

Determinants of Internet Financial Disclosure in GCC Countries

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Abstract

The purpose of this paper is to examine the determinants and characteristics of voluntary internet disclosures by listed companies in Saudi Arabia and Oman. This paper uses archival data from listed companies on Tadawul Stock Exchange and Muscat Securities Market. Binary Logistic Regression analysis is used to examine the determinants of internet financial reporting. Mann-Whitney test is used to examine the differences in disclosure characteristics between the two countries. The results of this study reveal that firm size is the major influencing factor that impacts internet financial reporting. The results reveal that a number of disclosure characteristics that differ significantly between the two countries. The paper provides insights into corporate internet disclosures in the GCC countries that will benefit all stakeholders with an interest in corporate reporting in this important region of the world.

Keywords: Internet, Financial reporting, Disclosure, Saudi Arabia, Oman, GCC

1. Introduction

This paper investigates and reports on the extent, nature and determinants of internet financial reporting (IFR) by companies listed on the stock exchanges in Saudi Arabia and Oman. While IFR is fast becoming the norm in most western countries, there is little empirical evidence of the phenomenon in Gulf Cooperation Council (GCC) countries. Until recently, hard (paper) copies have been the primary means for communicating financial information to shareholders and other interested corporate stakeholders. Technological advances have made the internet a useful, timely and cost-effective tool for the communication of this information to stakeholders. The internet has the potential to revolutionize financial reporting. Companies can include the traditional annual reports together with additional financial and non-financial information in multiple formats (Jones and Xiao, 2004).

Questions persist as to whether corporate organizations in the GCC are availing themselves of the opportunity provided by the internet to communicate financial information to their stakeholders. While the use of the Internet for the communication of financial information raises a variety of challenging issues, there is little doubt about its benefits. This paper is an important first step in gauging the extent to which such benefits are being captured in the GCC. Given the increasing importance of IFR and the lack of empirical study on IFR practices in the Middle East, this paper provides an important contribution to filling the gap in our knowledge of this subject. This is of particular importance in a time when there is so much interest in investment opportunities in the GCC countries where rapid economic growth is fuelled by booming oil revenues.

Evidence of IFR practices in various countries have been presented by a number of academic and professional studies – see, for example, Craven and Marston (1999) and Gowthorpe (2004) - UK, Deller et al. (1999) - US, UK and Germany, Gowthorpe and Amat (1999) – Spain, Hedlin (1999) – Sweden, Lymer et al. (1999) – International Comparison, Pirchegger and Wagenhofer (1999) - Austria and Germany, Marston and Polei (2004) – Germany, Trites (1999) - US and Canada, Oyelere et al. (2003), Fisher et al. (2004) and Laswad et al. (2005) - New Zealand, Marston (2003) - Japan, Xiao et al. (2004) - China, Smith and Peppard (2005) – Ireland, Khadaroo (2005) – Malaysia, and Chan and Wickramasinghe (2006) – Australia, Bozcuk et al. (2009) – Turkey, Ismail and Sobhy (2009) – Egypt, Mohamed et al. (2009) – Oman, Salawu (2009) – Nigeria, Mohamed (2010) – Middle East. They indicate the growing use of the Internet for the corporate dissemination of information, including providing annual reports on the Internet, and that the extent and sophistication of IFR practices varies across countries. The objective of this paper is to study IFR practices in the GCC. The paper provides evidence of the extent and determinants of IFR in two GCC countries, namely Saudi Arabia and Oman. The understanding of IFR practices is important for standard setting purposes.

The objective of this paper is to examine internet financial reporting practices and determinants in companies listed in Tadawul Stock Exchange (Saudi Arabia) and Muscat Securities Market (Oman). The rest of this paper is structured as follows. A review of relevant literature is provided in the next section. The proposed research methodology is

discussed in Section 3. Section four provides analyses and discussions on the extent, nature and determinants of IFR by companies listed in the two stock exchanges. Summary and conclusions are presented in the final section.

2. Literature Review

2.1 Background

The Internet provides a useful communication tool for corporate organizations. One of the main benefits of IFR is the potential for large savings in the cost of production and distribution of financial information. The Internet allows companies to reach a much wider range of stakeholders at a relatively lower cost. The use of IFR also leads to a reduction in incidental requests from non-shareholder financial statement users (Allam and Lymer, 2002; SEC, 2002, 2003a,b; Khadaroo, 2005). The literature also documents a number of other benefits that may accrue from IFR (Baker and Wallage, 2000; Ettredge *et al.*, 2001; Debreceeny, *et al.*, 2002; Wagenhofer, 2003; Jones and Xiao, 2004; Boritz and No, 2005). These include more equitable information dissemination among stakeholders as a result of the improved accessibility of the information. With IFR users can choose to access information that meets their specific needs as the Internet allows non-sequential access to information through the use of hyperlinks, interactivity and search facilities. IFR also presents companies with the opportunity to provide more information than is available in annual reports. The internet provides an opportunity for going beyond what is available in hard copy corporate financial statements to communicate additional financial information to users, possibly in real-time and on an interactive basis (McCafferty, 1995; Louwers *et al.*, 1996; Green and Spaul, 1997; Trites and Sheehy, 1997; Trites, 1999; FASB, 2000; Ettredge *et al.*, 2002; Wickramasinghe, 2006). IFR provides corporate organizations with a real opportunity to extend financial disclosure beyond the reproduction of a hard copy annual report and improve on the timeliness, scope, and interactivity of financial reporting, with multimedia, such as sound, animation and video, being used to potentially increase the understanding of information (Louwers *et al.*, 1996; Ravlic, 2000; Wickramasinghe and Lichtenstein, 2006). These developments have a great potential impact on users (Wallman, 1997; Green and Spaul, 1997; Gowthroe and Flynn, 2001).

A number of IFR-related issues and challenges have been noted in the literature. It is possible that the dividing line between current financial information used by management and historical audited financial information made available to public users of financial information could be erased by online, real-time reporting (Green and Spaul, 1997; Hodge, 2001; Oyelere, 2003), with auditors being possibly required to provide opinion on such hitherto internal financial information (Trites and Sheehy, 1997; Lymer and Debreceeny, 2003; Khadaroo, 2005). If IFR is installed as the only mode for communicating financial information it is likely that access to such information will be restricted to only those who possess costly computer equipment and skills. Hence, to ensure equitable access to financial information it will be necessary to ensure that the information being reported through corporate websites is also provided through other media of financial information disclosure (McCafferty, 1995). This could be seen as unnecessary duplication and may result in even

greater costs in the Middle East where financial information is commonly disseminated in both English and Arabic.

Additional issues and challenges for IFR include possible errors in the extraction or re-keying process, which may affect the reliability and integrity of the financial information; Generally Accepted Accounting Practice (GAAP) implications of IFR; the use of the corporate websites for many diverse purposes, which may make the location of financial information difficult; and the acceptability of Internet financial reports as alternatives to hard copy annual reports among users of corporate financial information (Laswad *et al.*, 2000).

By far the greatest challenge faced in the IFR environment is that of ensuring the security and integrity of the financial information published on corporate websites. Apart from possible errors in the publishing process, materials published on the web are susceptible to all manners of security risks. Financial information could, post-publication, be knowingly or unknowingly altered by parties both external and internal to the organization. There is a real risk that critical decisions could be made by users of financial information based on inaccurate financial information gleaned from corporate websites. The extent to which these issues are dealt with is likely to determine the long-term usefulness of the Internet as a medium of corporate financial information dissemination.

2.2 Hypotheses Development

Very little, if any, evidence exists on the extent and nature of IFR practices in the GCC countries. It is predicted that IFR is likely to overtake the hard-copy print form of financial information disclosure in the near future. It is therefore surprising that evidence on the variety of issues associated with this form of financial disclosure is currently not being publicly discussed. Such evidence will depend on the outcome of thorough, in-depth investigation and analysis, such as is being preliminarily undertaken in the current study. Therefore, considering the importance of IFR in disseminating financial information and the little research of these practices in emerging economies, the objective of this paper is to study the extent, practices and determinants of IFR in Saudi Arabia and Oman. While those countries share a number of characteristics due to being in the same region and sharing similar cultures, they are at different stages of development, or with different business environments that may affect the attributes of internet financial disclosure. This argument leads to the first hypothesis:

H₁. There is a significant difference in the attributes of corporate internet disclosure between Saudi Arabia and Oman.

Recent studies have provided evidence on the factors motivating the IFR behaviour of companies around the world. Given the voluntary nature of IFR, these studies sought to establish the reason why companies engage in IFR and the extent of such engagement. The majority of these studies have found corporate size to be a major factor, with IFR likely to provide greater economies of scale cost savings for larger firms (Ashbaugh *et al.*, 1999; Craven and Marston, 1999; Pirchegger and Wagenhofer, 1999; Debreceeny *et al.*, 2002;

Ettredge *et al.*, 2002; Oyelere *et al.*, 2003; Fisher *et al.*, 2004; Chan and Wickramasinghe, 2006; Trabelsi, 2007). Evidence on other variables examined is largely inconclusive.

Firm Size

Several studies examine the relationship between firm size and voluntary disclosure (Malone *et al.*, 1993; Ahmed and Nicholls, 1994; Raffournier, 1995; Haniffa and Cooke, 2002; Karim *et al.*, 2006; Almilía and Surabaya 2009; Aly *et al.* 2010). It is argued that stock market pressure forces large corporations to disclose more information on their websites to assist them in increasing their outside capital to enhance their performance. Hence, large corporations are more able to access financial markets through disclosing more information online (Bonso'n and Escobar, 2002). Large corporations can disclose information on the internet for lower costs as they have the resources to do so. Agency theory implies that large firms exhibit higher agency costs due to the information asymmetry between market participants (Jensen and Meckling, 1976). To reduce these agency costs, larger firms disclose a large flow of corporate information. While, according to the political cost hypothesis, large firms attract more financial analysts putting firms under higher pressure because they are more publicly visible (Boubaker *et al.*, 2012). Due to the industrial competition between companies, smaller firms tend to hide their important information (Almilía and Surabaya 2009, Marston 2003). Moreover, large companies always have a larger number of products and their distribution networks are very complex than smaller firms. Thus, information disclosure is required more in large companies (Marston 2003; Aly *et al.* 2010).

Empirical findings suggest a significant relationship between firm size and online disclosure (Hossain *et al.*, 1995; Ashbaugh *et al.*, 1999; Craven and Marston, 1999; Pirchegger and Wagenhofer, 1999; Brennan and Hourigan, 2000; Bonso'n and Escobar, 2002; Debreceeny *et al.*, 2002; Ettredge *et al.*, 2002; Larra'n and Giner, 2002; Oyelere *et al.*, 2003; Marston and Polei, 2004; Xiao *et al.*, 2004; Garcí'a-Borbolla *et al.*, 2005; Bollen *et al.*, 2006; Sriram and Laksmana, 2006; Ezat and El-Masry, 2008). This prompts the second research hypothesis:

H₂. There is a positive relationship between firm size and IFR

Profitability

It is suggested that firm profitability can be regarded as an indicator to good management, as management tends to disclose more information when the rate of return is high. Hence, profitable companies have extra financial resources to disseminate financial information voluntarily and have more incentives to disclose to both the stakeholders and public that they are more profitable than their counterparts in the same industry. This can be justified by the agency theory, where managers of the highly profitable companies disseminate more information on their companies' website to achieve personal advantages such as the maintaining their positions and justifying compensations (Singhvi and Desai, 1971; Wallace *et al.*, 1994; Haniffa and Cooke, 2002). Furthermore, signaling theory suggests that profitable companies have an incentive to disclose more information, to signal the firm's profitability to investors and to raise capital at the lowest price (Oyeler *et al.*, 2003; Marston and Polei, 2004). However, there are mixed results with some studies revealing significant relationship

between firm profitability and internet financial disclosure (Ashbaugh et al., 1999; Ismail, 2002; Debreceeny and Rahman, 2005), while other studies find no significant relationship between profitability and online financial disclosure (Larraín and Giner, 2002; Oyelere et al., 2003; Marston and Polei, 2004; Xiao et al., 2004; Momany and Al-Shorman, 2006; Ezat and El-Masry, 2008). Thus, the third research hypothesis is:

H₃. There is a positive relationship between profitability and IFR

Leverage

Based on the agency theory, the agency costs of loan capital depend on the nature of claims held by outsiders. It suggests that the costs are higher for firms with proportionally more debt in the capital structure (Leftwich et al. 1981). Voluntary disclosure can reduce the agency costs by facilitating debt supplier's assessment of a firm's ability to meet its debts (Jensen and Meckling, 1976). Thus, it is suggested that firms that are highly leveraged are more inclined to try and satisfy debt suppliers by disseminating reliable information on the website to make these creditors more confident about the ability of the companies to pay their debts. Though this dissemination results in extra disclosure costs, providing reliable information to debt suppliers reduces agency costs. Likewise, shareholders demand more information to assess the firm's financial ability (Ismail, 2002; Larraín and Giner, 2002; Oyelere et al., 2003; Xiao et al., 2004).

Nonetheless, the literature offers inconclusive evidence on the relationship between leverage and internet financial disclosure. Some studies show a significant positive relationship (Mitchell et al. 1995; Hossain et al. 1995; Xiao et al., 2004), other studies show a significant negative relationship (Meek *et al.*, 1995), while others show an insignificant relationship (Brennan and Hourigan, 2000; Debreceeny et al., 2002; Larraín and Giner, 2002; Oyelere et al., 2003; Bollen et al., 2006; Ezat and El-Masry, 2008). Hence, the fourth hypothesis is:

H₄. Firms that are highly leveraged are more inclined to practice IFR

Industry Type

According to the signalling theory, companies within the same industry tend to adopt the same level of disclosure. When a company within an industry tends not to follow the same disclosure practices, including internet disclosures, as others in the same industry, then it may be interpreted as a signal that the company is hiding bad news (Craven and Marston, 1999). The difference in disclosure practices between different industries may be due to different industries having different proprietary costs of disclosure and some may be more technologically advanced than others (Ismail, 2002). Several studies examine the relationship between the type of business activity and internet financial disclosure. The findings are mixed with some studies revealing a significant relationship between internet financial disclosure and industry type (Ashbaugh et al., 1999; Craven and Marston, 1999; Brennan and Hourigan, 2000; Bonsoñ and Escobar, 2002; García-Borbolla et al., 2005; Ismail, 2002; Oyelere et al., 2003; Ezat and El-Masry, 2008; Aly et al., 2010). However, others show insignificant relationship (Debreceeny and Rahman, 2005; Larraín and Giner, 2002; Trabelsi and Labelle, 2006). This leads us to the fifth research hypothesis:

H₅. There is a significant relationship between industry type and IFR

Audit Type

It is suggested that audit quality is an important factor in improving firms' overall reporting practices. International audit firms are more likely to facilitate the diffusion of innovative practices, such as the internet financial reporting (Hail, 2002; Xiao et al., 2004). Agency theory suggests that auditing helps mitigate agency costs due to the interest conflicts between manager and shareholders. Big auditors are likely to be independent and could constrain managers to maintain more stringent disclosure standards (DeAngelo, 1981). Large international audit firms are likely to demand high-quality disclosure. This could be explained by the signalling theory because managers that hire large auditing firms signal to the market that they are willing to provide quality disclosures (Healy and Palepu, 2001).

The findings of some prior studies reveal a positive relationship between audit type and internet financial disclosure (Ahmed and Nicholls, 1994; Raffournier, 1995; Xiao et al., 2004; Boubaker et al., 2012). Though, other studies no significant relationship between audit type and disclosure (Wallace et al., 1994; Hossain et al., 1995; Abd El Salam, 1999, Aly et al., 2010). Therefore, the sixth research hypothesis is:

H₆. Firms that are audited by a Big 4 audit firm are more inclined to practice IFR

3. Methodology

The aim of this study is to investigate and document the extent and nature of IFR practices among firms listed on the GCC countries. The research methodology employed to accomplish this aim is presented in this section. The population of the study consists of firms that are publicly listed in the stock exchanges of KSA and Oman. Data is collected for 2011 as it is the most recent year for which company annual reports are available for the sample at the time of undertaking this research. Table (1) below shows the population and samples selected for each of stock exchanges:

Table 1. Population and samples per stock exchange

	KSA (Tadawul)	Oman (MSM)	Total
All listed companies	156	126	282
Unavailable data	(3)	(13)	(16)
Total	153	113	266

Finally, the sample of this study is 266 firms out of 282 after excluding 16 firms for those firms that have not available data. Moreover, theses 266 firms are consist of 153 firms from KSA, and 113 firms from Oman. Table 2 below shows the sample selected for each of stock exchange in each country.

Table 2. Sample by Country

Country	Number of Companies	%
KSA	153	57.5%
Oman	113	42.5%
Total	266	100.0%

Data regarding whether these companies have website or not were obtained via searching the names of these companies in internet search engines. Where corporate sites are available, we moved to the next stage of the data collection process by investigating the type of information provided at these sites. Four categories of information – company history/background, products/services, financial and other information – were of interest to us at this stage. The next stage of the data collection process involved querying the extent and nature of financial information provided on the corporate websites. Of interest are the type of financial information - that is, whether full financial statements and/or financial highlights; the format of presentation, that is whether PDF, HTML, other formats or a combination of these; and the volume of financial information presented. This data collection approach is similar to the one used in Craven and Marston (1999), Deller et al (1999), Oyelere et al (2003), and Laswad et al (2005).

The objective of this paper is to examine internet financial reporting practices and its determinants in firms listed in KSA stock exchange (Tadawul), and Oman stock market (MSM). Table (3) shows the definition and measurement of these variables.

Table 3. Definition and measurement of variables

Symbol	Variable Definition	Measurement
Dependent Variables		
IFR	Internet Financial Reporting	If IFR exists = 1; If it does not = 0
Independent Variables (Determinants)		
FrmSize	Firm Size	Natural log of total assets
ROA	Return on Assets	Net Income / Total Assets
Lvg	Leverage	Total Liabilities / Total Assets
IndTyp	Industry Type	Manufacturing = 1; Non-financial Services = 2 2; Financial Services = 3
AudTyp	Auditor Type	If 'Big 4' = 1; otherwise = 0
Control Variables		
Market	Stock Market	Tadawul = 1; MSM = 2

4. Results and Discussion

4.1 Descriptive Analysis

Table 4 represents the descriptive statistics using minimum, maximum, mean and standard deviation for disclosure attributes (Panel A), while Panel B represents descriptive statistics for determinants of corporate internet disclosure as discussed in the literature review section.

Table 4 : Descriptive statistics

	Min.	Max.	Mean	SD
<u>Panel A:</u>				
EWeb	0	1	0.92	0.264
AWeb	0	1	0.63	0.483
Investor Relation	0	1	0.43	0.496
Figures & Graphs	0	1	0.55	0.499
Email Link	0	1	0.92	0.264
Multimedia	0	1	0.82	0.388
Format	0	1	0.58	0.495
CG Report	0	1	0.20	0.397
Company Information	0	1	0.91	0.282
Products & Services Information	0	1	0.91	0.287
Forward Looking Information	0	1	0.47	0.500
General Financial Information	0	1	0.62	0.485
IFR	0	1	0.58	0.495
Current Annual Report	0	1	0.52	0.500
IFRYrs	0	3	1.45	1.326
<u>Panel B:</u>				
ROA	-0.68	0.86	0.004	0.122
Audit Type	0	1	0.80	0.397
Industry Type	1	3	1.82	0.806
Lvg	0.00	1.38	0.475	0.265
FrmSize	14.98	26.53	20.52	2.058

The 266 companies listed on the two stock exchanges in KSA, and Oman has three industrial sectors. A distribution of the 266 companies among the different industrial sectors is presented in Table 5.

Table 5. Sample Distribution

Country	Manufacturing	Non-Financial Services	Financial Services	Total	%
KSA	61	50	42	153	57.5%
Oman	54	35	24	113	42.5%
Total	115	85	66	266	
%	43.2%	32%	24.8%		100.0%

Table 6 shows that the majority of companies (80.5%) operating in the GCC hire Big 4 audit firms. The highest percentage is in KSA where about 84% of companies hire Big 4 audit firms and 76% in Oman.

Table 6. Auditor Type

Country	Big 4	Non-Big 4	Total
KSA	128	25	153
Oman	86	27	113
Total	214	52	266
%	80.5%	19.5%	

A classification of “websites” and “non-websites” by country is provided in Table 7 and 8. Overall, 246 companies (92.5%) have English websites, while only 168 companies (63.2%) have Arabic websites. 150 companies (98%) in KSA have English website and 144 companies (94%) have Arabic website. 85% of Oman listed companies have English websites and 21% have Arabic websites. Generally, the proportion of website ownership appears good when compared with developed western countries such as the US, the UK, Australia and New Zealand (Lymer *et al.*, 1999; Oyeler *et al.*, 2003; Chan and Wickramasinghe, 2006).

Table 7. Listed Companies With or Without English Websites by Country

Country	With Website		Without Website		Total
KSA	150	98%	3	2%	153
Oman	96	85%	17	15%	113
Total	246	92.5%	20	7.5%	266

Table 8. Listed Companies With or Without Arabic Websites by Country

Country	With Website		Without Website		Total
KSA	144	94%	9	6%	153
Oman	24	21%	89	79%	113
Total	168	63.2%	98	36.8%	266

Table 9 provides description of internet disclosure attributes. Overall, all companies provide information on company, Email link and product and services with (100%). On the other hand, only 21% of companies disclose corporate governance information and 46% have a section for investor relations. While 88% of companies use multimedia on their websites, only 59% use figures and graphs. The number of companies that use their website for internet financial reporting is 154 out of 246 (63%) and 57% of the companies have the current annual report (2012) disclosed. A breakdown of the overall results is shown in table 10.

Table 9. Overall Internet Disclosure Statistics

Disclosure Attribute	Yes	%	No	%	Total
Investor Relation	114	46%	132	54%	246
CG Report	52	21%	194	79%	246
Email Link	245	100%	1	--	246
Multimedia	217	88%	29	12%	246
Company Information	243	99%	3	1%	246
Products & Services Information	242	98%	4	2%	246
Forward Looking Information	126	51%	120	49%	246
Figures & Graphs	145	59%	101	41%	246
General Financial Information	166	67%	80	33%	246
IFR	154	63%	92	37%	246
Current Annual Report	139	57%	107	43%	246

Table 10. Internet Disclosure Statistics by Country

Variable	KSA		Oman	
	Frequency	%*	Frequency	%**
Investor Relation	96	64%	18	19%
CG Report	44	29%	8	8%
Email Link	150	100%	95	100%
Multimedia	137	91%	80	83%
Company Information	150	100%	93	97%
Products & Services Information	149	99%	93	97%
Forward Looking Information	81	54%	45	47%
Figures & Graphs	124	83%	21	22%
General Financial Information	117	78%	49	51%
IFR	103	69%	51	53%
Current Annual Report	92	61%	47	49%

* Based on a total number of 150 companies with websites in KSA

** Based on a total number of 96 companies with websites in Oman

4.2 Hypothesis Testing

Mann-Whitney test is used to test the first hypothesis. For testing the remaining five hypotheses (H_2-H_6), Logistic Regression is used to examine the determinants of IFR in the GCC countries.

Table 11 reveals that there are significant differences at 1% level between the corporate internet disclosure among the two GCC countries in terms of corporate governance report ($z = -4.399$), products and services information ($z = -4.237$), general financial information ($z = -5.500$), investor relations ($z = -7.612$), the use of figures and graphs ($z = -10.094$), internet financial reporting ($z = -3.616$), the disclosure of current annual report ($z = -2.986$), the multimedia content ($z = -3.891$) and Email link ($z = -4.462$) as shown in table 11. While significant at 5% level for forward looking information ($z = -2.114$). These results support the first hypothesis that there is a significant difference in the characteristics of corporate internet disclosure among the two GCC countries.

Table 11. Mann-Whitney Test Results

Variable	Mean Rank		Mann-Whitney	
	KSA	Oman	z-value	Sig.
EWeb	140.89	123.49	-3.993**	0.000
AWeb	174.68	77.55	-12.157**	0.000
Investor Relation	159.95	97.69	-7.612**	0.000
Figures & Graphs	168.79	85.72	-10.094**	0.000
Email Link	141.76	122.31	-4.462**	0.000
Multimedia	144.09	119.16	-3.891**	0.000
Format	146.04	116.53	-3.616**	0.000
CG Report	145.75	116.92	-4.399**	0.000
Company Information	142.39	121.46	-4.506**	0.000
Products & Services Information	142.02	121.96	-4.237**	0.000
Forward Looking Information	140.91	123.46	-2.114*	0.035
General Financial Information	152.21	108.17	-5.500**	0.000
IFR	146.04	116.53	-3.616**	0.000
Current Annual Report	143.97	119.32	-2.986**	0.003
IFRYrs	144.31	118.86	-2.842**	0.004

* Sig. at 5% level.

** Sig. at 1% level.

The following equation is used to test hypotheses two to six:

$$IFR = \alpha + \beta_1 ROA + \beta_2 AudTyp + \beta_3 IndTyp + \beta_4 Lvg + \beta_5 FrmSize + \varepsilon$$

Using Logistic regression to examine the determinants of IFR in the GCC countries (Tadawul, and MSM), as in the equations above. Where, Where, $\chi^2 = 39.595$, Cox and snell $R^2 = 0.138$. The results in Table 12 show that the only factor that significantly impact internet

financial reporting in the GCC countries is firm size, where Wald = 29.373 (p-value = 0.000) at 1% level. All other variables show insignificant effect on internet financial reporting in the two countries. The results are consistent with the findings of previous studies (Ashbaugh *et al.*, 1999; Craven and Marston, 1999; Pirchegger and Wagenhofer, 1999; Debreceeny *et al.*, 2002; Ettredge *et al.*, 2002; Oyelere *et al.*, 2003; Fisher *et al.*, 2004; Chan and Wickramasinghe, 2006; Trabelsi, 2007; Ezat and El-Masry, 2008).

The results can be justified by the fact that to reduce these agency costs, larger firms disclose a large flow of corporate information (Jensen and Meckling, 1976). Also, large companies are more likely to use information technology than small ones to improve financial reporting to meet the greater demand for information (Xiao *et al.*, 1996). The relative cost of disclosing information may also be lower than smaller ones (Oyelere *et al.*, 2003). Furthermore, according to the political cost hypothesis it is argued that larger firms face more demands for information from analysts than smaller firms (McKinnon and Dalimunthe, 1993; Boubaker *et al.*, 2012).

Table 12. Logistic Regression Results

Variables	Dependent Variable (IFR)			
	Coefficient	SE	Wald	p-value
ROA	0.167	1.204	0.019	0.890
AudTyp	-0.229	0.370	0.384	0.536
InTyp	-0.094	0.180	0.271	0.603
Lvg	-0.680	0.582	1.366	0.243
FrmSize	0.457	0.084	29.373**	0.000
Constant	-8.315	1.596	27.138**	0.000
<i>Cox and Snell R2</i>	0.138			
<i>Chi-square</i>	39.595 (df = 5)			
<i>n</i>	266			

**Sig. at 1% level

5. Summary and Conclusion

This paper investigates and reports on the extent, nature and determinants of IFR practices among companies listed in Tadawul and MSM. As there is little empirical study on IFR practices in the Middle East region this paper is an important contribution to filling the gap the literature. The paper provides insights into IFR in the Middle East that will benefit all stakeholders with an interest in corporate reporting. Data has been collected and analysed on 266 companies listed on the stock markets in Saudi Arabia and Oman. While 246 of these companies maintain websites, only 154 provide internet financial reporting on their websites. The majority of these companies use the PDF format to publish financial information and some companies use the internet to provide additional financial information, in the form of financial highlights. This study reveals a good use of the internet for financial reporting purposes in Saudi Arabia and Oman.

The results show that large firms tend to disclose more financial information in order to reduce information asymmetry and also reduce agency costs. Also, the more exposure large firms are subjected to leads to the firms being under higher pressure to disclose information. Large corporations seem to disclose information on the internet due to the fact they can benefit from the lower cost that results from these firms having the resources to do so. Additionally, the results are consistent with agency theory that large firms attempt to reduce the high agency costs associated with information asymmetry between market participants by disclosing a large flow of corporate information. Furthermore, according to the political cost hypothesis, large firms attract more financial analysts putting firms under higher pressure because they are more publicly visible.

The benefits to be derived from IFR in the modern era of globalisation and endemic market inter-linkages are likely to far outweigh the pecuniary costs. The current level of technological expertise and development in the Arabian Gulf is more than adequate for the creation, operation and maintenance of corporate websites for IFR purposes. However, perceptions about cost and technological expertise may be limiting the widespread implementation of IFR among companies in the Arabian Gulf. Nonetheless, apart from initial set-up costs, which are relatively minor, the ongoing long-term costs of operating and maintaining corporate websites for IFR purposes are minimal. However, the results show that large firms tend to disclose more financial information in order to reduce information asymmetry and also reduce agency costs. Also, the more exposure large firms are subjected to leads to the firms being under higher pressure to disclose information. Perhaps the “novelty” factor is the main factor responsible for the current low uptake of IFR among companies in Saudi Arabia and Oman. This is likely to be generalisable to other countries in the Arabian Gulf region, and possibly the broader Middle East. If that is the case, the region is likely to witness an upsurge in IFR over the next few years and regulators and other governmental agencies, as well as other stakeholder groups will need to be prepared for this imminent development. Nonetheless, there is little by way of regulatory guidance or pronouncement on IFR in Saudi Arabia and Oman and perhaps in most countries of the Middle East. This situation needs to be remedied in advance.

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