INTERNET FINANCIAL REPORTING: AN INVESTIGATION OF FIRM CHARACTERISTICS

CHAPTER 1
INTRODUCTION

1.1 Introduction

In the past few years, corporate Web sites at the Internet has shown rapid growth and has become the most important information technology for global communication. The increase use of Internet to conduct business and the proliferation of dot.com companies are just an indication of the importance and vast potential Internet could bring in the future.

The role of financial reporting in the wake of the explosive growth in information technology is fast changing. Jenkins (1994) discusses the potential role of communication technologies in fulfilling the business/investor demand for improved timeliness of information and the nature and volume of information delivered to investors in this era of rapid change, globalisation and technology innovation. Similarly Wallman (1995, 1996) contends that in a dynamic, constantly changes business world, firms must be agile in adapting and meeting the competitive challenges and capitalising business opportunities and so does the accounting profession in producing usefulness financial information on timely basis for decision making. He explores the impact of these issues and challenges particularly in the areas of usefulness and timeliness of financial information and the distribution channel of such information. Will the Internet change the face and the pace of financial reporting? What role can the Internet play in order to improve timeliness and usefulness of financial disclosure while not compromising on the quality, comparability, confidentiality and integrity of this information? The potential role of Internet as medium for financial information disclosure and its implication has been the hot topic debated worldwide [Lymer (1997), Lymer, Debreceny, Gray and Rahman (1999) and FASB (2000)].

The extent to which corporate web sites are used to disseminate information vary from companies to companies but include among others the firm's products and services, corporate information, financial performance etc. Of particular interest to Accountants is the use of web sites by public listed corporations to provide financial information. This trend is growing rapidly in the world and in Malaysia, more companies are doing so now than before [Lymer (1997), Flynn and Gowthorpe (1997), Marston and Leow (1998), Ashbaugh, Johnstone and Warfield (1999), Ettredge, Richardson and Scholz (2000a), FASB (2000), Atan, Mohamed and Yatim (2000), Nik Salleh and Mohamed (2000) and Ismail and Tayib (2000)].

Presently there is no regulation, requiring companies listed in the KLSE to disclose financial information on their corporate web sites. There is no guideline on the presentation and the type of financial information that are disclosed on the Internet. This environment has led to wide variety and greatly different level of financial information provided across companies and industries. The question is should this be regulated or left it to the market forces?

Many research studies [see Firth (1979), Chow and Wong-Boren (1987), Lang Lundholm (1993), Hossain and Adams (1995), Ashbaugh, Johnstone and Warfield (1999), Ettredge, Richardson and Scholz (2000a)] have been carried to investigate the disclosure of voluntary financial information in a variety of media. However, very little is known about what motivate firms to disseminate such information via their Web sites. Yet Web sites are arguably becoming increasingly more important as channel for distributing financial data. Therefore it is timely to conduct a study to investigate the relationship between the firm specific characteristics and the extent of voluntary financial disclosure in the Internet.

1.2 The Internet and the World Wide Web

The Internet's growth rate has far surpassed the growth rates of any previously introduced electronic information dissemination mediums such as radio, television and personal computer (Greenstein and Feinman, 2000). It took only four years for Internet to reach 50 million people whilst other mediums required at least 13 years to do the same thing.

The Internet has evolved over time into its current form and is still evolving. By definition Internet is a very unique infrastructure that is owned by no one. It is a network of networks (Greenstein and Feinman, 2000). The Internet was started in 1969 as a joint project between the Defense Advanced Research Projects Agency and four university host computers. It was known as 'ARPANET' and it was used as a vehicle for the sharing of university and government research resources. Until the early 1990s, its use was limited to an elite of specialists and there was no need to make it user-friendly (Flynn and Gowthorpe 1997). However the advent of World Wide Web (WWW) has redefined Internet as a powerful communication technology. WWW allows easy access by unsophisticated, non-specialist users using hypertext on the Internet. It is the graphical interface for accessing and distributing information on the Internet. WWW provides special hypertext links to jump from one Internet location to another denoted by its uniform resource locator (URL). Most people surf the Internet using a web browser. Most web pages are designed with some form of hypertext transfer markup language (HTML) code. Companies can utilize the Web multimedia environment to publish information. At the same time, the web site can be made available by information publishers to web browsers in an efficient and user-friendly way.

1.3 Current Reporting Requirements

In Malaysia, presentation and disclosure of financial information is governed by Companies Act 1965 (the Act), Financial Reporting Act 1997 (FRA) and the accounting pronouncements issued by the Malaysian Accounting Standards Board (MASB). Under section 167 of the Act, every company is required to keep proper accounting and other records to sufficiently explain the transactions and the financial position of the company, and to enable true and fair profit and loss accounts and balance sheets and related documents to be prepared from time to time. This includes the preparation of cash flow statement, statement of changes in equity and notes to the accounts[1]. Further each company is required to comply with the disclosure requirements of the

[1] MASB 1, Presentation of Financial Statements defines financial statements to include balance sheet, income statement, statement of changes in equity, cash flow statement and notes to the account.

Ninth Schedule under section 169(14) of the Act. According to Section 166A of the Act, approved accounting standards are to be applied in relation to any published accounts of any business enterprise in Malaysia.[2]

In addition to the annual reports, public listed companies at KLSE are required to prepare interim financial statements on a quarterly basis. Interim financial statements play an important role as a progress report in the continuous financial reporting of the operating, financing and investing activities of an enterprise. Like annual financial statements, interim financial statements fulfil a confirmatory and predictive function (MASB Foreward). They are designed to enable users to monitor the progress of an enterprise and assess the impact of recent events on its operating performance and financial position (MASB SOP 2). KLSE has under its Revamped Listing Requirements (2001) required more detail financial disclosure aims at ensuring all material financial information is disclosed to the market on a timely basis.

Other statues that regulate the disclosure of financial reporting include the Securities Commission (SC), Banking and Financial Institution Act 1989 (BAFIA) and the Income Tax Act 1967. The SC plays the role of encouraging and promoting the development of capital market in Malaysia by regulating all matters relating to the security industry. It also has the power of enforcing compliance of approved accounting standards under the FRA 1997. The Bank Negara Malaysia (BNM) has also issued two sets of guidelines on financial reporting practices of financial institutions established under the BAFIA 1989. BNM has also given the enforcement power to ensure compliance with approved accounting standards under the FRA 1997. The Income Tax Act 1967 is more related to the subject of taxation as it is mainly concerned with ascertaining chargeable income and tax payable. However it also has some significant impact on financial accounting and reporting because taxation is considered a business expense that needs to be reflected in the income statement. Also the dividend imputation system has significant impact on an enterprise's distributable reserves (Tan 1997).

[2] For the purpose of both the Companies Act 1965 and Financial Reporting Act 1997, MASB Standards issued are "approved accounting standards" and compliance to the requirement of MASB's approved accounting standards is mandatory and legally enforceable.

1.4 Company Voluntary Disclosure

Financial disclosure can be divided into two broad categories, mandatory disclosure and voluntary disclosure. Mandatory disclosures are disclosure items required under the present laws or regulations and approved accounting standards as explained above. On the other hand, voluntary disclosure usually means additional disclosures made within the annual or interim reports of a company (Flynn and Gowthorpe 1997). It can also be defined as information releases, which are not stipulated by laws and regulations (Marston and Leow 1998). Voluntary disclosure does arise due to economic cost benefit considerations (Gray and Roberts 1989). Lang and Lundholm (1993) noted, required disclosures in annual and quarterly report frequently accompanied by voluntary content beyond the minimum required by regulations.

Disclosure can be financial or non-financial, quantitative or qualitative, in writing, graphs or pictures. Many company Web sites make use of graphics and photographs to enhance its presentation (see Kaplan 1999, Petravick 1999, O'Kelly 2000, Nik Salleh and Mohamed 2000, Atan, Mohamed and Yatim 2000). Disclosure can also be categorised as previously undisclosed 'new' information or previous disclosed 'old' information (Marston and Leow 1998). Based on the efficient markets perspective, disclosure of 'old' information will not have any impact on the share price (Brigham, Gapenski and Ehrhardt 1999). On the other hand, it may be more convenient for users if the old information is presented in a useful format (Marston and Leow 1998). One example is the provision of historical summary of information in annual reports. Another example of this is the provision of key accounting ratio.

Many studies have been carried out on the extent of voluntary disclosure, usually in annual reports. They have attempted to explain different levels of disclosure using company characteristics such as size, listing status, leverage or industry classification [see Firth (1979), Chow and Wong-Boren (1987), Lang and Luhdholm (1993), Hossain and Adams (1995)]. The selection of the explanatory variables may be explicitly theory driven or reference to past empirical results. Agency theory and cost benefit analysis have frequently been used in this context.

Lev (1992) argued that managers seldom disclose information with the careful attention and the detailed planning consistent with other corporate activities such as production, marketing and finance. He discussed the impact of voluntary corporate disclosures on perceptions and market values and considered the beneficiaries of the disclosure

Skinner (1994) in his study discussed corporate voluntary disclosure by examining in earning related disclosure. He argued that managers may face an asymmetric loss function in selecting their voluntary disclosure policies. Managers may incur legal costs (from shareholders law suits) and reputational cost if they failed to disclose bad news in a timely manner as a result of large negative earnings surprises.

Next agency theory, signaling theory and cost benefit analysis will be considered in the context of disclosure on the Internet.

1.4.1 Agency Theory

Various studies refer to agency theory to explain the differing disclosure practices of companies in several countries such as the Mexico, Malaysia, Sweden and Japan [Firth (1979), Chow and Wong-Boren (1987), Cooke (1989 and 1991), Hossain *et al.* (1994) Hossain and Adams (1995)]).

Chow and Wong-Boren (1987), in their research of voluntary financial disclosure of Mexican corporations revealed that firm size and financial leverage can be used to explain the extent of voluntary financial disclosure.

A later study by Hossain *et al.* (1994) used agency theory as the framework for an empirical analysis on the levels of voluntary disclosure in companies listed on the KLSE. This study used six variables (firm size, ownership structure, leverage, assets in place, size of audit firm and foreign listing status) to explain the level of information voluntarily disclosed by companies. In another study by Hossain and Adams (1995) on the voluntary disclosure by public listed companies at the Australian Stock Exchange found the significant relationship between voluntary disclosure and firm size, financial leverage and listing status.

Both of these studies used a disclosure index technique. In both cases the disclosure index comprised items, which could be classified as past information. Therefore agency theory can be used to predict voluntary disclosure of past information on the Internet.

1.4.2 Signaling Theory

Morris (1987) discussed agency and signaling theories and noted that these two theories are consistent but not equivalent. There is a overlapping which exists between these two theories and he concludes that given the consistency of agency and signaling theory, a combination of both theories can be used to make predictions about corporate lobbying, accounting policy choice and voluntary auditor selection.

Signaling theory predicts that higher quality firms will choose accounting policies, which allow their superior quality to be revealed, while lower quality firms will choose accounting methods which attempt to hide poor quality (Morris 1987).

Signaling theory can be used to predict that higher quality firms will use Internet to disseminate 'old' accounting information. Lower quality firms might want to maintain a lower profile and restrict access to accounting information to the more determined users. The very use of the Internet might itself be a signal of high quality. It implies that the firm is modern and up to date with the latest technology rather than old fashioned and conservative (Morris 1987).

1.4.3 Cost Benefit Analysis

The disclosure of voluntary financial information involves companies weighing the cost against the perceived benefits. Gray and Roberts (1989) suggested that voluntary disclosure of financial information can only happen when the benefits are perceived to exceed the costs. Forker (1992) used a cost benefit analysis to build a predictive model for disclosure of share options but in doing so he used agency theory to justify some of the hypotheses.

Internet potentially useful in corporate reporting because it helps to address the following issues:

i. It offers low cost solution to both user and producers to access of corporate data by using an established network structure that all can participate easily (Lymer 1997)
ii. It provides instant access to data at convenient times for users (Lymer 1997)
iii. It offers dynamic updating potential (Clackworthy 2000), (addressing timeliness implications – (Jenkins 1994, Wallamn 1995)
iv. It is flexible in presentation compare to the traditional paper versions (Green and Spaul 1997)
v. It allows access to greater volumes of data than previously possible (Lymer 1997, O'Kelly 2000)
vi. Flexibility in user models of data provided (Green and Spaul 1997)
vii. It facilitates the interlinking of information from one web sites to another (Lymer 1997)
viii. The possibilities of exporting data for users manipulation and provide facilities for simulation or what if scenario (Petravick 1999)

1.5 The Role of Internet in Corporate Reporting

The role of Internet in corporate reporting is being debated worldwide [Lymer (1997), Lymer, Debreceny, Gray and Rahman (1999) and FASB (2000)]. Lymer *et al.* (1999) in collaboration with IASC reviewed the impetuses behind the proliferation of Web based business reporting, evaluated the different electronic reporting technologies, conducted a survey of 660 corporations in 22 countries, explores the future technologies which are evolving at rapid pace and discuss the opportunities, challenges and implications for the accounting profession and the IASC, as international accounting standard setter. In essence they recognise the effect of these changes to the way accounting standard setting are conducted traditionally in that the electronic medium will create problems in financial reporting that were not conceivable under the print medium. The contentious issues are in the area of recognition and measurement. They propose a code of conduct on such diversified Internet reporting would ensure that accounting data stays relevant, reliable and understandable to the information users.

On the other hand, the study by Business Reporting Project Steering Committee sponsored by FASB (2000) is to assess the current state of reporting business information over the Internet and to identify notable practices in the U.S. They look at issues concerning the flow of information to non-specialist investors (previously only available to financial analyst), the role of company as information provider and the role of outsider, completeness and timeliness of data posted at the Internet, the variability of contents of those information disclosed at the Internet and the potential risk and related legal and other issues.

1.6 Notable Current Web-based Reporting

In the last two to three years, the Internet has become one of the most important channels for global communication. It is increasingly popular for corporations to use Internet as a medium for communicating corporate information (see Hussey and Sowinska 1999, etc). The World Wide Web (WWW), one of the areas of the Internet, has been widely used by companies worldwide for commercial purposes through their websites.

Various studies have been conducted to study the appropriateness of Internet to act as a delivery mechanism for accounting information. Schneider and Bowen (1997) as quoted in Lymer (1997) provide a summary of history of the debate of events versus value based accounting and come to the conclusion that the Internet could be the mechanism for allowing a new form of financial reporting to develop. Xiao (1996) as quoted in Lymer (1997) studied the issues of the potential of Internet and the constraints of the technology. Green and Spaul (1997) discuss the potential of disclosing financial information in a more economical and practical way by using the multimedia technology. The Internet serves as a tool to achieve this and the likely impact of the Internet on the availability of corporate performance information.

A number of prior studies have been undertaken to explain the extent of Internet reporting by companies of different countries. Lymer (1997) surveyed the top 50 companies on the UK Stock Exchange. Results as at June 1997 showed 46 (92 percent) of the companies had web sites. Of these

46 companies, 30 (60 percent) had annual accounts on the web but only 12 (24 percent) had full accounts. Analysis showed that companies under the retail and pharmaceutical categories produced better financial reporting web sites compared to banking and financial services and insurance companies.

In a similar study by Lymer and Tallberg (1997), results of Lymer (1997) on 50 UK companies are compared with 72 companies listed on Helsinki Stock Exchange of Finland. They found that 65 (90 percent) of the companies had web sites but only 8 (12 percent) had full accounts. 50 companies had some summarised financial information or full income statement and balance sheet but without notes to the accounts. The balance of 7 (11 percent) had no financial statements.

Flynn and Gowthorpe (1997) surveyed top 100 Fortune Global 500 companies and found that 89 (89 percent) companies had web sites. Out of these companies, 60 (71 percent) companies publish annual reports on the websites. They discovered that the nature of the information revealed on the websites of the largest companies in the world is highly disparate in both the content and style of presentation. US companies are found to be the most open and informative and German and Japanese companies provided the least information. Deller *et al.* (1998) showed similar trend that US companies ar emore advance in disclosing their financial statements on the Internet as compared to the UK and German.

Marston and Leow (1998) surveyed the FTSE 100 companies in the UK in 1996. They investigated the relationship between the company characteristics and Internet disclosure. They discovered significant relationship between the firm size and the disclosure of financial information on the websites. Further, it showed no significant relationship between industry type and the existence of a web site and financial disclosure.

In other studies the role of the Internet as an instrument for investor relations activities is described in the context of traditional instruments of investor relations. Deller, Stubenrath and Weber (1998) show the potential application of the WWW as a communication tool, especially with regard to private shareholders. It was found that in the USA, where about half the shares are held by private investors (UK slightly more than twenty and

Germany under twenty percent), and the Internet access is comparatively wide spread, investor relations via the Internet is more common and offers more features than in the UK and Germany. In another study by Ettredge, Richardson and Scholz (2000b) reveal that information companies with higher levels of individual ownership are more likely to provide information to which is benefit-related and suitable for users with relatively low levels of financial expertise. Conversely, companies with greater analyst following tend to disclose more objective, attributed related data. Companies with higher press following tend to provide information that exhibits attributes of both benefit and attributed related data.

The impact of the Internet on traditional assurance services is also another area where research is actively being conducted. Debreceny and Gray (1997) review the opportunities and challenges arise due to increase use of Internet to disseminate financial information. They raise concerned that auditor reports which is included in the web based reporting can be changed at any times. Opportunities for the auditors in assurance services given the tremendous growth in e-commerce are discussed. Considerations in protecting the security of assurance statements on the Web and ensuring these services maintain their objectivity are of paramount important if the credibility of the information is to be maintained. Similarly, Kogan, Sudit and Vasarhelyi (1998) explore the opportunities for continuous on-line auditing through the Internet and the cryptographic technology, which makes the necessary securities arrangements possible. Ettredge *et al.* (2000c) found out that companies receiving going concern modifications are less likely to publish those opinions on their web site than are firms that did not receive such modifications.

In Malaysia, Atan *et al.* (2000) explores the extent of electronic reporting by Malaysian top 50 companies quoted on the main board of KLSE for financial year ending 1999. It was found that two-thirds of the companies have web sites but only 48 percent of the companies presented financial information on the Web. There are variations in the extent of companies' usage of the Internet for financial reporting purposes. The extent of financial disclosure varies from presentation of a full set of corporate annual reports similar to the printed form, to some financial highlights in terms of graphical presentation.

Ismail and Tayib (2000) surveyed 237 companies listed on the KLSE and discovered that only 218 companies have web sites. Out of this, only 25 (11.5 percent) disclose full financial statements. Analysed data revealed that companies tend to disclose general information such as their corporate profiles, corporate information and corporate structure. Other non-financial information such as the chairman's statement, director's report and auditor's report received a lower ranking. The study also found that the industrial products sector as well as finance and trust companies are more likely to disclose their financial statements on the Internet as compared to other type of companies.

The above discussion suggests the increased use of Internet to disseminate financial information to the public via corporate web sites. In the USA there are studies conducted aim at finding out the motivations for firm to disclose financial information on the Internet (Ashbaugh, Johnstone and Warfield 1999, Ettredge *et al.* 2000a). However, thus far there is no research conducted in this area in Malaysia. This study re-examines provision of required disclosures at web sites and modelled closely to that of Ashbaugh *et al.* and Ettredge *et al.*'s study and at the same times to investigate the determinants of voluntary disclosure at web sites.

1.7 Objectives of the Study

Information technology has changed the flow of information between information providers and users of financial statements. Internet potentially creates a new mechanism by which firms can provide a menu of information to diverse decision-makers. Previous researches have shown increasing number of public listed companies engaged in distributing voluntary financial information through the Internet [Atan *et al* (2000), Ismail and Tayib (2000), Nik Salleh and Mohamed (2000)]. However these studies concentrate mainly on the descriptive analysis of financial and business reporting. Therefore it is the intent of this study to extend their studies to provide insights into how firms use Internet to voluntarily disclose financial information and the characteristics of firms engaged in Internet reporting. Specifically the objectives of the study are as follows:

i. To describe and analyse the financial information volunteered in the corporate Web sites of companies listed at KLSE; and
ii. To provide empirical evidence of the relationship between five firm specific variables derived from agency theory namely firm size, financial leverage, proportion of assets-in-place, type of audit firm and the shareholder size and the firms volunteering information on the Internet.

1.8 Hypotheses

Drawing on prior literature, five sets of null and alternate hypotheses were developed to accomplish the objectives mentioned in the preceding section.

The size hypotheses were stated as follows:

H_{0size}: *There is no significant difference between the company size and the extent of financial disclosure on the Internet.*

H_{1size}: *There is significant difference between the company size and the extent of financial disclosure on the Internet.*

In addition, listing status is also used as an alternative specification of the size hypothesis. The size hypothesis is therefore restated as follows:

$H_{0listing}$: *There is no significant difference between the listing status of the company and the extent of financial disclosure on the Internet.*

$H_{1listing}$: *There is significant difference between the listing status of the company and the extent of financial disclosure on the Internet.*

To examine whether financial leverage, assets-in-place, type of audit firm and number shareholders are predictors of voluntary disclosure of information on the Internet, the following hypotheses were formulated:

$H_{0Leverage}$: *There is no significant difference between the financial leverage of the company and the extent of financial disclosure on the Internet.*

$H_{1Leverage}$: *There is significant difference between the financial leverage of the company and the extent of financial disclosure on the Internet.*

$H_{0assets\text{-}in\text{-}place}$: *There is no significant difference between the proportion of assets-in-place and the extent of financial disclosure on the Internet.*

$H_{1assets\text{-}in\text{-}place}$: *There is significant difference between the proportion of assets-in-place and the extent of financial disclosure on the Internet.*

$H_{0auditor}$: *There is no significant difference between the size of the audit firm and the extent of financial disclosure on the Internet.*

$H_{1auditor}$: *There is significant difference between the size of the audit firm and the extent of financial disclosure on the Internet.*

$H_{0shareholder}$: *There is no significant difference between the number of shareholders of the company and the extent of financial disclosure on the Internet.*

$H_{1shareholder}$: *There is significant difference between the number of shareholders leverage of the company and the extent of financial disclosure on the Internet.*

1.9 Research Methodology

The study is basically divided into two main areas, namely the descriptive study on Web based financial and business reporting and the determinants of voluntary financial disclosure over the Internet. The purpose of the second part analysis is to ascertain whether the differences in Web sites are associated with the various firm characteristics such as the size, financial leverage, proportion of assets-in-place, type of audit firm and number of shareholders.

The companies covered in the first part of this study were selected based on the market capitalisation as at 31 December 2000. For the descriptive statistics analysis, top 100 KLSE companies were used. This sample was used to find out if these companies used their Web sites on the Internet to disclose financial information. Further studies were conducted to assess the content of the selected companies home page. Of the 100 companies, 3 financial institutions were excluded from the sample because they have merged with other financial institution. Hence a final total of 97 companies were used for this purpose. As an initial step, an online search was performed on the World Wide Web through KLSE home page. KLSE home page has a link to all listed companies as well as link to their Web sites.

In the event the Web address is not found, then attempts are made via the search portal, Lycos Asia (http://my.lycosasia.com) to locate for the homepage of that firm.

For the purpose of this descriptive study of the top 100 companies listed at KLSE, types of information are classified into two categories, namely non-financial information and financial information. Non-financial information comprises of the corporate profile[3], corporate information[4], corporate structure, corporate announcement[5], online share price and historical share price. Financial information category comprises of annual reports, quarterly reports and financial highlights. For this category, similar approach to that of Ashbaugh *et al.* (1999) is used to classify whether a firm is involve in Internet financial reporting or not. A firm is involved in Internet financial reporting if the annual reports or quarterly report is directly from the firm's Web site or through a link to those reports elsewhere on the Internet.

Second part of the study seeks to investigate the relationship between voluntary financial disclosure at Internet and the firm specific characteristics such as firm size, financial leverage, assets-in-place, auditors and number of shareholders. For this study, the sample size is increase to include (a) all companies that maintain Web site address at KLSE home page. At the time of investigation, there are 278 companies having link pages from KLSE to their Web sites (b) top 100 companies listed at KLSE and (c) the subsidiary or associate companies of the companies listed at KLSE that have link page at their holding company's Web site. The final sample size is as follows:

[3] Corporate profile refers to the corporate background, vision, mission and objectives.
[4] Corporate information refers to the board of directors, secretaries, registered office, principal bankers, registrar, auditor, solicitor and stock exchange listing.
[5] Corporate announcement refers to announcement made to KLSE that would be of interest to investors. For example, corporate earning, quarterly report, dividend, changes to Board of Directors and etc.

KLSE top 100 companies	69
Link page to KLSE homepage	278
Others	18
Less: companies included in top 100 above	(58)
	307
Web site cannot be accessed[6]	(36)
Total sample size	271
	===

Similar procedure as above was carried to find the corporate Web site address. For the purpose of this second part study, disclosure score based on selected items were computed and test its significant against the firm specific characteristics as mentioned above.

Thereafter univariate and multivariate tests were carried to examine the hypotheses formulated. Univariate tests using the Student's t and Mann-Whitney U tests were conducted to examine the categorical independent variables had an impact on the overall level of voluntary disclosure. Pearson product-moment coefficients (*r*) were used to ascertain the correlation between disclosure score and continuous independent variables. Multivariate tests using linear regression were then undertaken to consider the simultaneous effect of these variables.

1.10 Limitation of the Study

Due to the time and cost factors in relation to data collection, the study focused only on firms having their Web sites linked to KLSE homepage. Even though additional samples were picked up during the online survey, it is not sufficient. Efforts must be extended to include more companies in the study in order to arrive at a more concrete finding. Even though the study has investigated five firm specific characteristics, no efforts were made to ascertain the timeliness of the financial disclosure. More specifically, future research should extend the present study to investigate the time lag between the earning announcement and the posting to the corporate Web site at the Internet. Another area that warrants further study is on the reliability of financial information disclosed and the role of independent auditors in

[6] Web sites that can not be accessed are mainly still under construction at the point investigation

ensuring the reliability of this information. A third area that can be researched on is the impact of information clientele on the content of information disclosed. Given the cost of providing information is low, will firms provide selective information to different category of users?

Additionally, future research could test the robustness of the present study findings by extending empirical analysis over a longer period of time. Additionally, comparative agency-based studies using from data from multiple-listed companies of the other South East Asian countries could yield some interesting empirical results.

Finally, as the present study can be taken as the first initiative to investigate Internet reporting, it is expected that the Internet technology will be accelerating at an enormous pace. Therefore the role of Internet would not be restricted to just providing financial information, a reprint of the traditional paper based annual report. It is expected with Internet, the financial disclosure will certainly provide more advantages over the out-mode annual report, by improving timeliness, allowing interactivity and publication of more updated financial data on a more frequent basis.

1.11 Organisation of the Study

The project will be presented in five chapters as follows:

Chapter One:	Introduction (An Overview of the Research Project)
Chapter Two:	Literature Review
Chapter Three:	Research Methodology and Methods
Chapter Four:	Research Findings
Chapter Five:	Conclusion. Provides recommendations for future research.

1.12 Conclusion

This chapter provides an overview of the study. It explains the reasons for and the purpose of this study. The next chapter will review both overseas and local accounting literature pertaining to voluntary financial disclosure.