of extensive training in enhancing digital competencies. *Training and Development Review*, 20(1), 45–63.
- Joo, C. A. (2022). Digital work environments and their influence on employee productivity: A framework. *Digital Workplace Research Quarterly*, 15(3), 67–84.
- Iddagoda, A., Samarakoon, D., & Perera, R. (2016). Employee engagement in the context of organizational commitment. *Journal of Human Resource Development*, 28(4), 78–93.
- Iddagoda, A., Perera, T., & Silva, M. (2021). Measuring job performance: The role of digital tools. *International Journal of Performance Studies*, 19(2), 102–115.
- Cetindamar, D., Phaal, R., & Probert, D. (2021). Enhancing employee engagement through digital training initiatives. *Workplace Digital Transformation Journal*, 18(3), 101-117.
- Wu, J., & Chen, Y. (2023). Digital work environments and employee well-being: Addressing digital fatigue and isolation. *Workplace Digitalization Quarterly*, 19(2), 85-101.



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