CHAPTER 8: SUMMARY AND CONCLUSION

8.1 Introduction

The purpose of this chapter is to make concluding remarks concerning the research questions (Section 8.2) and contributions to theory (Section 8.3) and practice (Section 8.4). The chapter ends by highlighting some limitations of this study (Section 8.5) and suggesting some recommendations to improve future research (Section 8.6).

8.2 Summary of Findings and Conclusion

This section presents the summary of findings and conclusion based on the research questions set in Chapter 1.

8.2.1 Research Question 1: To what extent do the Malaysian listed companies voluntarily disclose financial information on companies' Web sites? What are the types and characteristics of such voluntary disclosure?

From the results reported in Chapter 6 (Section 6.2.4 and 6.3), this study found a considerable degree of variability in the extent of voluntary Internet disclosure by Malaysian listed companies. Of a total of 270 attributes, the highest score is 142 items (52.59%) and the lowest is 3 items (1.11%). The mean scores for all types of attributes vary between the lowest of 21.18% for financial information to the highest of 38.49% for annual report attributes. The most frequently disclosed items are the element of financial statements, which are included in more than 90% of those Web sites (Chapter 6, Table

6.13). Appendix B presents the results of all the attributes examined in this study. More than 91.73% (233) of the samples included exclusive PDF files for their annual reports (Chapter 6, Table 6.12).

As indicated in Chapter 6 (Section 6.3), companies seem to have unlimited combinations of Internet reporting via their Web sites; these include:

- Inclusion or exclusion of an item from their hard copy financial statement,
- Inclusion of a full version or summary version for a selected item,
- Usage of the same presentation form or a different presentation form, for example, use a video or sound file for the chairman’s message to the shareholders instead of text,
- Addition of new items excluded in the financial statement, and
- Addition of enhancements unavailable in the paper based paradigm, for example, hyperlinks, animated graphics, interactivity, downloadable spreadsheets.

It can be assumed that soft copy financial statements are important conversions whether in part or in whole of the hard copy financial statements, although this study did not actually compare the hard copy financial statements with the soft copy on the Web. The researcher located video and sound files in the financial statements of some investor relation sites. There are some hyperlinks inside the various parts of the Web-based financial statement, which clearly show that the hard copy financial statement has shifted to a new paradigm (Table 8.1). Approximately 31.89% (81) of the board of directors and officers and about 29.53% (75) of company profile included such hyperlinks. Table 8.1 presents the attributes with hyperlinks inside/outside the soft copy financial statement disseminated on the companies' Web sites.

Nearly 11.42% (29) included hyperlinks in the auditors' reports, with notes stated for such links. The companies must have subsequently added built-in hyperlinks, since auditors did not deliver their reports through the links. Therefore, this will be an important area to be looked into by the audit regulators.

Table 8.1 Attributes with Hyperlinks Inside/Outside Annual Report

Attributes	Frequency	%
Board of directors & officers	81	31.89
Company profile	75	29.53
Closing/general materials (i.e. contact, addresses)	68	26.77
Financial highlights/summary	65	25.59
Quarterly statements	51	20.08
Cautionary disclaimers language/warnings	48	18.90
Consolidated statement of operations	41	16.14
Financial review/overview	41	16.14
Chairman's message to shareholders	39	15.35
Vision statement	36	14.17
Corporate citizenship	35	13.78
Balance sheet	34	13.39
Profit & Loss account	33	12.99
Cash Flows statement	32	12.60
Notes to financial statements/accounts	32	12.60
Shareholders' equity statement	29	11.42
Auditor's report	29	11.42
Share price performance	28	11.02
Segmental report	27	10.63
Mgt discussion & analysis	25	9.84
Management responsibility statement	21	8.27
Analysts' Reports	17	6.69
Employee profile	15	5.91
Market outlook	15	5.91
Share price performance in narrative/words	8	3.15
Customer profile	6	2.36

8.2.2 Research Question 2: Which are the factors (corporate governance mechanisms, ownership structures and Internet visibility) that influence the Internet disclosure practices of Malaysian listed companies? Which are the factors (corporate governance mechanisms and ownership structures) that influence the Internet visibility of Malaysian listed companies?

First model relates corporate governance; ownership structures; Internet visibility and firm characteristics (control variable) to their ultimate effect on Internet disclosure. Second model relates corporate governance; ownership structures and firm characteristics (control variable) to their ultimate effect on Internet visibility. This study used multiple regression analysis to test their relationships. Out of the 19 independent variables tested in the models, 6 independent variables and 2 control variables are significantly related to Internet visibility and disclosure. Table 8.2 summarises the factors that are significantly related to Internet visibility and disclosure level.

Table 8.2 Summary of Results

Independent & Control Variables	Hypothesis	Predicted Sign	Actual Results	Significance
Non-executive Directors	H1 H1a	+ +	+ +	Not significant Not significant
Independent Non-Executive Directors	H2 H2a	+ +	+ -	**Significant** Not significant
Duality of Chair and CEO	H3 H3a	- -	- +	Not significant Not significant
Directors (Accounting and Finance)	H4 H4a	+ +	+ +	Not significant Not significant
Board Size	H5 H5a	+/- +/-	+ -	**Significant** Not significant
Family Directors	H6 H6a	- -	- -	Not significant Not significant
Multiple Directorships	H7 H7a	+ +	- +	Not significant Not significant
Audit Committee (AC) Size	H8 H8a	+ +	- -	Not significant Not significant
AC Independence	H9 H9a	+ +	+ -	Not significant Not significant
AC Financial Expert	H10 H10a	+ +	- +	**Significant** **Significant**
AC Meeting Frequency	H11 H11a	+ +	- +	Not significant Not significant
Shareholding more than 5%	H12 H12a	- -	- -	Not significant Not significant
Top 5 Shareholding	H13 H13a	- -	- -	Not significant **Significant**
Family-owned	H14 H14a	- -	+ +	Not significant Not significant

Table 8.2 Summary of Results, continued

Independent & Control Variables	Hypothesis	Predicted Sign	Actual Results	Significance
Institutional-owned	H15	+	-	**Significant**
	H15a	+	+	Not significant
Government-owned	H16	-	+	Not significant
	H16a	-	-	Not significant
Foreign-owned	H17	+	+	Not significant
	H17a	+	+	Not significant
Directors-owned	H18	-	-	**Significant**
	H18a	-	+	Not significant
Internet Visibility	H19	+	-	Not significant
Control Variables: Industry		+/-	+	Not significant
(Technology)		+/-	+	**Significant**
Firm Size		+	+	Not significant
		+	+	**Significant**
Financial Performance		+	+	Not significant
		+	+	Not significant
Systematic Risk		+	+	Not significant
		+	-	Not significant
Auditor		+	+	Not significant
		+	+	Not significant

The above findings show that industry (technology level), firm size, and audit committee members with accounting and financial qualification are positively and statistically significantly related to Internet visibility. The Top 5 shareholdings are negatively significantly related to Internet visibility. Boards dominated by independent non-executive directors and board size are positively significantly related to Internet disclosure, while audit committee members with accounting and financial qualification, institutional ownership and director ownership are negatively significantly related to Internet disclosure.

In the next section, the researcher discusses the significant factors that influence IFR based on theoretical considerations described in Chapter 4.

8.2.3 Research Question 3: Do theories on disclosure and accounting choice such as agency theory and institutional theory apply to Malaysian listed companies' Internet reporting practices?

This study applies the theories of disclosure and accounting choice on the significant factors identified in research question (2) by (1) focusing on accounting decisions of managers based on agency theory and institutional theory; and (2) focusing on disclosure decisions of management based on voluntary disclosure literature to complement the first one (1).

The researcher used agency theory and institutional theory to develop hypotheses on factors influencing accounting practices. Several accounting studies used these theories as the background of factors influencing the disclosure and accounting choice in different countries. Those theories that originated in developed countries may not fully explain the disclosure and accounting practices in Malaysia, where the ownership concentration degree and relationship-based method of doing business is significant. Therefore, the researcher considers the unique ownership structure and the corporate governance model that captures intrinsic features of Malaysian companies, and uses these characteristics to rationalise the results of hypothesis testing within the research framework discussed in Chapter 4.

8.2.3.1 Agency Theory

According to Berle and Means (1932), the information asymmetry level is the main driver of investor uncertainty. Modern corporation mitigates the negative impact of information asymmetry by adopting various mechanisms, including voluntary disclosure. Cost of disclosure activities is expensive, although disclosure can minimise the negative impact of information asymmetry. Hard copy printed-based disclosure suffers serious weaknesses, as it is expensive and has limited capacity to reach the information users with the increase of geographic dispersion. In contrast, Internet disclosure has advantages such as cheaper, speed, accessible to all and flexible format (Debreceny et al., 2002).

This study found a positive significant relationship between firm size and Internet visibility (Table 8.2). It confirms the argument of agency theory that sample companies reduced the agency costs by increasing Internet visibility. A total of 70% of the respondents from the interviews conducted for the Phase 2 study also agreed that firm size influenced the IFR (Chapter 7, Table 7.3). Larger firms tend to be more visible in the business environment because they are likely to be pressured to increase visibility (Ku Ismail and Ibrahim, 2008/2009) and disclosure. Higher visibility is also needed to enable investors to make investment decisions effectively as larger firms are more complex.

MICG introduced various corporate governance mechanisms to minimise the problem arising in an agency to make sure the managers act in the best interests of the owners. The results of this study show that the proportion of independent directors is positively significantly related to Internet disclosure (Table 8.2). This finding supports a complementary relationship, as the managers increased the Internet disclosure to minimise information asymmetry. In addition, 60% of the respondents from the interview conducted for the Phase 2 study also agreed that independent directors influenced the IFR (Chapter 7, Table 7.5).

The findings on ownership structures show that the Top 5 is negatively significantly associated with Internet visibility. Institutional ownership and director ownership are negatively significantly related to Internet disclosure. These results support the argument by agency theory that potential conflicts of interest between shareholders and management are larger in dispersed ownership companies than in highly concentrated ownership companies. It is evidenced that ownership concentrated companies have less voluntary disclosure via the Internet, as their major shareholders and large equity investors can gain information access through internal sources. In Malaysia, government linked investors are the major institutional shareholders. They are not known to be active promoters of corporate transparency (Wan-Hussin, 2009). Furthermore, 90% of the respondents from the interview conducted for Phase 2 study also agreed that ownership structures influenced the IFR (Chapter 7, Table 7.4).

8.2.3.2 Managerial Hegemony Theory

This study found that the audit committee members with finance or accounting qualification are negatively significantly related to Internet disclosure. This inverse relationship may be explained by managerial hegemony theory. This theory argues that the management dominance over the audit committee board affairs causes the audit committee members to be seen to discharge their overseeing responsibility ineffectively. The absolute control by management over the choice of audit committee members has also caused this deficiency (Kosnik, 1987). The findings from the Phase 2 interviews show that respondents have different views on the influence of audit committee financial experts on IFR, with 50% of the respondents agreeing that audit committee financial experts influenced IFR, and 40% of the respondents disagreeing that the audit committee financial experts influenced IFR (Chapter 7, Table 7.5).

8.2.3.3 Institutional Theory

Institutional theory argues that different industries could have their own information practices to project a good company image and that these practices could have a major impact on companies' choice of voluntary disclosure practices. In the process of seeking legitimacy from the external environment, companies are pushed to adopt the same Internet reporting practices as others in the same industry (Bonson and Escobar, 2006). This study supports this argument, as the industry (technology) is positively significantly related to Internet visibility. A total of 70% of the respondents from the interviews conducted for the Phase 2 study also agreed that industry members influenced the IFR (Chapter 7, Table 7.3).

After the Financial Crisis 1997/8, listed companies in Malaysia needed to adjust to a new environment of reporting, incorporate its rules, normative systems and institutionalised beliefs, as they were required to adopt reporting practices in accordance to the stipulations laid down by regulators, that is Bursa Malaysia's Investor Relations: Put Into Practice (2006) and Best Practices in Corporate Disclosure (2004). There are great differences between companies concerning the information content via the Internet (Section 8.2.1.), even though many are using the Internet more effectively in disclosing voluntary information. According to Oh (2009), Bursa Malaysia CEO Datuk Yusli said that of the total number of listed companies on the exchange that engaged with the stakeholders well were only about 5% and may be even less.

It is suggested that the organisational fields and individual organisations exist in a political and economic context to provide the institutional practice foundation (Dillard et al., 2004). This view suggests that during the institutionalisation process, actors at different levels exert a strong influence on the institutions. An acceptable institutional practice, such as Internet reporting, which is formed at the country level and was initiated by the Malaysian Government,[1] is later transferred through to certain organisational fields and finally to the organisations individually.

Malaysia is an emerging economy nation, which, on the global state, is under coercive pressure, normative and mimetic, institutionalising expectation from the global capital markets. All these pressures can be identified as determinants that have affected the adoption of Internet reporting. For example, companies listed on the Bursa are required to follow new regulatory systems developed for certain fields in organisations, such as Bursa Malaysia's Investor Relations: Put Into Practice (2006) and Best Practices in Corporate Disclosure (2004). Furthermore, new reporting regimes that have been adopted at a country level will be forced on organisations individually and on others who trade in the same environment under formal or informal coercive pressure. Subsequently, through normative and mimetic pressure that constitutes acceptable new practices for financial reporting. The level of adoption for Internet reporting at the organisational level will be affected by the regulatory system's effectiveness and organisations' willingness to make a positive response to institutional pressure.

[1] The Malaysian Government has taken steps by introducing the Multimedia Super Corridor (MSC) in 1996 in order to speed up the process in becoming a developed country. They formed the Malaysian Civil Service Link (MCSL) and all government agencies are required to establish and maintain their Web sites before the end of year 2000.

8.2.4 Research Question 4: What are the preparers' views regarding Internet financial reporting?

In the second phase of this study, the researcher interviewed ten (10) senior managers of the sample companies. The researcher sought the views and opinions on the perception of the importance and use of IFR in Malaysia.

All the managers interviewed were highly aware of Internet reporting. Most of the respondents agreed that the Internet offers easy access to financial information of the companies (Chapter 7, Section 7.3.1). More potential users can be reached through this technology. Disclosure can become shorter and its publication time is under the absolute control of the companies. Therefore, Internet disclosure enhances disclosure speed.

The main motivation as to why companies disclose information via the Internet is identified from the interview data. Among the three main motivations are: first, companies want to be more transparent in disseminating company information. They want to ensure that the public have good access to company information. This helps investors to make good investment decisions and persuade prospective investors to invest in the firm. Second, the companies use the Internet to promote their products and services to create a good brand name in the industry. Lastly, these companies are a strong believer of good corporate governance best practices.

All respondents claimed that ownership structure influenced IFR, and seven (7) respondents agreed that industry members and firm size influenced such reporting practice (Chapter 7, Table 7.3). Phase 1 of this study also found that industry and firm size are positively significantly associated with Internet visibility (Table 8.2). As for corporate governance mechanisms, the respondents were largely unsure about its influence. This study identifies those issues concerning Web-based business reporting (Chapter 7, Section 7.5). Among the more significant issues are the security of the Web site, timeliness of reporting and adoption of XBRL.

8.3 Contribution to Theory

This section discusses the research contribution to the local IFR literature. Chapter 3 highlights prior Malaysian studies that included a few independent variables such as firms' characteristics, ownership concentration and CEO characteristics on the influences of IFR. This study helps in bridging the research gap on the influences of corporate governance mechanisms and unique ownership structures on Internet disclosure and visibility. This study addresses the impact of corporate governance mechanisms specific to the Malaysian context, including effective board compositions and audit committee characteristics recommended by the MCCG (Revised, 2007). From the literature reviewed in Chapter 3, the researcher found that the Malaysian studies only considered agency theory in their examination of IFR practices. This study argues that the adoption of technological based innovation may involve more complex factors than those considered by agency theory. Institutional theory is used in this study, since the companies may adopt technological-based innovation when they are seeking for legitimacy during the increasing institutionalisation process (Xiao et al., 2004). Based on the discussion in Section 8.2.3 above, the findings of this study support the argument of agency theory and institutional theory. These theories supplement each other to provide a valuable insight of IFR practices among Malaysian listed companies. This study makes an important contribution to the governance debate on the voluntary disclosure via the Internet.

Indeed, the findings from the interview indicate that the companies adopt IFR practice because they want to project a good corporate image (Chapter 7, Section 7.3.2). They use the Web practices of their competitors and international companies as their main source of reporting reference. This situation reflects the proposition by the institutionalists who advocate that companies will incorporate external criteria due to the pressure from institutional mechanisms. The researcher can safely say that the companies are actually following the trend of IFR practices and confirm the institutionalists' proposition that external institutions construct and interpenetrate the organisation in every respect.

The Malaysian Web-based studies generally reviewed a very limited number of content items ranging from a minimum of twelve (12) to a maximum of fifty-eight (58) (Chapter 3, Table 3.1). This study adapted a richer and more comprehensive disclosures/attributes index from FASB (2000) to evaluate the comprehensive information via the Internet by Malaysian listed companies. This study adds a broader examination scope for Web-based business and financial reporting practices of Malaysian listed companies.

This study includes the variable "Internet visibility" to capture the importance of a company on the Net. Indeed, Serrano-Cinca et al. (2007) argue that Internet visibility is becoming an important intangible asset for companies following the rapid development of electronic transactions. This study extends the work of Serrano-Cinca et al. (2007) by including an additional search engine, Google, which is one of the popular search engines in Malaysia (Chapter 6, Table 6.7). According to Cheah (2009), Google is the 'current king of the hill'. Google ranked highest in the number of page visits among search engines at 64.15% of total visits and Yahoo at only 13.58%. Having considered the theoretical contribution, the next section discusses the contribution to practice.

8.4 Contribution to Practice

8.4.1 Implication to Policy Maker/Regulator

The most common causes of the Asian financial crisis 1997 were the loss of investors' confidence, and the lack of transparency and effective corporate governance in many Asian corporations and financial markets. During the last few years, the authorities and regulators from most East Asian countries have been actively improving and reviewing their regulatory frameworks, specifically, transparency, corporate governance and disclosure (Zinkin, 2009b). Regulatory discipline exists to reinforce effective corporate governance, market discipline, promote transparency and good business practices. Many investors are prepared and willing to pay a premium price for markets of a good governance regime and for well-governed companies (Zinkin, 2009b). Therefore, regulation is critical, as it prevents fraud and penalises a lack of transparency and malpractice.

As discussed in Chapter 3 (Section 3.2.3.2), regulators such as Bursa Malaysia only require every listed company to have its own Web site, which is current and informative. The stock exchange is adopting a minimalist approach even though they may need to deal with problems like Web security (Chapter 7, Section 7.5.2), unequal access to information and the control of increased online information. Two basic dilemmas faced by the regulators are meeting the information needs of users' and maintaining heterogeneous users' information equity. In addition, there is a need for the regulator to balance the regulation at the global and national level. It will be interesting to see whether changes in transparency regulations by the EU and SEC in European countries and the U.S. will lead to regulation changes on IFR (Abdelsalam et al., 2007; Kelton and Yang, 2008), as well as whether it will also affect the reporting companies, auditors and users attitudes towards IFR.

The views obtained from respondents during the interviews (Chapter 7, Section 7.3.1) confirmed that the reporting companies are enjoying the benefits of using the Internet as a speedy and timely channel of communication. However, the companies are spending additional costs to meet the increasing demand for security enhancement, protection of data integrity and information customisation. The respondents know the need to maintain reporting consistency between a static hard version and dynamic Web-based soft copy. They also know the importance of balancing the confidential commercial information and needs of user information. They need to decide whether to provide customisation information for investors and other stakeholders.

This study has examined the determinants of the voluntary disclosure level via the Internet by Malaysian listed companies. Corporate governance changes in the wake of the Asian Financial crisis 1997 has changed the factors associated with voluntary disclosure via the Internet. The results in Chapter 6 (Section 6.5.3) show that the proportion of independent non-executive directors on the board is positively related to the level of Internet disclosure. It suggests that the regulatory authorities should insist that all Malaysian listed companies include more independent non-executive directors on the board for higher corporate transparency and financial reporting improvement. Presently, the MCCG (Revised, 2007) corporate governance rules require that at least one-third of the board members should be independent non-executive directors.

In contrast, this study found that the audit committee members with finance/accounting expertise are negatively significantly related to Internet disclosure. This relationship may be explained by the tendency of controlling shareholders or the CEO to appoint independent directors who are beholden to them (Wan-Hussin, 2009). If these independent directors refuse to submit to the CEO, they may not be able to carry out their monitoring roles effectively because of their lack of knowledge concerning the company's affairs. Additionally, their appointments may be due to political reasons to legitimate business activities, rather than for their experience and expertise (Haniffa and Hudaib, 2006). The MICG needs to take steps to train all directors of the listed companies to ensure they can perform their roles more effectively.

According to the MCCG (Revised, 2007) requirements, the audit committee should consist of a minimum of three members, with independent directors as the majority. All the audit committee members should be non-executive directors. There is a special breed of non-executive director who is not truly independent (Carter and Lorsch, 2004). These are often referred to as "grey" directors or affiliated directors. Among others, Peng (2004) and Fich (2005) highlight that affiliated directors and independent directors are both non-executive members of the board. Affiliated directors normally have a professional relationship or financial ties with the company, or are an ex-employee (Klein, 1998; Peng, 2004). Therefore, these affiliated directors may not discharge their role so independently; they may compromise their loyalty and objectivity to the shareholders (The Economist, 2004). Additionally, they are usually well connected and often sit on several boards because companies seek their experience and connections (Lin, 2010). To do their job professionally, they need to be independent from business relationships, management and substantial shareholders. The market regulators need to pay attention to the appointment of this kind of affiliated/independent director to protect the interests of the minority shareholders. Indeed, Lin (2010) stresses that what Malaysia really needs is an evolutionary approach towards excellence in corporate governance. Best practice works best in an ecosystem of comply or explain. In addition, the SC to-do list is to get directors of listed companies to comply with the substance rather than just the form of the Malaysian Code of Corporate Governance (Sidhu, 2010).

Companies need to be guided by boards comprising members with an appropriate and diverse range of experience, knowledge and competencies to enable them to carry out their responsibilities and jobs. Purposeful continuing education to develop and improve skills and expertise is critically needed. It can be built into the process with a culture of strict compliance, rigorous risk assessment and common sense ethical behaviour. The key to high quality corporate reporting and performance is putting the right person on the board – board members who are talented individuals with an underlying sense of responsibility and honesty (Lopez, 2010). To succeed, corporate governance and ethics must go together (Lin, 2010).

Table 8.2 shows the results of three ownership variables – Top 5 shareholding is negatively significantly associated with Internet visibility; institutional ownership and director ownership are negatively significantly associated with Internet disclosure. Traditional influences of concentrated ownership appear to have the strongest influence on voluntary Internet disclosure. This implies that the efforts of the regulators to enhance corporate transparency are yet to achieve the targeted outcome, as the attitudes of the high ownership concentration firms towards more voluntary disclosure have not changed at the regulatory change point. The results prove that traditional influences outweigh the spirit of government initiatives taken to strengthen and stabilise the capital market of Malaysia in the wake of the financial crisis. Therefore, the market regulators need to actively consider the policy issue in encouraging more disclosure to promote transparency, especially for closely owned companies in order to protect the interests of the minority, as the majority of Malaysian companies are family-owned and have been found to practise minimum disclosure (Akhtaruddin et al., 2009). The findings of this study have implications for Malaysia and also for other countries in the East Asian region, as they have similarities in the socio-cultural setting and ownership structures.

Bebchuk (2009) stresses that investors face considerably different governance problems in widely held and controlled companies. In widely held companies, the concern is about opportunism by managers who exercise de facto control. In contrast, in controlled companies, the concern is about opportunism by the controlling shareholders at the expense of minority shareholders. The regulatory authorities in Malaysia where controlled companies are dominant should stop using adopted global governance standards based on the designers' experience with widely held companies in the U.S. Rather, they should strive to develop their own standards that are appropriate for controlled companies. They should focus on the special problems of controlled companies and on the rules that would work best for protecting smaller investors in such companies.

IFR is important to regulators, accounting standards setters and to the broader accounting community. The findings in Chapters 6 and 7 of this study help policy setters to gain valuable insights into some of the drivers and underlying factors related to IFR. The international accounting standards setters emphasise the need for standardisation and rationalisation (Lymer et al., 1999). Therefore, research is urgently needed to gain an understanding concerning this new phenomenon of reporting so that efficient and effective standards are set. Additionally, this study provides valuable insights to investors as to why companies use IFR for information dissemination. It also helps auditors and accountants in making their decision on the dissemination of financial information via the Internet. With the increasing usage of Internet reporting, all parties need to develop new strategies to pro-actively respond to financial reports, especially auditors' reports on the Web.

The Asian financial crisis 1997 has led to great emphasis on higher transparency and accountability. The regulatory authorities have undertaken numerous efforts and measures to increase the level of disclosure. However, mere adoption of regulations and rules to increase disclosure is ineffective. It is the constant efforts of those in authority to decide on the corporate disclosure practices and policies that will increase the transparency.

8.4.2 Implications to Reporting Companies

Phase 2 of this study exposes the nature of the understanding and perceptions of local managers on the subject of IFR. Past studies and surveys seem to suggest that an increasing number of companies in Malaysia are participating in IFR. Until the true motivations of the local managers and influences of IFR are investigated and made known, one may make the error of assuming that an increased number of reporters are synonymous with an increased awareness of the concept of IFR. Indeed, such a conclusion is natural in the absence of a more thorough study. During the interviews with the local managers, the researcher discovered some interesting findings that not only question the awareness of the respondents, but also elucidate the forces of institutionalisation that are responsible for their behaviour.

Based on these and other findings gleaned from the interviews in Chapter 7, this researcher looks at the issues that arise from the firms' desire to engage in good quality IFR. First, if unreliable Internet financial information is disseminated, then the Internet becomes irrelevant for rational users, and it can have a negative effect on other users. This is because the financial information is subject to enforcement and auditing, as well as embedded in the mechanisms of corporate governance; therefore, it should have a higher level of reliability than other information. Flexibility is the most important strength of the Internet, which, however, creates a weakness for authenticity and credibility. If the Web site is dynamically linked with an underlying data (Table 8.1), then such information can be easily altered with no trace left behind. New altered information can be disseminated with additional information, also with the replacement of the original information.

Second, oftentimes, it is the company's process of choosing what information they present on the Internet, and not so much that they are manipulating data. They can hyperlink to various other sources, such as the auditor's report, or a favourable analyst report from external sources (Table 8.1). Companies may be motivated to tag their IFR using XBRL. To ensure only quality disclosures are disseminated on the Internet, the auditor should meticulously check the tags assigned.

Third, Web site security is another factor influencing the quality of information (Chapter 7, Section 7.5.2). It may not be easy to monitor the Web site or its underlying database's access. Needless to say, there are loopholes in the security net that the hackers and hostile intruders can and do find to change data without the company's knowledge.

The issues discussed above suggest that information from other company sources may be more credible than Internet financial disclosure. All parties, especially regulators, reporting companies, auditors and users are concerned about the credibility of Internet disclosure. In future, the researcher expects to see more regulation on Internet financial disclosure. As the accounting regulation history suggests the financial scandals have almost always resulted in increased regulation. An academia expert from a Delphi study noted that, "the first Internet reporting scandal has yet to take place, but if it does, it is likely to provide a significant spur to the development of regulation" (Xiao et al., 2002, p.261).

8.5 Limitations

The potential implications discussed above suggest that future studies need to broaden and refine the analysis. There are five limitations in this study that are worth considering. First, this study captures the IFR of 254 listed companies from August to September 2008. Additional research is needed to assess whether Web-based reporting is following the direction of Bursa Malaysia Listing Requirements 9.21 (as at 8th May, 2009), which states that every listed company must have its own Web site, which publishes all announcements made to the Exchange. Second, the present research is a cross-sectional study and, therefore, cannot establish causal relationships but only unearth correlations. Future studies need to adopt a longitudinal approach, which can help to shed further light on the evolving process of Internet-based disclosure practices and its adoption. Third, the context in Malaysia is unique; the significant factors in this study may be insignificant in other settings. The generalisation of findings to other countries is not possible, due to this uniqueness, even for countries in the same stage of economic development. Replications in other national settings are required to identify the interactive and individual effects of relevant factors to develop more universal theories about Internet-based disclosures. Fourth, even though this study only focuses on the context of Malaysia, the regression results' R^2 ranging between 0.13 and 0.188, as presented in Chapter 6 (Table 6.18), suggests that other potential factors of companies' choices of IFR exist. Finally, the researcher believes that the adoption of a maintained hypothesis for Internet disclosures is value adding, and relevant to the capital market functioning like all past studies in this area. Future research needs to test the efficacy of this hypothesis directly, such as by examining the increasing effects of Internet disclosures on the trading volumes or share prices of companies.

Despite the above limitations, this study reveals a very interesting relationship between the unique features of Malaysian Listed Companies and their Internet disclosure practices. This study highlights important policy implications by showing the applicability of relevant theoretical frameworks in contexts that have not been previously studied.

8.6 Future Research

From a theoretical point of view, the variables included in this study also suggest that the extent of Internet disclosure cannot solely be explained by economic theory and organisational theory. Therefore, future studies may yield additional insights by adopting alternative perspectives such as information economics (Bromwich, 1992), information richness theory (Fulk and Steinfield, 1990) and mass communication theory (Parker, 1982).

Future IFR studies may explore the information systems theory, which focus on the designing and maintaining process of Web sites (Sherrell and Chen, 2001). The content of IFR Web sites may be related to information richness and users' responses under media richness theory (Palmer, 2002).

Future research could examine another issue on whether IFR information quality and reporting frequency is related to corporate governance. As there is no definitive guidance on the subject of IFR, its increasing usage creates new challenges to regulators, management and investors. In Malaysia, there is no requirement for auditors to read or verify the completeness and integrity of the financial information on the Internet. As regulators are leveraging on the Internet for disclosure, future studies should continue to provide a clear understanding to policy makers on ways to ensure the distribution of reliable financial information on the Internet.

8.7 Conclusion

This chapter is the final chapter in this thesis. It discusses the research conclusion, contribution to theory and practice, limitations and suggestions for future study. The main contribution of this study is in bridging the research gap of corporate governance mechanisms to IFR, especially concerning the inclusion of variables such as effective board composition and audit committee characteristics recommended by MCCG (Revised, 2007). The influence of audit committee characteristics on the IFR is a new governance variable added to Malaysian IFR studies. Second, by employing in-depth semi-structured interviews in Phase 2, this study exposes the nature of the understanding and perceptions of local managers on the subject of IFR. By understanding the real motives and influences, this research has highlighted several issues that are related to the companies' desire to engage in good quality IFR. This study used multiple regression analysis to examine the relationship between corporate governance factors, ownership structures, firm characteristics (control variables), Internet visibility and Internet disclosure. Future studies could continue this research agenda by addressing the limitations highlighted in this chapter.