EQUITY INVESTMENT DECISIONS OF LARGE INVESTORS AROUND IFRS ADOPTION: FINANCIAL VS. NON-FINANCIAL FIRMS

Manel Hessayri*, Malek Saihi**

*Department of Accounting and Finance, LIFE, University of Tunis El Manar and Tunis Business School, University of Tunis, Tunisia
**Department of Finance, IHEC, University of Carthage, Tunisia, and LIFE, University of Tunis El Manar, Tunisia

Abstract

This paper addresses the question of whether firms' IFRS adoption translates into increases in equity ownership for large shareholders. Using a sample of 55 non-financial firms and 23 financial firms from three emerging market countries, namely Morocco, South Africa and Turkey, we find evidence that top shareholders invest more heavily in firms' stocks after their commitment to IFRS. Surprisingly, we report opposite findings for ownership by blockholders in financial and non-financial firms displaying different incentives.

Keywords: Equity Ownership, IFRS Adoption, Large Shareholders, Emerging Market Countries, Non-Financial Firms, Financial Firms

1. INTRODUCTION

According to the EU Regulation No. 1606/2002, International Financial Reporting Standards (IFRS) are intended to increase comparability and transparency of financial statements. The objectives of accounting harmonization explicitly stated by IAS Regulation emphasize capital-market and macroeconomic effects (efficient markets, growth and employment) resulting from enhanced transparency and cross-country comparability of financial reporting (Brüggemann et al., 2013). Empirical literature on the capital-market effects of IFRS adoption generally provides evidence of positive effects assumed to stem from IFRS reporting resulting in more comparable and transparent financial statements. These empirical studies can be classified into studies that report direct evidence and others that report indirect evidence (Brüggemann et al., 2013). The first set of studies focuses on capital market features that are tightly linked to firm valuation, like stock market liquidity (Daske et al., 2008), cost of equity capital (Daske et al., 2008), cross-border equity investments (DeFond et al., 2011), and firm-level capital investment efficiency (Schleicher et al., 2010). The second set of studies focuses more on capital market perceptions of accounting quality by investigating information content of earnings announcements (Landsman et al., 2011), stock return synchronicity (Beuselinck et al., 2010), and the quality of analysts' information environment (Byard et al., 2011).

Despite its richness, literature investigating the capital market effects of IFRS adoption, in particular equity investments, is still in its infancy. Extant literature examines the effects of IFRS adoption on equity investments of institutional investors (Covrig et al., 2007; DeFond et al., 2011; Florou and Pope, 2012; Hessayri and Saihi, forthcoming). In addition to institutional investors, large investors are also viewed as key investors who are powerful enough to influence firms’ performance and strategies. To the best of our knowledge, no empirical study has thus far examined equity investments of large investors in relation to IFRS adoption. Hessayri and Saihi (forthcoming) fill this gap in the literature and investigate the dynamics of large investors' ownership following firms' IFRS adoption. However, the sample consists of non-financial firms only. The financial sector is known to be more regulated and better governed than non-financial firms. Because industry is also of importance to investors in equity investment decisions, we aim to complement Hessayri and Saihi (forthcoming) and provide new
evidence on large investors’ ownership dynamics following firms’ IFRS adoption.

Additionally, the endorsement of an international accountancy language is essential for emerging economies to open up their capital markets (Bradshaw et al., 2004; Rodrigues and Craig, 2007). Morocco, South Africa and Turkey are examples of emerging market countries seeking to enter global capital markets and to share in the benefits of accounting harmonization, and are thus faced with the necessity of adopting globalized technologies for accountability (Irvine, 2008). The objective of our empirical work is to investigate whether IFRS reporting is responsible for influencing large shareholders to increase their equity investment in adopting firms.

Our work contributes to the ongoing empirical research twofold. First, we complement previous work done on the capital market effects of IFRS adoption. Whereas most previous papers examine equity investments of institutional investors, our study provides complementary evidence about equity investments of large investors in order to better shape firms’ ownership structure. We provide deeper insight into the extent to which reduced information asymmetry under IFRS reporting standards benefits large shareholders. Second, our paper complements an earlier study on ownership dynamics (Hessayri and Saihi, forthcoming) by including the financial sector in addition to the non-financial sector in order to provide more comprehensive evidence.

Our evidence reveals that structural shareholding changes have taken place as a result of firms’ commitment to IFRS. A major contribution of this study is the finding of differential influence of IFRS adoption on block ownership between non-financial and financial sectors. In addition, we provide evidence of the importance of the measurement of the number of investors (largely ignored in the literature) in that it complements the cumulative percentage ownership measure and provides additional information that the latter fails to supply.

This paper progresses as follows. Section 2 outlines the relationship between shareholding structure and IFRS adoption and develops hypotheses, Section 3 describes our research design, Section 4 highlights empirical findings and Section 5 concludes.

2. EQUITY INVESTMENT DECISIONS OF LARGE INVESTORS: LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

2.1. Large Investors’ Reaction to IFRS Adoption

Prior literature documents that large shareholders (blockholders and top shareholders) are inclined towards maximizing their individual wealth and thus, have strong incentives to siphon resources out of member firms (Baek et al., 2004).

However, prior literature suggests that large shareholders can also derive benefits from changes in stock values in capital markets (Makhija and Patton, 2004), which alleviates agency problems and lead them to focus, more interestingly, on value-maximizing activities.

As investors place higher valuations on more transparent firms (Lang et al., 2012), they are likely to call for greater disclosure to derive benefits from share price increases. Even more, increased disclosure may be utilized to “hype the stock” (Lang and Lundholm, 2000). In other words, managers may provide greater disclosure to the public to publicize a company’s stock and attract investors.

Moreover, many commentators claim that IFRS reporting is intended to increase comparability and transparency of financial reporting (EC 1606/2002). Indeed, IFRS form a principles-based system that is more comprehensive than most local GAAP, especially with respect to disclosures (Daske and Gebhardt, 2006; Ding et al., 2007; Bae et al., 2008).

Based on the agency theory and the aforementioned arguments, IFRS standards (as higher quality accounting standards) would act as a governance mechanism and thus, is likely to positively influence share prices. This may attract more large shareholders to invest and take advantage of higher firm valuation.

Our research intends to address this issue and we hypothesize that IFRS adopting firms are more attractive to large investors. Therefore, we predict the following:

Hypothesis 1.a: the number of blockholders increases following the firm’s IFRS adoption.

Hypothesis 1.b: the percentage ownership of blockholders increases following the firm’s IFRS adoption.

Hypothesis 2: the percentage ownership of top shareholders increases following the firm’s IFRS adoption.

2.2. Large Investors’ Preferences for Firm Characteristics

2.2.1. Large Investors and Institutional Ownership

To counter agency conflicts between managers and shareholders, several monitoring mechanisms, like institutional governance, have been found to be quite efficient (Woidtkes, 2002) and worth considering. Indeed, highly-skilled institutional shareholders are viewed as potential monitors likely to alleviate agency problems through engaging in firm value-maximizing activities (McConnell and Servaes, 1990; Hessayri and Saihi, 2017).

In recent years, institutional shareholders have become increasingly active in corporate governance, especially in underperforming firms (Gillan and Starks, 2007). Therefore, large shareholders likely benefit from institutional monitoring that results in greater disclosure and reduced information asymmetry. This, in turn, is likely to yield higher share prices. Holding substantial stock in a firm, large shareholders are expected to extract share benefits. Therefore, we predict the following:

Hypothesis 3: the percentage ownership of large shareholders increases with institutional ownership.

2.2.2. Large Investors and Performance

The issue of the association between corporate ownership and performance was explicitly
addressed first by Berle and Means (1932) (Saihi and Belanes, 2013). They argued that the connection between ownership and control is broken down when ownership is dispersed, making the firm’s profitability questionable. Instead, as suggested by the agency theory, ownership concentration helps in aligning managers’ and shareholders’ interests thereby achieving firm value-maximizing objectives. Also, Faure-Grimaud and Gromb (2004) provide evidence that large shareholders are more concerned with conveying a good image of the firm and raising the firm’s value.

Conversely, we expect large shareholders to be more inclined to enter and/or enlarge their stakes in high-performing firms that eventually exhibit higher share prices. They may also seek private benefits of control in an attempt to maximize total benefits. Large shareholders are then more prone to enter and/or enlarge their stakes in high-performing firms to amass private benefits of control. Based on the rent-protection hypothesis (Bebchuk, 1990), they are more likely to do so in order to lock on control and prevent rivals from acquiring such benefits. Therefore, we expect the following: 

**Hypothesis 4:** the percentage ownership of large shareholders increases with firm performance.

### 2.2.3. Large Investors and Audit Quality

The extent to which IFRS adoption influences financial reporting is dependent on audit quality. The Big 4 accounting and auditing firms are renowned for their credibility. Therefore, investors are far more confident in disclosed information when a firm is audited by one of the Big 4 firms. In particular, large shareholders who have a tendency to extract share benefits likely prefer the greater disclosure and credible reported information that are likely to be the result of Big 4 auditing. Our fifth hypothesis is then the following:

**Hypothesis 5:** Large ownership is higher in firms audited by a Big4 audit firm.

### 2.2.4. Large Investors and Firm Size

It is acknowledged that large firms are more visible to investors and actively followed by analysts and the press (Koh, 2003). Therefore, information asymmetries are less acute in large-sized firms, resulting in a more transparent environment and higher stock prices. Investing a large amount of wealth in a single stock, large shareholders may realize substantial share benefits when prices rise. Accordingly, we expect large shareholders to favor large-sized firms that are more likely to experience higher firm valuation. Our sixth hypothesis is formulated as follows:

**Hypothesis 6:** The larger the firm is, the higher large ownership will be.

### 2.2.5. Large Investors and Debt

Leveraged firms are under close scrutiny of creditors. Indeed, debt enables to alleviate the agency costs of free cash flows thereby aligning stakeholders’ interests (Jensen and Meckling, 1976). Hence, creditors are viewed as alternative monitors, who put pressure on management (Jensen and Meckling, 1976). Firms that experience financial distress may suffer from a dramatic drop in share prices, despite expected performance in future periods. Therefore, large shareholders are no more inclined to invest in leveraged firms. Therefore, we hypothesize the following:

**Hypothesis 7:** The more levered the firm is, the lower large ownership will be.

### 2.2.6. Large Investors and Risk

The positive association between risk and performance has been largely discussed in modern finance (Sharpe, 1964). Just as managers are asked to take on risky projects that generate higher cash flows, shareholders are also drawn to invest in risky firms in order to yield greater returns (Saihi and Belanes, 2013).

Accordingly, shareholders react positively to higher risk and are likely to enlarge their stakes in an attempt to enjoy greater benefits and to remain in full control (Demsetz, 1983; Demsetz and Lahn, 1985; Saihi and Belanes, 2013).

Based on portfolio theory (Markowitz, 1952), however, diversifying one’s portfolio allows for the elimination of all diversifiable risk. Thus, blockholders and large shareholders holding substantial ownership in a single firm likely bear high risk. To get rid of the costs of risk, they would prefer to sell their risky stocks (Hu and Izumida, 2008). Therefore, we predict that large investors would invest less heavily in risky stocks. Our hypothesis is stated as follows:

**Hypothesis 8:** The riskier the firm is, the lower large ownership will be.

## 3. RESEARCH DESIGN

### 3.1. Sample and Data

#### 3.1.1. Sample Selection

In the current study our data relates to three emerging market countries, namely Morocco, South Africa and Turkey, in which IFRS are adopted as published by the IASB. This may potentially allow us to detect the effects of full IFRS adoption. Also, the period spins from 2001 to 2011 and consequently, our data cover a minimum of a four-year period prior to IFRS adoption and of a four-year period after IFRS adoption for each sample firm.

In the firm selection procedure, we eliminate firms not having a December fiscal year end, firms with missing accounting data, firms with missing annual reports, and firms for which ownership data are not available in their annual reports. Therefore, our final sample consists of 198 firm-year observations in Morocco, 359 firm-year observations in South Africa and 297 firm-year observations in Turkey. Ownership data are hand-collected from firms’ annual reports. We end up with a sample of 854 firm-year observations as shown in Table 1.
Because of fundamental differences in their financial accounting, the sample firms are partitioned into financial and non-financial firms to be run in separate regression models. The sample consists of 55 firms in the non-financial sector and 23 in the financial sector. The non-financial sector is categorized as manufacturing, services and technology.

3.1.2. Data Collection and Methodological Approach

To explore the impact of IFRS adoption on large investors’ ownership, we first define the variable of interest. We divide years of observations into two periods: years preceding the firm’s effective IFRS adoption date and years following the firm’s effective IFRS adoption date. We create a binary indicator variable, IFRS, that takes on the value of one for fiscal years ending on or after the firm’s IFRS adoption date. This variable should capture the ownership change for adopting firms once they start reporting under IFRS.

Second, we define dependent variables that track large investors’ ownership. Accordingly, our ownership variables include block ownership and the top shareholders’ ownership.

Third, we include control variables that are unrelated to financial reporting. In our regression model, control variables include an audit quality proxy and firm characteristics measures (performance, size, leverage and risk). We include industry (only for the non-financial sub-sample) and country variables to control for industries’ specific features and countries’ institutional differences.

The design of our ownership database accounts for both time dimension and firm dimension for the years 2001 through 2011. Accordingly, we used panel regression techniques that are likely to control for unobservable individual heterogeneity in comparison to time-series and cross-sectional techniques.

Prior to running panel data regressions a pooling test (heterogeneity test) is performed to check for heterogeneity among individuals. For this purpose, we use the Chow test statistic showing values that are significant at 1%. Hence, we reject the null hypothesis of homogeneity among individuals and confirm the presence of specific effects in our model. We then performed a Hausmann test to decide whether to use the fixed vs. random effects specification. As shown in Table 5, reported values are higher than 5%. Accordingly, we run our models using the random-effects specification. Also, a Breusch and Pagan test is performed to validate the hypothesis of the presence of random individual effects. Results (not reported) are significant at the 1% level of confidence for all specifications stating the significance of random effects.

3.1.3. Variables Definitions and Measurement

Table 2 provides details about dependent and independent variables’ measurement.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>( n_{block} )</td>
<td>Block ownership</td>
<td>The number of shareholders holding 5% or more of total shares.</td>
</tr>
<tr>
<td>( p_{block} )</td>
<td>The sum of percentage ownership of shareholders holding 5% or more of total shares</td>
<td></td>
</tr>
<tr>
<td>( Top_{own} )</td>
<td>Top shareholders’ ownership</td>
<td>The sum of percentage share capital owned by the top five shareholders</td>
</tr>
<tr>
<td>IFRS</td>
<td>IFRS adoption</td>
<td>1 for fiscal years ending on or after the firm’s IFRS adoption date, 0 otherwise</td>
</tr>
<tr>
<td>Inst(_{own} )</td>
<td>Institutional ownership</td>
<td>The sum of percentage ownership of institutional shareholders</td>
</tr>
<tr>
<td>Big4</td>
<td>Audit quality</td>
<td>1 if the firm’s auditor is one of the Big4 audit firms, 0 otherwise</td>
</tr>
<tr>
<td>m-b ratio</td>
<td>Performance</td>
<td>The market price to book value per share</td>
</tr>
<tr>
<td>size</td>
<td>Size</td>
<td>The natural logarithm of market capitalization</td>
</tr>
<tr>
<td>debt</td>
<td>Debt-to-equity ratio</td>
<td>Total debt over common equity</td>
</tr>
<tr>
<td>beta</td>
<td>Beta</td>
<td>Systematic risk</td>
</tr>
</tbody>
</table>

3.2. Econometric Model

In the current study, we run a panel regression analysis during the period from 2001 through 2011 for 55 non-financial firms and 23 financial firms. The panel regression is run for the two sub-samples separately.

Our empirical model is the following:

\[
\text{Block}_{it} = \alpha_0 + \alpha_1\text{IFRS}_{it} + \sum \text{Controls}_{it} + \epsilon_{it}
\]
dependent and independent variables for non-financial and financial firms. Panel A (Panel B) provides descriptive statistics of continuous variables in non-financial (financial) firms whereas Panel C includes frequencies of discrete variables. Descriptive statistics in Panel A show that the number of blockholders ranges between 1 and 8 in non-financial firms and between 0 and 8 in financial firms with an average of 2.84 and 2.64, respectively. These blockholders hold between 9% and 99% and between 0 to 92% of firms’ ownership rights in non-financial and financial firms, respectively, averaging 63.8% in non-financial firms, which is quite close to the median showing a symmetric distribution, and 53% in financial firms, showing that 53% of firm’s capital share is held by two or three blockholders. As for the top five shareholders, their ownership averages 68.4% and 57% of firms’ ownership rights in non-financial and financial firms respectively. Furthermore, the average market-to-book ratio is 2.03 and 1.93 in non-financial and financial firms respectively, which means that investors overstate firms’ equity. Additionally, the average market capitalization and debt-to-equity ratio indicate that financial firms are far more indebted but larger sized than non-financial firms. Finally, the beta risk in non-financial firms averages 0.66 with a variability of 0.443. This shows that, on average, stocks move in the same direction as the market while being less volatile. From Panel B, however, it appears clearly that financial firms exhibit higher risk than their counterparts in the non-financial sector. Panel C shows that 55% and 48% of firm-year observations represent the IFRS post-adoption period in non-financial and financial firms, respectively. In addition, Big 4 audit firms cover 54% of non-financial sample firms and 74% of financial sample firms.

4. RESULTS

4.1. Descriptive Statistics of Dependent and Independent Variables

Table 3 provides descriptive statistics of both dependent and independent variables for non-financial and financial firms. Panel A (Panel B) provides descriptive statistics of continuous variables in non-financial (financial) firms whereas Panel C includes frequencies of discrete variables. Descriptive statistics in Panel A show that the number of blockholders ranges between 1 and 8 in non-financial firms and between 0 and 8 in financial firms with an average of 2.84 and 2.64, respectively. These blockholders hold between 9% and 99% and between 0 to 92% of firms’ ownership rights in non-financial and financial firms, respectively, averaging 63.8% in non-financial firms, which is quite close to the median showing a symmetric distribution, and 53% in financial firms, showing that 53% of firm’s capital share is held by two or three blockholders. As for the top five shareholders, their ownership averages 68.4% and 57% of firms’ ownership rights in non-financial and financial firms respectively. Furthermore, the average market-to-book ratio is 2.03 and 1.93 in non-financial and financial firms respectively, which means that investors overstate firms’ equity. Additionally, the average market capitalization and debt-to-equity ratio indicate that financial firms are far more indebted but larger sized than non-financial firms. Finally, the beta risk in non-financial firms averages 0.66 with a variability of 0.443. This shows that, on average, stocks move in the same direction as the market while being less volatile. From Panel B, however, it appears clearly that financial firms exhibit higher risk than their counterparts in the non-financial sector. Panel C shows that 55% and 48% of firm-year observations represent the IFRS post-adoption period in non-financial and financial firms, respectively. In addition, Big 4 audit firms cover 54% of non-financial sample firms and 74% of financial sample firms.

Table 3. Descriptive statistics on dependent and independent variables of ownership regressions

Panel A: Descriptive statistics of continuous variables (non-financial firms)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs.</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Q1</th>
<th>Median</th>
<th>Q3</th>
<th>Std Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>n_block</td>
<td>600</td>
<td>0</td>
<td>8</td>
<td>2.845</td>
<td>0.526</td>
<td>0.684</td>
<td>0.787</td>
<td>1.438</td>
</tr>
<tr>
<td>p_block</td>
<td>600</td>
<td>0.094</td>
<td>0.998</td>
<td>0.638</td>
<td>0.526</td>
<td>0.684</td>
<td>0.787</td>
<td>1.438</td>
</tr>
<tr>
<td>Top_own</td>
<td>600</td>
<td>0.214</td>
<td>1</td>
<td>0.684</td>
<td>0.52</td>
<td>0.745</td>
<td>0.83</td>
<td>0.191</td>
</tr>
<tr>
<td>Inst_own</td>
<td>600</td>
<td>0</td>
<td>0.912</td>
<td>0.274</td>
<td>0.046</td>
<td>0.231</td>
<td>0.42</td>
<td>0.243</td>
</tr>
<tr>
<td>m-b ratio</td>
<td>600</td>
<td>0.02</td>
<td>19.62</td>
<td>2.032</td>
<td>0.87</td>
<td>1.44</td>
<td>2.41</td>
<td>2.158</td>
</tr>
<tr>
<td>size</td>
<td>600</td>
<td>0.128</td>
<td>33870.2</td>
<td>991.39</td>
<td>31.261</td>
<td>186.276</td>
<td>670.35</td>
<td>3141.92</td>
</tr>
<tr>
<td>debt</td>
<td>600</td>
<td>0</td>
<td>38.84</td>
<td>0.659</td>
<td>0.029</td>
<td>0.227</td>
<td>0.669</td>
<td>2.09</td>
</tr>
<tr>
<td>beta</td>
<td>600</td>
<td>-0.57</td>
<td>2.08</td>
<td>0.661</td>
<td>0.44</td>
<td>0.67</td>
<td>0.84</td>
<td>0.443</td>
</tr>
</tbody>
</table>

Panel B: Descriptive statistics of continuous variables (financial firms)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs.</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Q1</th>
<th>Median</th>
<th>Q3</th>
<th>Std Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>n_block</td>
<td>252</td>
<td>0</td>
<td>8</td>
<td>2.64</td>
<td>0.44</td>
<td>0.564</td>
<td>0.63</td>
<td>0.19</td>
</tr>
<tr>
<td>p_block</td>
<td>252</td>
<td>0</td>
<td>0.92</td>
<td>0.53</td>
<td>0.44</td>
<td>0.564</td>
<td>0.63</td>
<td>0.19</td>
</tr>
<tr>
<td>Top_own</td>
<td>252</td>
<td>0.15</td>
<td>0.92</td>
<td>0.57</td>
<td>0.3</td>
<td>0.6</td>
<td>0.7</td>
<td>0.17</td>
</tr>
<tr>
<td>Inst_own</td>
<td>252</td>
<td>0.437</td>
<td>0.92</td>
<td>0.457</td>
<td>0.183</td>
<td>0.439</td>
<td>0.708</td>
<td>0.282</td>
</tr>
<tr>
<td>m-b ratio</td>
<td>252</td>
<td>0.1</td>
<td>11.74</td>
<td>1.01</td>
<td>0.97</td>
<td>1.515</td>
<td>2.51</td>
<td>1.58</td>
</tr>
<tr>
<td>size</td>
<td>252</td>
<td>11.98</td>
<td>22150.83</td>
<td>2001.31</td>
<td>293.12</td>
<td>858.72</td>
<td>2461.19</td>
<td>4332.36</td>
</tr>
<tr>
<td>debt</td>
<td>252</td>
<td>0.0</td>
<td>12.31</td>
<td>0.98</td>
<td>0.03</td>
<td>0.26</td>
<td>1.01</td>
<td>1.89</td>
</tr>
<tr>
<td>beta</td>
<td>252</td>
<td>-0.15</td>
<td>1.25</td>
<td>0.73</td>
<td>0.44</td>
<td>0.73</td>
<td>1.06</td>
<td>0.34</td>
</tr>
</tbody>
</table>

Note: *Size values reported in the table are firm’s market capitalization measured in million US dollars before the natural logarithm transformation.
Table 3. Descriptive statistics on dependent and independent variables of ownership regressions (continued)

Panel C: Frequencies of discrete variables

<table>
<thead>
<tr>
<th></th>
<th>Non-financial</th>
<th>Financial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total sample</td>
<td>Obs. of discrete var</td>
</tr>
<tr>
<td><strong>IFRS</strong></td>
<td>600</td>
<td>333</td>
</tr>
<tr>
<td><strong>Big4</strong></td>
<td>600</td>
<td>328</td>
</tr>
</tbody>
</table>

Table 3 reports descriptive statistics of dependent and independent variables of our regression for non-financial and financial firms. Panel A (Panel B) reports descriptive statistics of continuous variables in non-financial (financial) firms. n_block represents the number of blockholders, p_block represents the proportion of share capital held by blockholders, Top_own represents ownership of the top five shareholders, Inst_own represents institutional ownership, mb_ratio is the market-to-book ratio, size represents the firm's size, debt represents the debt-to-equity ratio, and beta denotes stock risk. Panel C reports frequencies of discrete variables. IFRS denotes IFRS adoption, and Big4 refers to audit quality.

4.2. Correlation

Based on results provided by a Pearson correlation matrix, we report that coefficients of correlation between independent variables do not exceed 0.57 (in absolute value) in Table 4. Such outcomes allow us to confirm the absence of multicollinearity between retained variables.

Table 4. Pearson correlation matrix of independent variables of ownership regressions

Panel A: Correlation matrix of non-financial firms

<table>
<thead>
<tr>
<th></th>
<th>IFRS</th>
<th>Inst_own</th>
<th>m-b ratio</th>
<th>Big4</th>
<th>size</th>
<th>Debt</th>
<th>beta</th>
<th>svces</th>
<th>tech</th>
<th>Morocco</th>
<th>Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IFRS</strong></td>
<td>1.00</td>
<td>0.4952**</td>
<td>0.160***</td>
<td>0.062</td>
<td>0.298***</td>
<td>0.033</td>
<td>0.166***</td>
<td>0.214***</td>
<td>0.132***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Inst_own</strong></td>
<td>0.4952**</td>
<td>1.00</td>
<td>0.160***</td>
<td>0.062</td>
<td>0.298***</td>
<td>0.033</td>
<td>0.166***</td>
<td>0.214***</td>
<td>0.132***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>m-b ratio</strong></td>
<td>0.160***</td>
<td>0.160***</td>
<td>1.00</td>
<td>0.062</td>
<td>0.298***</td>
<td>0.033</td>
<td>0.166***</td>
<td>0.214***</td>
<td>0.132***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Big4</strong></td>
<td>0.062</td>
<td>0.062</td>
<td>0.062</td>
<td>1.00</td>
<td>0.211***</td>
<td>0.127***</td>
<td>0.293***</td>
<td>0.257***</td>
<td>0.324***</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td><strong>size</strong></td>
<td>0.298***</td>
<td>0.298***</td>
<td>0.298***</td>
<td>0.211***</td>
<td>1.00</td>
<td>0.127***</td>
<td>0.293***</td>
<td>0.257***</td>
<td>0.324***</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td><strong>Debt</strong></td>
<td>0.033</td>
<td>0.033</td>
<td>0.033</td>
<td>0.127***</td>
<td>0.127***</td>
<td>1.00</td>
<td>0.127***</td>
<td>0.293***</td>
<td>0.257***</td>
<td>0.324***</td>
<td></td>
</tr>
<tr>
<td><strong>beta</strong></td>
<td>0.166***</td>
<td>0.166***</td>
<td>0.166***</td>
<td>0.293***</td>
<td>0.293***</td>
<td>0.293***</td>
<td>1.00</td>
<td>0.257***</td>
<td>0.324***</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td><strong>svces</strong></td>
<td>0.214***</td>
<td>0.214***</td>
<td>0.214***</td>
<td>0.257***</td>
<td>0.257***</td>
<td>0.257***</td>
<td>0.257***</td>
<td>1.00</td>
<td>0.324***</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td><strong>tech</strong></td>
<td>0.132***</td>
<td>0.132***</td>
<td>0.132***</td>
<td>0.324***</td>
<td>0.324***</td>
<td>0.324***</td>
<td>0.324***</td>
<td>0.324***</td>
<td>1.00</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td><strong>Morocco</strong></td>
<td>0.135**</td>
<td>0.135**</td>
<td>0.135**</td>
<td>0.257***</td>
<td>0.257***</td>
<td>0.257***</td>
<td>0.257***</td>
<td>0.324***</td>
<td>0.324***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Turkey</strong></td>
<td>0.195***</td>
<td>0.195***</td>
<td>0.195***</td>
<td>0.324***</td>
<td>0.324***</td>
<td>0.324***</td>
<td>0.324***</td>
<td>0.324***</td>
<td>0.324***</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

Panel B: Correlation matrix of financial firms

<table>
<thead>
<tr>
<th></th>
<th>IFRS</th>
<th>Inst_own</th>
<th>m-b ratio</th>
<th>Big4</th>
<th>size</th>
<th>Debt</th>
<th>beta</th>
<th>svces</th>
<th>tech</th>
<th>Morocco</th>
<th>Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IFRS</strong></td>
<td>1.00</td>
<td>0.1336**</td>
<td>0.3176***</td>
<td>0.141***</td>
<td>0.310***</td>
<td>0.161***</td>
<td>0.161***</td>
<td>-0.053</td>
<td>-0.170***</td>
<td>-0.017</td>
<td></td>
</tr>
<tr>
<td><strong>Inst_own</strong></td>
<td>0.1336**</td>
<td>1.00</td>
<td>0.3176***</td>
<td>0.141***</td>
<td>0.310***</td>
<td>0.161***</td>
<td>0.161***</td>
<td>-0.053</td>
<td>-0.170***</td>
<td>-0.017</td>
<td></td>
</tr>
<tr>
<td><strong>m-b ratio</strong></td>
<td>0.3176***</td>
<td>0.3176***</td>
<td>1.00</td>
<td>0.141***</td>
<td>0.310***</td>
<td>0.161***</td>
<td>0.161***</td>
<td>-0.053</td>
<td>-0.170***</td>
<td>-0.017</td>
<td></td>
</tr>
<tr>
<td><strong>Big4</strong></td>
<td>0.141***</td>
<td>0.141***</td>
<td>0.141***</td>
<td>1.00</td>
<td>0.161***</td>
<td>0.161***</td>
<td>0.161***</td>
<td>-0.053</td>
<td>-0.170***</td>
<td>-0.017</td>
<td></td>
</tr>
<tr>
<td><strong>size</strong></td>
<td>0.310***</td>
<td>0.310***</td>
<td>0.310***</td>
<td>0.161***</td>
<td>1.00</td>
<td>0.161***</td>
<td>0.161***</td>
<td>-0.053</td>
<td>-0.170***</td>
<td>-0.017</td>
<td></td>
</tr>
<tr>
<td><strong>Debt</strong></td>
<td>0.161***</td>
<td>0.161***</td>
<td>0.161***</td>
<td>0.161***</td>
<td>0.161***</td>
<td>1.00</td>
<td>0.161***</td>
<td>-0.053</td>
<td>-0.170***</td>
<td>-0.017</td>
<td></td>
</tr>
<tr>
<td><strong>beta</strong></td>
<td>0.161***</td>
<td>0.161***</td>
<td>0.161***</td>
<td>0.161***</td>
<td>0.161***</td>
<td>0.161***</td>
<td>1.00</td>
<td>-0.053</td>
<td>-0.170***</td>
<td>-0.017</td>
<td></td>
</tr>
<tr>
<td><strong>svces</strong></td>
<td>-0.053</td>
<td>-0.053</td>
<td>-0.053</td>
<td>-0.053</td>
<td>-0.053</td>
<td>-0.053</td>
<td>-0.053</td>
<td>1.00</td>
<td>0.127***</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td><strong>tech</strong></td>
<td>-0.170***</td>
<td>-0.170***</td>
<td>-0.170***</td>
<td>-0.170***</td>
<td>-0.170***</td>
<td>-0.170***</td>
<td>-0.170***</td>
<td>0.127***</td>
<td>1.00</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td><strong>Morocco</strong></td>
<td>-0.017</td>
<td>-0.017</td>
<td>-0.017</td>
<td>-0.017</td>
<td>-0.017</td>
<td>-0.017</td>
<td>-0.017</td>
<td>0.127***</td>
<td>0.127***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Turkey</strong></td>
<td>-0.463***</td>
<td>-0.463***</td>
<td>-0.463***</td>
<td>-0.463***</td>
<td>-0.463***</td>
<td>-0.463***</td>
<td>-0.463***</td>
<td>-0.463***</td>
<td>-0.463***</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

Note: Table 4 reports Pearson correlation coefficients between independent variables for non-financial firms (Panel A) and financial firms (Panel B) with p-values between parentheses. *, ** and *** denote, respectively, significance at the 10%, 5% and 1% levels. IFRS denotes IFRS adoption, Inst_own is the institutional ownership, mb_ratio is the market-to-book ratio, Big4 refers to audit quality, debt represents the debt-to-equity ratio, size represents the firm's size, beta is the systematic risk, svces and tech denote, respectively, the services and the technology industries and Morocco and Turkey denote Moroccan and Turkish firms.
4.3. Empirical Findings

Results of the multivariate analysis regressions of Equations (1) and (2) related to non-financial and financial firms are presented in Table 5. Panel A (Panel B) reports results of the regression model on the impact of IFRS adoption on large investors’ ownership in non-financial (financial) firms. Panels A1, A2 and A3 (Panels B1, B2 and B3) present results on the effect of IFRS adoption on the number of blockholders, the percentage of block ownership and concentration of ownership, respectively in non-financial (financial) firms.

Surprisingly, we find opposite results on the sign and significance of IFRS coefficients in Panels A and B of Tables 5. More specifically, in Panel A1, the coefficient on the IFRS variable is negative and significant showing that the number of blockholders decreases following the IFRS adoption period in non-financial firms but is positive and significant in Panel B1 showing that the number of blockholders increases in the post-IFRS adoption period in financial firms. In addition, the coefficient on the IFRS variable is not significant as reported in Panel A2. This indicates that the percentage of block ownership is unchanged around the IFRS adoption period in non-financial firms. However, the IFRS coefficient is positive and significant at the 1% level of confidence in Panel B2, consistent with our prediction in hypothesis H1.b. Accordingly, in non-financial firms, some blockholders would prefer to exit the firm in the post-adoption period, potentially because of less opportunity to extract private benefits (Holderness, 2003; Saihi and Belanes, 2013). Blockholders who, informed shareholders would favor opacity and low disclosure levels that are mitigated under IFRS reporting. Those who “influence” (rather than “select”) firms accounting practices (Dou et al., 2012) feel as if they are under close scrutiny from high quality accounting standards that require practices that are internationally uniform and where a large amount of disclosure is demanded. By contrast, our findings support that blockholders are likely to enter financial firms having adopted IFRS and increase their ongoing holdings in these firms. Hence, greater disclosure and enhanced transparency provided by IFRS accounting result in higher specific and comparable information content (Bissensur and Hodgson, 2012), which reduces information asymmetry and enhances firm valuation (Lang et al., 2012). Therefore, blockholders are likely to take advantage of higher firm valuation by entering into stock investments of IFRS firms, or adding to their already established stakes in these firms.

Table 5. Results of multivariate regressions of large investors’ ownership variables on IFRS adoption

<table>
<thead>
<tr>
<th>Panel A: Non-Financial firms</th>
<th>Panel B: Financial firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Ownp_{it} = \beta_0 + \beta_1IFRS_{it} + \sum Control_{sit} + \varepsilon_{it} (3)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block ownership Eq (1)</th>
<th>Top shareholders ownership Eq (2)</th>
<th>Block ownership Eq (1)</th>
<th>Top shareholders ownership Eq (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>3.193*** (8.41)</td>
<td>0.655** (11.68)</td>
<td>0.708*** (13.25)</td>
</tr>
<tr>
<td>IFRS</td>
<td>-0.201** (-2.34)</td>
<td>0.009 (0.90)</td>
<td>0.019** (2.14)</td>
</tr>
<tr>
<td>Inst OWN</td>
<td>1.472*** (4.69)</td>
<td>-0.060 (-1.33)</td>
<td>-0.080** (-2.20)</td>
</tr>
<tr>
<td>mb-ratio</td>
<td>-0.012 (0.47)</td>
<td>-0.005* (-1.74)</td>
<td>-0.004 (-1.41)</td>
</tr>
<tr>
<td>Big4</td>
<td>0.055 (0.79)</td>
<td>0.001 (0.10)</td>
<td>-0.010 (-0.78)</td>
</tr>
<tr>
<td>size</td>
<td>-0.035 (0.79)</td>
<td>-0.009 (-1.36)</td>
<td>-0.011 (-1.90)</td>
</tr>
<tr>
<td>debt</td>
<td>0.047*** (2.02)</td>
<td>0.009*** (5.55)</td>
<td>0.005* (2.29)</td>
</tr>
<tr>
<td>Beta</td>
<td>-0.142 (-0.45)</td>
<td>-0.002 (-0.05)</td>
<td>0.009 (0.19)</td>
</tr>
<tr>
<td>svsce</td>
<td>0.128 (0.31)</td>
<td>0.058 (-0.89)</td>
<td>-0.061 (-1.02)</td>
</tr>
<tr>
<td>tech</td>
<td>0.575 (1.47)</td>
<td>-0.080 (1.27)</td>
<td>-0.009 (-1.60)</td>
</tr>
<tr>
<td>Morocco</td>
<td>-0.530*** (-3.37)</td>
<td>0.233*** (3.33)</td>
<td>0.203*** (3.10)</td>
</tr>
<tr>
<td>Turkey</td>
<td>1.044*** (-3.18)</td>
<td>0.097* (1.87)</td>
<td>0.110** (2.18)</td>
</tr>
<tr>
<td>Hausman</td>
<td>0.3582</td>
<td>0.3496</td>
<td>0.4489</td>
</tr>
<tr>
<td>Prob &gt; chi2</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0001</td>
</tr>
<tr>
<td>R2 overall</td>
<td>0.2693</td>
<td>0.1632</td>
<td>0.2061</td>
</tr>
<tr>
<td>R2 Between</td>
<td>0.3735</td>
<td>0.0274</td>
<td>0.3249</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.40</td>
<td>1.40</td>
<td>1.40</td>
</tr>
<tr>
<td>N obs</td>
<td>600</td>
<td>600</td>
<td>600</td>
</tr>
</tbody>
</table>

Note: Table 5 reports results of multivariate regressions of ownership variables on IFRS adoption for non-financial firms and financial firms, separately. The sample period ranges from 2001 to 2011. Overall, a minimum of four-year periods before and after the IFRS adoption date were warranted for each sample firm. Results of the Hausman test are significant at the 5%. Robust z-statistics are between parentheses. ** and *** denote, respectively, significance at the 10%, 5% and 1% levels. IFRS denotes IFRS adoption. Inst Own is the institutional ownership, mb_ratio is the market-to-book ratio, Big4 refers to audit quality, size represents the firm’s size, debt represents the debt-to-equity ratio, beta is the systematic risk of the stock, svsce and tech denote, respectively, the services and the technology industries and Morocco and Turkey denote Moroccan and Turkish firms.

Moreover, in Panels A3 and B3, and consistent with our hypothesis H2, the coefficient on our variable of interest is positive and significant at 5% and 1% respectively. This means that concentration of ownership is positively affected by the adoption of IFRS by the “investee” firm. An IFRS adoption strategy seems to influence large investors towards enlarging their holdings in equity shares. In other words, IFRS financial reporting gives rise to greater transparency and greater disclosure (Daske and Gebhardt, 2006), which lowers the cost of equity capital and enhances a firm’s valuation (Lang et al.,...
This in turn benefits investors, especially large shareholders who take advantage of higher share prices through discerning between value-creating and value-destroying investments (Francis et al., 2009). Furthermore, it is noteworthy that, in non-financial firms, ownership concentration increases despite the decrease in the number of blockholders. Accordingly, it seems that some of the existing shareholders tend to increase their ongoing holdings by buying those of blockholders deciding to exit the non-financial firm. This could be explained by the smaller benefits of control that an individual blockholder can receive in the presence of many blockholders (Belanes et al., 2011) and, more specifically, when the firm discloses a greater amount of information as required under IFRS reporting. The concentration of ownership increases, in turn, because the top five shareholders seem to make profitable equity investments in a firm whose valuation is going upwards. Furthermore, coefficients on the Inst_ownp variable are positive and significant at the 1% level in Panels B1 to B3 consistent with our predictions in H.3. This is evidence that large shareholders tend to enter and/or enlarge their ongoing stakes in firms on which institutional investors hold equity. The greater equity ownership of institutional shareholders is, the more prone blockholders and large shareholders are to invest in firms’ stock in financial firms. This provides persistent proof that large shareholders believe in institutions as effective monitors likely to complement IFRS reporting’s monitoring role. By contrast, institutional ownership has a negative effect on large shareholders’ ownership (the coefficient on Inst_ownp is negative and significant at the 5% level in Panel A3). Hence, institutions are viewed as rivals to large shareholders (Sahih and Belanes, 2013). The latter are less likely to invest in those firms governed by institutions since they are no long able to consume private benefits of control.

In addition to their preference for IFRS adopting firms, large shareholders, including blockholders and the top shareholders, are tempted to enlarge their stake in smaller-sized and leveraged firms in the non-financial sector (Sahih and Belanes, 2013). Surprisingly, they favor those firms that are in financial distress and have potentially lower visibility to investors, in order to be able to extract more private benefits at the expense of minority shareholders. In the financial sector, however, they have a preference for large-sized and less risky firms. In addition, they tend to invest more heavily in poorly performing firms, perhaps because they believe in their superior ability to influence power on these firms to better manage resource allocation and investment projects. Also, audit quality matters for large shareholders (Panel B2 and Panel B3) as additional evidence that disclosed information is in accordance with the requirements of IFRS reporting because “IFRS adoption is only likely to improve comparability when it is credibly implemented” (DeFond et al., 2011, p. 241).

Moreover, we fail to provide evidence of any significant differences in ownership variables among non-financial industries (manufacturing, services and technology). Finally, our findings support that, overall, Moroccan and Turkish firms exhibit higher ownership levels than their South African counterparts.

5. CONCLUSION

This paper addresses the question of whether firms’ IFRS reporting translates into an increase in equity ownership for large shareholders. For this purpose, panel data techniques with random effects are used on a sample of 55 non-financial firms and 23 financial firms from three emerging market countries, namely Morocco, South Africa and Turkey over a period ranging from 2001 to 2011. We examine each sample firm over at least four years prior to IFRS adoption and four years after IFRS adoption. Overall, our findings support evidence of increases in equity holdings following a firm’s IFRS adoption. This might reflect investors’ positive perception of IFRS reporting standards as a socially recognized practice and as a brand for transparency and disclosure. More specifically, we report opposite findings for block ownership in financial and non-financial firms. In non-financial firms, a drop in the number of blockholders in the post-IFRS adoption period is documented, showing that some blockholders would prefer to exit the firm in the post-adoption period, potentially because of less opportunity to reap private benefits of control since IFRS standards require stricter measurement rules and a larger set of disclosures. Nevertheless, in financial firms, we find strong evidence of an increased number of blockholders entering IFRS adopting firms, consistent with the monitoring role and value-maximizing objectives of blockholders and their preference for the greater disclosure and enhanced transparency provided by IFRS. Insight into the differences in our results can be drawn upon examining the features and specificities of the financial sector. In effect, financial firms are more regulated, more efficiently governed, and better supervised than non-financial firms. Only serious, legitimate and honest investors would be attracted by such a transparent environment.

As for ownership of the top shareholders, we register a significant increase in both financial and non-financial firms following IFRS adoption, despite differences in results with regards to block ownership. The top shareholders seem to take advantage of higher share prices and make profitable equity investments through sorting out value-creating investments. The current empirical work should be of value to managers, international investors and policy makers. Managers should be aware of the importance of IFRS reporting and are then required to ensure its proper implementation to publicize the stock. As for international investors who look for reliable, timely and comparable financial information across worldwide markets, they will find it easier to assess firms and select value stocks. Policy makers might have a clearer picture of the design of ownership around IFRS reporting to boost non-adopting firms committing to these high-quality international standards. Our work is also useful to researchers and academicians in the fields of corporate governance and international accounting. Further investigation should be conducted in order
to focus on whether capital market effects vary with the degree of compliance (full IFRS adoption vs. IFRS adoption with major or minor modifications). Another research path could be into stock liquidity, cost of equity capital and firm-level capital investment efficiency as additional capital market attributes in order to see how beneficial international reporting standards are for the development of capital markets.

REFERENCES


