Firm Specific Characteristics and Voluntary Disclosure: Evidence from Saudi Arabia

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Abstract

The purpose of this study is mainly to investigate the association between firm-specific characteristics and voluntary disclosure level in annual reports. Firm-specific factors identified for this study are profitability, firm’s age, firm size, auditor size, leverage, and ownership structure. Voluntary disclosure is measured by using the voluntary disclosure index while firm-specific variables are measured according to numerous proxies utilised by previous studies. Hence, a multiple regression analysis has been employed to identify the relationship. The findings show that the variables which have a positive influence on voluntary disclosure are profitability, firm size, and governmental ownership, while family ownership is found to be negatively associated with voluntary disclosure. The findings have could be helpful to investors, management, regulators and legislators in their attempts to comprehend the important factors influencing voluntary disclosure and to reduce agency problems.

Keywords: firm-specific characteristics, voluntary disclosure, Saudi Arabia.
خصائص الشركة والإفصاح الاختياري: حالة من المملكة العربية السعودية

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ملخص

باستخدام عينة فردية 147 شركة من السوق السعودي (تداول) خلال عام 2016م، كانت النتائج من هذه الدراسة هو لتقييم العلاقة بين خصائص الشركة ومستوى الإفصاح الاختياري في التقارير المالية. يقصد بخصائص الشركة الربحية، عمر الشركة، وحجم الشركة، ومكتب المراجعة الذي تعمل فيه الشركة، وملائمة الشركة، وملائمة الإفصاح، وملائمة الملكية. وفقًا لمنهجية الدراسة، تم قياس الإفصاح الاختياري بناءً على مجموعة من العناصر، وكذلك خصائص الشركة اعتباراً على الدراسات السابقة. باستخدام الانحدار الخطي لتحديد العلاقة، توصلت هذه الدراسة إلى أن الربحية، وحجم الشركة، والملكية الحكومية تؤثر إيجابياً في الإفصاح الاختياري بينما الملكية العائلية تؤثر سلباً عليه. هذه الدراسة تتوقع أن تكون مفيدة للمستشارين والإدارة والمشرعين في تفهم تأثير خصائص الشركة على الإفصاح الاختياري ومن ثم تحسين جودة الإفصاح بشكل عام مستقبلاً.

الكلمات المفتاحية: خصائص الشركة، الإفصاح الاختياري، المملكة العربية السعودية.
1. Introduction

Voluntary disclosure in annual reports and in other information media is an area of rapidly growing research in the accounting field which has been addressed in both developed and developing countries (Soliman, 2013). It involves the provision of additional information, not specifically required by law, and is becoming increasingly significant in order to make firms more competitive (Scaltrito, 2015). Voluntary disclosure is defined as “free choices on the part of company managements to provide accounting and other information deemed relevant to the decision needs of users of their annual reports” (Meek et al., 1995).

Investors’ confidence depends mainly on the strength of the capital market associated with beneficial disclosure; however, in recent years the financial crisis and corporate scandals globally have brought accounting standards reform to the forefront of the regulatory agenda.

Prior studies have suggested several benefits of voluntary disclosure for financial reporting users, and they confirm, among others aspects, that voluntary disclosure is a helpful means of reducing agency costs (Lan et al., 2013). Although many factors have been identified, the findings from previous empirical research demonstrate that firm-specific characteristics have a significant influence on the level of disclosure. The association between firm-specific characteristics and annual report information disclosure has been investigated since 1960 (Scaltrito, 2015). Various firm-specific characteristics have been identified in previous studies as having an impact on the quality of voluntary disclosure, but they show mixed results in different markets.

Voluntary disclosure attracts interest from researchers because of its perceived benefits to investors and firms, but little empirical research has been carried out to date on whether or not developing countries, such as Saudi Arabia, have witnessed significant economic reforms.

1.1 Significance of the study

A number of factors contribute to the significance of this research. Firstly, the Saudi government has launched its Vision 2030, which aims to make great strides in economic reform, enhancing the investment climate and encouraging local, regional, and foreign investments by creating and updating statutory rules such as the implementation of IFRSs and updating Companies Law. Secondly, voluntary disclosure is receiving increased perceptible attention in contemporary accounting studies, due to the fact that it provides financial reporting users with
the necessary information to make more informed decisions. What is more, 2017 saw the introduction of compulsory implementation of IFRSs in all Saudi firms, therefore the purpose of this study is to assess the level of voluntary disclosure presented in annual reports and reported by all firms listed on the Saudi Market after the implementation of IFRSs and to show how firm-specific characteristics can influence the level of voluntary disclosure. Thirdly, voluntary disclosure has been investigated more in developed countries than in developing countries where it has received scant attention. Thus, the findings of the empirical analysis are anticipated to provide a beneficial explanation of the quality of voluntary disclosure to financial reporting users and regulators, with impartial evidence from developing countries in general and the Middle East in particular. The remainder of this paper is structured as follows: background of Saudi Arabia; literature review on voluntary disclosure; hypotheses development; research methodology; findings analysis; conclusions; recommendations and limitations.

1.2. Background of Saudi Arabia

According to Vision 2030 launched by the Council of Economic and Development Affairs, Saudi Arabia has made great pace in economic reform, enhancing the investment climate and encouraging local, regional, and foreign investments. Therefore, the Saudi government has issued numerous procedures and implemented regulations to accelerate the rate of economic growth and to reinforce investors’ confidence in the Saudi market. One important step taken in this direction was the convergence with International Financial Reporting (IFRSs) in 2017, representing the general framework for corporate disclosure and developing of accounting standards. As a consequence, all listed firms in Saudi Arabia must comply with updating accounting standards which conform with IFRSs. Moreover, Companies Law has been updated, presenting new opportunities for Saudi businesses to enhance their performance and structure. Despite the fact that these mechanisms should increase the transparency of financial reporting, there is still a widespread theme as, traditionally, publicly listed corporations in the Middle East have a very low level of transparency and corporate disclosure due to the potential threat to competitiveness of high financing costs (Samaha and Dahawy, 2015).

Another issue in the Saudi market is that firms are characterized as having various aspects such as concentrated shareholding including family ownership, blockholders and state ownership. This structure is undoubtedly considered as an extra internal or external monitoring mechanism which can protect shareholders and stakeholders alike.
Until the end of 2016, voluntary disclosure in Saudi Arabia differed between industries due to the differences in Accounting Standards used; for example, insurance and financial firms implemented IFRSs, while other firms still utilised Saudi Accounting Standards. However, a commitment to converged accounting standards (IFRSs) is expected to unite financial reporting standards and reduce information asymmetry for all listed firms in the Saudi market.

Voluntary disclosure is defined as providing more information than it is compulsory to disclose. This means a firm is encouraged to provide additional information in order to meet the needs of users of financial reports. The items of voluntary disclosure may differ from country to country according to regulations. Voluntary disclosure in Saudi Arabia contains a number of items including, for example, strategic information, financial information, and non-financial information. Saudi firms’ attitudes to voluntarily disclosed information are driven by regulations, the market, and the needs of external users, and vary according to the issue of costs and benefits (Mariq, 2009; Alghamdi, 2016).

2. Literature Review and Hypotheses Development

The level of voluntary disclosure is an aspect of disclosure which is not yet strictly regulated in Saudi Arabia, which makes this paper necessary. In the accounting literature, the need to voluntarily disclose information is explored via various theories, because disclosure is a complex phenomenon that cannot be explained by only one model (Scaltrito, 2015). Thus, stakeholder theory, management incentive theory, agency theory and legitimacy theory, among others, are presented in order to explain the need for voluntary disclosure. Meek defines voluntary disclosure as “free choices on the part of company managements to present accounting and other information [which] seemed relevant to the decision needs of users of their annual reports (Meek et al., 1995). In most respects, certain determinants such as leverage, firm size, sector auditor, performance and ownership concentration may have an effect on voluntary disclosure. Prior studies (Ibrahim, 2014; Giannarakis, 2014; Soliman, 2013; Agyei-Mensah, 2012; Andrikopoulos and Kriklani, 2012; Branco and Rodrigues, 2008; Ghazali and Weetman, 2006; and Akhtaruddin, 2005) conclude that firm-specific characteristics have a substantial effect on the provision of additional information in annual reports, not specifically required by law. The following section presents an overview of the relationship between firm-specific characteristics and voluntary disclosure according to prior studies.
2.1 Profitability and Voluntary Disclosure

Depending on agency theory, it is argued by prior studies that profitable firms tend to disclose extensive information in order to reassure shareholders that they are acting in their best interests (Scaltrito, 2015). On the other hand, management of profitable firms prefer to disclose more information to the public to give a good impression of their performance and to reduce information asymmetry (Khlifi and Bouri, 2010; and Ghazali and Weetman, 2006). Performance and its impact on voluntary disclosure has been investigated in a number of previous studies (Giannarakis, 2014; Soliman, 2013; Agyei-Mensah, 2012; and Ghazali and Weetman, 2006) which show that more profitable companies are more likely to disclose financial information. Hence, this study presents the following hypothesis:

H1: There is a positive association between profitability and level of voluntary disclosure.

2.2 Firm’s Age and Voluntary Disclosure

The age of a company has been recognized in prior studies as having an impact on the quality of disclosure. For example, Ibrahim (2014), Soliman (2013), and Akhtaruddin (2005) suggest that younger firms may lack a ‘track record’ to rely on for public disclosure and therefore may have less information to disclose or information which is less rich. Owusu and Yeoh (2005) argue that younger companies may suffer competitive disadvantage if they disclose certain items such as information on research expenditure, capital expenditure, and product development. Ibrahim (2014), who examined the associations between firm characteristics and the extent of voluntary segments disclosure among the largest public listed companies in Nigeria, observed negative association between firm listing age and voluntary segments. In contrast, Soliman (2013) who provides evidence from 50 active Egyptian companies, concludes that firm’s age has no significant association with voluntary disclosure level. The logical reason for selecting this characteristic lies in the possibility that older firms might have enhanced their financial reporting practices over time. Therefore, in principle the age of a firm can be argued as an independent variable in explaining disclosure level. Thus, this study presents the following hypothesis:

H2 There is a positive association between firm age and level of voluntary disclosure.
2.3 Firm Size and Voluntary Disclosure

Firm size has been considered one of the most important predictive variables utilized in prior research on disclosure (Scaltrito, 2015). Most empirical studies advocate the notion that firm size influences corporate disclosure. In other words, previous studies argue that information disclosures may be utilised to reduce agency costs and to deal with information asymmetries between management and the users of annual reports. Therefore, firm size is used as a significant indicator of the costs incurred when publishing voluntary information and the benefits received by doing so (Domínguez, 2012). Ibrahim (2014), Giannarakis (2014), Soliman (2013), Uyar et al. (2013), Whiting and Woodcock (2011), Kaya (2011) and Ghazali and Weetman (2006) conclude that there is a significant positive association between firm size and voluntary disclosure level in annual reports. In contrast, Agyei-Mensah (2012), Xiao et al. (2004) and Eng and Mak (2003), assert that firm size is insignificantly related to the voluntary disclosure level. This study’s argument supposes that large firms are well-motivated toward beneficial disclosure since they are subjected to closer monitoring by investors and financial analysts. Based on the previous arguments, the following hypothesis is developed:

H3: There is a positive association between firm size and level of voluntary disclosure.

2.4 Auditor Size and Voluntary Disclosure.

Agency problems are mitigated by a number of actions that include monitoring conduct or even supplying a catalyst to boost conduct toward owners’ interest. In theory, external auditing considering one of those actions is a vital mechanism that plays a significant role in serving the interests of shareholders and the public to strengthen accountability and bolster trust and confidence in financial reporting via reducing information asymmetry (Piot, 2001). Accordingly, firms that face higher agency costs tend to trust in Big4 firms’ auditing activities. This is because a Big 4 firm has good knowledge of local and international standards, and its implementation costs are lower compared to those of smaller auditing firms (Scaltritom, 2015). Although prior studies do not find a strong relationship between the size of an auditing firm and the extent of information disclosed (Soliman, 2013), earlier research discovered a positive relationship between the Big4 firms and the extent of disclosure. For example, Scaltrito (2015), Jouriou and Chenguel (2014), Juhmani (2014), Uyar et al. (2013), and Lan et al.
(2013) investigated the association between auditor size and disclosure level of corporations and found a statistically positive significant association between the two variables. Hence, it can be argued that:

H4: There is a positive association between Big4 auditor firm and level of voluntary disclosure.

2.5 Leverage and Voluntary Disclosure

Agency theory was employed by previous studies to describe the relationship between leverage and corporate disclosure (Uyar et al., 2013; Abdullah and Ku Ismail, 2008). Specifically, leverage provides a view of a company’s financial structure, and measures the long-term risk implied by that structure (Watson et al., 2002). Therefore, most studies argue that leveraged firms have to disclose more information to satisfy the information needs of their creditors (Uyar et al., 2013). Prior studies have provided mixed results on the association between leverage and voluntary disclosure. Andrikopoulos and Kriklni (2012), Mukherjee et al. (2010), Branco and Rodrigues (2008), and Meek et al. (1995) observed significant positive relationships between the two variables while Giannarakis (2014) and Uyar et al. (2013) claim that leveraged firms disclose less information contrary to the arguments found in the literature. According to agency perspective, this study argues that:

H5: There is a positive association between leverage and level of voluntary disclosure.

2.6 Ownership Structure and Voluntary Disclosure

With a diverse of ownership structure, agency problems may increase due to the increased likelihood of conflicts of interest between shareholders. In order to mediate agency problems, more diffuse ownership firms have the incentive to disclose more information voluntarily (Scaltrito, 2015). Empirical evidence on ownership diffusion has been investigated and reveals a significant positive relationship with voluntary disclosure; on the other hand, some studies found a significant negative relationship. However, prior studies focused on ownership diffusion with no other classification for ownership structure. In addition, Saudi Arabia is characterized by a high level of family and governmental ownership, therefore this study will focus on those two types of ownership structure.
2.6.1 Family Ownership and Voluntary Disclosure

“There is a heated debate among studies concerning the effect of ownership control by family. Two different views emerge as a result of this dichotomy” (Alghamdi, 2016). The first view states that a founding family that has a long-term interest in a firm may lead to greater disclosure. This is because family ownership, unlike other forms, wishes to increase share prices by including more information in the annual report. However, opponents of this view argue that family control may lead to expropriation of the minority shareholders’ interests (Jaggi et al., 2009). In other words, a family-controlled firm is more likely to face agency problems stemming from the conflict between majority and minority shareholders (Ali et al., 2007) therefore, disclosure may be decreased. According to agency theory, concentrated ownership leads to mitigated agency problems (Tosi and Gomez-Mejia, 1989) which may in turn lead to increased disclosure; hence, this study argues that

H6: There is a positive association between the proportion of shares held by family-ownership and the level of voluntary disclosure.

2.6.2 Governmental Ownership and Voluntary Disclosure

Although few studies have looked into the effect of state-ownership on disclosure, the current study adapts the theme of agency theory to suggest that the existence of government as a shareholder may be beneficial in solving agency problems and disclosing more information to the public (Jensen and Meckling, 1976). The argument is that the proportion of state-ownership is positively associated with voluntary disclosure. There is scant literature on the effect of government ownership on different variables such as earnings management, however voluntary disclosure has not been considered. Thus, this relationship will be examined in the Saudi context to determine the level of voluntary disclosure with regards to governmental ownership and therefore a hypothesis is developed as follows

H7: There is a positive association between the proportion of shares held by governmental-ownership and level of voluntary disclosure.

As has been seen in the above discussion of the literature review, there is some controversy among the findings regarding the relationship between firm-specific characteristics and level of voluntary disclosure in annual reports. On the one hand, most previous studies (Scaltrio, 2015; Giannarakis (2014); Jouriou
and Chenguel, 2014; and Soliman, 2013) found a link between firm-specific characteristics and level of voluntary disclosure, while on other hand, many other studies have not.

Although there have been studies in Saudi Arabia such as Alsaeed, (2006) and Mariq, (2009), there has been little research into the relationship between firm-specific characteristics and the level of voluntary disclosure in the Middle East, particularly in Saudi Arabia. Moreover, previous studies in Saudi Arabia focus on only the level of disclosure and some of them attempt to study firm structure with compulsory disclosure. This study contributes to provide new evidence according to relationship between voluntary disclosure and interested factors such as governmental ownership that have not previously been examined. Thus, the current study is expected to add to the accounting literature in terms of showing new evidence. It may also be helpful for emerging markets in enhancing the disclosure of financial reporting.

3. Research Methodology

3.1 Sample Selection

The sample utilized for testing the hypotheses consists of all Saudi Arabian listed firms in 2017. It specifically used a one-year sample to test voluntary corporate disclosure and its relationship to firm-specific characteristics. The rationale behind selecting data from 2017 is due to the implementation of IFRSs in that year. The initial sample was obtained for all active companies listed on the Saudi Stock Exchange (TASI) which comprised 185 firms; however, firms with incomplete data were excluded. Standard deviations from their respective means were also deleted in order to mitigate any potential outlier effects. The annual reports of the sample companies for the financial year 2017 were downloaded from the Saudi Market website (Tadawul).

3.2 Dependent Variable (Voluntary Disclosure)

Voluntary disclosure is proxied by an aggregated disclosure score of non-mandatory strategic, non-financial and financial information. This paper applies the voluntary disclosure item checklist provided by prior studies such as Soliman (2013), Mariq (2009), Chau and Gray (2002) and Meek et al. (1995). This checklist consists of numbered items such as background, performance, and non-financial information (See Appendix 1). A company is awarded 1 if an item included in the disclosure checklist is disclosed and 0 if it is not disclosed. Finally, the total score is divided by 60 (total items) to obtain the voluntary disclosure score. This variable has been symbolized by VDISCL in this research.
3.3 Independent Variables Measurement

The data on firm-specific characteristics as explanatory variables were hand-collected from the annual reports. These variables are defined in accordance with prior studies by Scaltrito (2015); Jouriou and Chenguel, (2014); Soliman (2013); Uyar et al. (2013); Andrikopoulos and Kriklani (2012); Agyei-Mensah (2012); Mukherjee et al. (2010); and Jaggi et al. (2009).

Table (1): description and measurement of variables included in the regression model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Symbol</th>
<th>Descriptions and measures</th>
<th>EP.signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Profitability</td>
<td>PRO</td>
<td>This is measured by return on assets (that is, net income/total assets).</td>
<td>+</td>
</tr>
<tr>
<td>2 Firm’s age</td>
<td>FAGE</td>
<td>This is measured by log of the age of firm</td>
<td>+</td>
</tr>
<tr>
<td>3 Firm size</td>
<td>FSIZE</td>
<td>This is measured by log of the book value of total asset.</td>
<td>+</td>
</tr>
<tr>
<td>4 Auditor size</td>
<td>BIG4</td>
<td>Specifically, a score of 1 indicates a Big 4 auditor is present; otherwise, a score of 0 is assigned</td>
<td>+</td>
</tr>
<tr>
<td>5 Leverage</td>
<td>LEV</td>
<td>Total long-term debt divided by total assets</td>
<td>+</td>
</tr>
<tr>
<td>6 Government-ownership</td>
<td>FOW</td>
<td>The percentage of total shares held by family</td>
<td>+</td>
</tr>
<tr>
<td>7 Governmental ownership</td>
<td>GOW</td>
<td>The percentage of total shares held by government</td>
<td>+</td>
</tr>
</tbody>
</table>

A review of the literature on the relationship between voluntary disclosure and firm-specific characteristics led to the decision to include important control variables in the multiple regression model to test the main hypotheses. Industry type was the most used control variable in prior studies. In line with previous studies such as Ibrahim (2014), this variable was measured as dichotomous if a financial company was given 1, and non-financial scored as (0). Although only a few prior studies paid attention to complexity, it does seem to have an influence on voluntary disclosure. It is argued that there may be more voluntary disclosure when a firm has subsidiary operations in foreign countries that have a strong rule of law. Therefore, this variable is measured as a dummy variable and takes the value of 1 if the company has a subsidiary; otherwise it takes 0. Previous control variables have been symbolized by COMPLEX and IND as shown in the below model.

3.4 Model Specifications

The model formulated to test the association between voluntary disclosure level and firm-specific characteristics is presented below:
As seen from Table 1, all measures of independent variables are provided, as well as the measure of voluntary disclosure presented in the previous section.

### 3.5 Correlation Matrix and Multicollinearity Analysis

A correlation coefficient analysis is further performed to examine the relationship between the dependent and independent variables. As shown from Table 2, it is clear that there is no negative correlation between the independent variables in the model. As indicated, collinearity does not seem to cause concern in the interpretation of regression coefficients of the independent variables in the models. Furthermore, the variance inflation factor (VIF) for all variables is below 10, showing that multicollinearity is not a serious problem. The mean of VIF for each model is 1.63 and 1.78 respectively.

<table>
<thead>
<tr>
<th></th>
<th>VDISCL</th>
<th>PRO</th>
<th>FAGE</th>
<th>FSIZE</th>
<th>BIG4</th>
<th>LEV</th>
<th>FOW</th>
<th>GOW</th>
<th>IND</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDISCL</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRO</td>
<td>0.287*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FAGE</td>
<td>-0.278*</td>
<td>0.190*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSIZE</td>
<td>-0.401*</td>
<td>0.188*</td>
<td>0.234*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIG4</td>
<td>-0.131*</td>
<td>0.048</td>
<td>-0.095</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>-0.245</td>
<td>0.100*</td>
<td>0.222*</td>
<td>0.103*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOW</td>
<td>0.088*</td>
<td>0.243</td>
<td>0.368*</td>
<td>0.3423*</td>
<td>0.097</td>
<td>0.040</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOW</td>
<td>-0.055</td>
<td>0.039</td>
<td>0.040</td>
<td>-0.055</td>
<td>-0.043</td>
<td>-0.033</td>
<td>0.1485*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>IND</td>
<td>0.323</td>
<td>-0.218</td>
<td>0.371*</td>
<td>-0.117</td>
<td>0.238</td>
<td>0.144</td>
<td>0.425*</td>
<td>0.187*</td>
<td>1</td>
</tr>
</tbody>
</table>

This Table provides the Spearman's Correlation matrix for the main continuous variables used in the analysis indicating that correlation is significant at least at the 5% level.

* denotes significance at the 0.05 level
4. Analysis, Results and Discussion

Based on the data in Table 3, standard skewness and kurtosis data is not normally distributed. This is due to the fact that the value of both skewness and kurtosis for some variables indicates high values. Previous studies such as Abdul Rahman and Ali, (2006) suggest that data can be normally distributed if standard skewness is within ±1.96 and standard kurtosis is ± 2 or ± 3. On the other hand, the result of the Hausman Test is a common test used to check for strict exogeneity in social sciences. (if an explanatory variable is exogenous when the relationship between continuous variables is tested) shows insignificant finding as the Chi-2 result is higher than 5% for the model which led the current study to use random effect. Although the standard parametric test is a powerful method, requiring rigorous assumptions such as normality and homogeneity (Anderson et al, 2003), a non-parametric test does not require the previous conditions, following the free-distribution method, and does not require the measurement of data.

Table (3): Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDISCAL</td>
<td>0.271</td>
<td>0.072</td>
<td>0.61</td>
<td>0.454</td>
<td>0.411</td>
<td>3.044</td>
</tr>
<tr>
<td>PRO</td>
<td>0.110</td>
<td>-0.131</td>
<td>0.670</td>
<td>2.240</td>
<td>-1.309</td>
<td>3.440</td>
</tr>
<tr>
<td>FAGE</td>
<td>0.710</td>
<td>0.54</td>
<td>0.830</td>
<td>0.580</td>
<td>-0.939</td>
<td>5.711</td>
</tr>
<tr>
<td>FSIZE</td>
<td>9.330</td>
<td>7.690</td>
<td>11.44</td>
<td>0.687</td>
<td>0.777</td>
<td>3.197</td>
</tr>
<tr>
<td>BIG4</td>
<td>4.500</td>
<td>3.000</td>
<td>10.00</td>
<td>1.798</td>
<td>0.487</td>
<td>2.187</td>
</tr>
<tr>
<td>LEV</td>
<td>0.065</td>
<td>0.000</td>
<td>0.470</td>
<td>0.138</td>
<td>1.869</td>
<td>5.772</td>
</tr>
<tr>
<td>FOW</td>
<td>0.470</td>
<td>0.000</td>
<td>0.950</td>
<td>0.543</td>
<td>-0.895</td>
<td>2.899</td>
</tr>
<tr>
<td>GOW</td>
<td>0.640</td>
<td>0.000</td>
<td>1.000</td>
<td>0.576</td>
<td>-0.799</td>
<td>3.655</td>
</tr>
<tr>
<td>IND</td>
<td>0.220</td>
<td>0.050</td>
<td>0.890</td>
<td>0.433</td>
<td>1.800</td>
<td>5.221</td>
</tr>
</tbody>
</table>

GLS estimation (random effect) panel regression over a one-year test period was used in this study, because is considered the best linear unbiased data. (Anderson et al, 2011). It is worth noting that the current study used stepwise forward regression (Gujarati and Porter, 2009), commonly employed to determine the appropriate model by eliminating variables conceived to enhance the value of. As indicated in Table 3 outlining general descriptive statistics concerned with the model’s variables, the average voluntary disclosure index of the sample companies was 0.27, with a range of 0.07 to 0.64, suggesting low voluntary disclosure practices in Saudi Arabia. The findings are similar to those of Soliman (2013) and Almusali and Qeshta (2014) who found the mean VDISCAL of
Egyptian firms is 0.31, and that of Palestinian firms is 0.25, respectively. This result may be referred to as a culture of voluntary disclosure among Saudi listed companies not having been encouraged. Moreover, the type of information is voluntary in nature, and no effective regulations enforce firms to reveal it. The results also indicate that level of average profitability in the sample companies is 11%, as shown in Table 1.

As in many previous disclosure studies, regression analysis was chosen to investigate the association between firm-specific characteristics and voluntary disclosure level of Saudi firms. Table 3 reports the results of the GLS model in order to show whether firm-specific determinants significantly affect the level of voluntary disclosure.

**Table (4): Multivariate Analyses for all variables**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Expected sign</th>
<th>Coeff.</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const.</td>
<td></td>
<td>-0.576</td>
<td>***</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRO</td>
<td>H1</td>
<td>+</td>
<td>0.018</td>
</tr>
<tr>
<td>FAGE</td>
<td>H2</td>
<td>+</td>
<td>0.243</td>
</tr>
<tr>
<td>FSIZE</td>
<td>H3</td>
<td>+</td>
<td>0.010</td>
</tr>
<tr>
<td>BIG4</td>
<td>H4</td>
<td>+</td>
<td>0.230</td>
</tr>
<tr>
<td>LEV</td>
<td>H5</td>
<td>+</td>
<td>0.199</td>
</tr>
<tr>
<td>FOW</td>
<td>H6</td>
<td>+</td>
<td>-0.012</td>
</tr>
<tr>
<td>GOW</td>
<td>H7</td>
<td>+</td>
<td>0.067</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INDUSTRY</td>
<td></td>
<td>0.387</td>
<td></td>
</tr>
<tr>
<td>COMPLEX</td>
<td></td>
<td>0.43</td>
<td>0.221</td>
</tr>
</tbody>
</table>

As shown in Table 4, the value obtained for the Adj of the model was 0.43 indicating how much of the variance in the dependent variable is explained by the model. Thus, the analysis shows that the variables considered in the model largely explain firms' voluntary disclosure. The results of the analysis presented in the previous table underline that for H1, H3, H7 there is a positive significance relationship between profitability, firm size, governmental ownership and the
level of voluntary disclosure. The coefficient for those variables, as presented in Table 4, rates 0.017, 0.010, and 0.026 respectively. Thus, previous hypotheses are accepted.

This result is consistent with prior studies such as Giannarakis (2014), Ibrahim (2014), Giannarakis (2014), Soliman (2013), Uyar et al. (2013), and Agyei-Mensah (2012) who argue that large companies that are performing well tend to voluntarily disclose more information. Moreover, governmental ownership has an influence on the level of voluntary disclosure. This is because Saudi firms that are government owned are subjected to more monitoring, leading them to disclose more information.

Contrary to the hypothesis of this study, a negative relationship was found between family ownership and level of voluntary disclosure. Therefore, Hypothesis 6 is rejected. A plausible explanation of this result is that a family-controlled firm is more likely to face agency problems stemming from the conflict between majority and minority shareholders, hence they may expropriate the minority shareholders’ interests by not providing more information.

As seen in Table 4, the analysis could not find supportive evidence regarding the relationship between leverage, firm age, Big4, and the level of voluntary disclosure, therefore H2, H4, and H5 are rejected. The result contradicts previous studies such as Scaltrito (2015), Ibrahim (2014), and Uyar et al. (2013), which found leverage to be positively associated with voluntary disclosure level. A potential explanation may be that creditors share private information with their debtors. Also, firm age was positively and insignificant linked to voluntary disclosure level, which may be because most Saudi firms are young, hence they may suffer competitive disadvantage if they disclose more information than expected. Another reason may be related to the higher cost of voluntary disclosure. In terms of Big4 audit, firm size did not prove to be as predictable as was first envisaged. The rationale behind this finding lies in the possibility that the role of auditor is limited to the boundaries of mandatory information.

5. Summary and Conclusions

This study empirically examined whether and how firm-specific characteristics affect the extent of voluntary disclosure. Undoubtedly, the role of voluntary disclosure has been studied extensively in advanced countries; however little attention has been given to investigating this issue in a small, open economy. Therefore, to fill this gap in the previous literature, this study offers an extensive examination of relationship between firm-specific characteristics and level of voluntary disclosure.
Using a sample of 147 firms from the Saudi Market (Tadawul) during 2017, this study employed a multiple regression analysis to identify the relationship.

Profitability, corporate size, and governmental ownership seem to have the most significant positive impact on the level of voluntary disclosure; whereas the remaining firm characteristics (age, Big4 auditor, and leverage) were found not to be significantly associated with the level of voluntary disclosure, and family ownership showed a negative relationship. In general, large and profitable Saudi firms tend to publish more information than others. Also, Saudi firms that are characterized by governmental ownership appear to be motivated to present more information in their annual reports. Prior findings consistent with agency theory suggest that additional disclosure provided by firms, undoubtedly increase transparency in annual reports to financial reporting users; however, fewer disclosures increase information asymmetry and increase the potential for conflicts.

As with any research, there are a number of limitations to this study. First, it was limited to one year because disclosure policies usually tend to remain constant over time especially, after the implantation of IFRSs. Second, the items constituting the disclosure index were subjectively derived from a number of prior studies, thus the selected items may not reflect their level of importance as perceived by financial information users. Third, since there are no specific items of voluntary disclosure in Saudi Arabia, this study may unintentionally neglect some items.

Future research could extend this study by examining the relationship between firm-specific characteristics and the level of voluntary disclosure after 2017, when all Saudi firms should have implemented IFRSs in their financial reporting. The number of firms examined could be increased to make it more generalized and new variables could be added to strengthen the evidence beyond that presented in this study. Finally, a comparison between Saudi Arabia and other developing countries could be beneficial.

This study recommends that the board of director and management should work together to improve the quality and reporting of voluntary disclosure in their annual reports. Additionally, although auditors do not require their clients to report data in excess of that required by the accounting standards, they are considered as important guides for best practices of voluntary disclosures through the advice they give in order to enhance the quality of annual reports. Previous action will enhance the confidence of their investors, satisfy their creditors and customers, and improve the profitability and value of shares. Also, regulatory bodies in Saudi are expected to guide firms toward the best practices of voluntary disclosures. Moreover, they should increase the awareness of the importance of voluntary disclosures and its role in reinforcing confidence in the Saudi Market.
References


Akhtaruddin, M. (2005), “Corporate mandatory disclosure practices in Bangladesh”, International Journal of Accounting 40, 399-422.


Chau, G.K. and Gray, S.J. (2002). Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore”, The International Journal of


Appendix 1: List of Voluntary Disclosure Items (60 items) Based on Prior Studies

| Strategy items 15 | General presentation of the company's strategy  
Main corporate goals or objectives  
Main actions taken to achieve the corporate goals  
Definition of the deadline for each corporate goal  
Corporate position related to ethic/social questions  
Corporate position related to environment issues  
Detailed segment/unit performance  
Evaluation of the commercial risk  
Evaluation of the financial risk  
Evaluation of other risks  
Corporate I&D/Innovation policy  
Organizational Culture  
Main events of the current year  
Information about annalists  
Other important strategic information |
| --- | --- |
| Market and Competition items 11 | Identification of the principal markets  
Specific characteristics of these markets  
Dimension of the markets  
Identification of the main competitors  
Market shares  
Forecast of market growth  
Forecast of share market growth  
Impact of competition on profits  
Identification of markets' barriers to entry  
Impact of markets barriers to entry on future profits  
Impact of competition on future profits |
| Management and Production items 11 | Identification of the principal products/services  
Specific characteristics of these products/services  
Proposal for new products/services  
Changes in production/services methods  
Investment in production/services  
Norms of the quality of the product/service  
Rejection/defect rates (when applicable)  
Input/output rates (when applicable)  
Volume of materials consumed (when applicable)  
Change in product materials (when applicable)  
Life cycle of the product (when applicable) |
| Future perspective items 8 | Result application proposal  
New action/initiative/event  
Forecasts of sales/results/cash flows  
Investment forecasts  
Return rates for each investment project  
Hypothesis considered in forecast  
Dividend policy  
Macroeconomic background |
| Marketing items 7 | Disclosure of marketing strategy  
Disclosure of sales strategy  
Disclosure of distribution channels  
Disclosure of sales and marketing costs  
Disclosure of brand equity/visibility ratings  
Disclosure of the customer satisfaction level  
Disclosure of customer mix |
| Human capital items 8 | Description of workforce  
Description of the remuneration/compensation system  
Qualification policy of workers  
Value created by worker  
Employee retention rates  
Productivity indicators  
Strategies to measure human capital  
Other measures of Human capital |