



THE EXTENT, DETERMINANTS AND USES OF
CORPORATE INTERNET REPORTING IN
MALAYSIA

BY

SITI ZAIDAH BINTI TURMIN

A dissertation submitted in fulfilment of the requirement
for the degree of Doctor of Philosophy in Accounting

Kulliyyah of Economics and
Management Sciences
International Islamic University
Malaysia

JANUARY 2013

ABSTRACT

The widespread and increasing use of Internet technology in human life is undeniable. The Internet is accepted as an extremely important new technology in the business world and the use of Internet technology that is aligned with the organisational goals are considered a precondition for a company's success (Porter, 2001). The Internet facilitates communication in the business world. The communication process between the corporate sector and stakeholders via the medium of the Internet is specifically called Corporate Internet Reporting (CIR). CIR consists of the financial and non-financial information provided by companies through the medium of corporate websites (Kerckhoven, 2002). This study is conducted with the objective of examining the extent and determinants of CIR practised by public listed companies in Malaysia, the reasons for companies to practise or not to practise CIR, and the usage of CIR among stakeholders in Malaysia. The study uses a sample of 380 companies from the Main and ACE markets and 351 corporate information users consisting of institutional investors, fund managers, investment analysts, auditors and loan managers. Instruments of measurement used are unweighted index of 41 CIR attributes and two sets of questionnaires. Data is analysed by using various statistical tests –descriptive, correlation, regression, Mann-Whitney U Test, ANOVA, Independent Sample T-Test and Chi-square Test. Although the study found that 82 per cent of companies have websites and are practicing CIR, on average, companies only exhibited 28.9 percent of CIR attributes. Size, profitability and the activity sector are found to be a significant influence on the extent of CIR practice, while liquidity, auditor type, leverage, independent directors and ownership structure are not significant. The study reveals that the most important reasons for companies to practice CIR are companies' acceptance of CIR as a norm in today's business world, ability of CIR in providing very timely and more information to stakeholders, aspiration of companies to be in line with technological development and availability of data downloading and processing by stakeholders. On the contrary, users' request and preference over the traditional paper-based corporate reporting, companies' concern on the security of information being presented as well as consideration of cost and time are found to be the important reasons for companies not to practice CIR. Furthermore, the study found that downloads of financial statements, annual reports and other financial documents are the most used CIR items while sitemap and internal search engines are the commonly used website functionalities. This study has implications on companies, users and accounting regulatory bodies in Malaysia as well as on Internet reporting knowledge and literature. The findings, motivation, implications and limitations of the study as well as the suggestions for future research are discussed extensively in the study.

ملخص البحث

لا شك أن استخدام الانترنت لكي يكون مهما جدا في حياتنا وهذا التطورات أصبحت منتشرة ومقبولة كأحدث التكنولوجيا في عالم التجارة واستخدام هذا التكنولوجيا الذي مر محاذة بأهداف الشركة أصبح ركنا أساسيا في ثبوت نجاح الشركة (Porter 2001) أن عملية الاتصالات بين قسم الشركات مع أصحاب المصلحة (معطي رأس المال) عبر الانترنت نحن نسميها على وجه التحديد (بيان معلومات الشركة عبر الانترنت (CIR) يتضمن حساب المالي وغير المالي التي استعدته الشركة عبر موقع الشركة على الانترنت (Kerekhoven, 2002). هذا البحث أجري مع الهدف ليمتحن مدى والمتحدات CIR الذي استخدمه بعض الشركات العمومي في ماليزيا لكي نعلم لمن يستعمله ومن لم يستعمله و نسبة استعمالها لدى أصحاب المصلحة. هذا البحث ستستخدم نموذج 380 من البورصة الرئيسية و المستهلكية و 351 بيانات الشركات تضمنت فيها معلومات المستثمرين , مدير الأموال, مراجعي الحسابات و مدير القروض. نقيس البحث باستخدام علامة من 41 سمات CIR و نسختين من الأوراق الاستبانة. سنمتحن البيانات باستعمال اختبارات الاحصائية المختلفة - تصوري, تعالقي, تراجعي, اختبار Mann Whitney U, ANOVA - و اختبار نموذج المستقل و اختبار CHI المربع . فاننا نرى هذا البحث أن 82% من النموذج تملك موقع الانترنت ويستخدم CIR , بمعدل العادي الشركة تنفق الى 28.9% سمات CIR , المقياس وأصول الربحية, وأنشطة الشركات وجدت لتكون التأثيرات كبيرة على مدى ممارسة CIR والعكس على ذلك السيولة, أنواع مراجعي الشركة, قدرة الشركة المديرين و هيكل الملكية لا اهمية و أثر في الاختبار. هذا البحث يكشف أن أهم الاسباب للشركات لاستخدام CIR هي أنها مقبولة عند الشركات وما زالت لازمة قيامها في عصرنا هذا, استطاعة CIR لقيام المعلومات والتقارير الى أصحاب المصلحة بأسرع وقت ممكن , و أهداف الشركة لتكون متقدمة في خط واحد مع تطورات التكنولوجيا, و استطاعة تحميل المعلومات واجراءاتها عند أصحاب المصلحة. وبالعكس, مطلب المستهلكين و رغبتهم الى أوراق التقارير و من اهتمام الشركات على سلامة المعلومات و مراعاة الى الأعباء والأوقات صارت أسبابا كبيرة للشركات لاستخدام CIR , ونتيجة من ذلك , وجدت في البحث أن تحميل المعلومات مت تقارير الاحصائية , تقرير السنوي والأوراق هي أهم الأسباب لعمال الشركات في استخدام CIR. وبينما خريطة الموقع ومحركات البحث الداخلية لها آثار في هيكل الموقع. و أخيرا هذا البحث له آثار عند الشركات والمستهلكين وهيئات التنظيمية للحسابات في ماليزيا. اضافة الى معرفة ابلاغ المعلومات في الانترنت وأدائها. والأمور المكشوفة, التشجيع, السبب والنتيجة و حدود البحث والاقتراحات لبحث المستقبل سنناقشها عميقا بالتفصيل في البحث باذن الله تعالى.

APPROVAL PAGE

The thesis of Siti Zaidah Binti Turmin has been approved by the following:

Fatima Abdul Hamid
Supervisor

Nazli Anum Mohd Ghazali
Supervisor

Hafiz Majdi Abdul Rashid
Internal Examiner

Ku Nor Izah Ku Ismail
External Examiner

El Fatih Abdullahi Abdelsalam
Chairman

DECLARATION

I hereby declare that this thesis is the result of my own investigation, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Siti Zaidah binti Turmin

Signature:

Date:

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

**DECLARATION OF COPYRIGHT AND AFFIRMATION
OF FAIR USE OF UNPUBLISHED RESEARCH**

Copyright©2012 by Siti Zaidah binti Turmin. All right reserved.

**THE EXTENT, DETERMINANTS AND USES OF CORPORATE
INTERNET REPORTING IN MALAYSIA**

No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder except as provided below.

1. Any material contained in or derived from this unpublished research may only be used by others in their writing with due acknowledgement.
2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.
3. The IIUM library will have the right to make, store in a retrieval system and supply copies of this unpublished research if requested by other universities and research libraries.

Affirmed by Siti Zaidah binti Turmin

.....
Signature

.....
Date

ACKNOWLEDGEMENTS

In the name of Allah, the compassionate, the merciful. All praises be to Allah S.W.T., lord of the universe, and peace and prayers be upon his final prophet and messenger (P.B.U.H)

My utmost gratefulness to Allah for the *rahmah* that he showered me and the continuous strength that he granted upon me, which enabled me to accomplish my goal in writing this thesis till the end.

This thesis could never be completed without the supports and assistance from various parties. I would like to confer the highest appreciation to the dedicated supervisory committee members, Dr. Fatima Abdul Hamid and Dr. Nazli Anum Mohamad Ghazali. They have given the needed guidance and encouragement without fail throughout my journey in completing this thesis. Indeed, I will be forever indebted for the lessons and the enlightenment that both of you have given. May Allah showers you with his *rahmah*, endlessly.

The highest gratitude I wish to my mother, Patimah Jais, and my late father Turmin Jaruki. To both of them, thank you for bringing me into this world and brought me up with undivided love and attention. Thank you for every single thing that you have done and sacrificed for me without a moment of regret. Most importantly, *jazakumullah* for all your continuous suplications that formed the foundation of my strength and success. What you have committed could never be repaid, even if I tried my entire life. May we will be gather together in the hereafter, *ameen*.

To my husband, Mohamad Azzuha Che Rosli and the apples of my eyes, Muhammad Nabil and Aisyah Nabiha, you are the most special gifts that Allah has granted me. All of you have always be the one that kept burning my desire to complete this thesis. Thank you for your endless patient and timeless understanding of my condition.

Not forgetting my sibling, Mohamad Zaki Turmin and all my friends, thank you for your willingness to assist me.

Last but not least, I also wish to acknowledge the support and assistance of the Ministry of Higher Education of Malaysia, Universiti Putra Malaysia and the International Islamic University Malaysia.

TABLE OF CONTENTS

| | |
|---|------------|
| Abstract | ii |
| Abstract in Arabic | iii |
| Approval Page | iv |
| Declaration Page..... | v |
| Copyright Page..... | vi |
| Acknowledgements | vii |
| Table of Content..... | viii |
| List of Tables..... | xi |
| List of Figures | xiv |
| List of Abbreviations | xv |
| CHAPTER 1: INTRODUCTION | 1 |
| 1.0 Background Research | 1 |
| 1.1 Problem Statement..... | 5 |
| 1.2 Objectives of the Study..... | 10 |
| 1.3 Research Question..... | 10 |
| 1.4 Motivation for the Study..... | 11 |
| 1.5 Research Focus..... | 13 |
| 1.6 Contribution of the Study | 14 |
| 1.7 Structure of Research..... | 17 |
| CHAPTER 2: LITERATURE REVIEW..... | 19 |
| 2.0 Introduction..... | 19 |
| 2.1 Historical perspective of corporate internet reporting..... | 19 |
| 2.2 Research on Corporate Internet Reporting | 24 |
| 2.2.1 Research on the Nature and Extent of Corporate Internet Reporting (CIR) | 25 |
| 2.2.1.1 United States (US) | 25 |
| 2.2.1.2 European countries..... | 33 |
| 2.2.1.3 Other countries..... | 46 |
| 2.2.2 Research on the determinants of CIR | 62 |
| 2.2.3 Comparative CIR Studies Among Different Countries..... | 85 |
| 2.2.4 Research on attitudes and preferences of CIR..... | 94 |
| 2.2.5 Research on CIR in Malaysia | 98 |
| 2.3 Summary..... | 116 |
| CHAPTER 3: THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT..... | 119 |
| 3.0 Introduction..... | 119 |
| 3.1 Corporate Internet Reporting (CIR) as Voluntary Reporting | 119 |
| 3.2 Agency Theory..... | 120 |
| 3.3 Political Cost Theory..... | 121 |
| 3.4 Signalling Theory..... | 124 |
| 3.5 Capital Needs Theory | 125 |

| | |
|--|------------|
| 3.6 Hypothesis Development..... | 127 |
| 3.6.1 Firm specific factors | 127 |
| 3.6.1.1 Size of companies | 127 |
| 3.6.1.2 Liquidity | 130 |
| 3.6.1.3 Auditor type..... | 132 |
| 3.6.1.4 Activity sector..... | 133 |
| 3.6.1.5 Leverage | 135 |
| 3.6.1.6 Profitability..... | 137 |
| 3.6.2 Corporate Governance factors..... | 139 |
| 3.6.2.1 Proportion of independent directors | 139 |
| 3.6.2.2 Ownership Structure/ Diffuseness of Ownership/ Shareholders Concentration. | 140 |
| 3.7 Summary..... | 142 |
| CHAPTER 4: RESEARCH METHODOLOGY | 144 |
| 4.0 Introduction..... | 144 |
| 4.1 Population of Companies..... | 144 |
| 4.2 Sample Selection of Companies..... | 146 |
| 4.3 Part One (Secondary Data) | 151 |
| 4.3.1 Development of CIR Index | 151 |
| 4.3.2 Measurement of the Extent of CIR..... | 157 |
| 4.3.3 Data Collection Period and Test of Reliability | 159 |
| 4.3.4 Determinant Factors of CIR practiced by Malaysian Public Listed Companies..... | 160 |
| 4.3.5 Measurement of Independent Variables | 162 |
| 4.4 Part 2 (Primary Data)..... | 167 |
| 4.4.1 The Survey of Reasons for Companies Practising CIR and Not Practising CIR | 167 |
| 4.4.2 Survey on the Usage of CIR by Malaysian stakeholders..... | 169 |
| 4.4.3 Pilot Study..... | 173 |
| 4.4.4 Statistical Techniques | 174 |
| 4.4.5 Reliability Tests..... | 174 |
| 4.4.6 Descriptive Statistics Analysis | 176 |
| 4.4.7 Univariate Analysis and Test of Normality..... | 177 |
| 4.4.8 Bivariate Correlation Analysis | 178 |
| 4.4.9 Multivariate Analysis..... | 179 |
| 4.4.9.1 Regression Model for the Determinants..... | 179 |
| 4.4.9.2 Specific Test for the Multiple Regression Assumptions... | 181 |
| 4.5 Summary of the Chapter..... | 183 |
| CHAPTER 5: ANALYSIS, EMPIRICAL RESULTS AND DISCUSSION (1)185 | 185 |
| 5.0 Introduction..... | 185 |
| 5.1 Extent of Corporate Internet Reporting (CIR) Results and Discussion.. | 185 |
| 5.1.1 Descriptive Statistics..... | 185 |
| 5.2 Determinants of CIR Disclosure Results and Discussion..... | 207 |
| 5.2.1 Regression Analysis..... | 212 |
| 5.2.2 Specific Tests for Regression Model..... | 225 |
| 5.3 Summary of the Chapter..... | 227 |

| | |
|---|------------|
| CHAPTER 6: ANALYSES, EMPIRICAL RESULTS AND DISCUSSION(2) | 229 |
| 6.0 Introduction..... | 229 |
| 6.1 Survey Questionnaire on the Practice of CIR by Public Listed Companies in Malaysia..... | 230 |
| 6.1.1 Reliability Test | 230 |
| 6.1.2 Questionnaire Survey..... | 231 |
| 6.1.3 Non Response Bias | 245 |
| 6.2 Survey Questionnaire on the Usage of CIR in Malaysia..... | 248 |
| 6.2.1 Reliability Test | 248 |
| 6.2.2 Questionnaire Survey..... | 248 |
| 6.2.3 Non Response Bias | 267 |
| 6.2.4 Additional Test | 268 |
| 6.2.4.1 Independent Sample T-Test..... | 268 |
| 6.2.4.2 Chi-square Test..... | 269 |
| 6.2.4.3 One-Way Analysis of Variance (ANOVA)..... | 270 |
| 6.3 Summary of the Chapter..... | 271 |
| | |
| CHAPTER 7: CONCLUSION, LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH..... | 274 |
| 7.0 Introduction..... | 274 |
| 7.1 Summary of the Main Results..... | 275 |
| 7.2 Implications of the Study..... | 279 |
| 7.3 Limitations of the Study | 284 |
| 7.4 Suggestions for Future Research | 285 |
| 7.5 Summary of the Chapter | 286 |
| | |
| BIBLIOGRAPHY..... | 288 |
| | |
| APPENDIX 1: A Survey on the Practices of Corporate Internet Reporting (CIR) by Public Listed Companies in Malaysia | 302 |
| APPENDIX 2: A Survey on the Usage of Corporate Internet Reporting (CIR) in Malaysia..... | 308 |
| APPENDIX 3: List of Equity Brokers' Companies..... | 316 |
| APPENDIX 4: List of Commercial Banks in Malaysia | 317 |
| APPENDIX 5: List of Fund Management Companies in Malaysia | 318 |
| APPENDIX 6: Independent Sample t-Test | 322 |
| APPENDIX 7: Linearity Test | 325 |
| APPENDIX 8: P-P Plot of Regression Standardized Residual | 328 |
| APPENDIX 9: Independent Sample T-Test between CIR Users and Non CIR Users | 329 |
| APPENDIX 10: Chi-Square Test..... | 330 |
| APPENDIX 11: Test of Homogeneity of Variance (Levene's Test)..... | 332 |
| APPENDIX 12: Results of the Welch and Brown-Forsythe Statistics | 333 |
| APPENDIX 13: One-way ANOVA of the CIR Usage and User Groups..... | 334 |
| APPENDIX 14: List of Sample Companies..... | 335 |

LIST OF TABLES

| <u>Table No.</u> | | <u>Page No.</u> |
|------------------|---|-----------------|
| 4.1 | Classification of the Listed Companies | 146 |
| 4.2 | Sample Companies based on Listing Status and Sector | 149 |
| 4.3 | List of Corporate Internet Reporting (CIR) Attributes | 155 |
| 4.4 | Sample of the User Groups | 171 |
| 4.5 | Distributes and Received Pilot Questionnaires on the Practice of CIR by Companies | 175 |
| 4.6 | Reliability Test of the Pilot Questionnaires | 176 |
| 5.1 | Distribution of Sample Companies | 186 |
| 5.2 | Distribution of Sample Companies With Websites Based on Industry Type | 187 |
| 5.3 | Reliability Test of CIR Attributes | 190 |
| 5.4 | Descriptive Statistics of the Extent of CIR | 191 |
| 5.5 | Percentage of Companies Disclosed Based on Specific CIR Items | 194 |
| 5.6 | Means of the Extent of CIR based on Industry Type | 202 |
| 5.7 | Means of the Extent of CIR based on listing status | 206 |
| 5.8 | Values of Mean, Median, Skewness and Kurtosis of Actual Data | 208 |
| 5.9 | Values of Mean, Median, Skewness and Kurtosis With Normalization | 209 |
| 5.10 | Correlation Analysis | 211 |
| 5.11 | Standard Multiple Regression for the Determinants of CIR Extent Method Enter | 213 |
| 5.12 Panel A | Multiple Regression for the Determinants of CIR Extent Method Stepwise | 214 |

| | | |
|--------------|---|-----|
| 5.12 Panel B | Excluded Variables in Stepwise Regression Analysis | 214 |
| 5.13 | Summary of Hypotheses Testing and Results of Regression Models of the Determinants of the Extent of CIR | 225 |
| 6.1 | Reliability Test of the Questionnaire on the Practice of CIR by Public Listed Companies in Malaysia | 230 |
| 6.2 | Survey Questionnaire on the Practice of CIR by Public Listed Companies in Malaysia. Distributed, Received and Useable Questionnaires | 231 |
| 6.3 | Background of CIR Practising Companies | 233 |
| 6.4 | Reasons for Companies Practising CIR | 238 |
| 6.5 | Background of Non CIR Practising Companies | 239 |
| 6.6 | Reason for Companies Not Practising CIR | 244 |
| 6.7 | Independent Sample T-Test for the Group of CIR Practising Companies (Early and Late Response) | 246 |
| 6.8 | Independent Sample T-Test for the Group of Non CIR Practising Companies (Early and Late Response) | 247 |
| 6.9 | Reliability Test of the Questionnaires on the Usage of CIR in Malaysia | 248 |
| 6.10 | Survey Questionnaires on the Usage of CIR in Malaysia Distributed and Received Questionnaires | 249 |
| 6.11 | Profile of Respondents | 250 |
| 6.12 | Respondents' General Internet Use: Frequency and Place of Use | 251 |
| 6.13 | Distribution of CIR Users based on the Frequency of Use of Listed Companies Website | 252 |
| 6.14 | Mean of CIR Usage Items by CIR Users | 253 |
| 6.15 | The Use of Website Functionalities | 255 |
| 6.16 | Difficulty of Using Websites | 256 |
| 6.17 | Evaluation of CIR Content, Reliability, Easiness and Timeliness | 256 |
| 6.18 | CIR Usage Change, Likelihood to Return to Website and | 258 |

| | | |
|------|---|-----|
| | Recommend the Website | |
| 6.19 | Evaluation on CIR as Compared to Conventional Corporate Reporting | 259 |
| 6.20 | Opinion on CIR Level of Importance and CIR to Replace Traditional Paper-Based Corporate Reporting | 260 |
| 6.21 | Browsing of Websites Other Than Listed Companies Websites | 263 |
| 6.22 | Frequency of Using Websites Other Than Listed Companies' Websites | 266 |
| 6.23 | Mann-Whitney U Test for the Group of CIR Users (Early and Late Response) | 267 |
| 6.24 | Mann-Whitney U Test for the Group of Non CIR Users (Early and Late Response) | 267 |

LIST OF FIGURES

| <u>Figure No.</u> | | <u>Page No.</u> |
|-------------------|---|-----------------|
| 1 | Research Framework | 18 |
| 2 | Theories used in developing research hypothesis | 143 |

LIST OF ABBREVIATIONS

| | |
|--------|--|
| AIMR | Association for Investment Management and Research |
| ANOVA | Analysis of Variance |
| BRRP | Business Reporting Research Project's |
| CFO | Chief financial officers |
| CIR | Corporate Internet Reporting |
| D-W | Durbin Watson |
| EDGAR | Electronic Data Gathering, Analysis and Retrieval |
| EPF | Employees Provident Fund |
| FASB | Financial Accounting Standard Board |
| GCC | Gulf Co-operation Council |
| IASC | International Accounting Standards Committee |
| IFR | Internet Financial Reporting |
| KLSE | Kuala Lumpur Stock Exchange |
| LTAT | Lembaga Tabung Angkatan Tentera |
| LUTH | Lembaga Urusan Tabung Haji |
| MASB | Malaysian Accounting Standard Board |
| MCSL | Malaysian Civil Service Link |
| OECD | Organisation for Economic Co-Operation and Development |
| PNB | Permodalan Nasional Berhad |
| SEC | Securities and Exchange Commission |
| SOCSSO | Social Security Organisation |
| SPSS | Statistical Package for Social Sciences |
| UK | United Kingdom |
| US | United States |
| VIF | Variance Inflation Factor |
| VW | Van der Waerden |

CHAPTER 1

INTRODUCTION

1.0 BACKGROUND RESEARCH

The widespread and increasing use of Internet technology in human life is undeniable. The Internet is also known as the World Wide Web, net or web (Hassan, Jaffar, Mat Zain and Johl, 2002). According to Engaging Stakeholders (1999), the Internet has gone through an extraordinary pace of development as it took just three years to reach fifty million users. Petravick and Gillet (1996: 26) defined the Internet as “an international collection of more than 50,000 independent communication networks that are owned by a variety of public, educational and governmental entities”. The Asia Internet Usage Statistics and Population Statistics have noted a considerable increase in the Internet usage in Asian countries with an Internet user growth of 621.8% between the years of 2000 to 2010. At the end of 2009, the Internet penetration in Asia was 20.1%, thus, it is not far behind the world average Internet penetration of 26.6%. Looking specifically at the Malaysian perspective, Malaysia is among the top ten Internet users in Asia¹ with 64.6% Internet penetration in 2010 and an Internet user growth of 356.8% over the ten-year period between the years 2000 and 2010. This shows a significant increase of interest by the Malaysian people in the new Internet technology.

The purpose of the Internet in general includes seeking for work, finding information, exchanging e-mails and buying products and services (Bollen, Hassink and Bozic, 2006). In respect of businesses, the Internet is accepted as an extremely

¹ The top ten Asian countries for Internet use consisted of China, Japan, India, South Korea, Indonesia, the Philippines, Vietnam, Pakistan, Malaysia and Thailand.

important new technology (Porter, 2001). Thus, the use of Internet technology that is aligned with the organisation's goals is considered as a precondition for a company's success (Porter, 2001). The use of the Internet is acknowledged for a number of reasons. The Internet facilitates promoting and advertising activities of companies' products and services (Lymer, 1999; Mohamad, Mohamed and Mohamed, 2003). Furthermore, the Internet is used for the purpose of electronic commerce activities, creating corporate image and disclosing corporate information at lower cost (Bollen et al., 2006). Moreover, the Internet facilitates communication in the business world. This includes investor relations activities to inform investors of traditional paper-based annual report (Geerings, Bollen and Hassink, 2003), replacing and enhancing the traditional way of stakeholders' communication (Marston and Polei, 2004; Pirchegger and Wagenhofer, 1999), revolutionizing external reporting (Jones and Xiao, 2004) and also disseminating information to a wider range of people instantly (Ettredge, Richardson and Schultz, 2002). The communication process between the corporate sector and stakeholders via the medium of the Internet is specifically called Corporate Internet Reporting (CIR) otherwise known as web-based business reporting (Beattie and Pratt, 2003; Verma, 2010), online reporting (Allam and Lymer, 2003), digital reporting (Bonson and Escobar, 2006) or electronic corporate reporting (Lymer, 1999).

Past studies have given several definitions of CIR. The first definition was given by Ashbough, Johnstone and Warfield (1999). Ashbough et al. (1999: 241), in defining CIR in terms of the basic requirement of financial reporting, stated that "a firm is considered practicing Internet Financial Reporting in a way that it provides either a comprehensive set of financial statements in its web, a link to its annual report elsewhere on the Internet or a link to the Security and Exchange Commission's

Electronic Data Gathering, Analysis and Retrieval System”. Another definition of CIR that focused on financial information was given by Poon, Li and Yu (2003). Poon et al. (2003) referred to CIR as a role played by corporate websites in disseminating information on the financial performance of the corporations to promote themselves to investors. However, Larran and Giner (2002) mentioned that the future of companies’ Internet disclosure could not be restricted to the disclosure of financial information exclusively. Therefore, without focusing only on financial information in defining CIR, Kerckhoven (2002) developed a wider meaning of CIR. The definition of CIR by Kerckhoven (2002: 3) includes “the reporting of non-financial information that is not normally incorporated in the annual report together with financial information by corporations”. As this definition was adapted from the previous definition by Ashbough et al. (1999), Kerckhoven (2002) maintained the element of a comprehensive set of financial statements and a hyperlink to companies’ annual reports elsewhere on the Internet to be part of the definition of CIR. Later, Jones and Xiao (2004: 2), even though they did not provide a direct definition of CIR, mentioned that, “company websites can include the traditional annual reports together with additional financial and non-financial information in multiple formats”. This definition is consistent with the previous definition given by Kerckhoven (2002).

Looking at the definitions given by those studies, the definitions by Ashbough et al. (1999) and Poon et al. (2003) focused on disclosure of financial information in defining the reporting practice of companies through the Internet. In other words, both definitions focused on only one aspect of Internet reporting, namely, Internet financial reporting (IFR). Kerckhoven (2002) mentioned that elements of financial

information² were only basic requirements of Internet reporting. The definition offered by Kerckhoven (2002) goes beyond this basic requirement to include a wider scope of corporate reporting. The definition by Jones and Xiao (2004) was consistent with Kerckhoven (2002). For the purpose of this research, the definition by Kerckhoven (2002) is applied to encompass a broader outlook of CIR. In this research, CIR consists of financial and non-financial information provided by companies through the medium of corporate websites. This will include information of either a financial or non-financial nature that is not normally incorporated in the printed form of companies' annual reports. Details of the information are included in the later chapters.

CIR is seen as an important way for the corporate sector in presenting and disseminating business information to the stakeholders. The significance of CIR in business activities has been recognized by the Organisation for Economic Co-Operation and Development (OECD) (2004: 56) as mentioned in their statements, "channels for the dissemination of information can be as important as the content of the information itself". Among the advantages of CIR compared to traditional paper-based reporting are innovative presentation of information, (Jones and Xiao, 2004), dynamic multimedia formats (Debreceeny, Gray and Rahman, 2002), wider and easier access to information for larger groups of users without selection ((Ettredge, Richardson and Scholtz, 2001; Geerings et al., 2003), creating interest to potential investors and boosting corporate image (Ettredge et al., 2001), ability of providing timeliness (Pratt, 1996) and more interactive information with unlimited space (Joseph, 1995) as well as the faster and lower cost of information dissemination (Geerings et al., 2003).

² Referring to elements of a comprehensive set of financial statements and hyperlinks to companies' annual report elsewhere on the Internet.

Past research shows that there are still many aspects of CIR that have not yet been studied, which implies that there is a gap in this area of research that needs to be further clarified. Therefore, this research intends to take an in depth look at the issues of CIR in Malaysia from various perspectives due to the rapid growth of Internet technology usage in the corporate world.

1.1 PROBLEM STATEMENT

Previously, the practice of Internet reporting in Malaysia was voluntary in nature, whereby CIR was practiced by companies without the existence of any regulation. The practice of CIR was voluntary in that it provided companies the choice of an additional reporting medium for information disclosure (Bhuiyan, Biswas and Chowdhury, 2007). It also enabled companies to make additional voluntary disclosure to a large audience at an effective cost (Bhuiyan et al., 2007). As for companies, no standard or guidelines existed for them in practicing CIR. It was completely up to the companies whether or not to have websites. Some companies chose to engage in CIR, while some chose otherwise. For those companies with web sites, they were free to decide on the type and extent of information disclosed without any requirement to comply with the provisions of the Financial Reporting Act 1997, approved accounting standards and or Companies Act 1965 (Hassan et al., 2002). Subsequently, this leads to a lack of uniformity among companies in Malaysia in terms of the information disclosed and the way the information is presented. Although there were informative websites with lots of financial and non-financial corporate information, there were many with just minimal information. In other words, the extent of CIR practice varied widely between companies.

The inconsistencies of CIR practice among companies further raised several problems. Debreceeny, Gray and Mock (2001) mentioned three difficulties that arise due to the inconsistencies of CIR practice by companies. First, the variation in the practice of Internet reporting among companies may create the problem of companies' uncertainty concerning what information is to be displayed. Second, it may cause difficulties to users in locating and finding information on corporate websites. Third, it may lead to difficulties to the regulators in tracking, monitoring, comparing and assessing Internet reporting practise of the companies. In addition to these, the inconsistency in CIR practice may make it challenging for the regulators and standard setters in recommending standards or best practice for Internet reporting (Debreceeny et al., 2001).

However, on 3rd of August 2009, Bursa Malaysia introduced a new listing rule that requires the Malaysian public listed companies to have their own corporate websites Bursa Malaysia's Listing Requirement, Chapter 9, Paragraph 9.21). Specifically, the new listing rule is stated by Bursa Malaysia as follows:

9.21 Listed issuer to have a website

- (1) Every listed issuer must have its own website.*
- (2) A listed issuer must publish on its website all announcements made to the Exchange pursuant to these Requirements. The listed issuer must ensure that such announcements are placed on the listed issuer's website, as soon as practicable after the same are released on the Exchange's website.*
- (3) A listed issuer must ensure that its website contains the email address, name(s) of designated person(s) and their contact numbers to enable the public to forward queries to the listed issuer.*
- (4) A listed issuer should ensure that its website is current, informative and contains all information which may be relevant to the listed issuer's shareholders including analyst's briefings.*

(Source from Bursa Malaysia Listing Requirements, Chapter 9, Paragraph 9.21)

Following the introduction of this new listing requirement, significant changes occurred in respect of the practice of CIR in Malaysia. CIR practice is no longer

voluntary, but compulsory for all the public listed companies in Malaysia. However, despite this transformation, the new regulation can be said to be general, as the regulation does not mention the specific attributes of CIR that need to be presented on the corporate websites of the companies. In other words, there are still no specific guidelines on the practice of CIR that need to be followed by Malaysian companies. Consequently, even though the need for standardization and rationalization of Internet reporting practice is an international accounting agenda (Debreceeny, Gray and Rahman, 2002), uniformity of CIR practice in Malaysia is still difficult to achieve. Thus, problems faced by companies, users and regulators due to the inconsistencies of Internet reporting practice, as mentioned by Debreceeny et al. (2001), may continue to arise.

Furthermore, as CIR in Malaysia has been revolutionized from voluntary to mandatory practice, changes to the CIR practice by Malaysian companies are expected subsequent to the implementation of the new Bursa Malaysia listing requirement. The evaluation of the changes in the CIR practice following the implementation of the new listing requirement is of importance to determine the compliance of companies with the new listing regulation. In evaluating the changes, it is important to have a basis or a benchmark of current CIR practice prior to the imposition of this new listing requirement. In order to have this, it is best to have studies on the extent of CIR practice just prior to the imposition of the new listing regulation. The extent of CIR practice by the Malaysian listed corporations has been documented through several previous studies (Ismail and Tayib, 2000; Mohamad et al., 2003; Khadaroo, 2005a; Khadaroo, 2005b). However, the studies were conducted many years before the new Bursa Malaysia listing requirement was introduced. Therefore, the findings pertaining to the extent of CIR practice by companies in Malaysia by those studies do not

encompass CIR practice subsequent to the implementation of the new Bursa Malaysia listing regulations. In other words, no investigation of CIR practiced by the Malaysian corporations just prior to the imposition of the new listing rules exists that could be considered a benchmark for future studies. Thus, this causes a difficulty in further evaluating CIR practice after the implementation of the new listing rule and the compliance of companies against the new rule.

In addition, in providing corporate websites and practising CIR, companies spend huge amounts of money in the setting, updating and upkeep of the websites (Xiao, Yang and Chow (2004)). The costs involved include expertise, resources as well as time spent. Therefore, companies may expect some benefits from their practice of CIR in terms of usage of CIR by the users and satisfaction of the users in using CIR. This is to further ensure that companies are not just wasting their resources in providing something that is not being used by the users. In other words, without the demand of CIR from users, the resources used by companies to provide CIR are just a waste. However, it is not clear whether the CIR provided by the companies is really demanded by the users, to what extent CIR is really being used by the users, and whether CIR really does benefit the users. This is due to the scarcity of studies that look at the demand side of CIR, which results in very limited knowledge concerning this matter. Indeed, in Malaysia, studies on CIR that look into the perspective of users are totally non-existent. Therefore, despite companies' efforts in providing CIR, which are undeniable, it is unclear whether these efforts and the investment of the companies are worthwhile in terms of the utilisation and benefits from CIR to the users.

Moreover, as a developing country with an emerging market, there is a need for Malaysia to raise capital, attract foreign investment and promote the confidence of

stakeholders. Consistent with this, expanding the global reach of the Malaysian capital market has been mentioned as one of the strategic objectives of Bursa Malaysia. In addition, as Malaysia lags behind several ASEAN countries (Singapore and Thailand) in terms of foreign investment, there is a need for an expansion of foreign direct investment in Malaysia, as mentioned by Yeah Kim Leng, the chief economist of RAM Holdings Berhad (Ng, 2010). In attracting investors, it is important to have corporate information that is fair, efficient and transparent (Aly, Simon and Hussainey, 2010). With the many advantages of CIR over the traditional paper-based corporate reporting, CIR is believed to provide a way for the Malaysian companies to disseminate online corporate information to attract a wider range of national and international investors. However in Malaysia, the non-existence of specific guidelines on CIR to be followed by the companies, even with the implementation of the new rules by Bursa Malaysia pertaining to CIR, leads to the non-uniformity of CIR practice among companies. With the non-standardization of CIR, transparent, fair and efficient corporate information is difficult to achieve. It is expected that the inconsistency of CIR practice by Malaysian companies is caused by certain company characteristics and motivating factors that influence the level and extent of CIR practiced by the companies. Therefore, the necessity arises to examine the factors and reasons that motivate the Malaysian companies to practice CIR from two different perspectives. First, it may assist regulators to understand the drivers of CIR in Malaysia, and, thus, specify ways to enhance CIR fairness, transparency and efficiency. Second, examining the drivers of CIR may help companies to attract investors in making rational decisions on their investment, particularly for potential investors who are interested in investing in Malaysia. This is especially important due to the need for Malaysia to expand the inflow of foreign direct investment into the