

**AN EMPIRICAL INVESTIGATION OF THE  
SECURITY CONTROLS OF COMPUTERIZED  
ACCOUNTING INFORMATION SYSTEMS  
(CAIS) IN THE SELECTED LISTED  
COMPANIES IN SRI LANKA**

by

**NADARAJAH RAJESHWARAN**

**M.Sc. in Management**

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**NADARAJAH RAJESHWARAN**

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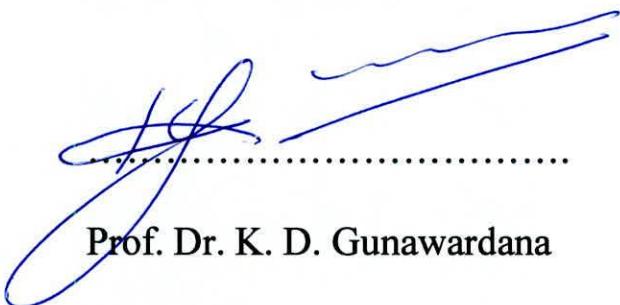
2008

The work described in this thesis was carried out by me under the supervision of Prof. Dr. K. D. Gunawardana and a report on this has not been submitted in whole or in part to any university or any other institution for another Degree/Diploma.

.....  
N. Rajeshwaran.....

N. Rajeshwaran

I certify that the above statement made by the candidate is true  
and that this thesis is suitable for submission to the University for  
the purpose of evaluation.



.....

Prof. Dr. K. D. Gunawardana

Date

Supervisor

28-10-09

**Prof. Dr. Kennedy D. Gunawardana**  
B.Sc(SJP), MBA(Col), PHD(Abac), CMA(Au)  
Prof of Accounting, Department of Accounting  
University of Sri Jayewardenepura,  
Nugegoda, Sri Lanka.

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## **ABBREVIATIONS**

ANOVA	Analysis of variance
AIS	Accounting Information Systems
CAIS	Computerized Accounting Information Systems
COBIT	Control Objectives for Information and Related Technology
Dept.	Department
ERP	Enterprise Resource Planning
IS	Information Systems
ISACF	Information Systems Audit and Control Foundation
IT	Information Technology
SCCPA	Security Controls of Correct Processing in Applications

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**ABSTRACT**

Drawbacks of the manual accounting systems, the rapid development of IT, availability of user friendly accounting software and the increased competition have forced companies to adapt Computerized Accounting Information Systems (CAIS) in order to remain competitive whereas threats to CAIS are unavoidable in the dynamic environment. In this scenario, security controls of CAIS are vital to the organizations. This study examines the existence and adequacy of implemented CAIS security controls to prevent, detect and correct security breaches in the selected listed companies in Sri Lanka. An empirical survey using a self-administered questionnaire has been carried out to achieve the objective. 41 out of 118 usable questionnaires have been collected to different types of companies representing 13 out of 20 sectors from 4<sup>th</sup> November to 10<sup>th</sup> December 2008. The results of the study spotlight a number of inadequately implemented CAIS security controls and significant differences among listed companies regarding the adequacy of implemented CAIS security controls. Based on the findings, some recommendations are given to strengthen the breaches in the present CAIS security controls in the listed companies. Findings of this study help accountants, auditors, managers, and IT users to better understand and secure their CAIS in order to achieve success of their visions.