THE IMPACT OF INSTITUTIONAL BLOCKHOLDERS ON VOLUNTARY DISCLOSURE AND TRANSPARENCY: THE CASE OF EGYPT

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Abstract

Disclosure and transparency are crucial elements in the improvement of overall corporate governance. Disclosure is a very important mean of communication between management and outside investors. This study investigates how institutional blockholders impact levels of voluntary disclosure released in annual reports of some of the most active companies in the Egyptian Stock Exchange. The results generated by the study did support a significant positive impact of institutional blockholders on voluntary disclosure and transparency. It also found that this impact is due to two types of institutional blockholders’ ownership: low institutional ownership defined as those owning from five to twenty percent and controlling institutions defined as those owning more than fifty percent of a company’s shares. This indicates that concentrated ownership can be viewed as a monitoring mechanism in an emerging market like Egypt. According to the author’s knowledge, this study is the first to explore the impact of different categories of blockholders; categorized by the size of their block; on levels of voluntary disclosure in Egypt.

JEL Classification: G1, D8

Keywords: Corporate governance; voluntary disclosure and transparency; institutional blockholders; agency theory.
1. Introduction
Corporate governance has been a topic of great interest in the past couple of years. It is perceived as an important element in enhancing both economic efficiency and investor confidence. One of the main pillars of corporate governance consists of disclosure and transparency. The corporate governance framework of any corporation should ensure accurate and timely disclosure on all relevant matters (Mallin, 2007). Since disclosure and transparency are fundamental components of corporate governance, they are clearly associated with the reform and quality of corporate governance. This is because corporate governance reform is linked to greater levels of disclosure, resulting in lower asymmetric information and higher firm value (Akhtaruddin et al., 2009).

The enhancement of corporate disclosure and transparency was greatly demanded especially after the numerous corporate scandals and financial crisis in the business world. This is because disclosure is an integral tool for firms to report their performance in order for investors to adequately evaluate them. The increase in corporate transparency happens when more and better-quality information is disclosed through various media, such as the companies' websites, annual reports, newspapers, etc. (Healy and Palepu, 2001; Uyar et al., 2013).

There are two different types of corporate disclosure: mandatory and voluntary. Voluntary disclosure consists of information voluntarily revealed by a company; and the extent of this type of disclosure is very important in enhancing overall transparency levels. In the same sense, Ronen and Yaari (2002) identify mechanisms that induce disclosure as either self-induced mechanisms or mandatory disclosure requirements. The self-induced are the ones pushing for more disclosure of information beyond those legally mandated: the voluntary disclosure.

Disclosure and transparency are ways of keeping corporate stakeholders more informed about the way the company is managed or governed in order for them to make informative investment decisions (Adiloglu and Vuran, 2012). So, greater corporate disclosure, especially voluntary disclosure, implies the decline of information asymmetry between various stakeholders. And, the decline of information asymmetry leads to greater liquidity, leading to lower cost of capital and eventually higher share prices (Makhija and Patton, 2004).

There is a problem with corporate disclosure and transparency especially in emerging markets. In 2002, Patel et al., concluded that emerging markets in Asia and South Africa show much higher transparency and disclosure compared with emerging markets in Eastern Europe, Latin America and the Middle East. This makes researching ways through which corporate voluntary disclosure in Egypt can be enhanced crucial.

There are many factors, both internal and external, that play a role in either the reduction or enhancement of the amount of voluntary disclosure released by firms to the public. Institutional investors have been identified as a governance mechanism and many reported their positive role in enhancing levels of voluntary disclosure (e.g., Rashid, 2011; Rouf and Al Harun, 2011; Uyar et al., 2013). In this research paper, the focus will only be on the impact of institutional blockholders and their varying influence depending on the degree of their ownership. Overall, this study seeks to investigate how institutional blockholders impact levels of disclosure and transparency, hence, reforming corporate governance in Egypt.

2. Literature Review and Hypotheses Development
In this study and in accordance with Shin-Ping and Tsung-Hsien (2009), Azzam (2010) and Jara-Bertin et al. (2012), institutional investors are defined as a long series of owners, such as banks, investment companies, mutual funds, insurance companies, governmental agencies, incorporated and holding companies, and any other institutional investors. They basically consist of any type of ownership other than individual ownership. Blockholders are identified as those who have a five percent or more ownership in a company (Eng and Mak, 2003;
Tsamenyi et al., 2007; Young et al., 2008; Puspitaningrum and Atmini, 2012). So, institutional blockholders are those institutions with a substantial stake of ownership (5% or higher).

The theory providing the theoretical foundation for this study is the agency theory. The agency theory is traditionally defined as the relationship between two different parties: the principal (owner) and the agent (manager). This principal-agent relationship creates the information asymmetry problem, where both parties have access to different levels of information (Mallin, 2007). This kind of problem creates what is known as agency conflicts. Sometimes, such agency conflicts take place between owners (majority and minority) and it is known as principal-principal agency. The impact of ownership by institutional blockholders on voluntary disclosure and transparency can be viewed from both the positive and negative perspectives.

On the positive side, high ownership by a few shareholders can be perceived as a monitoring mechanism. The size of an institution’s stake in a company may determine its willingness to becoming more active. This may also imply that not all blockholders will act in the same manner, but their actions may vary depending on the size of their block (Makhija and Patton, 2004). The kind of monitoring exerted by shareholders is believed to pressure managers to enhance their performance and to run the firm in a more transparent manner, thus curbing the conventional agency problems (Puspitaningrum and Atmini, 2012; Isik and Soykan, 2013). Also, it is assumed that large institutional blockholders will be encouraged to push managers to publically disclose more information in order for share prices to increase and consequently also the firm’s value (Makhija and Patton, 2004; Juhmani, 2013). All this goes according to the efficient monitoring hypothesis, which assumes that large institutional investors will efficiently monitor a firm’s management and reduce agency problems.

On the other hand (negative perspective), institutions who own a very high stake in a company may discourage the release of high levels of voluntary disclosure or manipulate disclosure in order to maximize their own private benefits at the cost of other shareholders’ or stakeholders’ interests, thus increasing agency problems (Shleifer and Vishny, 1997; Huiyun and Peng, 2011; Juhmani, 2013). This is because their large ownership size would enable them to get the information they want directly from the firm and its management (Makhija and Patton, 2004; Tsamenyi et al., 2007). So, they tend to have access to internal sources of information, not available to all shareholders, leading to greater information asymmetry. This goes in conjunction with the principal-principal agency, where the conflict of interest takes place between majority shareholders (blockholders) and minority shareholders. This conflict of interest between large and small shareholders suggests that highly concentrated ownership may lead to higher agency costs. This supports the assumptions of the strategic alignment hypothesis, where large shareholders will strategically align with management to increase their own private benefits.

So, it is possible to say that institutional blockholders will actively play a monitoring role, but only up to a certain level of ownership (Salehi et al., 2011). Once they exceed this ownership level, they may be motivated to take decisions that will only benefit them at the cost of others, thus, proposing a non-linear relationship between the size of institutional blockholders and voluntary disclosure.

2.1 Empirical evidence

Many of the literature supports a negative impact of blockholders on voluntary disclosure. This is because as the size of holdings increases, institutions can gain substantial direct benefits from the firm, resulting in less public disclosure. When conducted in the Ghanaian market, Tsamenyi et al. (2007) revealed a significant negative relationship between blockholders’ ownership and levels of voluntary disclosure. Also, in the Iranian market, Salehi et al.’s (2011) results support a negative role of institutional investors’ concentration.
In Bahrain, Juhmani’s (2013) study witnessed a significant negative association between blockholder ownership and voluntary disclosure. Also, in the nearby Middle Eastern country of Jordan, Alhazaimeh et al. (2013) evidenced a significant negative association between institutional blockholders and voluntary disclosure.

With regards to Egypt, Ismail and El-Shaib’s (2012) results support a significant negative relationship between blockholder ownership and voluntary disclosure levels. Also, Samaha et al. (2012) support a negative association between blockholder ownership and corporate governance disclosure of Egyptian listed companies.

On the other hand, Ho and Taylor’s (2014) findings support a positive association between voluntary disclosure and concentration of ownership measured by the proportion of shares held by the top five shareholders. Overall, most of the empirical literature supported a negative relationship between blockholders and levels of disclosure. It has to be noted, though, that not all of the included literature limited blockholder ownership to just institutions or corporations but some also included individuals with a high stake of ownership.

So, according to previous literature and the mixed theoretical assumptions discussed, the following hypothesis (H1) is proposed:

**H1**: There is a significant relationship between institutional blockholder ownership and levels of voluntary disclosure and transparency in Egypt.

Emphasizing the non-linear impact of different blockholders, some academics did not treat all blockholders equally but divided them into different categories depending on the size of their holdings (e.g., Makhija and Patton, 2004; Utama, 2012).

The study of Makhija and Patton (2004) supported a significant negative impact of investment fund ownership exceeding 15% on disclosure levels, which at lower ownership levels had a positive impact. This indicates that investment funds with large holdings in Czech are more interested in gaining private benefits of control over trying to increase share prices. Such results have led regulators in Czech to limit the size of ownership held by investment funds to 20%. So, their results support the notion that low levels of blockholding positively impact disclosure while high levels negatively impact it — an indication of a non-linear relationship. This may point to the idea that ownership over a certain limit may motivate blockholders to divert the company’s assets toward their own private benefits.

Utama (2012) found that the lowest disclosure levels were at medium levels of blockholder ownership and highest at the highest levels of ownership, thus once more supporting a non-linear relationship. The difference here is that at high or controlling ownership levels, disclosure levels were the highest — an indication of the monitoring effect.

So, in order to take the analysis of blockholders a step further, the paper will also test the impact of blockholders at different levels of ownership. By referring to Utama’s (2012) study, institutional blockholders will be divided into three groups: low blockholder ownership (5%-20%), moderate blockholder ownership (20.1%-50%), and controlling blockholder ownership (>50%).

According to most of the literature discussed, it is going to be assumed that institutional blockholders’ ownership of up to 20 percent will yield a positive impact — an indication of an efficient monitoring effect. On the other hand, any ownership beyond 20 percent will yield a negative impact — an indication of an alignment effect. These assumptions lead to the following three hypotheses:

**H2**: There is a positive relationship between low institutional blockholder ownership (5% - 20%) and levels of voluntary disclosure and transparency in Egypt.
H3: There is a negative relationship between moderate institutional blockholder ownership (20.1% - 50%) and levels of voluntary disclosure and transparency in Egypt.

H4: There is a negative relationship between controlling blockholder ownership (over 50%) and levels of voluntary disclosure and transparency in Egypt.

3. Research Methodology
3.1 Data
The study is conducted on the most active 50 firms in the Egyptian Stock Exchange in the years 2007-2011. The most active 50 companies change every year depending on their activity levels and are identified in the annual disclosure book published by the Egyptian Exchange. The study excludes firms belonging to the financial services sector due to different regulatory requirements. Also, firms with missing annual reports were excluded. This criterion leads to a final pooled sample size consisting of 191 observations over the five-year period. All the required data are collected from the firms’ annual reports and ownership structures. All the annual reports and ownership structures were purchased from the Egyptian Exchange and the Egypt for Information Dissemination (EGID).

3.2 Dependent variable: voluntary disclosure and transparency
Information provided in a company’s annual report includes a combination of backward looking information and forward looking information (Baroma, 2014). Backward looking pertains to past events, while forward looking pertains to the current or strategic information. The different types of information can be identified under three major categories; general and strategic, financial, and governance. General and strategic information can help investors understand the nature of the company and how they relate to the community in which they operate (OECD, 2004). Financial information assists investors in forecasting the company's future performance and in evaluating the value of its share (OECD, 2004). Governance information includes two kinds of information: corporate governance information, such as information on the board of directors, ownership structure, accountability and audit; and social and environmental governance information, such as information on health and environmental issues.

Since, the main interest of the study is to assess levels of voluntary disclosure and transparency: a voluntary disclosure checklist will be constructed. A voluntary disclosure checklist is a comprehensive list of disclosure items, including both financial and non-financial aspects, which may be voluntarily disclosed by firms in their annual reports (Rouf, 2011). Many voluntary disclosure checklists have been developed and/or used by many researchers (e.g., Eng and Mak, 2003; Rouf, 2011; Soliman, 2013; Uyar et al., 2013). A revision of a number of disclosure lists that are previously used and applied in different markets is conducted, then a choice of the most relevant and agreed upon items are used. The choice of items also depends on their relevancy and applicability on the Egyptian market. The final constructed disclosure checklist is provided in table 1.

The disclosure index for each company will be measured as the ratio between acquired score and the maximum possible one. When the relevant information in the annual report is found, "1" is assigned to the company; otherwise, the company gets "0" point. This unweighted approach in measuring voluntary disclosure index has been employed by many researchers in their studies (e.g., Huiyun and Peng, 2011; Rouf, 2011; Adiloğlu and Vuran, 2012; Uyar et al., 2013). The research will use an unweighted voluntary disclosure index and it will be calculated as follows;

\[ VDT \text{ Index} = \frac{\sum X_{ki}}{M_t} \]

Where; \( X_{ki} \) = "1" if \( k^{th} \) item is disclosed and = "0" otherwise
Mi = Total number of items on the disclosure list. It is the maximum number of items that can be disclosed by the company. Mi = 56

### 3.3 Independent variables

The independent variables tested in the models employed by this study consist of institutional blockholders and their three distinct categories. Table 2 summarizes how institutional blockholders and their different categories will be measured and accounted for in the study.

### 3.4 Control variables

There are four firm-specific characteristics that are considered important determinants for voluntary disclosure and transparency. They are the firm’s size, leverage, profitability and age. Bigger firms are believed to voluntarily disclose more than smaller firms, and many researchers have supported a significant positive impact by firm size on voluntary disclosure (e.g., Silva et al., 2008; Ismail and El-Shaib, 2012; Soliman, 2013; Uyar et al., 2013; Alhazaimeh et al., 2014). Also, regarding the leverage size, many have argued that as the level of debt increases, the greater the firm's willingness to disclose more information in order to provide creditors with more confidence that they will be paid back (e.g., Haniffa and Cooke, 2002; Barako et al., 2006; Huiyun and Peng, 2011). It is also assumed that firms with higher profitability or those who perform better tend to voluntarily disclose more information (e.g., Haniffa and Cooke, 2002). Finally, firms that are older in terms of their registration on the stock exchange are believed to disclose more voluntary disclosure than their younger counterparts. The measurements of the identified control variables are summarized in table 2.

### 3.5 Empirical regression models

Two research models are going to be tested in order to verify proposed hypotheses. Model one tests the legitimacy of H1 while model two tests H2, H3 and H4. They are separated into two distinct models in order to avoid the possibility of multicollinearity.

**Model one:**

\[
VDT = \beta_0 + \beta_1 \text{TBLOCK} + \beta_2 \text{SIZE} + \beta_3 \text{LEV} + \beta_4 \text{PROF} + \beta_5 \text{AGE} + \varepsilon
\]

**Model two:**

\[
VDT = \beta_0 + \beta_1 \text{LBLOCK} + \beta_2 \text{MBLOCK} + \beta_3 \text{CBLOCK} + \beta_4 \text{SIZE} + \beta_5 \text{LEV} + \beta_6 \text{PROF} + \beta_7 \text{AGE} + \varepsilon
\]


### 4. Empirical Results

#### 4.1 Descriptive analysis

By referring to table 3, containing the variables’ descriptive statistics, it can be noticed that the average voluntary disclosure and transparency (VDT) released by the most active firms in Egypt is only 44.88%. This is an indication for the need to promote greater levels of voluntary disclosure. Also, from the results of the descriptive statistics, it can be noted that many of the tested firms tend to have a concentrated type of ownership structure. This is apparent through the high mean (47.97%) of the aggregate institutional blockholders’ ownership (TBLOCK). The percentages of TBLOCK range from 0% up to 99.39%.

Table 3 also provides the descriptive statistics for the three categories of institutional blockholders; low (LBLOCK), moderate (MBLOCK), and controlling (CBLOCK). As can be noticed the average blockholders’ ownership represented by the three categories are; 13.71,
14.46, and 19.59, respectively. This means that, on average, 13.71% of the firms’ ownerships are held by institutional blockholders with ownership stake ranging from five to 20 percent. And, about 19.59% of the firms’ ownerships are held by controlling institutions owning more than 50 percent of the company.

4.2 Correlation analysis
Secondly, Pearson and Spearman correlation analyses are conducted between voluntary disclosure and transparency (VDT) and all explanatory variables. These bivariate results are presented in table 4. As can be noticed from both the Pearson and Spearman results, voluntary disclosure and transparency is positively and significantly correlated with aggregate institutional blockholders (TBLOCK), controlling institutions (CBLOCK), size (SIZE) and leverage (LEV) (sig. at the 0.01 level). It is also found that voluntary disclosure and transparency is negatively correlated with moderate institutional blockholders (MBLOCK), significant at the 0.01 and 0.05 levels. Profitability (PROF) became significant at the 0.01 level only under Spearman correlation. The listing age (AGE) showed insignificant results under both types of correlations.

4.3 Regression analysis
As provided by the regression results in table 5, the F-statistics in both models are highly significant indicating the goodness of the models (F-sig = .000). This indicates the importance of the models’ tested predictors. The explanatory power for both models (Adj. R2) are 25.9% and 30.4%, respectively. This implies that the second model, which separates institutional blockholders into three different categories based on their ownership size, has a greater explanatory power than model one which tests their aggregate impact. Also, while running the regression tests, the variance inflation factors (VIF) were examined and it was found that no VIF score was greater than 2.026, an indication of no multicollinearity problem.

The first regression model explores the impact of total institutional blockholders on levels of voluntary disclosure and transparency, while controlling for the firm’s size, leverage, profitability and age. As provided in table 5, the results of the model support a significant positive impact of total institutional blockholders (TBLOCK) on voluntary disclosure and transparency (β = .190, p < .01), thus accepting hypothesis H1. This result supports the assumption claiming that ownership by a few shareholders can be perceived as a monitoring mechanism, consistent with the findings of Ho and Taylor (2014). On the other hand, this result opposes many of the studies evidencing a negative impact of blockholders on voluntary disclosure and transparency (e.g., Tsamenyi et al., 2007; Salehi et al., 2011; Alhazainehe et al., 2013). With respect to the control variables, it is found that the firm’s size (SIZE) is the only variable showing highly significant impact on voluntary disclosure and transparency (β = .401, p < .01).

The results of the second regression model in table 5 supports significant positive impacts of both low institutional blockholders (LBLOCK) and controlling institutions (CBLOCK) on voluntary disclosure and transparency, significant at .05 and .01, respectively. These results lead to accepting H2 and rejecting H4. These results are consistent with Utama’s (2012) findings. Regarding the impact of moderate institutional blockholders (MBLOCK), the results reveal a negative impact, but the result is statistically insignificant. This result leads to the rejection of H3.

These findings are consistent with the findings of Utama (2012) who also evidenced the highest disclosure levels by companies with the highest ownership levels. In a sense, this finding reflects the secretive nature of the Egyptian culture (Hassan et al., 2009). This is because when there is dispersed ownership, shareholders with high ownership levels will be reluctant to encourage more voluntary disclosure. On the other hand, when ownership is concentrated in
the hands of one institution, this one institution will feel obliged to encourage more voluntary disclosure in order to enhance the image of the company, hence its own image as well. Also, when there is a controlling institutional investor, there will be fewer company owners, hence less conflict of interest, and more easiness in promoting greater voluntary disclosure and transparency. Again, as with the first model, the firm’s size is the only control variable that had significant results.

In order to further back up the results, a more robust test will also be conducted. This test is called the Tobit regression. The Tobit regression is used when the dependent variable is of a limited nature or falls within a specific range. In this case, since voluntary disclosure and transparency is of a limited nature, meaning that it cannot take a negative value, the Tobit regression will be employed for a more robust analysis.

The results of the Tobit regression as provided in table 6 further confirm the generated results. The results still support significant positive impacts by total institutional blockholders, low institutional blockholders, and controlling institutions on voluntary disclosure and transparency. The results also still show a negative but insignificant impact by moderate institutional blockholders.

5. Conclusion

While investigating the impact of institutional blockholders on the enhancement of voluntary disclosure and transparency, hence on overall corporate governance, the following conclusions are reached. First, and unlike many of the literature supporting a negative impact of institutional blockholders on voluntary disclosure, this study evidences a positive one. Second, it is found that this positive impact is caused by low institutional blockholders (those with an ownership size from 5 to 20 percent) and controlling institutions who own more than 50 percent of a company’s shares.

These results can be justified as follows: Institutional blockholders with a low ownership size do not own a big enough of a stake to allow them to get all the information they require from within, so they will push for more public disclosure. But, this suggests the necessity for all institutional blockholders at this low level to exert a positive collective action to maintain this positive impact. Furthermore, institutions with more than a 50 percent ownership can get all the information from within the company, but in order to improve their image and value, they will also push for more disclosure. On the contrary, institutions with a large stake of ownership, greater than 20%, but not greater than 50% are likely to discourage the release of information compared with their larger counterparts. So, the results of this study suggest that policy makers should promote ownership by institutional blockholders at very high levels (more than 50%), when it comes to enhancing levels of voluntary disclosure and transparency in Egypt. Most importantly, this study emphasizes the inadequacy of perceiving institutional blockholders as one homogenous group when it comes to their role in improving disclosure and transparency.
References


Table 1: Voluntary Disclosure Checklist

**General and strategic information:**
- The annual report is posted online (company’s website)
- Information about principal markets
- Information about the industry
- Brief history of the company
- Description of organizational structure
- Statement of corporate goals or objectives
- Statement of overall corporate strategy
- Discussion of actions taken during the year to achieve corporate goals
- Identification of financial objectives & strategy
- Identification of marketing objectives & strategy
- Timeframe for achieving corporate goals
- Actions to be taken in the future
- Description of competitive environment
- Market’s barriers to entry on future profits
- Identification & analysis of principal products (services) produced
- Improvements in products/services
- Analysis of capital projects
- Corporate policy on R & D
- Significant events affecting current year's performance
- Future expansion and capital expenditure
- Information on earnings and cash flow forecast
- Market share analysis
- Information on risk management (credit, interest rate, foreign currency, etc.)

**Financial information:**
- Financial history or summary (5+ years)
- Financial history or summary (2+ years)
- Use graphical presentation of financial data
- Profitability ratios
- Liquidity ratios
- Leverage ratios
- Other ratios
- Growth rate on earnings
- Discussion of current financial results & major factors affecting it
- Share price information
- Share price trend/behavior
- Market capitalization at year end
- Dividend payout policy and factors affecting it
- Details on bank loans, mortgages & their uses
- Amount spent on training

**Corporate governance and social responsibility information:**
- Names of the board of directors
- Experience and qualifications of board members
- Other positions held by directors in the company/affiliated companies
- Shares held by members of the board
- Composition of the board of directors: executives & non executives
- Remuneration of directors and top management
- Corporate governance codes and policies
- Ownership structure and identification of major shareholders
- Description of workforce
- Employee compensation
- Data on workplace accidents
- Training policy for employees
- Number of employees trained
- Health & safety Information
- Information on social activities (such as; health, sporting, and recreational projects)
- Information on environmental issues
- ISO or other quality awards
- Charitable donations / sponsorships programs

**Total extracted items** \( \sum X_{k1} \)
Table 2: Variables Definitions and Measurements

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variable:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VDT</td>
<td>Voluntary disclosure and transparency</td>
<td>Voluntary disclosure index (checklist)</td>
</tr>
<tr>
<td><strong>Independent variables:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TBLOCK</td>
<td>Total blockholder ownership</td>
<td>Sum of ordinary shares held by institutional investors owning 5% or more of the firm’s shares / total shares outstanding</td>
</tr>
<tr>
<td>LBLOCK</td>
<td>Low blockholder ownership</td>
<td>Sum of shares held by institutional investors with ownership level between 5% - 20% / total shares outstanding</td>
</tr>
<tr>
<td>MBLOCK</td>
<td>Moderate blockholder ownership</td>
<td>Sum of shares held by institutional investors with ownership level between 20.1% - 50% / total shares outstanding</td>
</tr>
<tr>
<td>CBLOCK</td>
<td>Controlling blockholder ownership</td>
<td>Shares held by institutional investors with ownership greater than 50% / total shares outstanding</td>
</tr>
<tr>
<td><strong>Control variables:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>Firm’s size</td>
<td>Natural logarithm of total assets</td>
</tr>
<tr>
<td>LEV</td>
<td>Leverage</td>
<td>Total debt / Total assets</td>
</tr>
<tr>
<td>PROF</td>
<td>Profitability</td>
<td>Net income / Total assets</td>
</tr>
<tr>
<td>AGE</td>
<td>Listing Age</td>
<td>Number of years since registration on the Egyptian Exchange</td>
</tr>
</tbody>
</table>

Table 3: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<tbody>
<tr>
<td>VDT</td>
<td>20.00</td>
<td>91.00</td>
<td>44.88</td>
<td>15.56</td>
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<tr>
<td>TBLOCK</td>
<td>.00</td>
<td>99.39</td>
<td>47.97</td>
<td>27.96</td>
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<tr>
<td>LBLOCK</td>
<td>.00</td>
<td>73.03</td>
<td>13.71</td>
<td>15.73</td>
</tr>
<tr>
<td>MBLOCK</td>
<td>.00</td>
<td>73.71</td>
<td>14.46</td>
<td>19.57</td>
</tr>
<tr>
<td>CBLOCK</td>
<td>.00</td>
<td>99.39</td>
<td>19.59</td>
<td>31.95</td>
</tr>
<tr>
<td>SIZE</td>
<td>17.61</td>
<td>25.28</td>
<td>21.24</td>
<td>1.72</td>
</tr>
<tr>
<td>LEV</td>
<td>1.20</td>
<td>287.00</td>
<td>42.81</td>
<td>29.10</td>
</tr>
<tr>
<td>PROF</td>
<td>-35.80</td>
<td>45.30</td>
<td>7.18</td>
<td>8.89</td>
</tr>
<tr>
<td>AGE</td>
<td>1.00</td>
<td>52.00</td>
<td>12.16</td>
<td>6.05</td>
</tr>
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Table 4: Pearson & Spearman Correlations – Bivariate Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson</th>
<th>Spearman</th>
</tr>
</thead>
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<tr>
<td>TBLOCK</td>
<td>.347**</td>
<td>.442**</td>
</tr>
<tr>
<td>LBLOCK</td>
<td>-.019</td>
<td>.087</td>
</tr>
<tr>
<td>MBLOCK</td>
<td>-.219**</td>
<td>-.183*</td>
</tr>
<tr>
<td>CBLOCK</td>
<td>.442**</td>
<td>.425**</td>
</tr>
<tr>
<td>SIZE</td>
<td>.471**</td>
<td>.396**</td>
</tr>
<tr>
<td>LEV</td>
<td>.205**</td>
<td>.297**</td>
</tr>
<tr>
<td>PROF</td>
<td>.909</td>
<td>.169*</td>
</tr>
<tr>
<td>AGE</td>
<td>.025</td>
<td>.007</td>
</tr>
</tbody>
</table>

Notes: ** Correlation is sig. at the 0.01 level. * Correlation is sig. at the 0.05 level
Table 5: Regression Results

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th></th>
<th>Model 2</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Standardized β</td>
<td>Sig.</td>
<td>VIF</td>
<td>Standardized β</td>
<td>Sig.</td>
<td>VIF</td>
</tr>
<tr>
<td>Constant</td>
<td>.003</td>
<td></td>
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Notes: The dependent variable is the disclosure index (VDT). DW- Durbin Watson statistic.

Table 6: Tobit Regression Results

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