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Is internet reporting useful? Evidence from Egypt

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Abstract

Purpose – The purpose of this paper is to explore the views of 18 users and preparers regarding the corporate internet reporting (CIR) practices of companies listed on the Egyptian Stock Exchange (EGX).
Design/methodology/approach – A decision-usefulness theoretical framework is used as a lens for the study, in order to shed light on: internet infrastructure and its use for disclosure purposes in Egypt; the benefits of and trends in practices relating to CIR in Egypt; how the information presented accords with the qualitative characteristics of "usefulness" set out in the IASB's conceptual framework of 2010; and the potential economic consequences of CIR.
Findings – The results indicate reasonable satisfaction with internet infrastructure in Egypt. The interviewees are intensive users of the internet, including accessing electronic sources of corporate information, but the perception remains of hard copy financial reports as the most important source of disclosure. With the exception of verifiability, the majority of respondents viewed CIR as having a (potentially) positive impact on the qualitative characteristics of accounting information as set out in the IASB framework.
Research limitations/implications – The use of the interview method is subject to some limitations. These include: the perceived lack of anonymity, which may restrict the extent to which participants speak honestly or openly about the topic being investigated; the non-standardisation of responses – which can result in the inability to make systematic generalisations; and interviewees' perceptions being influenced by events which have taken place prior to the discussion.
Practical implications – This research provides substantive insights for policy makers about the current attitudes of interested parties concerning CIR in Egypt.
Originality/value – This study contributes to our knowledge in a number of ways, as it provides up-to-date evidence of interested parties' views concerning CIR practices and it indicates how CIR has affected the quality of financial information disclosure practices. Moreover, this study extends prior research on the use of the internet as a disclosure channel by considering a different empirical site, namely Egypt, and also by adopting a different theoretical framework.

Keywords Financial reporting, Egypt, Corporate internet reporting, Qualitative characteristics
Paper type Research paper

1. Introduction

Wallman (1995) asserted "the value and worth of financial reporting lies, in an almost exclusive way, in its usefulness to users" (p. 83). Over the past 30 years or so, accounting standard-setters in the USA, UK and elsewhere have argued that in order to be useful for decision-making purposes, financial information must possess certain key characteristics. However in this regard, the rapidly changing nature of the global business environment has meant that traditional paper-based annual reports have serious limitations and are becoming increasingly less timely, especially with the increase in geographic investor dispersion; they have thus become less useful for decision-making purposes (Ashbaugh *et al.*, 1999; Debreceny *et al.*, 2002). However, a consequence of this is that: "the traditional

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paper-based reporting paradigm will continue to break down and move towards online reporting" (O'Kelly, 2000, p. 28). Today, the recent change towards a web-based reporting paradigm has been made feasible by a pronounced increase in the number of internet users over the past few years. For instance, in 1995, there were 44m internet users across the world, but by the end of June 2016. This number had risen to more than 3.6b, representing more than half of the world's population (Internet World Stats, 2016). Due to that, a greater demand for web-based financial reporting, combined with an increase in the number of investors worldwide who are considered to be users or potential users of corporate information, has led to an increase in the number of market participants, which might itself lead to greater market efficiency (Debreceny *et al.*, 2001; Larrán and Giner, 2002; Ahmed *et al.*, 2017). As different stakeholders have different needs for information (ICAEW, 2004), some prior studies argued that the traditional paper-based annual reports somehow satisfied but not enough for all users' decision needs. However, corporate internet reporting (CIR) "will allow multiple stakeholders to access precisely the information they want" (p. 17) and provide companies with the power to provide a menu of information to heterogeneous decision-makers (Ashbaugh *et al.*, 1999).

The present study aims to explore the perceptions of users and preparers of financial information regarding CIR practices and the impact of these practices on the qualitative characteristics of accounting information of companies listed on the Egyptian Stock Exchange (EGX). The current paper provides two main contributions to the literature on corporate usage over the internet as a disclosure medium. The first contribution pertains to the theoretical framework underpinning the study. Specifically, the study utilised the decision-usefulness framework as a lens to conduct the empirical work and to explain users' and preparers' perceptions concerning CIR practices in the Egyptian context. To the best of the researchers' knowledge, prior studies undertaken to date in this area have either: adapted theories from other disciplines (e.g. the technology acceptance model, innovation diffusion theory) (e.g. Al-Htaybat *et al.*, 2011; AbuGhazaleh *et al.*, 2012); adopted agency theory (e.g. Craven and Marston, 1999; Marston and Polei, 2004; Xiao *et al.*, 2004; Abdelsalam *et al.*, 2007; Ahmed *et al.*, 2017); or chosen not to adapt a theoretical framework at all (e.g. Khadaroo, 2005). Thus, the current study is one of its first kind to employ the decision-usefulness framework to explain CIR practices, despite the adoption of a decision-usefulness framework by accounting regulators in most countries, including Egypt. Specifically, the current study adoption of a well-specified theoretical framework with a focus on the qualitative characteristics of accounting information represents a substantial contribution to the extant literature by assessing CIR practices against the characteristics which financial reporting is traditionally judged. The second contribution relates to the empirical work, as most CIR studies undertaken to date have been descriptive in nature, focussing only on the supply of accounting information and providing a descriptive account of companies' practices. A scarce number of these studies have asked the interested parties, especially users and preparers, about their perceptions concerning CIR practices (e.g. Beattie and Pratt, 2003; Gowthorpe, 2004; Al-Htaybat *et al.*, 2011; AbuGhazaleh *et al.*, 2012). The present study fills this gap in the extant literature by incorporating interview evidence to explore the perceptions of users and preparers in the area. Particularly, the current research provides a useful and informative accompaniment to the descriptive studies in this area. The views of individuals taking part in the present study have a potential value to regulators and standard-setters that developing accounting standards relevant to web-based disclosure. In other words, drawing on the decision-usefulness as a theoretical lens of the current study to examine the extent to which CIR is perceived as useful for decision-making needs. In summary, based on the literature review and decision-usefulness theory, the current research not only ascertains views of key users of financial information about the quantity of CIR, but also investigates perceptions about the quality of CIR by Egyptian listed companies.

The remainder of this paper structured as follows: the Egyptian financial reporting framework outlined in Section 2; while the extant literature and the current study financial framework discussed in Section 3. Section 4 illustrates the methodology of the current study. The results provided in Section 5, while Section 6 concludes the paper.

2. The Egyptian financial reporting framework

The financial reporting framework within Egypt based on a well-organised and old securities exchange history. Specifically, the EGX is one of the oldest in the world and the first that established in the Middle East. Its history dates back to the nineteenth century, and the 1883 establishment of Alexandria Stock Exchange, quickly followed by the Cairo Stock Exchange in 1903. More recently, French civil law is the main source for the corporate legal framework in Egypt (Company law No. 159 issued in 1981), while Anglo-American common law concepts provide the basis for Capital Market Law No. 95 issued in 1992 and Central Depository Law No. 93 issued in 2000 (United Nations Conference on Trade and Development, 2007). In an attempt by the Egyptian Financial Supervisory Authority (EFSA) and the EGX to encourage listed companies to set up a website that include corporate financial information. The EFSA issued Decision No. 15 of 2012 that states that companies listed on the EGX should launch a website in order to publish its annual and periodical financial statements with the explanatory notes; as well as the auditors' reports and other data and information required by the EGX (EFSA, 2012). This decision suggests that the nation's authorities take CIR's potential seriously. It also could mark an important turning point towards the adoption of the internet as a communication channel by companies listed on the EGX. In addition to the contributions of the current study that discussed in the introduction section, this recent decree adds to the contribution and timeliness of the present study. Recently, 70 per cent of listed companies have an active website and engaging in online reporting (The Egyptian Exchange, 2016). Therefore, Egypt provides a great business environment to research the attitudes towards CIR practices of companies listed on the EGX.

3. Literature review and theoretical framework

3.1 Literature review

Recent years have seen CIR practices considered by a large and rapidly growing number of academic and professional studies around the world. Most of the studies attempt to determine the extent of CIR practices in specific countries and focus on the information providers' concerns (the supply side) rather than the information users' needs (the demand side)[1]. In general terms, the CIR literature indicates a growing adoption of the internet as a reporting medium especially in countries with a developed capital market.

On the demand side to date, only a handful of researchers have extended the analysis to go beyond the descriptive dimension of CIR practices. Specifically, these studies have sought to explore the views of interested parties regarding CIR practices by focussing more on information users' concerns. These studies include Beattie and Pratt (2003), who investigated the views of various user groups, preparers and auditors regarding proposals for change and newly emerging practices in the UK. The results showed that all online reporting features (e.g. navigation and search aids) viewed as being useful to some extent. The researchers concluded that expert and non-expert users held similar views in respect to many issues, whereas the perception of users and preparers varied significantly; auditors' views fell in between the latter. Gowthorpe (2004) examined the views of company officials regarding CIR practices; the study found that the decision regarding the adoption of CIR in general taken at a high level, with the disseminator of information taking the dominant role in determining the extent of CIR practices, with no consultation regarding users' needs.

The findings also revealed that the possibilities of enhanced and more symmetrical communication, via CIR practices, not exploited.

Al-Htaybat *et al.* (2011) used a questionnaire survey to investigate the perceptions of Jordanian users with respect to the usefulness and usability of CIR practices. The evidence showed that CIR in Jordan considered as usable, accessible and available at any time and from anywhere. However, Jordanian users viewed the traditional annual reports as the preferred source of accounting information. Similarly, AbuGhazaleh *et al.* (2012) sought to identify the factors affecting Jordanian companies' decisions to set up a web presence. They found that the level and type of competition in the market, compatibility with the needs of the company, the need to reach new markets, clients and investors, together with management support were the most common influences on companies' decision to maintain a website. They suggested that having a monopolistic position in the market was the most common reason for a company not to maintain a website. The study also found that the use of the internet for disclosure purposes in Jordan not seen as an effective way of reducing the cost of capital, as it is influenced by other factors not related to disclosure.

Egypt is targeted for the current study for some crucial reasons. First, all CIR studies undertaken in Egypt to date have been descriptive in nature focussing largely on the supply side (e.g. Ezat and El-Masry, 2008; Desoky, 2009; Aly *et al.*, 2010; Ezat, 2010; Ahmed *et al.*, 2017), no studies have sought to explore views of interested parties despite the adoption of a decision-usefulness framework by accounting regulators in Egypt. Internet technology, together with Egyptians' demand for democracy and transparency fuelled the protests, as thousands of demonstrators joined together in several cities following an online campaign. Despite difficulties with communications technology at the height of the revolution, internet usage in Egypt has continued to increase dramatically, with 38.6 per cent (34.8m users) of the population having access to the internet at the end of June 2016, compared to only 0.58 per cent in 1999 (Internet World Stats, 2016). This level of growth is directly relevant to the present study as it has been argued that:

> […] where general internet usage is more prevalent in a country, users will expect more company information to be placed on the internet. Similarly, firms will likely have higher IFR if they believe that there is a large internet audience (Debreceny *et al.*, 2002, p. 376).

Second, the Egyptian economy is badly affected by the civil unrest, and so CIR practices might prove important in the economic re-building process by providing the detailed and timely information necessary to attract foreign investment. Third, as mentioned above, the EFSA has now obliged listed companies to set up a web presence and engage actively in CIR practices (EFSA, 2012), suggesting that the nation's authorities take CIR's potential seriously. This decision could mark an important turning point towards the adoption of the internet as a communication channel by companies listed on the EGX. This recent decree adds to the timeliness of the present study.

3.2 Theoretical framework

In September 2010, the IASB released its "Conceptual framework for financial reporting (The IFRS Framework)" (International Accounting Standards Board (IASB), 2010). This framework clearly stated that the general aim of financial reporting is providing useful information for "present and potential investors, lenders and other creditors" (IASB, 2010, p. 9). Therefore, the IASB employed a hierarchical approach to identify usefulness; specifically, they classified relevance and faithful representation as the "fundamental qualitative characteristics" of financial information, while comparability, verifiability, timeliness and understandability measured as "enhancing qualitative characteristics". The current paper is adopting the fundamental and enhancing qualitative characteristics of financial information as the main research model on the usefulness of the CIR. Based on these above prior studies, qualities and features of the financial information, this study investigates the extent of CIR in Egypt; Figure 1 illustrates the model of the study.

4. Methodology: interviews approach

Initially, interviews planned with 15 users (include financial analysts and investors) and 10 preparers. The researchers select and contact a random group of preparers for interview appointment purposes. However, Egypt is not an open society; thus, Egyptian business people are not familiar with the notion of interviews by academics, where deep-rooted secrecy is part of the culture (Dahawy and Conover, 2007). As a result, the actual number of interviewees was less than originally planned. Thus, the final sample consisted of semi-structured interviews with 13 users (comprising 9 financial analysts and 4 investors) and 5 preparers (officials from firms listed on the EGX).

A semi-structured interview employed to guide the interview flow and to provide a consistent framework for each of the conversations and help maintain a focus on the research aims. There were two versions of this document; one version per group (preparers and users). The questions generated from careful analysis of the disclosure literature in general and the CIR literature in particular to identify the most pertinent issues; moreover, some questions created through the lens of the IASB conceptual framework 2010. Specifically, the questions grounded in decision-usefulness theory as discussed in Section 3.2. This theoretical perspective was used because: Egyptian Accounting Standards (EAS) are based on the International Accounting Standards (IAS/IFRS) which themselves reflect the decision-usefulness criterion; the fact that the main objective of the present study is to investigate the perceptions of users and preparers concerning CIR practices.

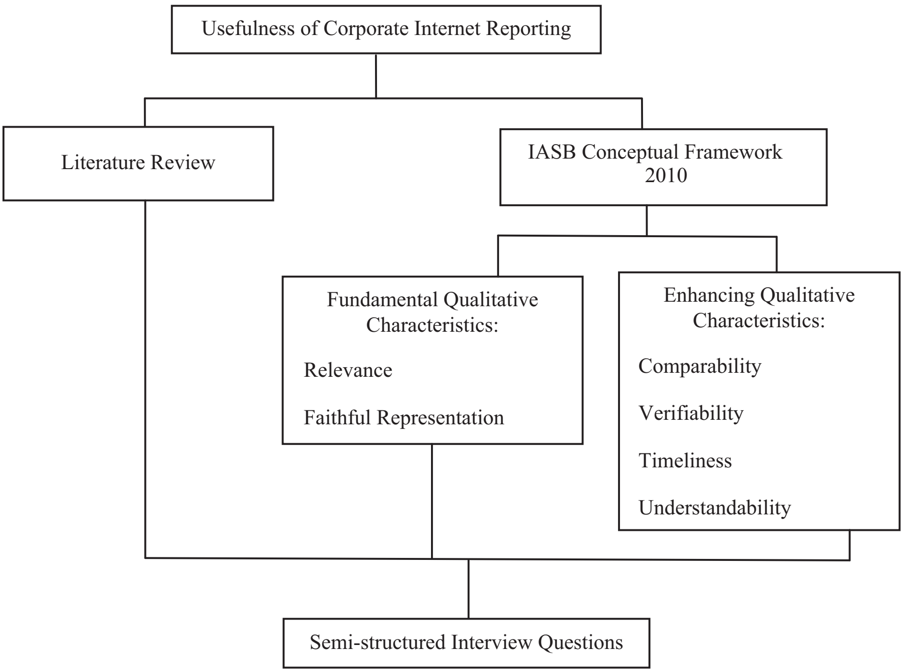

Figure 1.
Model of the study

Table AI provides background demographic information about the 18 interviewees. Inspection of the table shows that 16 of the 18 interviewees were male but there was a wide age range (from less than 30 to more than 60), suggesting that the responses reflect a wide range of knowledge and experience. With regard to the level of education, nine of the interviewees held bachelor degrees, five had a post-graduate diploma, three had master's degrees and one had a PhD[2]. Most of the interviewees had majored in accounting and finance, but one interviewee had majored in engineering and one in veterinary medicine.

5. Findings

5.1 Internet infrastructure in Egypt

Ojah and Mokoaleli-Mokoteli (2012) argued that: "the more available the physical infrastructure for IFR there is in a country, the more likely firms in the country are to adopt IFR" (p. 6) and the more likely users are to acquire corporate information via the web. Egyptians now have a range of different ways of connecting with and accessing the internet. Views were mixed among the interviewees regarding their satisfaction with internet infrastructure in Egypt. Half of those taking part indicated satisfaction with the infrastructure in general although two interviewees, whilst broadly satisfied, had some concerns regarding issues of cost, speed and security. For instance, Interviewee FA9 explained that: "generally, the service is reasonable but there may be some concerns related to security". On the other hand, several interviewees indicated a broad dissatisfaction with the service; these individuals highlighted major concerns relating to cost, speed, maintenance and technical support. For example, Interviewee FA4 pointed out that:

> There is not enough maintenance and upgrading of the service and it is still costly compared to other countries. The high cost of the service prevents a lot of people from subscribing.

With respect to the views of company officials, 80 per cent of the participants were satisfied with the internet infrastructure in Egypt; these included Interviewee C1, who indicated that: "the service in the company is good as we have our own server". However, Interviewee C2 put forward a different view, noting that "the current service needs to be improved; speed is not high, even if you subscribe for high speed".

Use of the internet. As mentioned earlier, internet use in Egypt has increased significantly over the past few years and the perceptions of the interviewees in the present study were consistent with this trend. A question was about the frequency of accessing the internet, almost all the interviewees were extensive users. For example, Interviewee I3 suggested that: "it [the internet] is like water and electricity and it would be a big problem if the service went off", while Interviewee FA5 indicated that: "you could better ask me how many times you do not use the internet". Regarding the purpose of internet use, accessing information about listed companies, getting reports on the Egyptian economy, undertaking research, communication and social networking were the most common of internet usage purposes amongst the users.

Opinions again were mixed among the interviewees regarding the use of companies' websites to access corporate information; while half of the sample viewed firms' websites as the main source of corporate information, a number of interviewees indicated that they do not use the websites of listed companies, relying instead on the EGX and third party companies' websites. In this context, Interviewee FA8 pointed out that: "I rely on third party sites (e.g. Mubasher[3]), as I do not know the company's site". Raising the importance of this issue, Petravick and Gillett (1996) indicated that: "it is important for companies to advertise the existence of their sites because the information is of no value unless users know it is there" (p. 29). Some interviewees reported reliance on both the corporate and third party sites, this included Interviewee FA3, who indicated that:

> Personally, I get corporate information from third party companies, particularly Mubasher, but if the required information is not available on these sites, I may access the company's.

In terms of the views of company officials, 80 per cent of the participants indicated that their companies had maintained a website for between three and ten years. Presenting corporate information, communicating with existing and potential investors and undertaking e-commerce were the most commonly stated purposes of maintaining a web presence. Of particular note here, given the global nature of modern capital market are the views of Interviewee C1 who explained that:

> Our company is very active with disclosure in general and with foreign investors in particular. Foreign investors rely extensively on this medium, and it's a good communication channel with that type of investor. Other companies do not give the same concern to that matter as we do, because they do not have foreign investors; they deal with this as if it is some sort of prestige.

Two company officials indicated that they only disclose online information about their share capital, along with some financial ratios. This limited use of the internet reflected several factors including: the absence of qualified staff, the availability of company reports on the EGX site, and the fact that firms listed on the EGX are not required by law to engage in such practices.

When asked why they did not publish full annual reports online, one company official (C3) suggested that their investors do not ask for much in the way of detail and so the (limited) financial information available on the company's website satisfies their needs. While he stressed that "as a state-owned company, we are obliged to have a website and to publish some financial information; we are following the national company and it is the country's policy". He also argued that disclosure levels amongst state-owned companies are inevitably going to be limited compared to private companies, as the latter are required satisfying the needs of a large number of stakeholders.

When linking the views of company's officials to their level of education, it is clear that well-educated participants' hold positive attitudes towards the use of the internet as a disclosure channel.

5.2 The benefits, importance and future of CIR practices

As outlined earlier in the paper, the extant literature has reported many advantages of using the internet for disclosure purposes and the interviewees did indeed acknowledge a wide range of practical benefits; for example, Interviewee FA3 argued that:

> It is considered to be a cost-effective means of disclosure, as information is available free of cost. It also provides the possibility of interacting with the investor relations department of the company. Where there is coverage from financial analysts, I can find answers to my questions in FAQ in a much timelier and cost-effective way.

In general, Interviewee FA9 pointed out that: "CIR enhances communication between the company and its stakeholders inside and outside the country".

With regard to the importance of CIR practices as a source of corporate information for users and as a means of disclosure for preparers, nearly all the participants indicated that hard copy annual reports remain the main source of corporate information. While listed companies in Egypt are required by law to publish these reports in hard copy in two daily national newspapers, CIR practices in Egypt are still in their infancy, as Interviewee I1 pointed out:

> In the age of information technology the internet is the most important source, but companies' disclosure on their sites is still limited, so for Egypt the hard copy annual report is still the main source.

In terms of the relative importance of hard and electronic copies of annual reports and accounts, a shift in favour of the latter might be expected. For example, as noted earlier, by March 2013 companies listed on the EGX will be required by regulation to provide online financial statements while Lybaert (2002) argued a decade ago that: "over time, the web will become the primary means of communication of financial information" (p. 227). Similarly, O'Kelly (2000) indicated that: "the traditional paper-based reporting paradigm will continue to break down and move towards online reporting" (p. 28). Indeed, the CIR literature as a whole argues that hard copy annual reports will soon exist only as an archival source of information (e.g. FASB, 2000; Lybaert, 2002). Nevertheless, many of the interviewees appeared to be equivocal with respect to the future of such documents in Egypt. On the one extreme, some interviewees believed that hard copy annual reports will continue to exist for many years, as they provide documentary evidence regarding the company's performance; Interviewee I3 stated passionately that: "no, no, we cannot leave the hard copy reports, it is the reference of the company and it is discussed in annual general meetings" (AGMs). Similarly, Interviewee C3 claimed that: "I cannot see a point in time where we will adopt CIR", while Interviewee FA2 envisaged that:

> CIR will not overtake hard copy reports in the near future; as the users' knowledge is still limited in this regard and governmental authorities still depend on these reports as the main source. It is also a cultural thing, so we need to change people's culture first and this is difficult.

On the other hand, some interviewees predicted that CIR would overtake hard copy reports in the near future; for example, Interviewee FA9 asserted that: "the natural development of what is happening at the moment is the adoption of CIR and the disappearance of hard copy reports". As companies listed on the EGX are required by law to issue hard copy reports, she stressed that: "these laws were issued depending on the circumstances at the time, so these laws have to be updated to reflect the changes that have taken place". Between these two extremes, some interviewees articulated the idea of hard copy reports and CIR complementing each other. For example, Interviewee FA4 simply indicated that: "the hard copy will be used along with other means of disclosure". Consistent with this prediction, Al-Htaybat and Napier (2006) claimed that traditional hard copy annual reports are unlikely to be replaced entirely by CIR. Furthermore, Marston and Polei (2004) asserted, "the internet offers companies new opportunities to supplement, replace and enhance traditional ways of investor and stakeholder communication" (p. 286).

5.3 CIR and the qualitative characteristics of useful accounting information

According to the IASB (2010), there are two fundamental characteristics: relevance and faithful representation; and four enhancing characteristics: comparability, verifiability, timeliness and understandability. In this context, Debreceny *et al.* (2002) indicated a decade ago that CIR practices have the potential to "enhance the qualitative characteristics of disclosure" (p. 376), thereby enhancing the usefulness of that disclosure. The following subsections discuss the thoughts of the 18 interviewees concerning each of the characteristics in turn.

Relevance. Taking into account the rapid increase in the number of internet users in Egypt, developing a web presence for disclosure purposes is viewed as an effective strategy that companies adopt to deliver more information that is relevant to decision-makers (Ashbaugh *et al.*, 1999). Similarly, Smith and Pierce (2005) asserted that: "internet technology is regularly claimed to facilitate greater relevance and timeliness of business information" (p. 47). As companies' websites have the ability to accommodate traditional paper-based annual reports, along with additional financial and non-financial information in multiple formats (O'Kelly, 2000; Budisusetyo and Almilia, 2008), these websites can include up-to-date share price information and financial analysts' reports that may contain forward-looking information. From a decision-usefulness point of view, companies' websites might, therefore, provide a fuller and more relevant set of inputs for the economic decisions of users by enabling them to consider past, present and future events. Furthermore, the internet has the potential of providing companies with "the ability to disseminate new information nearly instantaneously to a worldwide audience" (Barac, 2004, p. 9); therefore, CIR can facilitate more timely information releases, thereby affecting the relevance of this information in a positive way.

In total, 15 out of the 18 interviewees replied "Yes" to the question "Do you think CIR enhances the relevance of accounting information?" suggesting that there is widespread perception of a positive impact of CIR practices in this regard. For example, Interviewee FA4 indicated that:

> CIR enhances the relevance of accounting information, as all the components of making a decision are readily available (past, present and future looking information) on companies' websites.

Faithful representation. In order to be useful, financial information is required to not only represent relevant phenomena but also faithfully represent the phenomena that it purports to represent. To be a perfectly faithful representation, a depiction would have three characteristics. It would be complete, neutral and free from error (IASB, 2010). In this context, using the internet as a disclosure channel could have an impact on this characteristic. With respect to completeness, corporate websites can play a crucial role in this regard as it can accommodate both financial and non-financial information in multiple formats, as it has been argued that the web has provide companies with the power to provide a menu of information to heterogeneous decision-makers (Ashbaugh *et al.*, 1999).

When asked about the impact of online reporting on the completeness of accounting information, the fast majority of participants indicated that exploiting all the possibilities of the internet could help companies in publishing a complete set of their financial and non-financial information and satisfy all the informational needs of their stakeholders. Taking into account the costs of printing and distributing hard copies of corporate information, interviewee FA indicated, "It is impossible for companies to provide a complete set of their corporate information in a hard copy formats, while this can be done easily via engaging on online reporting". In the same vein, a private investor (I3), stressed, "Good websites contains very rich content, which enable the users to make informed decisions".

When it comes to corporate websites being neutral and free from error, taking into account the fact that CIR is still developing and there are only a handful of companies, which publish a full set of financial information online. Other companies either disclose summary information, disclose certain items from their financial statements, do not disclose any financial information; or do not maintain a website at all. Therefore, corporate information published via companies websites may not be all the time neutral and free from error, this is why some companies use the disclaimer statements. In this context, Khan (2002) argued that the existence of disclaimer statements could undermine the quality of CIR; however, most of the interviewees saw the inclusion of this statement on companies' websites as insignificant. Indeed, Interviewee FA9 pointed out that: "the disclaimer statement is used for cautionary purposes only", while Interviewee C1, from one of the reporting companies, admitted that: "we copied this statement from Western companies".

Comparability. In a decision-usefulness context, financial statements must be comparable across time and between entities (IASB, 2010). It suggested that the potential provided by the web as a communication medium could enhance the comparability of accounting information (Aly, 2008). From the CIR perspective, companies have the ability to provide an archive of annual reports in more than one language and in accordance with more than one set of GAAP, while the different presentational formats available electronically can be used to present financial information in a more user-friendly fashion (Budisusetyo and Almilia, 2008). Furthermore, Bonsón and Escobar (2006) indicated that CIR:

> Allows companies to […] personalize [sic.] the information provided taking into account different profiles […] to increase its quantity and quality (comparability, relevance, completeness, clarity, etc.) (p. 304).

In line with these arguments, the majority of the interviewees agreed that CIR could indeed enhance the comparability of accounting information. For example, Interviewee FA1 stressed that:

> CIR is very useful in this regard, as companies have the ability to summarise and present information which enhances the comparability of that information. It is quite difficult to do comparisons through hard copy annual reports.

Similarly, Interviewee FA3 indicated that: "it is extremely difficult to get the annual reports of the company for ten years to do comparisons, while with online reporting it is very easy, using an Excel spreadsheet". Interviewee FA9 stressed the global angle, noted, "It is really helpful especially for foreign investors, as they will have the opportunity to get the financial information in accordance with more than one set of GAAP".

Verifiability. According to the IASB's 2010 framework, verifiability means that different knowledgeable and independent observers could reach consensus, although not necessarily complete agreement, that a particular depiction is a faithful representation. Regarding the impact of CIR practices on the reliability of accounting information, the extant literature highlights specific benefits of CIR that may have a positive effect on reliability; for example, websites could include details of the company's investor relations team[4], analyst coverage and external auditors, as well as full contact details for each. However, it argued that companies practicing CIR could not exercise absolute control over online content (Xiao *et al.*, 2004; Mohamed *et al.*, 2009) as information is potentially open to manipulation. Moreover, the inclusion of the disclaimer statement on companies' websites may affect users' perceptions about the reliability of information published on it. More generally, Xiao *et al.* (2002) argued that the reliability of CIR practices is likely to be a big concern for users; in Egypt, where no rules exist governing such practices and companies have discretion in terms of the amount of information made available via their websites, the problem is unlikely to be trivial. Similarly, Khan (2002) argued, "a problem of concern is the level of reliability that can be placed on and the verifiability of the internet-based financial information" (p. 74). When asked about the impact of CIR practices on the reliability of accounting information, the views of participants in the present study again mixed. 5 out of the 18 interviewees indicated that CIR practices could have a positive impact, but half of the interviewees believed that information made available on companies' websites is less reliable, as it could be subject to manipulation. For example, Interviewee FA6 argued that: "it is less reliable, as I'm concerned about the possibility of manipulating information available online", while Interviewee I2 indicated doubts: "that it is 100% correct". Four interviewees held an intermediate standpoint, perceiving there to be no impact of CIR practices on the reliability of accounting information. They pointed out the limited nature of Egyptian CIR practices, where a scanned copy of hard copy annual reports was often the norm.

Timeliness. Timeliness means having information available to decision-makers in time to be capable of influencing their decisions (IASB, 2010). In this context, it can be argued that providing timely information is one of the most apparent advantage of CIR. Rowbottom and Lymer (2009a) pointed out that "online reporting can offer instantaneous, two-way communication and provide direct linkages between different disclosures" (p. 177). When questioned about the impact of CIR on the timeliness of corporate information, views were decisive. All of the interviewees indicated that CIR has made the instantaneous disclosure of financial information as it becomes available a reality. Financial analyst (FA5) stressed that "corporate websites have the potential to provide information in real-time". In addition, a company official (C1) indicated, "having a web presence is the best way to communicate with interested parties in a timelier manner".

Understandability. The extant literature on CIR identifies many ways in which the understandability of accounting information enhanced. These include: the disclosure of corporate information in more than one language and in accordance with more than one set of GAAP; the existence of analyst coverage and a financial glossary; and the availability of contact details and investors' "frequently asked questions". At the same time, it has been argued that the flexibility in presentation format made available by the new technology enhances the readability, accessibility and understandability of corporate information (FASB, 2000), while O'Kelly (2000) suggested that: "the internet has allowed users greater access to financial information. Users are becoming better educated and more demanding of providers of financial information" (p. 30). More explicitly, Bonsón and Escobar (2006) indicated that:

> The application of these new technologies to the corporate reporting systems allows companies […] to personalize [sic.] The information provided taking into account different profiles, to facilitate its understanding for those users who may not be trained to interpret accounting information (p. 304).

When asked about the impact of CIR on the understandability of accounting information, two-thirds of the interviewees indicated that exploiting possibilities provided by the web as a communication channel could have a positive impact. In this context, the participants highlighted the impact of corporate information made available in more than one language and in accordance with more than one set of standards. Interviewee FA5 stressed the difficulties associated with getting and accessing hard copy annual reports; he suggested that CIR: "could enhance that (understandability) characteristic, taking into account difficulties associated with getting the hard copy reports, as not all people can get them".

Six of the interviewees suggested that the information on companies' websites is simply a copy of traditional printed reports and, as a result, the new communication channel has no implications for overall understandability. In any case, the participants believed that not many companies listed on the EGX yet engaged in extensive CIR practices. When linking responses to the level of education, four out of the six participants hold bachelor degrees, while two hold post-graduate diploma. This level of education suggests that the level of education seemed to have an impact on the participants' attitudes towards the impact of CIR on the understandability of accounting information.

5.4 The economic consequences of CIR

A number of studies have investigated the economic consequences of CIR practices (e.g. Gabriëls and Kerckhoven, 2007; Hunter and Smith, 2009; Lai *et al.*, 2010; Rahman, 2010). However, all of these studies employ large sample statistical analysis and detailed evidence on perceptions about the link between CIR and market outcomes is lacking from prior literature. The investigation here focussed on two key variables: cost of capital and share price.

The impact of CIR on the cost of capital. Past theorising suggests that a negative association is likely to exist between the level of corporate disclosure and the cost of capital (Diamond and Verrechia, 1991); empirical research has supported this prediction (Botosan, 1997). However, in the case of CIR practices, Gabriëls and Kerckhoven (2007) reported a surprising positive relationship between the cost of capital and the existence of CIR. This latter result is considered to be at odds with expectations because the addition of information with the qualities discussed earlier should reduce risk and allow firms to obtain funds at a relatively low cost (Larrán and Giner, 2002). Referring to the potential of CIR in this context, Debreceny *et al.* (2002) indicated that "the reduction in the cost of capital through foreign listing might only be achieved if further initiatives are taken to improve the understandability and timeliness of disclosures" (p. 375). When questioned about the impact of CIR on the cost of capital, views were inconclusive. In total, 10 out of the 18 respondents argued that there might be a negative relationship between CIR practices and the cost of capital. For example, a private investor, Interviewee I1, indicated that: "CIR practices could be used as a support along with other factors (e.g. traditional disclosure, financial position, and reputation […] etc.)". Interviewee FA1 claimed that although there are many factors that might affect the cost of capital, CIR could have a negative impact in this regard. Interviewee I3 mentioned the impact of the January 2011 revolution on disclosure in general – and CIR in particular – as he claimed that:

> Generally we all ask for transparency. When there is no disclosure, risk will increase. Before the revolution, there was no disclosure and a high level of risk. After the revolution, disclosure is much better. There should be a link.

On the other hand, 4 out of the 18 respondents asserted that there is no such relationship and pointed to other factors that affect the cost of capital more directly. For example, Interviewee C4, one of the firm-based participants, claimed that: "no no, we do not have this (impact on cost of capital) here, this relationship is correct theoretically, but in reality it is not", Interviewee FA2 suggested that:

> Currently, online reporting does not affect the cost of capital, as companies adopt online reporting voluntarily; these practices are not standardised, and people's awareness of such practices is still limited.

In line with the aforementioned findings, a study by AbuGhazaleh *et al.* (2012) reported that the use of the internet for disclosure purposes in Jordan not seen as an effective way of reducing the cost of capital, as it is influenced by other factors not related to disclosure. With respect to stock market liquidity, Haddad *et al.* (2009) found that higher voluntary disclosure increases stock market liquidity for a sample of Jordanian companies.

The impact of CIR on share prices. It argued that the global accessibility of CIR can help companies attract new investors, therefore ensuring a healthy demand for, and growing price of, the shares concerned (Craven and Marston, 1999). This sub-section of the paper reports the thoughts of the interviewees regarding such a relationship. In total, 11 out of the 18 interviewees replied "No" to the question "Do you think there is a positive relationship between the existence of CIR and share prices?", justifying their views by arguing that emerging markets in general, and the EGX in particular, are not efficient. In this context, Interviewee C4 suggested that: "In Egypt, as an emerging market, financial information is the last thing to affect share prices; it is mainly driven by rumours".

These remarks are similar to those reported in Jordan by AbuGhazaleh *et al.* (2012) where the participants viewed CIR practices as having only a negligible effect on share prices. However, seven interviewees in the present study put forward a different view, claiming that share prices influenced by CIR practices if the potential provided by the internet as a reporting channel were fully exploited. In particular, one of the financial analysts, Interviewee FA3, believed that: "sufficient disclosure through CIR practices could diminish the effects of rumours, and this reduces the fluctuations in share prices". Similar to the results revealed above, participants' attitudes are not linked to their level of education.

6. Summary and conclusion

This paper has provided detailed evidence on the views of users and preparers of financial information regarding CIR practices in Egypt; the questions posed in the interviews chosen in the context of the decision-usefulness framework underpinning Egyptian financial reporting. In general, the responses were encouraging in terms of the perceived potentiality of CIR in Egypt, although views were far from unequivocal in certain cases. With respect to the robustness of Egypt's internet infrastructure and the use of the internet for financial reporting purposes, majority of the views mixed with half of the sample appearing to be satisfied with the current infrastructure. In terms of the frequency of using the internet service, the majority of interviewees were extensive users, with accessing corporate information, undertaking research, engaging in communication and social networking representing the most common uses of the internet, while corporate use focussed on external engagement with investors and customers, as well as internal communication. While the interviewees agreed upon and recognised the key purported benefits of CIR, they indicated that the hard copy annual report remains the main source of corporate information. With respect to the future of CIR, participants had a range of opinions, perhaps reflecting the on-going practical problems with CIR in developing countries including Egypt.

In terms of the impact of CIR practices on the qualitative characteristics of useful accounting information, the majority highlighted the positive impact of CIR on the relevance of accounting information whereas views about its impact on the faithful representation were inconclusive. As respondents agreed upon the positive impact of CIR on the completeness of accounting information. On the other hand, views regarding to the verifiability of accounting information mixed, with half of the interviewees indicating that CIR might not help in this regard; nonetheless, the majority of interviewees expressed very positive thoughts concerning the influence of CIR on the comparability, timeliness and understandability of accounting information. As regards the economic consequences of CIR practices, the participants had a range of views regarding the impact on cost of capital; some perceived there to be a negative relationship, while others argued that in a market such as Egypt, where rumours play a key role in determining asset prices, there is no relationship at all.

In terms of the practical implications, the results of the current study have several insights to stakeholders' decision-making process and policy makers including the IASB as well as Egyptian regulators. For example, the results may notify the IASB that accounting information based on internet reporting is useful to decision-making needs; suggests affirming within its future conceptual frameworks. Further, the results provide some insights for the IASB and Egyptian regulators into how CIR effect on the firm's cost of capital and share prices. Moreover, the results should provide insights for the stakeholders' decision-making process and EGX about the relevance and faithful representation of adopting CIR to listed companies. These insights may also have policy implications for other developing countries that are working hard to improve the quality of CIR for their business entities. For instance, the findings of the current study could encourage other developing countries that still provide CIR on voluntary basis to switch to mandatory basis. The findings of the present study should be of interest to preparers, users, regulators and standard-setters that monitor and govern CIR practices. For preparers, disseminating knowledge of these findings should help them to develop effective websites and engage extensively in such practices. For users, the evidence should increase awareness that, although still at an early stage, CIR does exist in Egypt and this raised familiarity may in turn increase demand for detailed and widespread disclosures in the future. Finally, these results should provide useful guidelines for regulators and standard-setters in identifying best practices, which in turn should allow CIR practices to become more standardised, making them easier to monitor and govern.

Future research could usefully explore the views of other users of corporate information, such as institutional investors, regulatory bodies and standard-setters. Further interviews and/or questionnaire surveys targeting these interested parties might give broad insights and provide more understanding on the topic. In terms of widening the scope of the work in the area, future research might also examine the relationship between corporate governance and CIR practices, while on a related note the role of auditors in assuring the integrity of CIR requires a detailed study at some point.

Notes

1. For example Louwers *et al.* (1996), Petravick and Gillett (1996), Gray and Debreceny (1997), Ashbaugh *et al.* (1999), Petravick (1999), FASB (2000), Ettredge *et al.* (2001), Ettredge *et al.* (2002), Davis *et al.* (2003), Kelton and Yang (2008), Hindi and Rich (2010).
2. Two financial analysts were studying for their masters and one financial analyst was studying for his PhD.
3. Mubasher is a specialised website that provides corporate information about listed companies in Egypt and Arab countries (www.mubasher.info/portal/CASE/homePage.html).
4. Investors should feel more secure when the contact details of the investor relations team are available (Anargiridou and Papadopoulos, 2009).

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Appendix

Interviewee code	Gender	Age	Level of education	Job title
Panel A: financial analysts (users)				
FA1	M	30–40	Diploma	Financial analyst
FA2	M	30–40	Master	Financial analyst
FA3	M	30–40	Diploma	Financial analyst
FA4	M	30–40	Bachelor	Financial analyst
FA5	M	30–40	Diploma	Financial analyst
FA6	F	30–40	PhD	Financial analyst
FA7	M	30–40	Diploma	Financial analyst
FA8	M	41–50	Master	Financial analyst
FA9	F	Less than 30	Bachelor	Financial analyst
Panel B: Private investors (users)				
I1	M	30–40	Bachelor	Investor
I2	M	30–40	Bachelor	Investor
I3	M	More than 60	Bachelor	Investor
I4	M	More than 60	Bachelor	Investor
Panel C: Company officials (preparers)				
C1	M	30–40	Master	Investor relations director
C2	M	51–60	Bachelor	Financial manager
C3	M	30–40	Diploma	Financial manager
C4	M	41–50	Bachelor	Financial manager
C5	M	41–50	Bachelor	Financial manager

Notes: This table provides summary details regarding the 18 interviewees, the codes and some demographic information. Panel A reports background information concerning the financial analysts; Panels B and C provide the same for private investors and company officials respectively

Table AI. Demographic characteristics of the interviewees

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